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**Performance of the Hollow State: Local Responses to the
Devolution of Affordable Housing**

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**Performance of the Hollow State: Local Responses to the
Devolution of Affordable Housing**

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Dedication

For Wesley,
For five years in Texas

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Performance of the Hollow State: Local Responses to the Devolution of Affordable Housing

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The ways in which governments are being organized and managed is changing. To an increasing extent public policies and programs are being administered through complicated webs of multifaceted entities which include public authorities, special districts, government "instrumentalities", government sponsored enterprises, nonprofit organizations, and private for-profit corporations. This dissertation examines how local general purpose governments attempt to govern in this new environment referred to as the "hollow state." At the same time there has been a trend toward adopting managerial reforms as a means for improving government performance. Yet the hollow state environment is expected to make public management more complicated due to the numerous and varied relationships that it requires. The purpose of the study is to explain the relationship between decision-making and performance in the hollow state.

Specifically, the study examines how local public managers attempt to manage the production of affordable housing which is undertaken by entities largely outside the governmental hierarchy utilizing resources provided by the HOME Investment Partnerships Program, a federal block grant for housing.

The study first examines the efficiency in affordable housing production utilizing three different techniques: standard regression analysis, Substantively Weighted Least Squares (SWAT) and Data Envelopment Analysis. The multi-technique approach is useful in that the techniques emphasize different aspects and together provide a more thorough picture of government efficiency. The study also involves a detailed comparative analysis of six mid-sized cities. The findings reveal that despite differences in managerial philosophy managers in each of the six cities employ similar management mechanisms which are largely influenced by national level institutions. Further, performance is largely influenced by strategy adoption which differs according to the organization of governmental entities. Thus, while managerial reforms as a means for improving performance may be necessary, they are not sufficient without institutional change. A number of tools exist for managing in the hollow state but without institutional change, local managers are constrained from employing many of these mechanisms.

Table of Contents

List of Tables.....	xiv
List of Figures	xvii
List of Illustrations	xviii
Chapter 1: Devolution and the Hollowing of the State	1
Introduction	1
Background	3
The Devolution and Hollowing Out in Affordable Housing.....	7
Implications of the Hollow State for Governance.....	12
Focus of the Study.....	16
Method of Inquiry	20
Structure of the Dissertation.....	26
Contributions to the Literature	27
Chapter 2: Understanding Governance Theoretically	29
The Logic of Governance.....	29
Incorporating Inputs: Context and The Institutional Level of Governance .	32
Ideological Influences on Housing Policy in the U.S.	32
Federalism	38
New Institutionalism	45
Form of Government.....	46
Public Authorities and Quasi-Governments.....	51
Strategy Development: The Managerial Level of Governance.....	56
New Public Management	56
Governance Types.....	60
Markets.....	60
Hierarchy	61
Economics of Public Goods	61

The Alternative: Network.....	64
Cooperation	67
Developing Measures of Governance Type	70
Producing Outputs: Managerial and Technical Level Interactions	75
Transaction Cost Economics	75
The Nonprofit Sector.....	77
Affordable Housing Policy and Theory	78
A Framework for Governance.....	83
Governance in the Hollow State.....	87
Chapter 3: Affordable Housing Outputs and Performance	90
Affordable Housing Outputs	91
HOME Program Expenditures	95
Expenditures by Jurisdiction Type.....	97
Expenditures by Beneficiary Income Level	104
Expenditures by Housing Activity and Tenure	107
Summary of Outputs	112
Challenges in Measuring Performance	114
Efficiency	115
Description of Data and Data Limitations.....	123
Models of Efficiency	125
A Production Function of Affordable Housing.....	126
Production Function Results	129
Shortcomings of the Production Function.....	134
Substantively Weighted Analytic Techniques (SWAT)	135
The Adjusted Performance Measure Model.....	136
Application of the Substantively Weighted Least Squares Technique	140
SWAT Results.....	141
Strengths and Weaknesses of the SWAT Technique	152

Data Envelopment Analysis	154
DEA Results	158
Summary	167
Chapter 4: Understanding Governance Empirically	172
City Selection	173
Data Gathering	181
The Managerial Level of Local Affordable Housing	182
Managerial Attitudes Toward Governance	183
Housing Programs and Management Practices in the Cities.....	190
Owner-Occupied Rehabilitation Programs	192
Down Payment Assistance Programs.....	195
Housing Development.....	200
Analysis of Housing Program Governance	204
Owner-Occupied Rehabilitation Programs: A Hierarchical Example.....	204
Down-Payment Assistance Programs: A Network Example ...	207
Tax Credits and SMART Housing: Market Examples.....	210
Affordable Housing Development under HOME: Variations of Governance	213
Relationship between Attitudes, Plans, and Actual Expenditures	221
The Institutional and Technical Levels of Local Housing Production.....	225
Influences of the Choice of Governance Type.....	226
Historical Patterns of Interaction.....	226
The National Mortgage Market.....	228
Design and Regulations of the HOME Program.....	228
Influences on the Choice of Housing Strategy.....	242
The Local Development Process.....	243
Structure and Form of Government	244
Community Assets and the Housing Network	247

Summary	248
Chapter 5: Governance and Performance.....	251
Mechanisms Employed to govern in the Hollow State	252
Explaining the Choice of Governance Mechanisms: Institutional Structure	255
National Institutional Structures.....	256
Local Institutions.....	258
Decisions and Performance.....	262
Methodological Contributions.....	263
The Efficiency of Local Affordable Housing Policy	270
The Problem of Multiple Objectives: Some Caveats	273
Conclusions	275
Appendices	281
Appendix A: Data Aggregation.....	281
Appendix B: Comparison of Models of Efficiency	286
Appendix C: Production Function Results.....	288
Appendix D: Cost Function Specification	297
Appendix E: Data Envelopment Analysis Results.....	299
Appendix F: Documents to be Reviewed.....	332
Appendix G: City Study Protocol	333
Appendix H: Characterization of Sample Cities	336
Bibliography.....	392
Vita	400

List of Tables

Table 2.1: Dimensions of Governance Types	84
Table 3.1: HOME Allocations by Jurisdiction Type 1992-2001	92
Table 3.2 Number of HOME Grantees by Jurisdiction Type 1992-2001	93
Table 3.3 Average HOME Allocations per Grantee 1992-2001	94
Table 3.4: Total Expenditures by Sources of Funding.....	97
Table 3.5: HOME Expenditures by Jurisdiction Type 1992 - 2001.....	97
Table 3.6: HOME Expenditures per Unit by Jurisdiction Type 1992-2001	98
Table 3.7: Total Expenditures per Unit by Jurisdiction Type 1992-2001.....	99
Table 3.8: Proportion of Units Completed by Income Group by Jurisdiction Type.....	100
Table 3.9: Proportion of Total Expenditures by Source and Jurisdiction Type..	101
Table 3.10: Distribution of Units by Income Level	106
Table 3.11: Expenditures per Unit by Activity and Source	108
Table 3.12: Proportion of Units Completed by Income Level and Activity	108
Table 3.13: Expenditures and Production by Tenure.....	109
Table 3.14: Proportion of Units Completed by Tenure and Activity.....	110
Table 3.15: HOME Expenditures and Production by Activity/Tenure Category	111
Table 3.16: Proportion of Units Completed by Tenure and Income Level.....	112
Table 3.17: Production Function Results	131
Table 3.18: Low Income Production Function Results.....	133
Table 3.19: Homeowner Model Results.....	142
Table 3.20: Rental Model Results	143

Table 3.21: Test of Difference of Means - Homeowner Model.....	146
Table 3.22: Test of Difference of Means - Rental Model.....	147
Table 3.23 Summary of DEA Model.....	159
Table 3.24: Statistics on Input/Output Data.....	160
Table 3.25: Correlation.....	160
Table 3.26: DMUs with inappropriate data with respect to chosen model.....	161
Table 3.27: Frequency in Reference Set.....	161
Table 3.28 Sample City DEA Scores.....	164
Table 3.29: Input Projections of Sample Cities (in Thousands).....	166
Table 3.30 Output Projections of Sample Cities.....	166
Table 4.1: City Selection Short List.....	180
Table 4.2: Manager's Attitudes by Governance Type.....	190
Table 4.3 Dimensions of Governance Type.....	191
Table 4.4: Characteristics of the Down payment Assistance Administrating Organizations.....	197
Table 4.5: Community Housing Development Organizations' role in HOME ...	202
Table 4.6: Sample City Allocation of Resources According to Action Plan.....	221
Table 4.7: Estimated HOME Program Income as a Percentage of Allocation ...	222
Table 4.8: Comparison of Governance Attitudes and Action Plan Allocations..	223
Table 4.9: Actual HOME Program Expenditures by Program 1992-2001.....	224
Table 4.10: Comparison of Governance Attitudes and Actual Expenditures.....	225
Table 4.11: Comparison of SNAPSHOT and Efficiency Measures.....	235

Table 4.12: Total Expenditures per Unit by Housing Program for Sample	
Cities.....	246
Table C.1: City Coefficients and Rankings from Production Function Models .	288
Table E.1: City Rank and Efficiency Score	299
Table E2: DMU Resource Input Projections.....	304
Table E.3: DMU Output Projections.....	318
Table H.1: City Relationship in Region	350
Table H.2: Household Type	352
Table H.3: Size, Growth and Density	355
Table H.4: Form of Government, Council Size, Terms and Term Limits	367
Table H.5: Characteristics of Established CHDOs	386

List of Figures

Figure 3.1: Total Expenditures per Unit by Jurisdiction Type 1992-2001	102
Figure 3.2: Proportion of HOME Expenditures by Activity	103
Figure 3.3: Expenditures Per Unit by Source 1992-2001	103
Figure 3.4: Proportion of Units Completed by Income.....	106
Figure 3.5: Proportion of Units Completed by Activity.....	107
Figure 3.6: Homeowner Model Slope Change.....	150
Figure 3.7: Rental Model Slope Change	152
Figure H.1: Age Distribution of Population.....	352
Figure H.2: Distribution of Household Size by City.....	353
Figure H.3: Household Income Distribution.....	354
Figure H.4: Ethnicity.....	357

List of Illustrations

Illustration 4.1: Example Owner-Occupied Rehabilitation, Aurora, CO	192
Illustration 4.2: Owner-occupied Rehabilitation Before and After, Aurora, CO	193
Illustration 4.3: Example of Homebuyer Development, Nashville, TN.....	200
Illustration 4.4: Example of Rental Development, Lexington, KY	201

Chapter 1: Devolution and the Hollowing of the State

INTRODUCTION

The past twenty years have seen a number of changes in the ways in which governments are organized and managed to provide goods and services. 'New Federalism' reforms of Nixon, Reagan and most recently the 104th Congress headed by Newt Gingrich have, albeit incrementally, served to change the nature of the federalism in the post Great Society period (Conlan 1998). 'New Federalism' initiatives have devolved responsibility for several federal programs to states and localities. At the state and local level, where this new discretion is being vested, other decentralizing trends are shifting authority from hierarchical structures to collaborative networks of public, private, and nonprofit entities. "Public policies and programs are being administered to an increasing extent through complicated webs of states, regions, special districts, service delivery areas, local offices, nonprofit organizations, collaborations, networks, partnerships, and other means..." (Lynn, Heinrich, and Hill 2001). This phenomenon has been referred to as "the fragmented and disarticulated state" (Frederickson 1999) or "the hollow state" (Milward and Provan How networks are governed 2001) and is characterized by an increasing irrelevance of jurisdictional borders and the related diminishing capacity of the state to manage complex social and economic issues, the blurring of public and private sectors, and increased contracting-out (Frederickson 1999).

Public managers are perceived as not having the capacity to manage in this new environment because of a lack of competition among providers and an inability to identify clear principal-agent relationships. Therefore, the public administration literature postulates that new management tools are needed to manage in this new environment. This research is an empirical examination of governance in the hollow state. A study of governance would not be complete without an examination of outcomes. It is important not only to understand what governments are doing to manage the hollow state but how well their efforts are working. To what extent does the choice of governing mechanisms impact overall outcomes? What are the most important factors explaining outcomes? To summarize, this study is about the relationship between government choice and performance with a substantive focus on affordable housing production. Its primary focus is in seeking answers to the following questions:

1. How are local governments attempting, in the area of affordable housing, to manage (control) the hollow state? What mechanisms are they employing?
2. How does institutional structure influence the choice of mechanisms employed? Are certain institutional factors conducive to or barriers to different types of governance?
3. What is the relationship between decision-making and performance? What are the most important factors explaining government outcomes?

This research seeks to contribute to building a better theory of governance by analyzing the relationship between broad categories of governance mechanisms referred to here as governance types and government outcomes or

performance. In addition, it seeks to provide understanding as to the link between governance type and institutional structure.

BACKGROUND

The theoretical motivation for federal devolution is based on theory of functional federalism, which assigns governmental functions to the level of government that holds a comparative advantage or a relative competence, authors such as Paul Peterson and Alice Rivlin argued for devolution of many federal programs to state and local governments (Peterson 1995; Rivlin 1992). The principles of fiscal federalism contend that the federal government should be responsible for the provision of "national" public goods, macroeconomic stabilization policies, and income redistribution to the poor, while local governments should provide goods and services whose consumption is limited to their own jurisdiction (Oates 1999).

The federal government's responsibilities are thus defined because fundamental constraints at the local level prevent such functions from being adequately addressed by decentralized units. Local governments lack the tools for macroeconomic control of their economies and the mobility of economic units can create a situation where local redistribution will cause an influx of the poor and an exodus of higher income residents who bear the tax burden. Local governments can tailor service provision to preferences of a local constituency resulting in economic welfare superior to what can be achieved through uniform levels of service under national provision (Oates 1999).

Related to the theory of functional federalism is the principle of subsidiarity which in the past decade has become an important idea invoked in support of the European Union and in the U.S. by advocates of privatizing social welfare policy (Hehir 2000). The concept is best described by J. Bryan Hehir:

The principal use of the concept is to set proper limits on the state's role in society. In the continuous tension between freedom and order as concepts of social organization, subsidiarity's primary thrust is in support of freedom, preserving a sphere of free activity in the socio-economic order (Hehir 2000).

Traditionally, conceptions of republican government similarly posited that democracy works best that is closest to the people. Both of these ideas emphasize the value of civic society and the need for vibrant institutions that exist distinct from the state or the market but not in isolation from them. For democracy to be effective the concept of citizenship must be present which not only implies the granting of certain rights but also requires responsibility of individuals. Democracy works best when citizens share a common moral fabric or values which can be articulated through the political process. These values are cultivated and expressed when individuals interact outside the political arena in voluntary associations which serve to also create a sense of responsibility toward each other's welfare. Such interaction is only possible where individuals can maintain relationships with each other -- generally at the local level. Thus the founding fathers envisioned a federal system that would balance the need for local participation with the need for a strong national government.

More recently the concept of subsidiarity has become important as globalization has lead to increased interdependence of institutions and the state,

although still the foundation of world politics, must now fit within a framework of forces and relationships which deny it unfettered control or uncontested status (Hehir 2000). As Hehir explains:

Setting limits is one side of subsidiarity; filling gaps is equally constitutive of subsidiarity's legacy. The principle seeks to empower "lower" or "lesser" actors in social policy. Subsidiarity seeks an effective state not simply a limited state. Precisely because its role is to point toward coordinated action in support of the common good, subsidiarity must continually call for responses to unmet human needs. There is not contradiction between support for subsidiarity and commitment to activist state policy. The principle will encourage initiatives by "lesser" agents to respond to human need, but such initiatives may well require new commitments by the state to be effective (Hehir 2000).

Another important idea that has promoted devolution is the idea of states and local governments as "laboratories of innovation." Supreme Court Justice Louis Brandies coined the term in the early part of the 20th century to describe how solutions to social and economic problems could be tested at the local level and applied nationally if successful, as was the case with many Progressive programs, which preceded the New Deal. David Osborne has argued that a similar process occurred in the latter part of the twentieth century when local governments struggled with ways to deal with a new economic environment (Osborne 1988).

As local governments sought to fashion new strategies for promoting community and economic development they developed new models of service delivery in which governments partner with private sector organizations to deliver public goods or services. In most cases government will employ, through a contract agreement, private sector entities to deliver goods and services.

Alternatively, governments may provide incentives to encourage the private sector to pursue public goals. This model was quickly adopted nationwide. The growth of the public-private partnership has led to the growth of nonprofit organizations, termed by some as the 'third sector' and has coincided with new forms of organizing government particularly the growth of special district governments and quasi-public entities.

This growth of the 'third sector' and the development of additional single-purpose public agencies have meant that hierarchical structures of authority are being discarded in favor an arrangement based on bargaining and negotiation. The result is that the boundaries between the public and private sectors are blurring. Whereas traditionally 'public' meant government, public now includes private organizations and institutions that contract with government to do government work, public serving organizations, and quasi-governmental organizations such as privately held utilities (Kettl 1993).

Governments are increasingly contracting out the delivery of services to private organizations. In the area of social services governments are increasingly contracting with nonprofit organizations, which have experienced tremendous growth in their numbers. The independent sector comprising charitable social welfare and faith-based organizations has grown over 66% since 1977 and includes over 1.23 million organizations in 1998. The independent sector accounts for 10.8% of U.S. employment employing more than 16 million people (The Independent Sector 2001). In addition, the Bush Administration's Faith-Based Initiative has encouraged and made it easier for primarily religious organizations

to not only become involved in social service provision but to receive federal resources to do so.

The 'public' realm is also growing. There has been significant growth in the number and type of special district governments. These are single or multi-purpose governments created to deliver a particular type of service such as municipal utility districts and whose authority is independent of the general-purpose government. The number of special district governments is more than three times what they were in 1952 increasing from 12,340 to over 35,356 in 2002. The growth in the number of special district governments since 1982 has been 26%. There are 3,399 special district governments devoted to housing and community development in 2002 representing 10% of all special districts (U.S. Census Bureau 2002). The creation of quasi-governmental entities has increased as well. These entities, although technically considered entities of the general-purpose government, have substantial independent authority including independent budgets and control over resources. One arena that is illustrative of these changes in how governments are organized is affordable housing production.

THE DEVOLUTION AND HOLLOWING OUT IN AFFORDABLE HOUSING

Federal policies toward affordable housing production have always been relatively decentralized. Housing is such a local issue that it has been necessary to implement federal housing programs locally, but the character of that decentralization has changed in recent years. Throughout the period of federal activism in affordable housing production (1930s - 1960s), policies were designed

and controlled at the Federal level. Local entities, such as public housing authorities, were primarily federal vehicles for implementing national programs designed at the center. One of the motivations for creating public housing authorities as independent agencies was to isolate them from local politics. Then in the 1970s and 1980s when federal cut backs reduced housing spending, a local housing movement developed whereby localities, largely driven by grassroots nonprofit organizations, adopted uniquely local tools for addressing housing issues (Goetz 1993). Even during this time, though, federal housing programs primarily in the form of categorical grants made up a significant portion of local spending on housing.

Local decision makers, although free to adopt housing policies on their own, had little control over federal spending in their jurisdiction. Federal decision-makers controlled what type of housing activities would be undertaken, who would be served, and how resources would be allocated. The exception to these categorical programs was the Community Development Block Grant (CDBG) of 1974, which granted localities not only federal resources but also the authority to choose how to spend them among a list of various activities. CDBG authorized activities included community and economic development projects such as water and waste water systems, community centers, streets and roads. Although housing was an allowable activity under CDBG, localities had to choose between housing and other community development activities. Several categorical grants still existed for housing such as the section 8 rental program. Therefore, housing was often not the priority for CDBG spending. In the late 1980s and

early 1990s, the federal government devolved responsibility for affordable housing production to states and localities, which provided local governments with federal resources for housing and the discretion to develop uniquely local housing policies although this devolution represented a decrease in federal allocations. Housing policy approaches adopted since the early 1980s have been referred to as the postfederal period of housing policy (Goetz 1993).

Federal involvement in affordable housing production was devolved to states and localities, beginning in the late 1980s, with the Low Income Housing Tax Credit Program and the Home Investment Partnerships Program. The Tax Credit program allocates states \$1.25 per capita in tax credits annually for private investment in affordable housing. States allocate the credits to eligible developers through a competitive process that allows states to specify criteria for housing that meets their needs and goals. Private individuals or corporations who invest in housing that is affordable under the guidelines of the program receive a credit against their federal income tax liability, which can be taken for ten years. Additionally, investors also receive the traditional tax benefits as owners of real property such as the deductibility of operating expenses. Nonprofit developers also participate in the program by acquiring the tax credits from the state and 'selling' them to private investors. The tax credit program provides a great deal of resources for affordable housing production and is profitable for private investors. One drawback is that states have the onus of monitoring the projects for compliance over an extended period of time and there are questions about whether

they will be able to continue that function as more and more projects are added to the stock.

The Home Investment Partnerships Program was created in the Cranston-Gonzales National Affordable Housing Act of 1990. The HOME program combined the Section 8 new construction and substantial rehab program with a number of smaller categorical grants for housing. It is a housing block grant from the federal government to states, cities, urban counties and consortiums of local jurisdictions, which can be used for a number of different housing activities including rehabilitation of existing structures, new construction of rental or homeowner housing, owner-occupied rehabilitation for low-income homeowners, tenant based rental assistance and homebuyer assistance. The program gives local jurisdictions great discretion in designing and implementing local housing policies. It also reinforces the public-private partnership model by setting aside 15% of the funds to be delivered by nonprofit community housing development organizations (CHDO) and includes various provisions to build the capacity of those entities to deliver housing. The program also seeks to strengthen the ability of states and localities to address housing issues and requires a local assessment of needs and comprehensive planning process.

The Low Income Housing Tax Credit and the HOME Investment Partnerships Program represent a significant change in federal housing policy in terms of the amount of discretion granted to states and localities. These programs have made it possible for local decision-makers to pursue local housing goals, not only with local resources but also with federal resources. Steven D. Gold has

identified diversity of production technology as an important issue raised by devolution. That is, with greater freedom to design programs we should expect increased variation in how states structure and operate the delivery of services (Gold 1999).

The shift of responsibility for housing policy implementation from the federal to the local level is not, however, the only change that has occurred. The pursuit of local housing goals has also increasingly being undertaken by a growing number of private, nonprofit, quasi-public and special district governments. From the mid 1960s through the late 1980s, state governments created housing finance authorities that now are major players in implementing housing policy. Some states also passed enabling legislation allowing units of local government to create their own housing finance authorities. These entities were largely created for the purpose of issuing mortgage revenue bonds to provide below-market financing for low and moderate income first-time homebuyers, but with increasing responsibility at the state and local level some such entities have since become responsible for administration of devolved federal programs. Of the 50 states, only 14 of the housing authorities are directly under the governor's direct supervision, only 15 are included in the governor's budget and 38 are independent authorities governed by a separate public board (National Council of State Housing Agencies 2000). Most of these agencies are responsible for administering the Low Income Housing Tax Credit programs and 37 state housing agencies administer the HOME program.

Local governments rely on non-profit community development organizations to deliver their housing programs as well as partnerships with other units of government. This reliance on 'third party' entities for the delivery of housing services is characteristic of changes that have taken place in many areas of domestic policy and is termed the "hollow state." The key elements of the hollow state are: 1) joint production of goods and services, and 2) several degrees of separation between the source and use of funds (Milward and Provan How networks are governed 2001). Such a situation raises a number of questions about governments' ability to manage public resources and to ensure accountability utilizing traditional mechanisms of control.

IMPLICATIONS OF THE HOLLOW STATE FOR GOVERNANCE

Traditionally, government accountability has been maintained through a system of hierarchical controls. The principal-agent model has long been used to explain hierarchical governance that utilizes procedures, rules and regulations, and norms to govern how public resources are allocated and expended in the pursuit of public goals. The principal-agent model sees democratically elected decision-makers as the principal that seeks to engender cooperation from bureaucratic agents that implement government programs. The model has further been utilized to understand mechanisms of control under both devolution and contracting-out situations.

In the devolutionary situation, a two-tiered principal-agent model is utilized to understand the control between the levels of government. In this two-tiered model federal decision-makers are the principal to federal bureaucrats who

design and monitor programs serving as agents to the federal decision-makers while at the same time existing as principal to local government agents. Similarly, in the contracting-out situation the government represents the principal that seeks compliance from private sector agents through the use of the contract agreement.

The principal-agent model, specifically, and hierarchical governance, generally, become problematic in the current environment which consists of a complicated web of entities involved in service delivery. In this new environment clear principal-agent relationships are not easily identified because of the multitude of existing relationships. Entities that ultimately deliver the good or service are often responsible to multiple principals including different governmental entities, foundations and other funding entities, and donors or investors. The amount of resources that a service agency receives from any one governmental entity may be only a small proportion of the total cost of delivering said service, creating a situation where any one governmental entity can not expect to exert a significant amount of influence over the service agency. As the complexity of a good or service increases so does the complexity of its production, delivery, and web of provider organizations, reducing further the efficacy of hierarchical mechanisms of controls.

Many believe that the decentralization of public goods provision represents a move away from hierarchical governance and bureaucratic control toward market mechanisms of management. Some advocate such a move as a means for improving government performance (Osborne and Gaebler 1992).

Osborne and Gaebler in their seminal work which kicked off the 'reinventing government' movement in the United States argue that government should 'steer not row'. Instead of trying to "control" activities, government should steer "[a]nd perhaps the most powerful method of steering is structuring the marketplace: creating incentives that move people in the direction the community wants to go, while letting them make most of the decisions themselves" (Osborne and Gaebler 1992). They argue that market-based incentives should replace command mechanisms of control. In this vein, it is not necessary for government to provide goods and services but rather to see that they are provided by properly structuring or restructuring the market. By moving from government provision to government procurement, governments can create a market where none previously existed and thereby overcome the market failure problem of under-production of public goods. This is done by augmenting the supply of goods and services in order to ensure that they are produced at a level commensurate with demand. Such quasi-markets are governed not by hierarchical controls such as rules and regulations and superior-subordinate chain of command but rather by the same mechanisms that govern free-enterprise - primarily competition and incentives. Competition is seen as an important governing mechanism because it allows governments to choose among providers. Providers have an incentive to perform well in order to be chosen.

There are, though, reasons to believe that even a market-style of governance is not appropriate in the hollow state. These reasons stem from two aspects of public goods and service provision, particularly social service

provision. The first is that there are rarely a large number of small firms competing for the right to provide such a service. Instead there are a few firms that are usually distinguished either geographically or by some service niche which limits the amount of competition they face and the government's choice of providers. Without choice, government's influence over production and delivery outputs is minimized. Also, once a provider has won the right to provide a good or service in the first period the process of providing that good or service generates knowledge and investment which may privilege that organization over others in subsequent rounds of procurement further reducing competition.

The second aspect of the hollow state, related to the first, which may prevent market-style governance from being effective, is the complexity of public goods provision. Complexity may imply that the good or service can not be provided by a single organization but requires the effort of two or more organizations. In such a situation it is necessary not only to ensure that each performs as expected but that their efforts are coordinated. Such coordination is not guaranteed by competition and may require hierarchical, third-party or other means of control. Also, complexity may raise the level of asset specificity that is required to produce a good or service. That is, producing a complex public good or service may require specific assets such as a trained staff, appropriate building or capital equipment that create barriers to entry for other organizations and again reduce the level of competition.

FOCUS OF THE STUDY

The hollowing out and fragmentation of the state suggest that the traditional means of governing, primarily through hierarchy or markets, may be ineffectual and raises the question of how governments are seeking to influence outcomes that are derived from activity that occurs beyond their organizational boundaries and with what impact. What means are public managers employing to exert influence over the fragmented and disarticulated state? Have they adopted traditional hierarchical mechanisms of control consistent with the principal-agent model such as performance contracts and monitoring? Have they adopted mechanisms that are consistent with market-style governance such as franchises or quasi-markets that rely primarily on competition to govern relationships? Or have they adopted some alternative means for gaining control of the decentralized state? One possible alternative is a network type of governance.

Although the network metaphor has been appropriately applied to understand the structure of the hollow state, less is known about how a network is governed. The network emphasizes individual nodes and the interrelationships among them. Individual relationships within the network rely mainly on trust and reputation for their success. What role is there for government in such a system? Milward and Provan argue that a network integrated by a strong core agency, called a network administrating organization (NAO), will be more effective than one that is not integrated (Milward and Provan 1998). The role of NAO may be an appropriate one for government but it may also require that public managers think very differently about their role in ensuring government accountability. For

example, public managers may need to provide technical assistance in order to facilitate cooperation among third party entities but their role as technical assistance provider may conflict with their role in contract monitoring. This research hypothesizes that such thinking is influenced by various institutional factors that exist in our democratic system generally and a local jurisdiction specifically. Such factors include the political environment and citizen's attitudes toward government's role, existing rules and norms, or organizational structures within which programs are administered. Therefore it is also important to examine how institutional structure influences the choice of governance mechanisms.

The term governance, as used throughout this research, refers to broad categories of institutional design with particular emphasis on the mechanisms by which productive activity within those institutions is governed. The use of the term is consistent with the management literature on governance with reference to the private sector. It differs slightly, however, from the use of the term in the literature on public administration or organizational theory which places greater emphasis on structural aspects especially the institutional structure of governing organizations. For example, market governance refers to any arrangement in which the interaction among entities is governed by bargaining and negotiation facilitated by competition. In contrast an example of an institutional structure for governing is the U.S. federal system which divides power among levels of government. Institutional structure is concerned with rules, norms, and organizational arrangements of specific institutions.

Governance is a broader concept than institutional structure and reflects categories of institutional structure as well as governing mechanisms. Governance can be conceived as existing on three different levels -- the institutional, the managerial, and the technical. While the institutional level includes aspects of institutional structure, the managerial level includes mechanisms of control, and the technical level includes specific tasks. This research focuses on the interaction between the institutional and managerial levels. The term 'governance type' is meant to emphasize broadly the means by which cooperative economic activity is achieved. To clarify, there are three general governance types: market, hierarchy, and network. By focusing on governing mechanisms rather than on institutional structure alone, the hope is to gain greater understanding of the reforms which have sought to "banish bureaucracy" and "marketize" government, but will also shed light on the role of alternative forms of governance such as the network. Performance is conceived of as outcomes produced as a result of government action. The primary focus will be on measuring the efficiency of government activity. Three hypotheses related to the research questions will be tested:

1. The choice of managerial mechanisms at the local level is driven by an overarching ideal governance type - either market, hierarchy, or network.
2. The governance type present in a city is influenced by the local institutional structure.
3. Network governance is more efficient than hierarchical governance and more feasible than market governance.

The devolutionary efforts undertaken in the U.S. in the 1990s offer a unique opportunity to examine the relationship between governance and performance. There are two advantages to examining the devolution of federal housing policy in an attempt to understand governance and performance. First, the devolved program offers a common specific and measurable goal with which to pursue a cross-sectional study of performance. The Cranston-Gonzales National Affordable Housing Act of 1990 in establishing the HOME Program delineates the parameters and constraints within which the policy is to operate and specifies a common goal with which to evaluate outcomes. Second, the devolution provides numerous "laboratories of democracy" or jurisdictional units with multiple variations in terms of institutional structure and governance approaches pursuing a single common goal. Examining governance and performance at the local level ensures a maximum variation in governance structures and mechanisms employed. Although there are a number of devolved federal programs that could offer similar opportunities for study, federal housing policy was chosen for several reasons.

First, the history of Federal housing policy largely mirrors governmental changes over the course of the 20th century. Housing policy was one of the early policies devolved to the states and local governments in the early 1990s. As a result, the efforts at the local level have been underway for over 10 years. Second, comparable data are collected by the federal government on a national basis allowing for a quantitative analysis of housing outputs. Third, housing, unlike many social service programs, includes an infrastructure component which

makes outcomes easier to measure than many social services but it also has the character of a social service program.

METHOD OF INQUIRY

This inquiry into the relationship between governance and performance begins with an investigation of the theoretical propositions of the literature which: 1) help define the characteristics of each governance type, and 2) create a foundation for understanding how institutional factors affect the adoption of a specific governance type. This section includes an introduction to the theories of governance and the postulates of new institutionalism; a discussion of the current theories of public management and networks; and a review of transaction cost economics, theories of the nonprofit sector and current housing policies and guiding theories.

Much of the current literature concerned with government performance focuses on managerial reforms as a means for improving performance. A major hypothesis of this dissertation research derived from the literature is that the choice of managerial mechanisms at the local level is driven by an overarching ideal governance type (or philosophy) - either market, hierarchy or network. That is, individual local governments tend toward one of three governance types and the managerial mechanisms employed are thus consistent within each governance type making it possible to categorize local governments into governance types by observing the mechanisms employed. If this first hypothesis is true then it is possible to test the additional hypothesis that one governance type consistently produces better outcomes than another governance type. This would be done by

categorizing local governments into governance type and comparing performance across the types. On the other hand if the first hypothesis is false then it is necessary to explore alternative factors which drive the choice of managerial mechanisms through cross-government comparisons.

Comparing performance across governmental entities creates a number of challenges due to the presence of multiple objectives common to any government action. This research attempts to minimize these challenges by focusing on a single performance measure of government efficiency derived from the primary purpose of the federal HOME program which is to increase the supply of affordable housing. Initially several performance measures were created to evaluate each of the various objectives pursued by the HOME program. However, because these objectives were given different priorities at the local level it significantly complicated the evaluation of performance. While incorporating multiple measures would have allowed for a more thorough understanding of performance under the HOME program, it would not have contributed any to the analysis of governance. In the interest of parsimony these additional performance measures were left for future inquiry. The performance measure used is the total number of affordable housing units produced or made affordable given a certain level of expenditures.

The implementation of this research required the collection of multiple types of data from multiple sources. It was necessary to collect detailed data, both qualitative and quantitative, on the political process and on the outcomes of governmental action. The political process includes environmental aspects which

shape the demands on the political system, as well as the interpretation of those demands by decision-makers articulated through policy choice, the adoption of strategies and policy implementation by managers and the production of outputs by workers.

Performance was measured primarily in terms of efficiency as the amount of resources both public and private that were expended to produce a unit of affordable housing or to house a low-income household. Several different analytical techniques were used to evaluate the performance of the 350 cities nationwide that received HOME funding between 1992 and 2001. These techniques included a production function, Substantively Weighted Analytic Techniques (SWAT), and Data Envelopment Analysis (DEA). While each of these techniques produced somewhat different results, the results are not inconsistent. Each technique has its strengths and weaknesses and in many ways they complement each other such that each technique makes an important contribution to our understanding of performance. Quantitative data from the U.S. Department of Housing and Urban Development's Integrated Disbursement and Information System (IDIS) on the HOME program and from the U.S. Census Bureau were used to evaluate the performance of local housing programs.

Descriptive statistics from the HOME program data illustrate the government outputs that have been produced by the various local governments. These data are then utilized to evaluate government outcomes (as distinct from outputs) by controlling for housing market differences and comparing across jurisdictions, specifically cities. Performance was first modeled as a production

function utilizing standard regression analysis. This model utilizes a panel data set of all 350 cities in each of the 10 years from 1992 to 2001. This model provides estimates of the relative contribution of the various inputs to the overall outputs on average. It also provides a ranking of each of the cities in terms of performance. This analysis is valuable in understanding the level of performance that has been achieved, in general, under the HOME program but this model has limited analytical power in understanding how that performance can be improved. There are also some weaknesses in the model specification which can only be improved with additional data which was not available for this study.

Since the primary motivation of this research is finding ways to improve government performance it is necessary to not only understand the average performance that has been achieved but to identify what the better than average jurisdiction does differently in order to understand how performance can be improved. Substantively Weighted Analytic Techniques is an exploratory method which allows for an examination of how performance can be improved. The SWAT analysis makes some adjustments to the original production function model in order to overcome some of its weaknesses. These include: 1) utilizing cross-section data rather than panel data; 2) separating the model into two distinct models because of differences in cost structures, one for homeownership activities and one for rental activities; and 3) the addition of some important variables which either are beyond simple inputs (as required by the basic production function) such as policy variables or for which data were not available in each of the ten years.

The SWAT analysis then places greater emphasis on those cities that have performed better than average and identifies those variables whose contribution differs from the average. This analysis helps to highlight what high performing cities do differently and how overall performance can be improved. This technique though also has its weaknesses. Questions about the proper model specification remain and it is not possible to rectify performance between the two different models, homeownership and rental. That is, it is not possible to evaluate multiple outputs or to determine the optimal mix of outputs.

Data Envelopment Analysis is a linear programming technique which provides an alternative means of analyzing performance. Instead of comparing a jurisdiction's outputs to the average output in order to evaluate the outcome, DEA compares a jurisdiction's outputs to its most similar peers in terms of inputs and housing market characteristics. In this way DEA provides a more direct comparison as a means for analyzing how performance can be improved. In addition DEA overcomes problems of model specification and can incorporate multiple outputs. The DEA not only provides a ranking of the cities' performances in terms of efficiency but it also produces an estimate of those inputs that have been over-invested by a jurisdiction and outputs which have been under-produced for each jurisdiction. This is valuable practical information that can be utilized by individual jurisdictions to implement change. The drawback is that it is very difficult to generalize this analysis to the entire population. It must be interpreted with reference to an individual jurisdiction. While each of the techniques employed to evaluate performance has certain difficulties, together

they provide a multidimensional analysis of the performance of the cities' affordable housing production under the HOME program. An important element of this research is to not only understand performance and potential ways to improve performance but to also understand the governing processes that facilitate or hinder better performance. Therefore, additional analysis of the governance that produced such performance is also required.

Given the time and resources required to collect detailed data on governance (i.e. the political process), only a small sample of local governments was feasible. Data were gathered on the political processes of five mid-sized U.S. cities through site visits involving observation, in-depth interviews, and a review of documents. The cities were chosen with the goal of maximizing differences in both governance and performance but minimizing differences outside the control of local actors such as housing market characteristics. While the performance of the cities was known in advance and variation in performance ensured, the field work was undertaken in order to identify the governance type of a city. Therefore, the categorization of cities by governance type could not be accomplished until after the data gathering effort. Thus it was more difficult to ensure variation in governance type. It was assumed that the governance type was largely driven by the institutional arrangements present in a city and therefore cities were chosen so as to maximize the variation in institutional arrangements. Prior to the site visits a pilot study was conducted in Austin, TX to test the questions and methodology. Data from the pilot study were also included in the analysis.

The analysis of governance involved developing a framework for understanding the different governance types. The initial framework was derived from the literature. A conceptualization of how this framework could be applied to affordable housing activities and an identification of the observable dimensions of each type was then developed as a means to inductively categorize the cities into different governance types. The cities were categorized according to the observable dimensions of each type such that performance could be compared across types. The analysis revealed that the original hypothesis, that the choice of managerial mechanisms at the local level is driven by an overarching ideal governance type, to be false and led to further exploratory investigation of the factors related to the choice of managerial mechanisms.

STRUCTURE OF THE DISSERTATION

This dissertation includes separate analyses of government performance and governance which are then related through comparisons among several cities. Chapter Two provides a review of the literature and the current state of knowledge on governance and performance. An initial framework of governance type derived from the literature is presented. Chapter Three provides a picture of government outputs under the HOME program and an evaluation of local housing outcomes or performance. This chapter includes a discussion of the techniques utilized to evaluate performance and the results of the analysis. Chapter Four presents the analysis of governance. It begins with a discussion of the selection of sample cities and the data gathering process. Then an identification of the observable dimensions of governance type is made and housing activities are

categorized by type. The analysis identifies factors influencing the choice of governance type and the choice of housing activities by local actors. Finally, Chapter Five discusses the relationship between governance and performance and draws conclusions.

CONTRIBUTIONS TO THE LITERATURE

This dissertation makes three important contributions to the literature on governance. First, an important finding of this research is that national institutions are a significant factor influencing the choice of governing mechanisms employed at the local level. This finding suggests that while managerial reforms may be necessary to improve government performance they are not sufficient. In some cases institutional change may be needed to improve performance and the institutions that need to change may be at a different level of government. Second, this dissertation provides empirical confirmation of theories of New Public Management which claim that institutional arrangements that strive to separate politics from administration are more efficient. This dissertation finds that such arrangements are important not solely because they insulate managers from political pressures but because they give professional managers with expertise in a policy arena greater influence over the strategies that are adopted in the pursuit of public goals. Further, the adoption of specific strategies is the most important factor influencing government performance when managerial choice is limited by institutional constraints. Third, a methodological contribution is made by combining three techniques in the analysis of performance. A production function estimated with standard regression analysis,

Substantively Weighted Analytic Techniques, and Data Envelopment Analysis each emphasize different aspects of performance and as such each is limited in its ability to provide information about performance. However by employing the three techniques a multidimensional analysis of performance is provided.

Chapter 2: Understanding Governance Theoretically

A variety of literatures address specific elements of governance. This focus on individual elements helps to further our knowledge of governance generally. However, each of these literatures covers only a slice of the overall picture. It is important to bring these various literatures together in order to examine interactions among them. An examination of the broader picture can also contribute to knowledge of individual elements by clarifying issues that may exist related to a specific element but largely influenced by another. This chapter brings together a number of different literatures related to specific elements of governance. It is organized according to the logic of governance suggested by Lynn et. al. which divides governance into institutional, managerial and technical levels. The primary focus of this research is on managerial level elements and their interaction with the institutional and technical levels. This chapter begins to develop a variable called governance type which will be utilized to examine the relationship between governance and performance.

THE LOGIC OF GOVERNANCE

In this time of the fragmented and disarticulated or hollow state, contemporary public administration has jumped ahead of public administration theory. A number of scholars are now developing theories and models to explain contemporary public management. One of the more promising efforts has been articulated by Laurence Lynn, Carolyn J. Heinrich and Carolyn J. Hill through a number of works ((Heinrich and Laurence E. Lynn; Lynn 1996, 2001; Lynn,

Heinrich, and Hilt 1999; Lynn, Heinrich, and Hill 2001) in which they promote the study of "governance." The term governance has been used widely in both the public and private sectors and has included a broad and ambiguous set of definitions, but as Lynn et. al. point out governance generally "concerns relationships between authoritative decisions and government performance" (Lynn, Heinrich, and Hill 2001) They further define governance as "regimes of laws, rules, judicial decisions, and administrative practices that constrain, prescribe, and enable the provision of publicly supported goods and services" (Lynn, Heinrich, and Hill 2001).

One way in which governance theory differs from other research in public administration and management is in its attempt to link context, governance and outcomes. Although much of the literature on public administration and management argues that context shapes structures, it is only in governance theory that researchers "attempt to incorporate hard-to-specify contextual considerations into investigations of structures and management to discriminate between structural causes of policy impacts and the effects of underlying political, social, and economic circumstances." Lynn et. al. develop a logic of governance to guide research which uses a hierarchical model to depict not only influences within a certain level of analysis but also to recognize the relationship to other levels of analysis. That is global, national and cultural context are seen to influence political interests and legislative choices which influence governance regimes which influence management strategies which influence primary work and outcomes which then influence political assessment that feeds back into the

context level. The objective of governance research, according to Lynn, is to identify the influence on government performance of these various elements, in order to inform administrative reform, public policy design, and public management practices. The artifacts of governance research include formal government structure, policy mandates, agencies, departments and their officers, policy and program design, public budgets, financial and accounting practices, and personnel including executives, managers, workers and agents. A simplified model of governance based on the work of J. Thompson (open-systems model) and T. Parsons (levels of responsibility and control) includes three levels of governance: the institutional level, the managerial level, and the technical level.

The institutional level is concerned with the interrelations between context, citizen preferences and legislative choices, the structure of formal authority, and de facto organization of agencies and programs. The managerial level concerns the elaboration of strategies by organizational actors and the technical level is concerned with the primary work level. Much of the previous work that has been done in this area focuses on a particular level of governance or specific aspects of governance. The current research takes a broader view and seeks to understand not only what occurs within each level of governance but linkages and interaction between levels. Because this dissertation seeks to examine multiple levels within this logic of governance the theoretical propositions to be tested derive from multiple distinct but related literatures. Therefore it will be necessary to examine the theoretical propositions from a

number of different literatures; the logic of governance provides a guide for understanding how these propositions fit together.

INCORPORATING INPUTS: CONTEXT AND THE INSTITUTIONAL LEVEL OF GOVERNANCE

The institutional level includes environmental factors, policy choice, governmental structure and the organization of agencies and programs. Contextual factors of importance include intergovernmental arrangements, inter-jurisdictional competition, and cultural aspects that affect government decisions. Legislative choices are developed within and influenced by the structure of formal authority and the organization of agencies may dictate which players exert influence and the considerations of implementation. Several areas of research are important for understanding the institutional level of governance: federalism, fiscal federalism and public choice, new institutionalism, and organizational theories related to the use of special district governments.

Ideological Influences on Housing Policy in the U.S.

Hays argues that American society is supported by an ideological belief in capitalism which stems from three tenants: that self-interest and competition promote productivity (the ideal economic actor is the entrepreneur), that the market is the most efficient means for allocating goods and services (perfect competition) and that government should play a secondary role (limited government or laissez-faire capitalism). "[T]hese beliefs form an ideal image of the U.S. system, which functions as a potent symbol" (Hays 1995). But the ideal

may not always be possible therefore it has been necessary to adapt these beliefs into an "operational ideology".

In the operational ideology the entrepreneur has been displaced by the presence of vast, complex, corporate entities and the norms of professionalism. The corporate structure requires not only competition but also team work and cooperation among individuals. Professionalism has meant that beyond material self-interest individuals may find rewards in problem-solving and task accomplishment. Rather than a world in which entrepreneurial self-interest is controlled by Adam Smith's invisible hand, professional norms "suggest the deliberate choice of objectives and the pursuit of those objectives by scientific means. Such planning and coordination suggests, in turn, a more active role for government, which is traditionally the major vehicle for deliberate societal choice"(Hays 1995). Further, with the growth of huge corporations the U.S. has moved farther and farther away from the ideal of perfect competition. In oligopolistic markets, large firms can influence supply and demand and limit the competitive struggle. Many see the lack of traditional market controls over price and efficiency as necessitating an increased economic role for government. Others believe that dominant firms have obtained such a position by superiority and thus it benefits society to preserve the power of these market winners. As a result differences in ideology have developed between liberals and conservatives in the U.S.

Although the ideological divide between liberals and conservatives is most often characterized as differences in the size of government i.e conservatives want

smaller government and liberals larger government, many theorists have shown this characterization to be too simplistic to capture the more notable differences. Lowi and Savitch recognize "an elite consensus supporting an active government role in subsidizing and supporting key market activities. In light of this consensus, the traditional designation of liberals as for big government understates the willingness of most conservatives to utilize government for a variety of purposes" (Hays 1995) (emphasis in the original). Instead Savitch and Hays argue that differences in ideology are characterized, not by the size of government, but by the legitimate role government should play. Conservatives support government action which reinforce ongoing market activities and are favorable to players who are already market winners, whereas, liberals support government action to restrain and channel the activities of the market. They "frequently support the same kind of interventions on behalf of market winners also favored by conservatives." However they also believe that wealth should be "redistributed to ameliorate life for those at the bottom of the economic scale, thus curbing their resentment and potential for rebellion."(Hays 1995).

Hays argues that ideological conflicts are a central element explaining federal housing policy decisions. Policy subsystems are important within the broader political environment. These subsystems are organized either along the lines of sub government alliances or may be more open and fluid (Hecl and Kingdon) but they each have their own history and are resistant to change meaning that policy changes only incrementally. The ideological orientations of national leaders will send messages to these subsystems which are interpreted and

implemented by subsystems actors. Feedback also plays an important role becoming ammunition for the ideological struggles.

Hays further suggests that policy contexts or frames can result in different responses even within the same ideological beliefs. He outlines three frames of reference in which federal housing policy has been viewed: 1. social welfare policy; 2. community development policy; 3. macroeconomic policy. These frames are reinforced by other authors as well as by existing organizational structures. Public choice scholars such as Peterson, Wong and Basolo drawing on Theodore Lowe's earlier typology of distributive, redistributive and regulatory policies, characterize housing policies as either redistributive or developmental. Redistributive policies are akin to a social welfare policy frame while developmental policies are related to housing within a community development policy frame. These authors largely ignore as housing policy the largest housing subsidies which go to the middle class through the mortgage deduction. These subsidies to higher incomes which are not even considered affordable housing policy fall within Hays' macroeconomic stabilization policy frame. This typology is also reinforced by HUD's organizational design and budget which is divided into Community Planning and Development (CPD), Public and Indian Housing, and Housing Programs. The Community Planning and Development department includes the Community Development Block Grant (CDBG) and the HOME program which are viewed as developmental policies while Public and Indian Housing may be perceived as social welfare and Housing Programs such as

mortgage guarantees through the Federal Housing Administration (FHA) are tools of macroeconomic stabilization policy.

When viewed as a social welfare policy the conservative view is one which opposes government taking over the productive apparatus and becoming a direct provider of goods and services. This is viewed as competition (usually unfair competition) with market players which threaten the private sector and confer too much power on the public sector - further it is an inefficient use of resources. More acceptable to the conservative are programs which subsidize private firms in order to make the provision of goods and services affordable to the lower income while remaining profitable to the firm. Housing programs in the 60s such as project-based section 8 were consistent with this view whereby the private sector produces housing and charges fair market price, low-income household pay what they can afford (as determined by government), and government pays the difference. To some conservatives this is inefficient. Milton Friedman argues that such in-kind subsidy reduces efficiency (Friedman 1962). Instead he argues for direct cash payments to poor because direct cash payments allow families to choose their consumption mix which enhances individual freedom but also guarantees that resources are used most efficiently. The debate over cash versus in-kind subsidies has been central to housing policy (Hays 1995). Another issue for the conservative in social welfare policy is that of scale. Too much redistribution gives too much power to the public sector such that the conservative seeks to minimize the scale of such activities and as a result advocates for restricting redistribution to only the lowest income in order to

control costs. As Hays points out this somewhat contradicts the conservative ideal of being rewarded for working hard.

The liberal view with respect to social welfare policy appeals to the "social cost" justification (Friedman 1968). Hays describes three types of social cost justification: 1. long-term threat to stability of political and economic systems posed by suffering of the poor; 2. impact on other segments of society such as slums and infectious diseases or homeless in the streets; and 3. the individual in poverty as a human resource. Together these factors make up a "culture of poverty" which should be counteracted by proper public intervention (Waxman 1983).

The ideological differences between liberals and conservatives are less clear within the community development policy frame but never the less are an important part of the environment in which housing policy is formed (Hays 1995). According to Hays two distinct sets of issues have dominated community development policy: the role of local government vis-à-vis the private sector and the changing distribution of power between federal, state and local governments. Community development is largely a private market activity although public services and amenities are an essential element. Over time there has been increased support for planning and zoning on behalf of government in order to subsidize private sector investors and to support economic growth. Conservatives which may oppose social welfare programs support community development programs that promote economic development even if costs are imposed on lower income persons. Liberals support community development programs only if they

also directly address the needs of the poor. With regard to the question of which level of government should administer housing programs, conservatives tend to favor decentralized programs which tend to disrupt local power structures less, while liberals tend to support centralized programs because of the ability pursue more equitable outcomes. The issue of which level of government is best suited to deliver affordable housing policy is addressed in more detail by scholars of fiscal federalism and public choice theory. The debate over centralized versus decentralized policy represents an important context for housing policy and the federal structure is an important institutional arrangement that influences legislative choices.

Federalism

Scholars of fiscal federalism argue that certain kinds of policies should be the responsibility of the federal government because local governments face fundamental constraints which prevent them from adequately addressing certain functions. These functions are primarily macroeconomic stabilization policies and income redistribution to the poor. The federal government should also be responsible for the provision of "national" public goods such as defense and trade. In the U.S. local units of government lack the tools for macroeconomic control of their economies and thus this function should be the purview of the federal government. Also, because economic units are mobile relative to local jurisdictions, states and local governments must compete for economic development (Oates 1999). For example, public choice scholars argue that local governments will not engage in redistributive policies because of competition at

the local level. Redistribution would attract lower income residents and drive off higher income residents. Cities want to attract and keep higher middle income residents in order to ensure viable tax base therefore they prefer developmental policies over redistributive policies (Peterson 1995). Public choice scholars that have addressed the issue of urban housing (Basolo 1998, 1999; Peterson 1981, 1995; Wong 1990) all see housing as a redistributive policy.

At same time, fiscal federalism also recognizes that there are certain functions which should be the purview of local governments because of their comparative advantage relative to the federal government in such policies. These functions primarily include the provision of goods and services whose consumption is limited to the jurisdiction. Local governments can tailor service provision to the preferences of a local constituency such that the economic welfare is superior to what can be achieved through uniform levels of service under national provision. Presumably, these functions include those that Hays has categorized as developmental including housing as community development. Thus, housing policy when viewed through the different policy frames redistributive, developmental and macroeconomic, presents a problem in a federal system as to which level should be responsible for such policy because there is little agreement as to which policy frame many housing activities appropriately fit.

The history of affordable housing policy demonstrates the weaknesses of each level in adequately addressing the issue. Prior to the Great Depression, housing was decentralized and there was no legitimate role for the federal

government. In fact, until 1931 housing was primarily a private sector activity supported by building societies, the ancestors of savings and loans, which accepted savings deposits and made mortgage loans (Lea 1996). With the crisis of the great depression many investors left the market and the savings and loans failed to meet the housing needs. Further, cities faced tremendous physical and financial problems that local governments were incapable of dealing with.

The federal government's role in housing thus began in response to the crisis of the Great Depression. Initially, the federal role was consistent with fiscal federalism notions in that the first housing policies that were developed were macroeconomic stabilization policies and redistributive policies. The macroeconomic stabilization policies included three important innovations in housing finance: the creation of Federal Home Loan Banks which increased liquidity and reduced interest rate risk; deposit insurance which increased funds availability; and mortgage insurance through the creation of the Federal Housing Administration (FHA) which pooled risk and thus increased affordability and competition. The federal response to the Great Depression also spawned the public housing program as a redistributive policy that would provide in-kind housing subsidies to the most needy households although it was not implemented as such until after World War II.

The initial success of these programs reinforced the idea of a federal role in housing policy but over the course of the 20th century these programs faced some difficult challenges and by the 1980s, federal housing policy was severely criticized. The FHA had a profound, perceived most often as negative, affect on

the physical environment of cities. As Hays points out, "Blacks were first officially and later unofficially segregated by the FHA, and the spiral of decline affecting central-city neighborhoods was accelerated by the FHA's refusal to underwrite mortgages in such areas" (Hays 1995).

Similarly, the public housing program tended to cluster the poor creating what became known as "pockets of poverty." This occurred despite the fact that the permanent public housing program attempted the devolution of authority by establishing a means for local control. The program required that public housing authorities be created by special legislation in each state and that the local governments be given a role in site selection through cooperative agreements (Hays 1995). The design of the program, however, left very little decision-making to the local public housing authorities such that the only real local decision to be made was site selection but local political pressure with regard to site selection was so overwhelming that even here housing authorities had little choice but to local new units in areas already occupied by the poor.

In the 1960s the federal government initiated a number of new housing programs which experimented with new ways of providing affordable housing but none of these were largely success nor did they garner significant political support. Rising housing costs and a declining supply of affordable housing beginning in the 1970s further highlighted the inadequacy of federal housing policy. A conservative attack on federal housing policy finally led to a retrenchment in federal housing policy during the Reagan administration. The lesson learned by this point was that local governments lacked the resources to

implement a housing policy and the federal government lacked the ability to tailor specific housing policies to the needs of individual cities. Therefore, neither level of government has been shown to be adequately equipped to institute a successful housing policy.

Intergovernmental grants are an important tool allowing the federal and local levels of government to cooperate in a federal system. Unfortunately, there is a lack of understanding of how grants affect spending and overall economic efficiency. This lack of a consensus on the theoretical implications of intergovernmental grants makes it difficult to understand how and why grants are implemented. The creation of the HOME Investment Partnerships Program as a housing block grant, however, is clearly a response to the past failures of housing policy and an attempt to combine the revenue raising advantages of the federal government with the public good and service provision advantages of the local levels of government. Such a grant would generally be seen as a means for improving the overall tax system but the specific details of the program are inconsistent with such a purpose.

The literature emphasizes three potential roles for intergovernmental grants. The internalization of spillover benefits to other jurisdictions is accomplished in theory through conditional matching grants which provide the incentive for jurisdictions to engage in activities that have spillover benefits. The matching amount should reflect the extent of spillovers. Fiscal equalization across jurisdictions can be accomplished through grants that transfer funds based on an equalization formula that incorporates fiscal need and capacity. An

improved overall tax system may be accomplished through unconditional transfers from the federal government to states and localities (Oates 1999). If the HOME program were simply a means for addressing the tax assignment problem and thus allowing for an improved housing policy, we would expect it to be an unconditional, non-matching grant, with a per capita distribution. Instead the program has specific regulations that are more consistent with categorical (conditional) grant than a block grant, it requires a 25% match from the local jurisdiction, and it is distributed based on a formula of housing need and fiscal capacity. This design confuses the theoretical role of the grant and thus raises a number of questions about its purpose and affect on economic efficiency. It also confuses the policy frame in which it should be viewed - is it a redistributive policy or a developmental policy?

Public choice theory predicts that cities will not engage in redistributive policy with local resources but it has little research has examined whether cities will chose redistributive activities over developmental activities when given the choice in spending federal resources. Waste argues that "many mayors and policy entrepreneurs have reframed redistributive policies/programs so that they are widely viewed as development or allocational policies" (Waste 1989). Basolo also argues that "redistributive policies may be viewed as advantageous to local residents based on the presentation of the policy by an elected official" (Basolo 1998).

Fiscal federalism theories based on economic efficiency concerns are not the only theories that address the assignment of functions among the levels of

government. Also relevant to understanding the devolution of affordable housing policy through the HOME program and Low Income Housing Tax Credits is the theory of "laboratories of democracy" and political theories of participation. It has long been recognized that a federal system provides the opportunity for individual local jurisdictions to experiment with different policy approaches and thereby promote technical progress without the threat of failure to the larger population. As Justice Louis Brandeis wrote in 1932:

There must be power in the States and the Nation to remould, through experimentation, our economic practices and institutions to meet changing social and economic needs...It is one of the happy incidents of the federal system that a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country (Osborne 1988).

Given the failure of the federal housing policy it makes sense that we should at the end of the 20th century turn to the States and local governments to devise a better approach to housing in the United States.

Political scientists generally presume that decentralized political systems are more conducive to citizen participation. Inman and Rubinfeld find "that both citizen influence and effort increase as the size of government declines" (Inman and Rubinfeld 1997 cited in Oates 1999). Further cross-national studies of economic development generally support decentralization as a means for economic growth as Oates summarizes: "Development policies that are sensitive to particular regional or local needs for infrastructure and even human capital are likely to be more effective in promoting economic growth than are centrally determined policies that largely ignore these geographical differences" (Oates 1999). All federalism theories support the notion that institutional structure is an

important factor in policy design and implementation, a notion that has considerable support.

New Institutionalism

The general contention of the new institutionalism paradigm is that institutions matter. Institutions are frameworks within which human interaction occurs. Institutions include both formal constraints such as constitutions, statutes or judicial rulings and informal constraints such as norms of behavior, cultural traditions, or codes of conduct that humans devise to shape their interactions. Institutions are not the same as organizations although they are closely related. Organizations develop to take advantage of the opportunity sets that arise from the existing set of constraints in society and in the course of attempts to accomplish their objectives are a major agent of institutional change (North 1990).

New Institutionalism goes beyond the traditional view of the bureaucracy as actor and sees the bureaucracy as also acted upon, influenced by the social, economic and political context but also powerfully shaping that context (Frederickson 1999; Kettl 1999). New institutionalism denies that policy can be separated from administration. Key to the scholarship on new institutionalism is James Q. Wilson's *Bureaucracy* and March and Olsen's *Rediscovering Institutions* that focus on the structure within which individual and group behavior occurs (March and Olsen 1989; Wilson 1989). Both see the limits of economics and market logic in accounting for institutional behavior and demonstrate how rules, roles, norms and expectations are socially constructed (often as organizations) to

constrain individual and group choice and behavior (Frederickson 1999). According to March and Olsen, "Political democracy depends not only on economic and social contributions but also on the design of political institutions" (March and Olsen 1984). Terry M. Moe has contributed to institutionalism by placing rational choice theories within the institutional framework. By doing so he incorporates principle-agent theory and the problems of information asymmetry and builds on the argument of bounded rationality articulated by Herbert Simon (Kettl 1999; Moe 1990; Simon 1947). Douglass North emphasizes that institutions are not necessarily efficient but are path dependent and thus,

History matters. It matters not just because we can learn from the past, but because the present and future are connected to the past by the continuity of a society's institutions. Today's and tomorrow's choices are shaped by the past. And the past can only be made intelligible as a story of institutional evolution [North 1990, vii].

Thus, the institutional level of governance as outlined by Lynn includes not only formal frameworks such as the federal structure but also context such as history and cultural influences as embodied in ideology. Further, the institutional level of governance also includes the structure of formal authority and the organization of agencies which although more mutable than other aspects of the institutional level nevertheless represent important constraints on human interaction.

Form of Government

Progressive reform efforts of the early 20th century played a significant role in changing the structure of formal authority at the local level. In an effort to improve efficiency and effectiveness, reforms sought to depoliticize and

professionalize municipal governments. One of the primary goals of the reform movement was to separate politics from the administration of government, a theme which occurs across many theories of how to improve government performance. This was primarily accomplished by changing the form of government from one based on the federal government structure to one more consistent with the structure of a corporation. The typical form of city government at the turn of the twentieth century, the mayor-council form, was largely associated with machine politics and party patronage despite its advantage in maximizing representation. The reform movement sought to move from the mayor-council form of government to the council-manager form. Under the council-manager form of government the council is the governing body and includes the mayor or president who presides over the council. The manager is hired by the council to oversee the day-to-day administrative operations. Usually, the mayor is the political head but does not have the power to veto legislation. The council-manager form of government was largely promoted as a means for separating politics from administration.

The mayor-council form which remains in a number of cities parallels the federal government with an elected legislature -- the council and a separately elected executive the mayor. The authority of the mayor can vary drastically and has resulted in a strong-mayor versus weak-mayor dichotomy within the mayor-council form. Under strong-mayor forms the mayor is in charge of overseeing day-to-day operations and has veto power over acts of the legislature. Sharp finds

the more politicized character of the mayor-council form is responsive to interest-group activism and mass political pressures (Sharp 2002).

The council-manager form is promoted as being more efficient and effective due to greater professionalism from the hired city manager. On the other hand it appears that cities with the council-manager form are less responsive (Feiock, Jeong, and Kim 2003) and may experience less citizen participation (Spending limits work: Just ask albuquerque 2002). More recent reforms have sought to further address these issues. H. George Frederickson, Brett Logan, and Curtis Wood have recently highlighted post-progressive era reforms that have taken place in mayor-council cities. These include an increased use of appointed professional chief administrative officers (CAO) and longer terms for both mayors and council members which they believe indicate a trend toward greater political stability and greater administrative effectiveness in mayor-council cities (Frederickson, Logan, and Wood 2003). Other scholars have also identified a move in the council-manager forms toward greater responsiveness by adding a directly elected mayor. These are referred to as adapted cities (Frederickson and Johnson 2001).

A recent study by Richard C. Feiock, Moon-Gi Jeong, and Jaehoon Kim examines how the form of government can affect policy instrument choices. They find, "The form of government influences development decisions through its influences on incentives -- and thus the propensity to respond to political and economic changes in a morally hazardous manner" (Feiock, Jeong, and Kim 2003). The impetus for their study is that "[w]hile a growing literature explores

how context can affect the choice of policy instruments, most attention has narrowly focused on comparison of markets with public bureaucracies. Moreover, this work has focused on national-level policy, to the neglect of instrument choices at the local level" (Feiock, Jeong, and Kim 2003). They compare policy instrument choices for development policy between the council-manager form of government which is presumed to allow for greater consideration of long-term interests and the mayor-council form of government which "has been regarded as responsive to popular demands and less likely to insulate local decisions from demands and pressures of the community" (Feiock, Jeong, and Kim 2003).

Their findings reveal that the council-manager form of government constrains administrative officials' by substituting low-power bureaucratic incentives for high-power electoral incentives and that the credible constraint of morally hazardous or opportunistic behavior can enhance efficiency in development policy. They attribute administrators and elected officers ability to resist opportunistic behavior to the separation of politics and administration embodied in the council-manager form. They further argue, "The separation of administration from electoral control enhances efficiency because it removes high-power incentives for executives, reduces transaction costs, and makes commitment more credible for elected officers" (Feiock, Jeong, and Kim 2003).

There appear therefore to be important differences in policy choices between council-manager cities and mayor-council cities. Tao suggests that development activities are used as an alternative to redistribution in council-

manager cities (Feiock, Jeong, and Kim 2003; Tao 2001). Feiock, Jeong and Kim also state that "[t]he influences of strategic planning on development policy were evident in council-manager cities, but not in mayor-council communities" (Feiock, Jeong, and Kim 2003). Many regret the fact that reformed institutions operating under the council-manager form of government are intended to make government less responsive to citizens. More recent reforms have created the adapted model which is intended to make the council-manager form more political. Non-reformed cities operating under the mayor-council form are more responsive but the cost of responsiveness is high: "It results in costly development choices that are largely symbolic and ineffective at the ostensible purpose of creating jobs" (Feiock, Jeong, and Kim 2003).

Another important dimension of the form of government is boundary delimitation in terms of single-member districts or multimember districts. Single-member districts strengths include close ties between representatives and constituents, accountability of representatives to voters, and constituency service. Single-member districts are more political than multimember districts. The disadvantages of single-member districts include the need to redraw boundaries and they tend to over-represent the majority party.

Multimember districts have the advantage of being able to generate more balanced representation both in terms of under-represented groups such as women or minorities and in political parties. At the local level, instead of political parties, multimember districts may allow greater representation of special interest groups. A criticism of the multimember district is that it tends to dilute the

accountability of individual representatives. Also, multimember districts may not improve the likelihood of groups concentrated within a given territory to be elected. The Voting Rights Act encourages the creation of districts where racial and ethnic minorities predominate. As a result blacks and Hispanics are more likely to be elected from single-member districts (Grofman, Handley, and Niemi 1992; Handley Multimember districts: Advantages and disadvantages 1997, Single-member districts: Advantages and disadvantages 1997; Kousser 1999).

Public Authorities and Quasi-Governments

A final important consideration under the institutional level of governance is that of the government organization. While government has traditionally been organized hierarchically and periodically reorganized to meet new and changing needs, a more recent trend reveals that new governmental entities and quasi-governmental hybrid organizations are increasingly being created to deal with a number of different types of government functions. Most of these organizations serve a single function but there are a great variety of such organizations serving functions from water and sewer, to community development, to resource preservation. As many of these organizations are autonomous or semi-autonomous entities their use in providing goods and services raises a number of questions about democracy and accountability.

The 2002 Census of governments reports an almost three fold increase in the number of special district governments since 1952 - a total of 35,052. Special district governments are usually single purpose entities called districts or authorities. The most common functions include natural resource protection, fire

protection, water and sewer provision and housing and community development. To be counted as a special district by the census an entity must have governmental character and substantial fiscal autonomy. There are a number of authorities which are considered to be subordinate agencies of general purpose government due to their close legal relationship with those governments and thus are not included in the count of special districts. Although these subordinate agencies may not have significant fiscal autonomy usually determined by the presence of a dedicated revenue stream and or the ability to levy taxes they do have considerable autonomy in policy-making decisions. Unfortunately because of the great diversity in function and legal status of these organizations, there is little known about the size and scope let alone the implications of such entities. Even less is known about entities which can appropriately be called "quasi-governmental instrumentalities" than about special district governments.

Ronald C. Moe has recently attempted to categorize the quasi-government at the federal level and says, "[w]riting about the quasi government is like entering a thicket with little hope of escaping unscathed. The truth is that the quasi-government, virtually by its name alone and the intentional blurring of its boundaries, is not definable in any precise way" (Moe 2001). Moe refers to these entities as hybrid organizations because they possess legal characteristics of both the government and the private sectors. An example of such a hybrid is the government sponsored enterprise (GSEs) of Fannie Mae which is an independent authority that purchases mortgage loans and packages them into mortgage-backed securities. Fannie Mae has been instrumental in creating a secondary market for

mortgages thereby drastically increasing the availability and reducing the cost of mortgage credit. While there are hundreds of such organizations at the federal level alone, the phenomenon of quasi-government is not limited to the federal level.

There are a number of theories to explain the creation of special district governments. While the research on special district governments does not necessarily include the lessor understood quasi-governmental entities, the differences between the two are in some cases very subtle and often definitional such that the theories have considerable merit in also explaining the creation of hybrid organizations. The theories on special district government genesis can be divided into two categories: instrumental theories and governance theories (Bourdeaux 2002).

Instrumental theories see public authorities as a means for solving a particular policy problem while the governance form is tangential. The most prevalent theories view public authorities as a means for circumventing debt limitations. That is, by creating a public authority with the authority to issue debt the general purpose government can continue to provide services at the level demanded without increasing the amount of debt they themselves issue and thus avoid state imposed debt limitations. Also, important are theories that see public authorities as solving a problem of scale. Existing jurisdictional boundaries often do not appropriately match the demand for public services. Public authorities may be created to more appropriately match taxpayers to the benefits of a good or service or to increase efficiency through economies of scale. Finally, public

authorities may be used for political illusion. That is, by creating a public authority the general purpose government can take credit for higher levels of service while moving the cost of that service "off budget" (Bennett and DiLorenzo 1983).

Governance theories, on the other hand, see governance as the primary reason public authorities are used. The key component in these theories, consistent with the theme of separating politics and administration, is that elected officials create the public authority for its ability to resist political influence or otherwise be "buffered" from politics. One theory is that public authorities are used to block the transfer of funds. In this scenario elected officials are willing to give up political control in order to guarantee to their constituents that a certain revenue stream will flow to a particular public service and not be siphoned off for other uses. In this way the elected official can establish a "credible commitment" with constituents who may then be willing to commit more revenues to a certain function. Related to the idea of credible commitment is Frant's argument that removing a function from political control can change the type of incentives that managers face and therefore improve the capacity to serve more low profile functions (Frant 1997). This is particularly relevant to such functions as infrastructure maintenance or for example affordable housing maintenance whereby the elected official may face high powered incentives to build a project but little incentive to maintain it. Buffering the public authority from electoral pressures essentially changes managers incentives from high powered to low

powered thus creating the capacity to better balance the budgetary needs of building new versus maintaining existing assets (Bourdeaux 2002; Frant 1996).

Beyond the blocking of transfers public authorities are seen to improve management by virtue of buffering managers from politics. Harking back to the ideas of progressive era reformers, public authorities represent a professional alternative to the government agency where managers are more likely to be hired on merit than patronage and do not have to deal with conflicting political forces. Only one set of interests are represented in the authority and thus authorities do not face the traditional difficulties of public management:

Goals are often clear, incremental performance results are regularly used in evaluating effectiveness, and the pressure to achieve immediate results is at times far less than it is in other public agencies and in many business corporations... If we look more closely at managerial strategies within public authorities, we find that many of them... behave in ways not unlike the well-run private corporation (Doig 1983).

The growth in public authorities and quasi-governmental entities raises a number of concerns about democratic accountability. Moe argues that whether the growth in the quasi-government should be encouraged or resisted largely depends on the inquirer's adherence to one of two different public management paradigms. Constitutionalist view public management as distinct from private management in that government action must have its basis in law. Hierarchical governance is designed to ensure accountability which is more important than performance and results. The public manager as a member of the executive branch of government is employed to execute the law, therefore, legal process and political accountability should take precedence over efficiency and results. The constitutionalist opposes quasi-governmental hybrids because he believes that

they are instruments of relatively small constituencies whose interests are promoted over those of the whole population. On the other hand, the entrepreneurial public management paradigm views government and the private sector as fundamentally alike and the main objective of each should be results. Entrepreneurs oppose hierarchical structures and instead favor flexibility, competition and managerial risk taking and therefore view quasi-governmental hybrids as an attractive option (Moe 2001).

STRATEGY DEVELOPMENT: THE MANAGERIAL LEVEL OF GOVERNANCE

The managerial level concerns the elaboration of strategies by organizational actors. Several areas of research are important to understanding the managerial level of governance. These include traditional theories of public administration, theories of management reform especially new public management, transaction cost economics and theories of public goods, and the theory of networks.

New Public Management

New Public Management (NPM) has grown largely out of the worldwide management reforms with particular attention to the success of the New Zealand reforms. A less sweeping U.S. version has been highly popular in some circles as evidenced by former Vice-President Gore's Reinventing Government initiative (National Performance Review) as well as local initiatives. The New Zealand style management reforms relied heavily on the separation of policy and administration embodied in the parliamentary system (Kettl 1999). It has been much less successful in federal systems such as Australia than the more

centralized New Zealand. According to Kettl, "American institutions and traditions simply do not fit the requirements of many NPM strategies and tactics."

Similar types of management reforms have occurred throughout the world, a phenomenon that has come to be referred to as the global public management revolution. These reforms in public management have been attempted in order to increase productivity and improve government performance. Most of these reforms have been characterized as attempts at marketization - what Donald F. Kettl refers to as "using market-style incentives to root out the pathologies of government bureaucracy"(Kettl 2000). According to Kettl, these reforms have followed two different models. One based on "new public management" or the Westminster model most aggressively pursued by New Zealand has as a basic premise the separation of policy and implementation or the separation of the purchase and production functions. That is elected officials should be responsible for deciding what is to be done and then rely on the most efficient and effective producers to get it done. Inevitably it was an effort to replace government bureaucracy and authority with the market and competition. The second model the "reinventing government" or the American model continued to blur the functions of policy making and implementation. Instead of trying to shrink the role of government by replacing it with private players in the market, the American reforms sought to make government act more like the market. One important aspect of this effort has been the devolution of administrative responsibility and policy decision-making to the states and local governments (Kettl 2000).

The New Public Management literature argues that government performance can be improved by decentralizing, focusing on the customer, and separating decision-making from goods and service provision. New Public Management (NPM) advocates a market-based system focused on "decentralization, competition, deregulation, load-shedding, privatization, user fees and 'enterprise' culture" (Rosenbloom 1993). This includes 'reinventing government' in the US which praises market mechanisms and private sector solutions to the problems of government waste and inefficiency (Osborne and Gaebler 1992; Pollitt and Bouckaert 2000). There is much continued debate as to whether such a reform movement really exists, the efficacy of the changes and whether or not there has been convergence between the two models.

One of the major criticisms of new public management is that it assumes that government and the private sector are essentially alike. Many scholars dispute this assumption claiming that public outputs are harder to quantify and measure, that the public sector holds different values and thus objectives than the private sector, and that public sector managers may need to satisfy multiple principals (Dixit 1997; Moe 1994). The proposition that raises the most opposition is that the primary objective of government should be performance. Many believe that the primary objective of government should be to protect the rights of the citizenry against possible arbitrary government action. Critics see new public management as a threat to democracy. For example Box et. al. criticize the NPM for replacing the voter with the customer:

The result is a distancing of the citizen from her or his public-service institutions and a tacit assumption that interactions in the public sphere

(determining what issues will be on the public agenda and how they will be addressed, for example) should also be left to the invisible hand of the market (Box et al. 2001).

Ultimately, these criticisms come down to the question of accountability and control.

Unfortunately some of the more interesting ideas and perhaps more fruitful theoretical pursuits highlighted by such reforms have been largely overlooked in the public management literature. The clear theme that emerges from these worldwide reform efforts is the assumed dichotomous structure of governance. That is, underlying each of these reforms is a normative assertion that government has become too bureaucratic, bureaucracy being a hierarchical structure of command and control with too little of the benefits of the market. Arguments for government reform are generally based on the idea of a spectrum of governance structures with hierarchy on one end and market on the other. The goal, then of any reform effort, is to situate institutions properly on the spectrum to achieve the most efficient governance structure. Such a framework for thinking of organizational changes often obscures the possibility of alternative governance structures which may be superior to both markets and hierarchies. One possible alternative which has been suggested and for which there is some empirical evidence of support is the network structure. The network structure, in theory, borrows the strengths of both market and hierarchy without the disadvantages of either.

Governance Types

Technology and technological innovation are known to drive and shape economic activity. Technology in terms of organizational structure is also an important factor (independent variable) in explaining organizational performance. Technology includes methods used to coordinate activities and motivate performance - every aspect of organizational structure and design (Stanbury and Thompson 1995).

Markets

The market has long been heralded as the most efficient means of organizing economic activity. Individuals free to pursue their own self-interest have consistently outperformed other forms of economic organization. In the market form, the price mechanism governs relationships automatically adjusting based on supply and demand for different goods or services. Competition among a large number of small firms ensures that the price mechanism works properly and resources are allocated in the most efficient manner. The problem with the market is that even under perfect competition it may fail to allocate resources efficiently in the production of public goods. Markets also fail when perfect competition is not present. In the case of public goods, the government becomes responsible for providing public goods. In other situations firms are created to overcome the increased transaction costs that develop as a result of less than perfect competition.

Hierarchy

Both of these situations, government provision and firm provision represent an alternative governance structure, the hierarchy. Under a hierarchical governance structure organization becomes the mechanism to coordinate the production of goods and services. According to Williamson, the hierarchy has important efficiency advantages over the market. These include asset specialization and economies of scale. But the hierarchy also has several disadvantages including loss of high powered incentives, loss of access to outside customers, loss of strategic flexibility, and higher labor costs (Williamson 1985). It is for these reasons that reformers have advocated reinventing government through marketization. Under the New Zealand model government decides on the allocation of resources but relies on the market for the production of public goods by acting as a buyer of goods in the market. Similarly, the American model has attempted to 'steer rather than row'. Osborne and Gaebler maintain that government has various tools with which to steer others (primarily the private sector) to produce goods and services. These tools include contracts, quasi-markets and franchises (Osborne and Gaebler 1992).

Economics of Public Goods

A perfectly competitive market is unlikely to allocate resources efficiently in the production of public goods and services due to externalities. Externalities can take four forms: external economies of production occur when action taken by economic unit results in uncompensated benefits to others for example a firm trains workers who then go to work for another firm. In this case the gains to

society are greater than the gains to the firm; external economies of consumption occur when action taken by a consumer results in uncompensated benefit to others. for example homeowner maintenance can improve value of neighbor's land; external diseconomies of production occur when action taken by economic unit results in uncompensated costs to others. The classic example is pollution; and external diseconomies of consumption occur when action taken by a consumer result in uncompensated costs to others. the primary example is not being able to keep up with the Jones (Mansfield 1991).

As a result of externalities the market will produce less public goods than consumers are willing to pay for. This is referred to as allocative inefficiency (Stanbury and Thompson 1995). A public good has two characteristics. It is nonrival and nonexclusive. Nonrival means that the marginal cost of providing the good to one additional person is zero such as National defense. Nonexclusive means that people can not be excluded from consuming the good. This argument is the market failure argument and the justification for why government should step in and provide public goods.

Affordable housing and other social services to the poor do not meet the standard definition of a public good. They are not nonrival -- for each additional person served there is a marginal cost. They are not nonexclusive -- individuals can and are excluded from these services. These goods and services (such as housing and social services) are distinguished from pure public goods by the term *publicly provided goods and services*. We have chosen to have government provide these goods because they produce external economies of consumption.

Consumption of these services by beneficiaries presumably produces benefits to society. The primary role that government plays in the delivery of these services is to disaggregate the customer from the beneficiary. That is the government allows for voters/taxpayers (customer) to buy goods or services that directly benefit others (beneficiaries) but their consumption of such services has external economies of consumption which benefit the taxpayer (customer).

Advocates of reform in the U.S. therefore have argued for relying on the price mechanism over the organization mechanism, for being customer-focused, for decentralizing and reducing the size of government. The shortcoming of these efforts to 'create a market' is that they only overcome the failures of the market in efficiently allocating resources for public goods provision they do not overcome the failures of the market resulting from team production externalities such as shirking, opportunistic behavior and moral hazard or the problems of thin market with only one buyer which raises transaction costs due to information asymmetry. These are the primary reasons that firms or hierarchical governance structures are created in the private sector. As a result, we should expect that marketization efforts by government will only be successful for the provision of goods and services which can be solely produced by a single firm. These are goods and services that are straight forward and for which goals and outcomes can be clearly articulated such as garbage collection. This proposition is supported by the literature on contracting out which argues that contracting works best with low asset specificity and low complexity (Globerman and Vining 1996). On the other hand marketization efforts should be expected to have little success in the

provision of more complicated goods and services those for which joint production is required. As Sanford Borins states, "In areas where coordination is needed, it is becoming increasingly evident that informal coordination and partnerships are a better alternative than central coordination" (Borins 1995).

The Alternative: Network

Another important theoretical framework that promises to reshape the public administration discipline is network theory. The network metaphor is an important metaphor for understanding the formal and informal linkages among entities that made up the decentralized administrative apparatus. This metaphor represents the importance of interdependence within the disarticulated state. As O'Toole describes,

...networks include interagency cooperative ventures, intergovernmental program management structures, complex contracting arrays, and public-private partnerships. They also include service-delivery systems reliant on clusters of providers that may include public agencies, business firms, not-for-profits, or even volunteer-staffed units all linked by interdependence and some shared program of interests (O'Toole 1997).

Of particular relevance are attempts to explain cooperation in the absence of hierarchies or markets. Elinor Ostrom's *Governing the Commons: The Evolution of Institutions for Collective Action* demonstrates how self-organization and cooperation can and does occur without direct regulation by a centralized authority. "Most of the institutional arrangements used in the success stories were rich mixtures of public and private instrumentalities" (Ostrom 1990). Also important are Williamson's transaction cost analysis in *Markets and Hierarchies*, Axelrod's use of iterative game theoretics in *The Evolution of Cooperation*, and

the work of Walter Powell, Brinton Milward, and Fritz Scharpf (*Axelrod 1984; Milward 1994; Powell and DiMaggio 1991; Scharpf 1993; Williamson 1975*). Of particular relevance for this study is the work of Milward and Provan which distinguishes between "network governance structures based on contractual ties and interorganizational networks held together by historical patterns of collaboration, personal relationships and trust." They say, "while the principal-agent model appears to fit the hollow-state contracting relationship, it seems less useful for explaining more informal, trust-based ties that typically hold a network together over time. Clear principal-agent relationships and trust-based ties facilitate network governance" (Milward and Provan *How networks are governed* 2001).

Decentralization in an effort to improve government has led to a great deal of government services being contracted out to a network of organizations -- a situation that Milward and Provan refer to as the "hollow state." (Milward and Provan 2000) Such a situation may represent an alternative governance structure to either markets or hierarchies. The network is inherently a weaker form of social action than either the market or the hierarchy. Whereas price governs the market and organization governs the hierarchy, the network is largely governed by trust and reputation although formal linkages in terms of contracts and financial commitments may be present as well. A network governance structure may arise when governments contract out the production of public goods and services that are more complex and involve more than one organization in their delivery. A network is a hybrid of the market and hierarchy governance types,

which as Jeffrey H. Dyer has shown in his study of US and Japanese automakers, can realize the advantages of the market and the hierarchy without the disadvantages of either (Dyer 1996).

The implications of the network structure are that command and control mechanisms will not work and coordination not competition is an important governing factor. When command and control relationships are not present the concern for accountability should be diminished. Robert Behn argues that holding someone accountable basically means punishing them for nonperformance (Behn 2001). It is characteristic of a principal-agent relationship in which one party monitors the other. Yet as cooperation becomes more important, so does mutual "responsibility." Dyer finds that information sharing among network members is an important component of success. Also Milward and Provan find that networks are more effective when managed or coordinated by a strong core agency called a "network administrating organization." Organizations in a network structure must cooperate to deliver goods and services, but in the public sector as Milward and Provan point out there is "little evidence that central governments know very much about how to govern or manage networks" and there is also little evidence that we know how to manage decentralized programs at the local level (Milward and Provan 2000). They also state, "A critical empirical question is the degree to which they [network organizations] operate autonomously or are steered by the state"(Milward and Provan 2000).

Cooperation

The role of government in providing goods and services not strictly definable as public goods but which are none the less desirable by a majority of the population due to externality benefits, is to engender cooperation. The traditional means government has adopted for doing such is to act as purchaser of services through a contractual arrangement. To the extent that government becomes a monopoly buyer and the producers are dependent upon the government contract for survival rather than serving to create cooperation the government has merely expanded its hierarchy to include additional players. (See models of bureaucracy by Beetham). That is, the principal-agent controls which are utilized to ensure compliance serve to 'bureaucratize' the private sector rather than 'marketize' the public sector. The need for ensuring government accountability has led to the assumption that government must control the actions of actors receiving public resources. This is consistent with Hobbes pessimistic view of human nature. Hobbes conclusion was that a paternal government was required to engender cooperation. He began his assumption with the state of nature which is a state of war where every man is selfishly for himself and all is chaos unless the state intervenes as the third party enforcer.

Axelrod shows that cooperation can not only occur in the absence of a third party enforcer but can evolve into a stable system. "The key factor is that the participants know they will be dealing with each other again and again"(Axelrod 1984). Axelrod says, "The importance of future interactions can provide a guide to the design of institutions. To help promote cooperation among

members of an organization, relationships should be structured so that there are frequent and durable interactions among specific individuals" (Axelrod 1984).

Further:

The foundation of cooperation is not really trust, but the durability of the relationship ... Whether the players trust each other or not is less important in the long run than whether the conditions are ripe for them to build a stable pattern of cooperation with each other... [and] ... Just as the future is important for the establishment of the conditions for cooperation, the past is important for the monitoring of actual behavior ... The role of time perspective has important implications for the design of institutions (Axelrod 1984).

Rapid turn over by elected officials or executives can lessen the possibility of cooperation.

Elinor Ostrom in studying common pool resource problems found, "none of the successful cases involved direct regulation by a centralized authority. Most of the institutional arrangements used in the success stories were rich mixtures of public and private instrumentalities" (Ostrom 1990). Putnam was afforded the unique opportunity to study the creation of various regional governments that were to be built from scratch in each of Italy's diverse regions. Thus, Putnam and his colleagues engaged in a long-term, systematic study of how institutions develop and adapt to their social environment that lasted nearly 25 years. For Putnam, the study culminated in the publishing of the widely popular *Making Democracy Work: Civic Traditions in Modern Italy* in which he claims that the single most important factor in explaining institutional performance is the existence of a civic community (Putnam 1993). Putnam later points out that at a time when liberal democracy has swept the battlefield, both ideologically and geopolitically, growing numbers of citizens within the established democracies

are questioning the effectiveness of their public institutions. He concludes, “In America, at least, there is reason to suspect that this democratic disarray may be linked to a broad and continuing erosion of civic engagement that began a quarter-century ago” (Putnam 1993). Perhaps the most intriguing contribution that Putnam has made to the theory of democracy is the application of a theory of social capital, which he undertakes in Chapter 6 of *Making Democracy Work*. Putnam attempts to explain that civil society is important because civil engagement builds social capital. Social capital refers to trust, norms, and networks that facilitate coordinated action. James Coleman, whom many credit with the original theory of social capital states, “social capital is productive, making possible the achievement of certain ends that would not be attainable in its absence...” (Putnam 1993).

Putnam articulates his theory of social capital within the framework of the dilemma of collective action. The dilemma is basically that everyone would be better off by cooperating. In the absence of credible sanctions against defection, no party can be assured that the other will not be tempted by the incentive to shirk and become a free-rider, leaving the first party with the sucker’s pay-off. In other words, if one cooperates and the other does not the first is worse off than if there was no cooperation and the second is better off. Therefore, the stable equilibrium is where no cooperation occurs, despite the fact that both would benefit from cooperation. Putnam argues that there are only two solutions to this dilemma of collective action: third-party enforcement or social capital. (Axelrod, as previously discussed, argues that repeated interaction is a third).

In the first case, the classic Hobbesian solution, a third party such as the state acts as a coercive enforcer of the cooperative agreement. The problem is that this solution itself is not necessarily stable. There are still incentives for various parties to alter their behavior, especially the third party. The other problem is that third-party enforcement is expensive. Putnam's theory of social capital posits that through civic engagement individuals develop social trust that promotes cooperation among people holding similar values or social capital. Because of certain underlying norms held by and civic networks among people who associate with each other they have a certain safety net that enables them to risk "brave reciprocity." Analogous to capital wealth, those with more wealth are more willing and able to take financial risks for financial gain, those with more social capital are more willing and able to take cooperative risks for cooperative gain. In this sense, Social Capital is more than social trust. It is social norms of reciprocity and networks of civic engagement.

Developing Measures of Governance Type

Although the interest in governance theories has been strong recently the number of empirical studies remains limited. Those studies that do exist focus primarily on specific details or institutional factors which when employed affect performance such as leadership or performance measurement. Alternatively they focus on issues wholly contained within a single governance type. Although some studies seek to study the comparative advantage of the market over the hierarchy or vice versa very few include the network as an alternative when analyzing governance and performance. For this reason, there are few measures

of governance provided by the literature which will allow for the categorization of certain programs or policies into the theoretical governance types: market, hierarchy, or network.

The current research will explore through in-depth interviews and documents review specific measures which may be used to categorize a government policy or program into one of the three types. Two previous studies provide some guidance in this endeavor: Mark Considine and Jenny M. Lewis' study of governance types in four OECD countries and Jeffrey H. Dryer's study of Japanese Keiretsu Alliances. Considine and Lewis identify four *ideal* types based on recent phases of public management reform in the 1980s and 1990s including recent theories of the network. The four types include: procedural, corporate, market, and network. Procedural governance corresponds to hierarchy where the source of rationality is law, the form of control is rules, the primary virtue is reliable treatment and the service delivery focus is universal. The corporate governance type derives from the view taken in the 1980s that public organizations should be run as "corporations" and public managers should behave like business managers. The source of rationality is management and the form of control is plans. It is goal driven and targets specific groups for service delivery. The market governance type is the ideal type of the 1990s in which a "quasi-market" takes the place of traditional forms of coordination. The source of rationality is competition; the form of control is contracts. It is cost driven and the service delivery focus is on price. Finally, network governance is identified with culture being the source of rationality, co-production the form of

control, flexibility as the primary virtue and clients being the focus for service delivery.

Considine and Lewis then seek to test the existence and explanatory power of these types utilizing factor analysis on data gathered through structured interviews with front-line staff in Australia, Britain, the Netherlands, and New Zealand. They find evidence of three distinct governance types among the four countries. While they find evidence of both the procedural and the network governance types, they find that neither the market nor the corporate governance type exist in isolation as theorized but instead find the existence of a new governance type which is a combination of the two. They term this new type "enterprise" governance and state "these two orientations toward public service-delivery [corporate and market] are in fact one single approach so far as these officials are concerned"(Considine and Lewis 2003). These findings support the proposition that front-line workers and their views toward work are impacted by different governance approaches adopted by managers. The current research is an attempt to 'measure' these types as they exist in the management of local affordable housing policy and to determine their relationship with government performance.

The measurement of governance type is further guided by the literature in organizational science and particularly Dyer's study which compares the governance structure of Japanese and U.S. automakers. The term 'governance structure' as utilized here and in the literature on management science and transaction cost economics is consistent with the conception of a 'governance

type' as conceived by Considine and Lewis¹. Dyer states, "Governance structures may be defined as institutional arrangements which govern the exchange by controlling opportunism. The purpose of governance mechanisms is to provide, at minimum cost, the coordination, control, and 'trust' that is necessary for transactors to believe that engaging in the exchange will make them better off" (Dyer 1996).

Utilizing data gathered from surveys with the executives of major auto manufacturer suppliers, Dyer finds not only systematic differences in the governance structures of Japanese and U.S. automakers but that these differences affect performance. Dyer measures governance structure primarily by the level of vertical integration of a firm broken down by the percentage of total component costs that are 1) manufactured internally; 2) provided by a partner supplier defined as one in which there are fewer than three possible suppliers for a component; and 3) provided by arms-length suppliers those in which there are more than three potential suppliers. Internally manufactured components represent a hierarchical governance structure while arms-length suppliers represent a market structure and partners represent a hybrid/alliance structure which is comparable to the network governance type in the public management literature. While the U.S. governance structure is primarily bi-modal characterized by the make-buy decision of in-house production versus contracting-out, the Japanese structure relies to a greater extent on alliances with less in-house or contracted-out components.

¹ The term governance type is preferable to 'governance structure' in discussions of public organizations in order to avoid confusion with 'government structure.'

The alliance structure realizes the advantages of the hierarchy without the disadvantages. The alliances achieve the hierarchical advantages of asset specialization and economies of scale while avoiding the loss of high powered incentives, the loss of access to outside customers, the loss of strategic flexibility, and higher labor costs - all the things that current government bureaucracy is criticized for. In addition the alliance structure has lower transaction costs than market governance structures. The reduction in transaction costs is achieved by relying on informal "safeguards" against opportunism which are buttressed by formal, non-contractual bonds. The Japanese automakers rely significantly more on trust, reputation, and financial hostages and less on formal contracts to protect their interests than U.S. firms.

Thus Dyer finds that governance influences performance in three ways: 1) through transaction costs; 2) the level of relation-specific investments, and 3) the strategic use of information. He further finds that "there may be an optimal mix of governance structures for certain types of activities which may change from industry to industry and country to country" (Dyer 1996). Alliance or network structures have comparative advantage under conditions of greater uncertainty and more complex products while markets and hierarchies obtain a comparative advantage in less complex products. Applying such findings to the public sector suggests that public managers should seek to adopt the appropriate governance type for the provision of different types of public and publicly provided goods and services. It can help to explain why there have been many successful examples of

contracting-out for less complex services such as garbage collection but fewer examples of successful contracting in for more complex government services.

PRODUCING OUTPUTS: MANAGERIAL AND TECHNICAL LEVEL INTERACTIONS

The technical level is the level of the primary work. In the disarticulated state it is carried out largely by the private entities, nonprofit organizations or special district and quasi-public authorities. At this level it is not only important to examine specific theories of affordable housing but because of the distance of these organizations from government itself it is important to try to understand how the technical level is linked to the managerial level embodied in the work on contracting out, privatization, and nonprofit organizations.

Transaction Cost Economics

The literature on public management focuses primarily on the fact that the market fails to efficiently produce public goods because of externalities. As a result the solutions proposed by NPM focus on how to create a market situation that will produce public goods. This literature fails to recognize that there are other instances of market failure besides public good provision. That is, as a good or service becomes more complex the requirements for coordination lead to increased transaction costs in a pure market environment such that firms governed hierarchically are created to reduce transaction costs and promote cooperation. The private sector rarely resembles the ideal of the perfectly competitive market that public management strives to create. Instead the private sector is an agglomeration of a number of hierarchical firms. Firms may integrate production

processes either vertically or horizontally. The twentieth century has seen a great growth in the size of private sector firms. This growth has led to more power and less competition.

The increased size of corporate America has, like the increased size of the government bureaucracy, created a number of problems including monopolistic practices, corporate scandal and corruption. The growth of firm size like the growth of the government bureaucracy is seen as detrimental to free market capitalism despite many advantages gained through the growth of firms including economies of scale, increased cooperation and reduced transaction costs. Optimal organizational size is an important factor in the production of both public and private goods and services. To focus only on the problems of market failure due to externalities and not transaction costs obscures some of the major challenges in organizational design which include allowing for some elimination of transaction costs by forming hierarchical structures while avoiding excessive bureaucratization.

Dryer's findings are consistent with the literature on contracting-out with regard to asset specificity and uncertainty. The literature on contracting-out is concerned mainly with issues of control and accountability. This literature seeks to find a solution to the principal-agent problem and the problems of moral hazard and adverse selection resulting from information asymmetries. Performance measurements and activity-based costing are important elements in the contracting relationship. Competition, though, is seen as the most important mechanism for ensuring accountability and control of agents. In the absence of

competition the gains from contracting are diminished (Prager 1994) and even if competition is present then contracting is only worthwhile if the reduction in production costs exceed the costs of monitoring the contract (the transactions costs) (Globerman and Vining 1996). Gates and Hill even argue that "Competition is irrelevant as long as sanctioning is costly" (Gates and Hill 1995). There is a recognition that competition disappears over time as certain government contractors gain a monopoly, through experience and expertise, on the delivery of public goods and services. A possible alternative solution is presented by Elliot D. Sclar who suggests that more recently, relational contracting based on trust, reciprocity and reputation are taking the place of more traditional competitively bid contracting arrangements (Sclar 2000). The nonprofit sector may be an important prerequisite for a relational contracting regime.

The Nonprofit Sector

Nonprofit organizations are part of civil society. They interact with the market and the state and are the glue that holds communities together formally and informally (Boris and Steuerle 1999). The roles of nonprofits have been defined differently by different disciplines. Economic theories see nonprofits resulting from market failure (Weisbrod 1988 and Hansman 1987) in which case nonprofits are formed to solve problems after the free market has failed to provide a solution. The nonprofit literature recognizes the case of "nonprofit failure" in which nonprofits are viewed as the preferred provider and government must step in when nonprofits fail to meet needs (Salamon 1995). The political science view

is one that sees nonprofits as providing an avenue for civic participation and representation (Douglass, Verba, Scholozman, Brady, Lohmann) while communitarians view nonprofits as precursors to both government and the market (Etzioni, Putnam, Walzer).

Generally, the nonprofit literature suggests that nonprofit organizations are a complement to traditional public hierarchies. Nonprofit organizations are seen to be more trustworthy than private for-profit organizations because of their mission-driven nature. It is argued that the monitoring costs of contracting with nonprofit organizations are significantly reduced because the profit motive is absent and the mission is likely to correspond with public goals. Lester Salamon is a key contributor to this theory of the nonprofit sector developed through a number of articles and books published throughout the 1980s. Salamon contends that the nonprofit, voluntary sector has a number of strengths that correspond well with government's weaknesses and vice versa (Salamon 1987). In contrast, more recent scholarship has focused on the tensions between nonprofits and government and find that government contracts threaten agency autonomy and lead to bureaucratization (Frumkin 2000; Gronbjerg; Smith and Lipsky 1993). The nonprofit sector plays an important role in the delivery of affordable housing production and the nonprofit literature can provide a context for understanding theories of affordable housing production.

Affordable Housing Policy and Theory

In the mid-1980s, nonprofit organizations came to be seen as an important vehicle through which to achieve federal goals of affordable housing. Nonprofit

organizations because of their mission driven nature are seen as more likely to maintain long-term affordability than private for-profit entities (or at least to have the will to), but are also more likely to ensure long-term maintenance because they are not conflicted with other goals or changing political whim as governments are. The past has shown that both government (hierarchies) and the private sector (markets) have failed in this regard

The greatest challenge in producing affordable housing has not been the actual production of units which history has shown can be accomplished by either government or the private sector but rather the maintenance of housing assets and their continued affordability over their useful life. Previous experiences with federal housing policy have shown that the government is capable of producing housing as was done with public housing programs but such programs failed because of government's unwillingness to maintain such assets over time which thus fell into disrepair and became slums or blighted areas. The Section 8 project-based program as well as Section 235 and Section 221(d)3 and Section 236 programs demonstrated that the private sector through market incentives could produce affordable housing. The failure of these programs though was that private sector owners would quickly convert these assets to higher uses thus removing them from the affordable housing stock. Thus, the challenge of affordable housing is not only production but also maintaining long-term affordability.

Unfortunately, the same characteristics that make nonprofit organizations strong candidates for affordable housing ownership create potential problems.

Nonprofit organizations lack experience in real estate development and have less access to capital and financing options than that of the for-profit private sector. These weaknesses may lead to increased costs associated with development because of time delays. Research on differences in efficiency between nonprofit and private for-profit developers is inconclusive. Although most studies show that nonprofits incur greater costs critics argue that they also produce better quality housing. Another potential weakness of nonprofits is financial instability due to difficulties in raising revenues which may threaten affordable housing assets which are held by the nonprofit organizations.

According to Edward Goetz the local housing movement resulted from Reagan federalism reforms (Goetz 1993). The Reagan cut backs represented a form of de facto devolution of housing policy in the 1980s. Four important ideas were promoted at the local level during this time: non-market production, ownership and management of housing; the use of land-use controls and market regulations; taxing the private development process; and community based planning. Many of these ideas were then rolled into the de jure devolution which codified the federal role in providing assistance through the Cranston-Gonzales National Affordable Housing Act of 1990.

One of the major failures of the federal housing policy was the inability to ensure the long-term affordability of subsidized housing. The public housing program provided for initial capital for construction of units but because the units were restricted to the very lowest income families, the developments were not able to cover the long-term maintenance and operating costs without additional

subsidies. The unwillingness to provide continued subsidies meant that public housing units suffered from deferred maintenance and became undesirable places to be. Federal efforts with subsidizing the private sector to provide affordable housing met with a different fate. Private developers began to prepay their mortgages and convert the properties to market rate units. The development of neighborhood nonprofit organizations was thought to be a solution to this long-term problem. Nonprofit organizations could develop, own and manage affordable housing and maintain its affordability overtime through its tax-exempt subsidy and voluntary contributions. Because the organizations were not motivated by profit but by a social mission, the units would not be lost to the market but instead would remain affordable over their useful life.

Mixed land use and mixed income housing became an important idea as well. It was recognized that exclusionary zoning practices which aimed at land use control and segregated buildings by use inflated property values and largely eliminated housing that was affordable to the lowest income groups (Fischel 1990; Katz and Rosen 1987; Parnell; Pollakowski and Wachter 1990; Tucker 1991). Fischel concludes that the cost to housing affordability exceed the benefits of zoning (Fischel 1990). In 1966, Jane Jacobs had made a convincing argument in *The Death and Life of Great Cities* that mixed use made cities more livable (Jacobs 1961). Mixed use is also seen as a way to address the long-term affordability issue whereby revenue-generating uses can subsidize residential uses. For example, in many downtown revitalization efforts which were undertaken in the 1980s commercial retail space on the lower levels of buildings

made downtown residential units on upper levels affordable and the presence of Jacobs "eyes on the street" reduced crime and made the new downtown attractive. Related to the idea of mixed use is the theory of mixed income housing, which suggests that housing for the low-income can also be subsidized by more moderate income households. But the theory of mixed-income also includes a social welfare perspective in that it is hypothesized that middle-income families can serve as role models for low-income households who will have the incentive to pull themselves up the socioeconomic ladder. These goals were achieved by the adoption of 'inclusionary zoning' practices. Inclusionary zoning is "a zoning scheme under which prospective developers are required by a municipality or county to provide, as a condition of approval, or alternatively, are given incentives to provide low- and moderate-income housing as part of, or in conjunction with, their proposed development projects" (Goetz 1995).

Other efforts at the state and local level included making use of their authority to tax and issue tax-exempt bonds. Some localities taxed the development process while other dedicated taxes to develop housing trust funds that would generate resources for affordable housing. At the state level many states created housing finance authorities to issue tax-exempt bonds and lend the proceeds at below-market rates to low-income homebuyers. Despite some drawbacks of these progressive efforts, (i.e the nonprofit developers do not have the same capacity to deliver housing as the private sector and thus produce less and have been less cost effective than federal programs and mixed use and mixed income has not been entirely successful due to tensions among the mixes) a new

housing approach is underway with state and local governments at the helm. The federal government now plays an important role in providing assistance and resources for affordable housing policies initiated at the local level.

A FRAMEWORK FOR GOVERNANCE

Based on the literature and previous studies of governance, a framework for evaluating different governance types can begin to be developed. The primary governance types of market (or a variant enterprise), network and hierarchy. These types can be distinguished along a number of dimensions the most important being the means by which opportunism is controlled- called the governing mechanism. Table 2.1 illustrates these dimensions.

Table 2.1: Dimensions of Governance Types

	Market	Network	Hierarchy
Characteristics:	Many small firms, one-time interaction	Many nodes (entities) linked formally and informally	Single firm Hierarchically organized
Governed by:	Competition	Trust, reputation, reciprocity	Rules and laws
Benefits:	Flexible, innovative	Flexible, innovative as well as asset specialization and economies of scale	Asset specialization, economies of scale
Limitations:	Problems of shirking and opportunism	of neither market nor hierarchy, weaker form of social interaction - less stable	Lack of innovation, loss of high powered incentives
Failure:	Inefficient allocation of public goods (externalities) Less than perfect competition	Unknown	expensive
Nonprofit role:	Private market player, substitute for government	Partner to government	Complement to government - extension of hierarchy

A governmental entity may use a contract to govern under any of the three governance types but the key to understanding the governance types is to understand how the contracting relationship differs among the three. A contract which is initiated under a market style of governance relies primarily on competition as a governing mechanism. Therefore such a contract is most likely entered into after some form of competitive bidding. Further, in order to fully

take advantage of the benefits of the market such as flexibility and innovation the competitive process is more likely open-ended. That is, the competing firms propose the solution to a specified problem rather than the agency specifying the end product or service up front. For example, a governmental entity issues a request for proposals and the proposal which they feel most appropriately addresses the problem at hand is chosen. In such a situation price may or may not be an important determining factor. The hiring of the contractor to carry out his project proposal is time-limited and there is no expectation that the contractor will be chosen again for future projects.

A contractual relationship may also be governed hierarchically but differs from a market governed contract in the sense that the governing mechanism is different. Under a hierarchically governed contract, the governmental entity maintains an expertise as to the product or service being delivered and as such specifies in detail up front the requirements of the 'job'. The contract may or may not be competitively bid and when it is price may be more important after a firm is able to demonstrate the appropriate capacity to complete the job. A hierarchical contract resembles a labor contract in that the job is clearly identified and a firm with the appropriate skills to carry out the job is hired to perform the job. The contract is governed by specific rules and regulations which may include performance measures.

Finally, a contract that is governed under a network arrangement relies to a much greater extent on trust, reputation, and/or reciprocity. A contract entered into in this scenario most certainly lacks the element of competition. Further, the

contractor may expect future contracts with satisfactory performance. Such a contract may be much more vague than either the market or hierarchical contract and represent to a greater extent a partnership with government in which the details will be negotiated or worked out along the way. What is also unique about the network governance type is that the use of formal agreements may be much less important than various informal linkages.

Unlike Dryer's work which relies on in-house versus contracted-out as an important means for measuring governance structure, the in-house versus contracted-out dichotomy is less useful in the government contracting situation. Since government contracts out a great variety of goods and services the simple distinction of whether it is done in-house or not is insufficient to distinguish governance types. A government can contract out a service but still maintain hierarchical control over that service by means of detailed specifications up front. Also, a government may maintain hierarchical control if the entity with which it is contracting with receives the majority of its revenue from the government. This is largely the case with nonprofit organizations which rely heavily on government resources for their funding. If a government provides a majority of a nonprofit organization's revenue then the government may expect to exert a greater amount of influence over the organization much like if it was an internal department. This is the nonprofit role as a complement to government which exists under hierarchical governance. On the other hand if the government provides little to no operating revenue for a nonprofit and the nonprofit delivers a product or service that the government does not, the nonprofit is a substitute to government which

happens under market governance. The government may be able to contract with such a nonprofit for a specific one-time project and exert some amount of influence over that project under a market-type arrangement but should not expect to exert significant influence over the remaining activities of the nonprofit. Finally, if the nonprofit is a true "partner" with government it might be expected to produce some good or service in exchange for some benefit from government as is the case under network governance. As a partner the nonprofit would expect future cooperation from the government following an effort to provide a service that government would like to see provided. In this relationship government can be expected to play a greater role than simply a buyer or funder of activities.

Therefore governance type may be distinguished by the following:

- The level of competition (3 or more firms)
- The detail of specification in the contract and the source of that detail (government initiated or following a proposal)
- the extent to which a partner is a financial hostage
- the level of trust and reciprocity that exists among the entities
- the presence of informal linkages or cooperation in the absence of formal agreements
- the presence and character of contract monitoring
- the presence of joint production

This framework will provide the basis for examining governance in the hollow state of affordable housing production in Chapter 4.

GOVERNANCE IN THE HOLLOW STATE

The logic of governance proposed by Lynn et al provides a useful framework for an analysis of performance in the hollow state. Government performance is a result of the political process. When viewed as a system the

political process takes place within a specific environment or context which creates demands or inputs to the system. These demands are interpreted by decision-makers who identify goals or objectives to be pursued. Public goals and objectives are then pursued by public managers through the adoption of specific strategies. Strategies are carried out by front-line workers resulting in the production of government outputs. These outputs translate into outcomes or performance which feeds back into the system. Lynn's logic of governance divides this system into three different levels -- the institutional, managerial and technical.

The hollow state poses a particularly difficult governing situation in that the technical level of governance, the level at which outputs are produced, is undertaken by operators in entities outside of government. Workers operate beyond the control of public managers. The public manager's ability to implement strategies is thus dependent on his ability to influence actors beyond the boundaries of government. This situation is further complicated by the fact that publicly provided goods and services are being jointly produced by multiple entities serving multiple governmental units. The traditional principal-agent model which employs a specific and detailed contract, competitively-bid among qualified producers is not expected to be a sufficient tool in the hollow state because there are multiple agents serving multiple principals and little competition.

Scholars see this new environment characterized by increasing irrelevance of jurisdictional borders, the blurring of public and private sectors, and increased

contracting out, as requiring the use of new and different tools by public managers (Frederickson 1999). Some have argued that the public sector is ill equipped to deal with this new environment. As Agranoff and McGuire state, "The classical, mostly intraorganizational-inspired management perspective that has guided public administration for more than a century is simply inapplicable for multiorganizational, multigovernmental, and multisectoral forms of governing" (Agranoff and McGuire 2001). Further, Milward and Provan have argued that there is little evidence that central governments know how to manage in the hollow state or that local governments know how to manage decentralized programs.

There are primarily three types of governance in the literature that are available to public managers. These governance types consist of market (or a variant enterprise), network and hierarchy but the existing knowledge of governance suggests that neither market nor hierarchical governance is appropriate in the hollow state. It is hypothesized that an overarching governance type present in a city influences the specific management mechanisms that are adopted to govern the relationship with private sector partners. Further, different governance types are hypothesized to produce different levels of efficiency. This research will explore the extent to which these different governance types are employed and with what success.

Chapter 3: Affordable Housing Outputs and Performance

Any study of governance must necessarily include an analysis of how government outputs (in this case programmatic expenditures) translate into policy outcomes or results. This can be accomplished by comparing a particular situation that exists after government action has occurred to the situation that existed prior to government action. In many ways this is difficult to do because there are a number of other intervening actions that may have also contributed to differences in the situation. There is a threat to the internal validity of the study due to history or maturation. The ability to control for such factors in a social study is significantly limited.

An alternative means for studying performance and understanding outcomes is to compare across governments while controlling for important differences in those entities. To the extent that differences can be successfully controlled, this approach minimizes threats to both internal and external validity. Such is the approach taken here, whereby government performance is evaluated based on a comparison of governmental entities that controls for major differences.

In this chapter, descriptive statistics illustrate the character and nature of government outputs in terms of programmatic expenditures under the HOME program for all jurisdictions and jurisdiction types. Following the illustration of government outputs is a discussion of the difficulties of measuring performance. Performance as conceived here is primarily a measure of technical efficiency but

a number of inefficiencies may exist across all jurisdictions which will not be captured by cross-sectional comparisons. A discussion of the sources of these inefficiencies along with some brief examples derived from the data gathered during the site visits is included. Finally, the chapter concludes with an evaluation of performance based on comparisons among the city jurisdictions. The evaluation of performance relies on three different modeling techniques which each contribute something different to the analysis.

AFFORDABLE HOUSING OUTPUTS

Affordable housing outputs are best understood as outputs of the HOME program as it is the largest resource dedicated to affordable housing activities at the local level. This discussion begins broadly examining overall allocations and expenditures with a particular emphasis on differences among different types of jurisdictions, then narrowing examines in more detail program expenditures by cities. Data are from HUD's IDIS database (discussed in greater detail later). The HOME Investment Partnerships Program created under the Cranston-Gonzales Affordable Housing Act of 1990 is a housing block grant to states and local governments for the purpose of increasing the number of families served with decent, safe, sanitary, and affordable housing and to expand the long-term supply of affordable housing.

Allocations are made by HUD to states and units of local government utilizing a formula consistent with the legislative intent. Allocations were first made in fiscal year 1992. After adjusting for inflation using the housing portion of the consumer price index, total HOME allocations have increased in real terms

each year with the exception of 1997 and 2000. Overall the program has experienced real growth of 29% from 1993 to 2001. Table 3.1 shows HOME allocations by jurisdiction type from 1993 through 2001.

Table 3.1: HOME Allocations by Jurisdiction Type 1992-2001

Allocations in thousand of Constant 2000 dollars						
Year	Metro Cities	Consortium	Urban Counties	States	Insular Areas	Total
1993	519,652	93,995	93,216	471,805		1,178,668
1994	606,568	133,765	115,212	564,332		1,419,878
1995	648,919	146,630	123,745	606,214		1,525,509
1996	650,445	142,714	117,773	599,417	3,108	1,513,457
1997	619,808	139,210	109,285	571,722	3,029	1,443,054
1998	654,386	147,871	114,239	603,530	3,172	1,523,198
1999	689,991	157,549	119,608	636,591	3,311	1,607,050
2000	668,025	152,720	115,745	616,310	3,200	1,556,000
2001	713,859	167,524	124,102	661,264	3,454	1,670,203
Total	5,771,654	1,281,979	1,032,926	5,331,185	19,273	13,437,017
Share	42.95%	9.54%	7.69%	39.68%	0.14%	100.00%

Forty percent of the HOME program is allocated to the 50 states, Puerto Rico and the District of Columbia. The remaining 60% is allocated among metropolitan cities, urban counties and consortia of contiguous local governments which join together to apply for HOME funds. In 1996, HUD also began setting aside a small portion of the program for the insular areas of American Samoa, Guam, Northern Marianas, and the Virgin Islands. The legislative split between states and local governments in the allocating of funds means that increases in programmatic funding affect states and local governments differently. While the number of states remains the same and 40% of annual allocations are reserved for the states, states as a whole have realized the same real growth (29%) in program funding over the 10 year period as the overall program. Allocations for local

governments, on the other hand, are qualified based on a minimum funding amount such that increases in program funding result not necessarily in funding increases for each jurisdiction but instead lead to increased numbers of jurisdictions that are eligible for funding. Thus from 1993 through 2001 the total number of HOME participating jurisdictions has increased 37% from 437 in 1993 to 598 in 2001. The greatest increase has been among consortia of local governments which have increased 55%. Overall metropolitan cities as a whole have experienced little growth in average funding per jurisdiction over the period (-0.03%) while consortia have experienced a 13% increase and urban counties an 8% increase.

Table 3.2 Number of HOME Grantees by Jurisdiction Type 1992-2001

Year	Metro Cities	Consortia	Urban Counties	States	Insular Areas	Total Grantees
1993	247	69	70	51	0	437
1994	306	85	79	51	0	521
1995	334	89	83	51	0	557
1996	345	93	83	51	4	576
1997	341	98	84	51	4	578
1998	348	100	85	51	4	588
1999	348	101	84	51	4	588
2000	348	104	86	51	4	593
2001	350	107	86	51	4	598
Change 1993-2001	41.70%	55.07%	22.86%	N/A	N/A	36.84%

Table 3.3 Average HOME Allocations per Grantee 1992-2001 (constant 2000 \$)

Year	Metro Cities	Consortia	Urban Counties	States	Insular Areas	Total
1993	2,104	1,362	1,332	9,251		2,697
1994	1,982	1,574	1,458	11,065		2,725
1995	1,943	1,648	1,491	11,887		2,739
1996	1,885	1,535	1,419	11,753	777	2,628
1997	1,818	1,421	1,301	11,210	757	2,497
1998	1,880	1,479	1,344	11,834	793	2,590
1999	1,983	1,560	1,424	12,482	828	2,733
2000	1,920	1,468	1,346	12,085	800	2,624
2001	2,040	1,566	1,443	12,966	863	2,793
Change						
1993-2001	-3.05%	14.93%	8.36%	40.16%	N/A	3.55%

Allocations by HUD to the jurisdictions are based on a formula that includes the following factors: 1) low vacancy rate and poor renters; 2) substandard and/or inadequate rental housing measured by the presence of one four housing problem conditions - overcrowding, incomplete kitchen facilities, incomplete plumbing, or high rent to income ratio; 3) rental units built before 1950 that are occupied by the poor; 4) RS Means cost index and the number of inadequate rental units; 5) number of families in poverty; and 6) per capital income and population. The formula is intended to allocate federal resources relative to local needs including the number of potential beneficiaries, the inadequacy of the existing housing supply, and the fiscal capacity of the local jurisdiction to address housing needs. Local match of 25% is required although jurisdictions with less fiscal capacity may receive a partial waiver of the matching requirement thus reducing their requirement to as little as 12.5%. While the resources are allocated in such a way there are several reasons why actual

expenditures may not address the particular needs identified in the formula particularly rental housing and families in poverty.

Local decision makers' perceptions of a community's needs may be very different from federal decision makers' conceptions of need. Local decision makers may also experience different types of political pressure for one type of housing or another than those experienced by federal decision makers. Since decisions of how the funding will be spent are left to local decision makers, this means funding does not necessarily address community needs conceived by the federal government through its funding formula. In particular, local leaders may be much more willing to view HOME program resources as a community development tool with which to influence the built environment rather than a redistributive tool to alleviate the cost burden of its poorest residents. Also, the HOME program regulations are broader than the specific needs that are targeted by HUD's allocation formula. While the formula emphasizes rental housing, families in poverty and rehabilitation, the program regulations allow local jurisdictions to spend the resource for homeownership, all households including non-related households (not just families the relative proportion of which varies among jurisdictions) and for households that have incomes not just below poverty but up to 80% of the area median income, and on such activities as new construction or acquisition of existing units.

HOME Program Expenditures

How jurisdictions have chosen to expend the HOME resources reveals some important trends and provides an indication of the differences between local

and federal preferences. Data on HOME expenditures comes from HUD's Integrated Disbursement and Information System and includes data on all completed projects from 1992 through 2001². All expenditures are reported in constant 2000 dollars, the conversion of which is discussed in the appendix. Discrepancies between these data, HUD's data, and the data of local jurisdictions exist due to differences in fiscal years among the jurisdictions and the conversion of expenditures into constant dollars. Despite these discrepancies these data provide an overall indication of the results of HOME program expenditures over the ten year period 1992-2001.

In the period 1992 through October 2001, the HOME program has produced 384,846 units of affordable housing through a variety of activities, including newly construction for both homeowners and renters, rehabilitation of existing substandard units for both homeowners and renters, and assistance in acquiring existing units that will be made affordable to low income homeowners and renters. This production has absorbed approximately \$6.25 billion (in constant 2000 dollars) in HOME expenditures in addition to \$16 billion in expenditures from other sources. Other sources include other public resources either federal, state or local, private resources, program income, and low income housing tax credit proceeds.

² It is important to note that data on tenant based rental assistance (TBRA) has been excluded as have all expenditures on projects that had not yet reached completed status as of October 2001. TBRA represents a relatively small proportion of most jurisdictions' allocation and is simply a rental subsidy. It has been excluded because this activity does not affect the long-term supply of affordable housing in the community and its inclusion would require a great deal of additional data manipulation.

Table 3.4: Total Expenditures by Sources of Funding

Source of Funding	Total Expenditures (in constant 2000 \$)	Expenditures/ Unit	Proportion of Total
HOME	6,254,402,080	16,252	27.53%
Public	4,496,046,244	11,683	19.79%
Private	8,669,280,448	22,527	38.16%
Program Income	143,772,331	374	0.63%
Tax Credit Proceeds	3,151,828,133	8,190	13.88%
Total Expenditures	22,715,329,237	59,024	100.00%

Expenditures by Jurisdiction Type

State spending equals 44.28% of HOME expenditures and accounts for 45.25% of all units produced, while metropolitan cities equal 38.84% of expenditures and account for 37.31% of units produced. The remaining funding activity is undertaken by urban counties and consortium as illustrated in Table 3.5.

Table 3.5: HOME Expenditures by Jurisdiction Type 1992 - 2001

Year	HOME Expenditures (in thousands of constant 2000 \$)					
	Metro Cities	Consortia	Urban Counties	States	Insular Areas	Grand Total
1992	2,272	1,121	55	25		3,472
1993	53,902	5,082	11,056	29,152		99,192
1994	149,361	21,218	26,569	184,239		381,387
1995	166,051	20,768	50,728	278,173	162	515,883
1996	201,030	28,922	59,792	316,038	766	606,548
1997	259,126	30,389	54,023	373,712	937	718,187
1998	358,580	57,088	97,164	413,413	1,829	928,074
1999	547,490	85,302	156,939	423,543	2,255	1,215,528
2000	374,381	61,961	125,815	309,375	1,648	873,179
2001	316,772	61,104	89,546	441,878	3,650	912,951
Total	2,428,963	372,957	671,688	2,769,547	11,248	6,254,402
Share	38.84%	5.96%	10.74%	44.28%	0.18%	100.00%

The average expenditure of HOME funds per unit is very similar across all types of jurisdictions (with the exception of the insular areas) despite potential differences in cost structures. The average HOME expenditure per unit differs by no more than \$1000 across the different jurisdiction types even though one might expect transportation and labor costs to be higher in rural areas (served by states) and land costs to be greater in urban areas (Table 3.6). Differences in administrative costs would also be expected to differ due to differences in program size and geography as well as the different legal position of the jurisdictions which require greater cooperation on behalf of states and consortium. This highlights a drawback of the data, in that, administrative expenditures incurred by the jurisdiction beyond that allowed by the home program are likely missing³.

Table 3.6: HOME Expenditures per Unit by Jurisdiction Type 1992-2001

Year	Metro Cities	Consortia	Urban Counties	States	Insular Areas	Total
1992	15,046	58,984	10,932	12,335		19,616
1993	13,629	14,948	14,175	15,073		14,152
1994	17,015	14,221	15,910	16,372		16,444
1995	17,641	16,289	18,582	16,601	20,236	17,092
1996	14,668	14,411	15,567	16,155	12,163	15,481
1997	18,658	12,470	14,391	15,226	13,775	16,070
1998	20,047	15,753	17,037	14,687	29,502	16,745
1999	17,662	15,704	16,275	16,283	29,675	16,845
2000	14,353	14,548	15,362	14,246	35,063	14,482
2001	16,925	16,063	15,660	18,234	57,940	17,378
Average	16,918	15,106	15,980	15,902	29,063	16,252

³ Additional research is needed to acquire data on local expenditures for administrative purposes, although only one of the six sample cities has such expenditures.

Although the amount of HOME funds per unit are relatively constant across jurisdictions the total expenditures per unit differs such that consortia and urban counties spend \$20,000 to \$30,000 more per unit than either states or cities (Table 3.7). It is unlikely that such differences are due to differences in construction costs. Consortia and urban counties are metropolitan communities near metropolitan cities and as such they are in close proximity to construction labor and materials. Yet the land costs in these largely suburban areas would be expected to be lower than in cities. This is the opposite of what one might expect in the rural areas served by the states where labor and materials would be higher and land would be cheaper. It also does not appear that these higher costs result from serving lower income beneficiaries.

Table 3.7: Total Expenditures per Unit by Jurisdiction Type 1992-2001

Year	Metro Cities	Consortia	Urban Counties	States	Insular Areas	Total
1992	26,459	124,420	10,932	22,896		36,496
1993	30,254	69,391	44,297	25,707		32,461
1994	40,369	44,310	34,924	35,106		37,677
1995	44,729	51,669	66,834	42,515	36,233	45,790
1996	48,466	65,454	84,566	45,702	15,149	51,441
1997	54,730	68,243	100,281	51,891	25,748	57,690
1998	61,858	74,234	78,947	50,493	61,132	58,653
1999	59,898	89,446	84,385	59,094	51,963	65,096
2000	54,345	76,022	87,336	58,052	65,744	61,701
2001	63,080	99,257	81,082	79,842	105,608	75,442
Average	54,917	77,438	81,351	54,425	52,914	59,024

As table 3.8 shows, the proportion of units produced for the lowest income households is less and the proportion of units produced for the highest income group is greater by consortia and counties than by cities and states.

Table 3.8: Proportion of Units Completed by Income Group by Jurisdiction Type

(%)	vacant	0-30% AMI	30-50% AMI	30-50% AMI	60-80% AMI
Metro Cities	7.50	22.75	28.91	15.92	24.92
Consortia	4.95	19.59	27.44	15.62	32.41
Urban Counties	4.43	20.04	29.21	17.16	29.15
States	5.68	23.08	31.45	17.62	22.17
Insular Areas	2.07	17.83	27.39	17.83	34.88

There are several possible explanations for the higher costs in these jurisdictions. One explanation is that urban counties and consortia are producing better quality units. Such units may be larger in terms of square footage and/or number of bedrooms⁴, be more attractive in terms of architectural design and use of building materials (for example use brick or stone instead of siding), or contain more amenities such as swimming pool, laundry facilities, computer or learning lab and/or on-site services (such as childcare or case management). The largely suburban nature of these jurisdictions may mean that they have different preferences and priorities for housing than either their more urban or rural counterparts. An alternative explanation is that counties and consortia may experience greater development costs due to the need to coordinate their activities with other jurisdictions. A final explanation, which is explored in more detail later, is that counties and consortia choose housing activities which are more difficult and/or more expensive than those chosen by states and cities.

⁴ Data on square footage is not available to test this hypothesis although the average number of bedrooms per unit is similar for all jurisdiction types. The median number of bedrooms produced by all jurisdiction types is 3 bedrooms per unit.

Although counties and consortia have higher per unit costs, they are better at leveraging private sector resources than any other type of jurisdiction. Forty-six percent (counties) to 50% (consortia) of total project costs of these jurisdictions are covered by private resources. States are the poorest at leveraging private resources with only 30% of total costs covered by the private sector. Projects produced by states have a greater amount of other public resources than other jurisdictions. This is most likely due to the fact that states control a greater amount of other public resources for affordable housing including private activity bond volume cap, low income housing tax credits, and state dedicated resources and because the rural communities served by the states have less private resources available to them. Together this might lead states to contribute a much greater proportion of public resources to affordable housing than other types of jurisdictions that serve communities with greater availability of private resources.

Table 3.9: Proportion of Total Expenditures by Source and Jurisdiction Type (%)

Jurisdiction Type	HOME	Public	Private	Program Income	Tax Credit Proceeds	Total
Metro Cities	30.81	15.30	41.01	0.98	11.91	100.00
Consortia	19.51	17.33	50.49	0.78	11.89	100.00
Urban Counties	19.64	18.05	46.44	0.74	15.13	100.00
States	29.22	24.70	30.32	0.27	15.49	100.00
Insular Areas	54.93	1.14	43.94	0.00	0.00	100.00

Over time the amount of HOME expenditures per unit has been fairly stable for all jurisdiction types. On the other hand the total expenditures per unit have risen steadily (Figure 3.1). This increase in total expenditures corresponds with an increase in the proportion of HOME funds that are expended for new

construction and a decline in the amount of expenditures dedicated to rehabilitation (see Figure 3.2). The increase in total expenditures per unit is accomplished principally through increased private expenditures but also consists of increases in public sources and low income housing tax credits (see Figure 3.3).

Figure 3.1: Total Expenditures per Unit by Jurisdiction Type 1992-2001

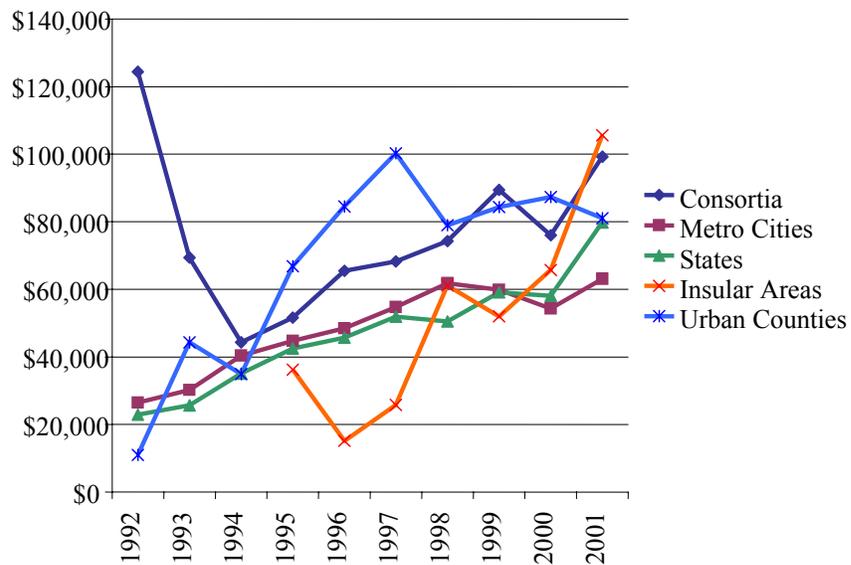


Figure 3.2: Proportion of HOME Expenditures by Activity

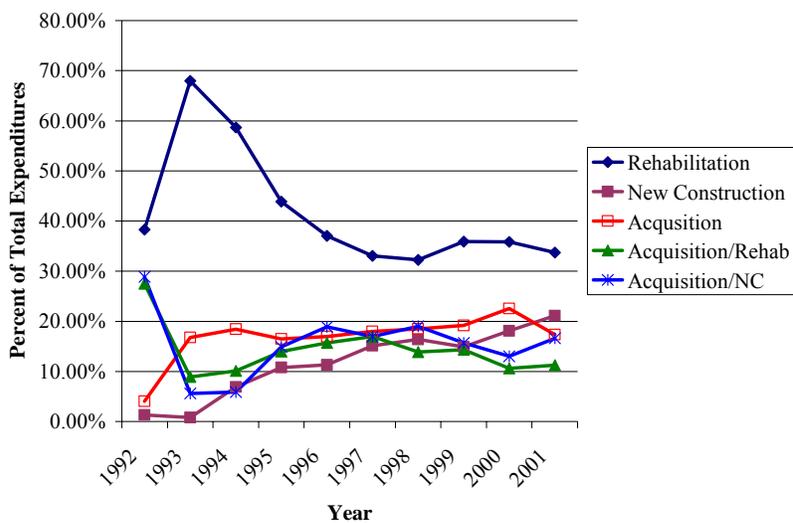
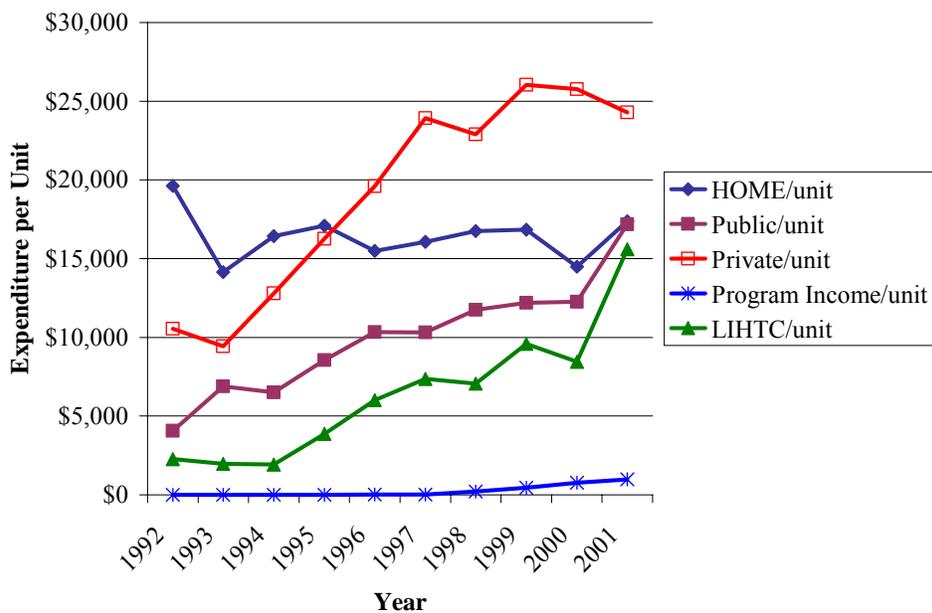


Figure 3.3: Expenditures Per Unit by Source 1992-2001



Insular Areas, consortia and urban counties have expended a greater proportion of their HOME funds on new construction activities than cities or states. This highlights an important trend in the HOME program which is that as programmatic resources grow more and more suburban-type or non-central city jurisdictions become eligible for funding. These jurisdictions are then more likely to utilize the funds to develop affordable housing through new construction activities which although utilize no more HOME funds on a per unit basis draw on private and other public resources to a greater extent than other affordable housing activities. While new construction is an important means for increasing the supply of affordable housing, its increase may have some negative affects as well. New construction may be a less efficient means of making housing affordable to lower income households because of its greater cost. If new construction is increasingly undertaken in areas that are distant from the city center, it may strain the public transportation system and the environment if workers live far from their place of employment, and may increase their transportation costs.

Expenditures by Beneficiary Income Level

The HOME program regulations require that housing benefit households that are have income levels below 80% of the area median income (AMI). The area median income is generally defined at the county level except in metropolitan statistical areas where the entire area is used as the geographic area. While 80% of the area median income is the HOME requirement, many jurisdictions target their resources to serve different income levels within that

requirement. These include the extremely low-income (0-30% AMI); very low-income (30-50% AMI); low-income (50-60% AMI); or lower income (60-80% AMI). While HUD displays a preference for serving the lowest income groups, through their allocation formula and through their performance measures, the HOME legislation states that primary attention should be toward rental housing for very low-income and low-income Americans. This is generally interpreted to include all the eligible income groups meaning that there is no income group preference in the HOME legislation and jurisdictions are free to choose to serve beneficiaries at the income level the jurisdiction deems appropriate. However, there is in the legislation a preference for rental housing and a requirement that 90% of all rental units benefit households below 60% of the area median income. This has largely been interpreted as a preference for serving lower income households. It is expected that the cost of serving lower income levels is greater than serving higher income groups. Unfortunately, it is not possible to estimate the true cost of serving the different groups because expenditure data is at the project level and a project may serve multiple income groups.

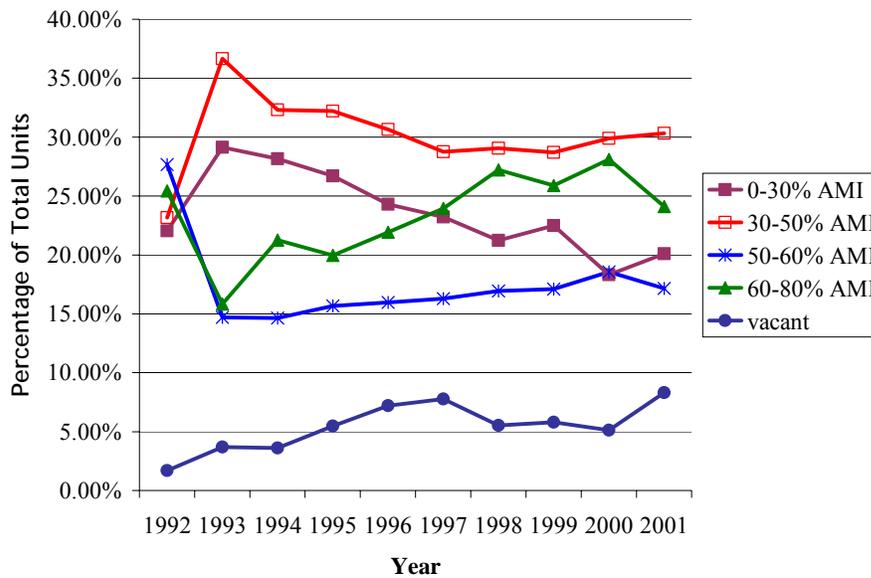
Table 3.10 illustrates the distribution of units produced by income level over the ten-year period. The number of units produced at all income levels has grown over time as the level of expenditures have grown but the trend has been a reduction in the proportion of units produced for the extremely low-income group (0-30% AMI) and a corresponding increase in the proportion of units produced for the lower income group (60-80% AMI) (See Figure 3.4). This trend is most likely related to shifts in the type of housing activity undertaken with HOME

resources and shifts in the tenure of beneficiaries served. Rehabilitation activities existed prior to the implementation of the HOME program and many jurisdictions simply began to use HOME to fund existing rehabilitation programs in the early years of the grant. Since then jurisdictions appear to have learned how to implement additional housing activities which has led to decreases in the proportion of HOME funds that are expended for rehabilitation activities.

Table 3.10: Distribution of Units by Income Level

Income	Total Units	Share
0-30% AMI	86,181	22.39
30-50 % AMI	115,430	29.99
50-60% AMI	64,693	16.81
60-80% AMI	94,783	24.63
vacant	23,759	6.17
Total	384,846	100.00

Figure 3.4: Proportion of Units Completed by Income



Expenditures by Housing Activity and Tenure

HOME program activities include rehabilitation, new construction, acquisition, acquisition/rehabilitation and acquisition/new construction. Over the study period expenditures for activities have grown but the proportion of expenditures dedicated to rehabilitation have declined while the proportion of expenditures for all other activities have increased (Figure 3.5). Despite the decline in rehabilitation expenditures it remains the largest activity.

Figure 3.5: Proportion of Units Completed by Activity

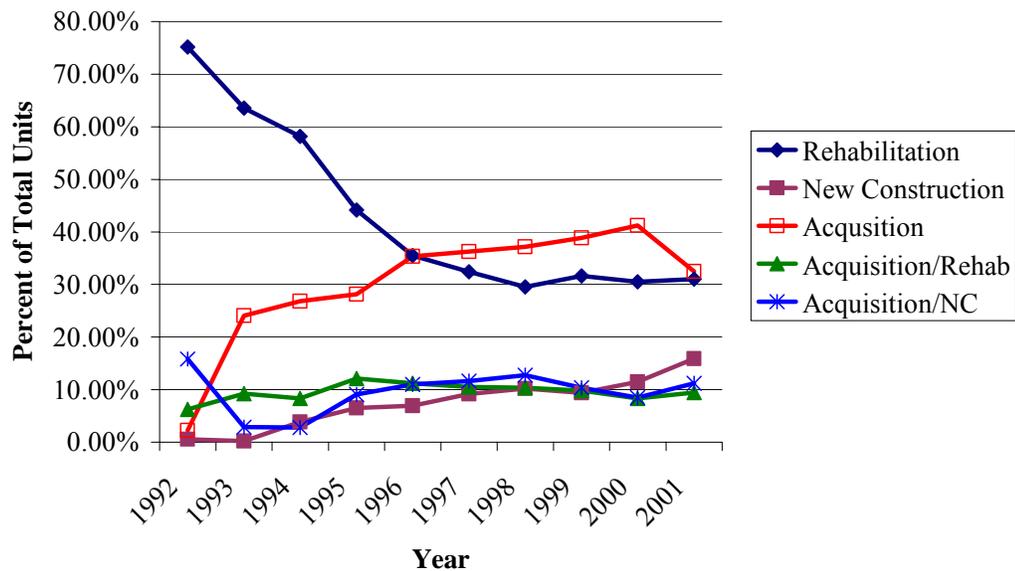


Table 3.11 shows the amount of HOME expenditures per unit and the total expenditures per unit by activity. Acquisition is the most inexpensive means of creating affordable housing and relies to the greatest extent on private resources.

New construction and Acquisition/New construction are the most expensive means of creating affordable housing and draw significantly on all types of funding with the greatest proportion coming from low income housing tax credits. Rehab and Acq/Rehab rely to the greatest extent on HOME expenditures. With the exception of acquisition, the different activities are similar in the income levels they serve (Table 3.12). Acquisition to a greater extent than any other activity benefits higher income households. This is largely due to the relationship between activity and tenure.

Table 3.11: Expenditures per Unit by Activity and Source

Activity	HOME	Public	Private	Program Income	Tax Credit Proceeds	Total
Rehab	17,474	5,349	4,950	423	3,083	31,279
New Const.	25,216	26,969	32,871	521	29,363	114,940
Acquisition	8,500	11,181	36,415	332	836	57,264
Acq/Rehab	21,893	12,987	19,453	353	9,833	64,519
Acq/NC	25,244	19,301	27,152	231	29,803	101,732

Table 3.12: Proportion of Units Completed by Income Level and Activity (%)

Activity	Income Levels (as a percentage of area median income)			
	0-30%	30-50%	50-60%	60-80%
Rehab	33.94	35.17	12.38	13.59
New Construction	23.06	35.80	17.34	14.28
Acquisition	7.40	21.41	22.25	46.33
Acq/Rehab	31.57	30.53	13.08	12.88
Acq/NC	25.86	36.34	16.06	7.53

Three different tenures are served by the HOME program. These include renters, homebuyers and existing homeowners living in substandard units. During

the period, 46.57% of HOME expenditures have been targeted at renters⁵, 27.59% at homebuyers, and 25.84% at existing homeowners. However, due to differences in the total cost of serving the different tenure types, 41.53% of the units have benefited homebuyers, 34.51% have benefited renters, and 23.84% have benefited existing homeowners (Table 3.13).

Table 3.13: Expenditures and Production by Tenure

Tenure	HOME Expenditures		Total Units		HOME/ Unit	Total Exp/ Unit
	\$	%	No.	%		
Rental	2,912,850,215	46.57	132819	34.51	21,931	87,746
Homebuyer	1,725,693,711	27.59	159819	41.53	10,798	56,659
Homeowner	1,615,858,153	25.84	92208	23.96	17,524	21,753

Over time expenditures targeted at existing homeowners have declined while the expenditures for both renters and homebuyers have grown. The decline in expenditure for existing homeowners is related to the decline in rehabilitation as almost 70% of rehabilitation activities have served existing homeowners. Acquisition predominantly (86% of expenditures/ 95% of units) serves homebuyers, while new construction, acquisition/rehab and acquisition/new construction primarily serve renters but also some homebuyers.

⁵ This does not include tenant based rental assistance (TBRA) which is approximately 2% of total allocations.

Table 3.14: Proportion of Units Completed by Tenure and Activity (%)

Activity	Rental	Homebuyer	Homeowner
Rehabilitation	30.46	0.39	69.15
New Construction	63.28	36.69	0.03
Acquisition	13.67	86.33	0.00
Acq/Rehab	71.19	28.80	0.01
Acq/NC	87.16	12.84	0.00

Although there are several combinations of housing activity and tenure these can be simplified into a few common categories which represent different housing programs such as down payment assistance (acquisition/homebuyers); owner-occupied rehab (rehab/existing homeowners), rental rehab (rehab/renters) and development activities which include new construction, acquisition/rehab, and acquisition/new construction for either homebuyers or renters. The remaining combinations, primarily rental acquisition make up an 'other' category which is less than 3% of all units. These programmatic categories will be explored in more detail as strategies that are adopted by cities.

Metropolitan cities make up the greatest number of jurisdictions with 352 cities that have completed projects under the HOME program. Although states have actually produced a greater percentage of HOME units (45% compared to 37.28% for cities) states are more diverse and their programs more difficult to compare - an exercise that is left for future research. Cities have (like the overall program) expended 47% of their HOME resources to benefit renters, 30% for homebuyers and 23% for existing homeowners. While the HOME legislation and decision-makers at HUD have expressed a preference for serving renters, cities

have spent more resources on homeowners. These expenditures have translated into only 36% of the units benefiting renters while 44% have benefited homebuyers and almost 20% have benefited existing homeowners. Table 3.15 illustrates by activity and tenure category HOME expenditures, units produced and average expenditures per unit.

Table 3.15: HOME Expenditures and Production by Activity/Tenure Category

Activity/ Tenure Category	HOME		Units		HOME/ Unit	Total Exp/ Unit
	\$	%	No.	%		
DPA	397,147,477	16.47	50842	35.69	7,811	46,386
OO Rehab	546,365,712	22.66	27683	19.44	19,737	24,161
Rental Rehab	510,451,356	21.17	28038	19.68	18,206	53,640
Homebuyer Dev	323,351,643	13.41	11788	8.28	27,431	67,470
Rental Dev	571,277,668	23.70	21000	14.74	27,204	106,080
Other	62,051,341	2.57	3086	2.17	20,107	94,017
Total	2,410,645,197	100.00	142437	100.00	16,924	55,072

Cities favor homeownership over rental housing although it is not known whether this is because they value homeownership more or because homeownership activities are easier to implement. Much of the HOME resources have been used to further homeownership opportunities and although down payment assistance programs have served a greater proportion of households at the higher income levels (60-80% AMI), it is important to recognize that these programs have assisted a greater proportion of households in all income groups except the extremely low income (0-30%) than any other HOME activity and has done so with only 16% of the total expenditures. Further, owner-occupied rehabilitation programs have primarily benefited the lowest two income groups

(65%). Thus, when combined homeownership activities (down payment assistance, owner-occupied rehab, and homebuyer development) have produced 64% of all completed units while accounting for only 53% of all HOME expenditures and 49% of total expenditures. For all income groups except the extremely low, cities have employed homeownership activities more often than rental activities.

Table 3.16: Proportion of Units Completed by Tenure and Income Level (%)

Income Level	Rental	Homeownership
0-30% AMI	64.30	35.70
30-50% AMI	39.97	60.03
50-60%AMI	22.97	77.03
60-80%AMI	4.95	95.05
Total Units	36.38	63.62

Summary of Outputs

The HOME program allocates funds to several different types of jurisdictions. Different types of jurisdictions have utilized the funding differently as represented by the proportion of expenditures for specific activities. The greatest amount of expenditures has been made by metropolitan cities which also include the greatest number of jurisdictions. For this reason, this research focuses on cities. Although the allocation of HOME funds at the federal level have increased in real terms during the period 1992 - 2001, because of the design of the program and the funding formula, this has not translated into real increases in funds for cities. In fact, cities are the only jurisdiction type to have experienced a real decrease in average allocation during the period. As a result cities may be

more likely to try to economize on the use of the HOME funds than other types of jurisdictions. This may translate into the adoption of local policies that raise the required return on HOME funds above that required by other jurisdiction types. However, the proportion of HOME expenditures to total expenditures is higher for metro cities than for any other jurisdiction type except the insular areas. Cities have been less successful in leveraging other resources for housing than any other jurisdiction type but they have generally produced housing that required the least amount of total expenditures on a per unit basis.

Several trends in HOME program expenditures are important for understanding outcomes. While the amount of HOME funds per unit has remained relatively stable over the period, total expenditures per unit have risen steadily. Thus over time jurisdictions have been able to leverage greater amounts of other types of resources for affordable housing. This is most likely attributable to changes in the allocation of HOME funds by activity and tenure including serving more moderate income beneficiaries and providing more funds for acquisition of existing units. Rehabilitation is the most cost effective activity but it requires a large amount of public resources and is the least effective way to leverage private resources. Acquisition of existing units while still cost effective is the best activity for leveraging private sector resources. These activities primarily benefit homeowners and homebuyers. New construction activities primarily benefit renters in the lowest income categories and are the most expensive means of producing affordable housing. The differences in costs and beneficiaries served of the various activities are important for understanding the

choice of activities made by cities and the outcomes produced in terms of the number of households that are served. There are difficult decisions that must be made by cities regarding the trade-offs between the total number of households that can be served and the nature of those households.

CHALLENGES IN MEASURING PERFORMANCE

Democratic government often produces programs with objectives and designs that seek to serve multiple, sometimes competing or incompatible goals. In a representative democracy legislative choices are often the result of complicated compromises among representatives acting in the best interest of the public sometimes in the best interest of a specific constituency or sometimes in their own best interest. Majority rule in a representative democracy produces programs with objectives and designs that would not be chosen by any of the interested parties. A determination of the extent to which the goals of a program are achieved depends upon the perspective of the interested parties. In the private sector, success can ultimately be determined by profitability, but there is no such universal measure of success in government or for publicly provided goods and services. Identifying a general measure of performance that evaluates a program across multiple constituencies and interests will, inevitably, result in an oversimplification perhaps overemphasizing some dimensions and underemphasizing others. This study is no different.

Government outputs (in terms of expenditures and program implementation) produced in pursuit of a variety of objectives lead to complicated outcomes. In order to gain meaningful understanding of these outcomes it has

been necessary to choose to measure a few dimensions while ignoring a number of others. Government performance under the HOME program is here examined along two dimensions: efficiency and effectiveness. Efficiency is the relationship between benefits realized and resources used, while effectiveness is the degree to which program goals are achieved. These in themselves raise a number of difficulties: 1) there are several types and sources of government inefficiency - here we examine only one; 2) it is difficult to measure, quantitatively, whether a goal has been achieved unless the goal is stated in terms amenable to quantification which they rarely are and it is difficult to judge effectiveness when there are multiple goals present; 3) efficiency and effectiveness are not necessarily compatible. There are efficient organizations that are not effective and there are effective organizations that are not efficient (Cooper, Seiford, and Tone 2000). Reconciling which is a better measure of government performance can only be done by those that have a stake in government outcomes - primarily citizens and taxpayers.

Efficiency

Economists distinguish between two types of efficiency: technical efficiency and allocative efficiency. Technical or X-inefficiency is the failure to minimize costs or maximize output because of not employing the best technology available. Stanbury and Thompson explain 'best technology available' as "not only plant and equipment but also the methods used to coordinate activities and to motivate performance - every aspect of organizational structure and design. By best available, we mean in practice not merely in theory"(Stanbury and Thompson

1995). Technical efficiency is the primary focus of this research. It is believed that there may be methods to coordinate activities which are superior to traditional hierarchical methods embodied in principal-agent controls for coordinating complicated webs of public, private and nonprofit entities which are being employed by some governments but not by others. Identifying these methods and the barriers to their adoption in technically inefficient organizations is the primary concern of this dissertation and is therefore the primary performance measure that is used. Allocative efficiency results from decisions on how resources should be utilized, and economists' use of the term is closely associated with organizational theorist use of the term 'effectiveness'. Therefore, before examining how the efficiency of housing programs is measured it will be useful to understand allocative inefficiency and other types of government waste with specific examples from the housing arena.

There are several potential sources of allocative inefficiency when governments provide goods and services. The first A-inefficiency is simply the case of producing less than consumers are willing to pay for. This occurs for three reasons: 1. government's treatment of the timing of outlays - too much weight is attributed to current costs and too little to future costs; 2. governments' propensity to disregard questions of feasibility - overregulation; and 3. a propensity to disregard incentive effects of prices it sets. For example, the low grazing fees on BLM leads to overgrazing (Stanbury and Thompson 1995). There are several examples of A-inefficiency in the case of housing policy.

The first, and perhaps most detrimental, is the federal government's willingness to allocate current resources for housing development coupled with an unwillingness to pay for maintenance and up keep of those assets that are required over their useful life. This has been the major failure of the public housing program. The federal government has allocated resources to build housing targeted to the very low income but have refused to subsequently pay for the long-term maintenance and operation of public housing units. Public housing units are restricted to the lowest-income households and the rent that is charged to those households is further restricted to 30% of their income. As a result, the rents that are collected on these units are insufficient to cover maintenance and operation costs and policy-makers have refused to cover these costs producing the situation where public housing units fall into disrepair and become problems of slum and blithe and centers for crime.

Another example from the HOME program is the numerous federal regulations which attempt to achieve multiple often incompatible goals. The HOME Program regulations beyond the specific requirements for affordable housing dictate compliance with certain 'other federal regulations'. The most onerous of these are Davis-Bacon wage requirements, Lead-based paint assessment and abatement, the Uniform Relocation Act and the Women and Minority Owned Enterprise requirements. Davis-Bacon requires that any housing project larger than 10 units utilizing federal resources to pay local fair market wages. While this may be a laudable goal, in practice it is difficult to implement, not because of increases in labor costs but because of the increased administrative

burden of monitoring worker wages. Entities producing housing with federal resources are required to not only track local fair market wages for a number of different job types, they are also required to track and report worker wages for each person that contributes to a project. This additional reporting burden creates a situation where it is more difficult for a developer to produce affordable housing utilizing federal resources than it is to produce housing for the market. As a result developers will chose to produce smaller projects (less than 10 units) in order to avoid these regulations even where there may be a need and resources for a larger project.

Similarly, lead-based paint requirements dictate that any existing structures that are to be acquired and/or rehabilitated for use as affordable housing for low income households must be assessed for the presence of lead-based paint hazards and if hazards exist they must be abated by a certified lead-based paint contractor. Some communities like the City of Albuquerque face a shortage of lead-based paint certified contractors to do the work. There is only one contractor in the city of Albuquerque certified to do lead-based paint work and there are only two certified in the entire state of New Mexico. The city has attempted to increase the supply of certified contractors by paying for the certification training but the requisite insurance costs are too high for many of them to afford and the increased paperwork deters them from getting the certification. The Uniform Relocation Act requires that any one currently living in a structure that is to be acquired or rehabilitated utilizing federal dollars receive assistance in relocating (Public Law 91-646; 49 CFR 24). The jurisdiction must cover the costs of

relocating these individuals to alternative residences. Such a proposition can be extremely costly and jurisdictions will usually avoid any project that invokes the Uniform Relocation Act.

Under another federal regulation, local jurisdictions are required to track and report the amount of federal resources that are contracted to women or minority owned businesses. Although this reporting burden falls mainly on the participating jurisdiction it still serves to increase the administrative costs of producing affordable housing. The consequence of these regulations is that nonprofit housing agencies and even local participating jurisdictions will chose housing activities in order to avoid or minimize these burdens.

A final example of A-inefficiency in affordable housing policy is local governments' disregard for the incentive effects of the prices they set. Many local governments have adopted a policy of requiring HOME funds to be repaid. This raises the cost of the resource for affordable housing developers. If HOME funding represented a primary source of financing this might not be such a bad idea but local jurisdictions have coupled this decision with the decision to only utilize HOME funds for gap financing. That is, after an affordable housing developer has secured primary financing which often requires as many as eleven layers of financing then the city will contribute HOME funds. When coupled the higher cost of this resource through repayment requirements and the increased cost that accrues to the project from federal requirements, developers may be unable to utilize the resource. This was the case with a nonprofit developer in Austin, who after securing a commitment of HOME funds to fill a financing gap

decided that the repayment and additional federal requirements would make the project infeasible. He returned the HOME funds to the City of Austin and sought alternative gap financing. It should also be noted that the requirements of one source of funding may be incompatible with the requirements of another funding source although both may originate with the federal government.

The second type of allocative inefficiency, according to Stanbury and Thompson, B-inefficiency results from doing the wrong things: 1) the hard to justify include those things that would not command the support of the majority (except for logrolling). They work at cross purposes and/or they subsidize activities that would be supported anyway (pork barrel); 2) the impossible to justify include funding such things as a library that receives 568 visitors in 1 year; and 3) the impossible to do because they are prohibitively costly, and individuals do not know how to achieve them (Stanbury and Thompson 1995). Examples of B-inefficiency are also present in the HOME program.

Housing advocates often argue that government should not subsidize people at 80% of area median income who can afford housing in the absence of subsidy. This is a particularly salient argument in the HOME program where households between 60% and 80% of area median income are seen to compete for valuable housing subsidies with those more needy below 60% of ami. In the City of Aurora, for example, a family of four with a total household income of \$54,400 is eligible for assistance under the HOME program. On the other hand, attempts to serve the most needy often result in housing subsidies that don't make economic sense. For example, the state of New Mexico used a \$60,000 HOME

grant with no recourse to rehabilitate an 80-year old woman's home in a rural area where the market value of a new home would not fetch \$35,000. It is important to understand these incidents of allocative inefficiency as well as other sources of government waste for two reasons: 1. it may not be possible to differentiate the effects of technical and allocative inefficiency in the given data; and 2. allocative inefficiency and other types of government waste may interact with decisions affecting technical efficiency or they may represent barriers to achieving stated goals.

Stanbury and Thompson also identify other sources of government waste which are present in local affordable housing policy. Spillover costs include the costs of complying with regulations, taxes and intergovernmental mandates or accrue to citizens as a result of government actions (Stanbury and Thompson 1995). As discussed previously the 'other federal regulations' which are attached to the use of HOME funding create spillover costs in complying with these regulations. Not only are they a case of allocative inefficiency because they deter the undertaking of a desirable activity they also create spillover costs in terms of monitoring and reporting. Davis-Bacon wage requirements, increase the cost of producing affordable housing not only because of increases in labor costs (in some markets) but because of the increased administrative cost of tracking and reporting wages. The lead-based paint assessment can increase the cost of affordable housing by \$500 per unit and abatement averages \$5-6,000 per unit but can often exceed the total cost of the rehabilitation. Similarly, the development process at the local level drives up the cost of developing housing not only by

imposing development fees but also by creating delays in the process. The development process, including planning and zoning, engineering approvals, permitting and utilities can in some cases be drawn out for as many as 24 months. During this time the developer is incurring costs associated with holding the land. Developers of affordable housing face the same fees and delays as other developments but can not expect the same kind of return on their investments. There is therefore little incentive for developers to produce affordable housing.

Idle assets such as holding cash and money market funds, large inventories and idle land are another source of government waste because users are not charged with use of assets therefore there is no incentive to conserve. Reducing idle stock usually means transferring it to the private sector which raises concerns that the private sector will gain at public expense. Several local jurisdictions face state restrictions on the donation of publicly owned land to nonprofit housing developers because of the concern of turning over a public assets to private hands; but when the city has no alternative use for the land it may often sit idle for long periods of time tying up government assets and creating a loss in terms of forgone revenue. In the HOME program, as well, the federal government allows a city five years to expend the HOME resources. As a city delays expenditures those public resources are tied up and not being put to the most economic use.

Finally, corruption, fraud, theft and red tape although rare and in isolated incidents are also present in housing programs. In Texas, several employees including the head of the state housing agency lost their jobs because of favoritism in the allocation of public resources under the Low Income Housing

Tax Credit Program. Two individuals were indicted for criminal activity and one was convicted and sentenced to prison. In Albuquerque, the city has faced problems of embezzlement and other crimes within the nonprofit community which threatens the viability of these organizations: after turning one organization around, another faces failure creating a loss for the city in terms of the capacity of the housing network and previous resources expended by the city to build that capacity. Other sources of waste such as deadweight losses due to redistributive transfers, wasteful transfers or rent-seeking are less apparent in the HOME programs and recent housing policies although they may also exist.

DESCRIPTION OF DATA AND DATA LIMITATIONS

The data for the analysis come primarily from HUD's Integrated Disbursement and Information System (IDIS). The IDIS system collects data from all jurisdictions that receive the HOME grant. The database is very rich in that it includes over 500 jurisdictions, covering 10 years of program operation and includes a wide variety of variables. Data are available from the beginning of the program 1992 through October 2001 and include: financial information such as HOME funds expended as well as other federal funds expended, state and local funds expended, private funds contributed, HOME program income expended and proceeds from Low Income Housing Tax Credits; project information such as activity type (rehabilitation, new construction, acquisition, acquisition/rehab, or acquisition/new construction), tenure type (rental, homebuyer, existing homeowner), units produced, mixed income or mixed use projects, FHA insurance, and recipient of the funds (local government, nonprofit, other entity,

state or state recipient); and beneficiary information such as income level, head of household race, size of household, type of household. Additional data on population, median income, and median house value was obtained from the Census and fair market rents were obtained from HUD' s published fair market rents.

Despite the richness of the HUD database it nevertheless has several problems and limitation. Several potential problems arise as a result of the method of data collection. The data are collected at the jurisdiction level in a relational database. Jurisdictions are required to enter the data in order to receive HOME funds. One potential problem is that the database does not appear to have adequate controls for required information. It is possible to enter some information for a project but not all producing an incomplete record with missing data. Since the data are collected at the local level the diligence with which it is recorded is dependent upon local priorities and personnel and may vary not only across jurisdictions but also over time with changes in policy or personnel. Although because the database is used to track commitment and expenditure of HOME funds, (a jurisdiction has two years to commit funds and five years to expend the funds before they revert back to HUD) local jurisdictions do have the incentive to keep the data up-to-date. Yet incompleteness in the data posed several challenges in aggregating the data which is discussed in more detail in the appendix. Problems in the data also exist because the IDIS system was not in place at the beginning of the HOME program. Data for years prior to its implementation were imported from a previous accounting system LOCCS.

There were a number of errors during the data conversion process which HUD is attempting to clear up but had not completed by 2001 when the data were obtained for this research.

The greatest limitation of the data is the inability to appropriately associate cost or expenditures with the income level of the beneficiary. Lower income beneficiaries are expected to require greater amounts of subsidy and therefore producing housing for these households costs more than serving households with higher incomes. In order to appropriately measure the efficiency of serving different income levels it is necessary to know not only the total number of households housed by income level but also total expenditures by income level. While data on beneficiaries is available at the unit level, data on expenditures is only available at the project level thus making it impossible to estimate the amount of resources expended by income level. This is due to the fact that multiple income levels are housed in the same project. Other limitations of the data were that median income, median house value, and fair market rents were not available for each of the ten years of the program. Also, information on differences in construction costs for each jurisdiction was not available for each of the ten years.

MODELS OF EFFICIENCY

The efficiency measure used here is the ratio of the total number of low-income housing units produced and/or the total number of low-income households housed (total output) to the total resources expended (total expenditures). The total expenditures includes HOME funding, other public funding such as

resources from other federal housing programs, state and local resources, private resources and recycled expenditures of HOME funds termed 'program income'. This is the sole efficiency measure and primary performance measure utilized although three different methods were considered to evaluate it.

Rubenstein et. al., in their work on school districts outline four models for evaluating efficiency: the adjusted performance measure; the production function, the cost function; and Data Envelopment Analysis (Rubenstein, Schwartz, and Stiefel). Each of these models was adapted to the case of affordable housing production and considered in the evaluation of HOME program performance. Three of these models used to evaluate performance while the fourth, the cost function was specified but not estimated due to lack of available data. A comparison of the models as applied to affordable housing was adapted from the comparison provided by Rubenstein et. al. and is included in the appendix.

A Production Function of Affordable Housing

A production function is commonly used by economists to model the relationship between production inputs and outputs (Mansfield 1991). Traditionally, inputs were considered to be land, labor and capital but more recent work has adapted the production function to include other types of inputs (Rubenstein, Schwartz, and Stiefel). While land, labor and capital are important inputs to the production of housing they are not necessarily the most important inputs to use to understand the production of affordable housing. When a governmental entity seeks to produce affordable housing, it draws on a mix of

resources that contribute to subsidizing the production of housing by the private sector.

Evaluating how a government efficiently subsidizes a private activity requires evaluating the resource inputs that are used. Thus, instead of land, labor and capital the inputs to affordable housing production include the resources available for subsidizing housing. These resources are the HOME program, other public resources (federal, state and local), private resources, HOME program income (resources recycled by the HOME program), and proceeds from the Low Income Housing Tax Credit program. Outputs include the total number of affordable housing units produced including newly constructed units, units rehabilitated, or households that are housed in existing units. The production function was estimated using a panel data set of 342 cities over the ten year period 1992-2001⁶. The model sees output as a function of housing market characteristics, resource inputs, city dummy variables, time dummy variables and an error term. The model expressed in logarithmic form is:

$$\ln units = \beta_0 + \beta_1 \ln pop + \beta_2 \ln fmr + \beta_3 \ln home + \beta_4 \ln public + \beta_5 \ln privt + \beta_6 \ln proginc + \beta_7 \ln lihtc + \beta_8 Yr_{92} + \dots + \beta_{15} Yr_{01} + \beta_{16} City_1 + \dots + \beta_{357} City_{342} + \varepsilon$$

where:

units = total completed units

pop = population

⁶ Only those cities that received HOME funds for all ten years were included.

fmr = fair market rent

home = home expenditures

public = public expenditures

privt = private expenditures

proginc = program income expenditures

lihtc = low income housing tax credit proceeds expended

yr = is a dummy for year (1996 is dropped as the base year)

city = is a dummy for the city (Santa Barbara is dropped as the base)

It is expected that any increase in resources contributed to affordable housing will contribute to an increased number of units produced. To the extent that all of the factors of production identified in these models are monetary expenditures they can be thought of as pure substitutes of each other such that an increase in any one of them will produce an increase in the total number of affordable housing units produced. The relative prices (cost) of these resources though are not equal and it is the relative prices which dictate the extent to which an input contributes to producing more units. Unfortunately the relative prices of the inputs are not known exactly.

Of the resources identified (HOME, public, private, program income and LIHTC) HOME has the lowest cost of capital (i.e. is the cheapest when viewed from the perspective of the local government) and therefore would be expected to contribute (Herbert and Wallace 1998) a greater number of units. This resource is also limited and a jurisdiction's efforts to stretch or recycle this funding could

raise the cost/price of this input reducing its contribution to the number of units produced. At the other extreme the cost of private investment capital is the most expensive in terms of the required return but it is also the most abundant of all the resources. The price of the public expenditures depends on their substitutability with other public expenditures and also the tax price. Program income is HOME program funding that has been recaptured or otherwise recycled from previous affordable housing activities. It like HOME has a low cost of capital but is limited such that the lower the jurisdiction chooses to set the HOME and program income price (through their required return on investment) the more limited the resource will be. Finally, the LIHTC proceeds which are only available for rental housing projects depend on a number of factors including the investors' tax price and the secondary market for tax credits. It is expected that all of these variables will be positive but their relative influence on units produced is unknown.

The other variables population and fair market rents are meant to control for differences in housing markets among the jurisdictions. An important variable, median income is omitted because of lack of data on an annual basis. The model would be significantly improved with the inclusion of this variable. Relative efficiency is measured by the coefficient on the city dummies and the coefficient on the resources measures marginal productivities.

Production Function Results

The production function model reveals the average performance of cities under the HOME program. Table 3.17 shows the results of the production function model (the year and city dummies have been omitted from table 3.17 but

the city dummy coefficients are included in Table C.1 in Appendix C). As expected, all expenditures are positive and significant with the exception of low income housing tax credit proceeds. This suggests that allocating HOME funds to LIHTC projects does not increase the number of units a jurisdiction is able to produce. Further, since the coefficients on the resource variables measure the marginal productivities of this resource, the results reveal the relative importance of the resources to affordable housing in general⁷.

On average HOME funding contributes 80% of the total output while other public resources contribute less than 1%, private resources almost 3% and program income approximately 1.5%. Or in other words a 10% increase in HOME funding would lead to an 8% increase in output while a 10% increase in other public sources would be expected to produce only 1/10th of a percent increase in output and a 10% increase in private funding a 3% increase in output. From this we can surmise about the relative prices of the various inputs. As expected the HOME funds have the lowest price to the local decision-maker and thus has the highest marginal productivity. Also, as expected private resources have a significantly higher price than the HOME funds (and corresponding lower marginal productivity) but a lower price than other public resources. Neither population nor fair market rents are statistically significant. 1998 is the only year that is statistically significantly different from 1996 and it is negative.

⁷ The coefficients on the resources variables should be interpreted with caution. Some of these resources are potentially endogenous. The Hausman test for endogeneity reveals slight endogeneity of the program income, public, and private variables. However, the structural equation utilized for this test is a poor instrument for these variables. Additional data is necessary to produce a valid test. Remedies to this problem would require a different method of data aggregation. These may include simultaneous equations or a fixed effects model with lagged variables. The ranking of the cities should not be affected by this problem.

Table 3.17: Production Function Results

Variable	Parameter Estimates	Std Error	t-value
Intercept	-3.3513	5.18431	-0.65
Population	-0.49613	0.42529	-1.17
FMR	0.07625	0.2966	0.26
HOME	0.80276	* 0.01457	55.09
Public	0.00909	* 0.00341	2.67
Private	0.02882	* 0.00362	7.96
Program Income	0.01491	* 0.00438	3.41
LIHTC	-0.000277	0.00384	-0.07
Adjusted R2 = .8413			

* statistically significant at the 5% level

A major advantage of the production function model according to Rubenstein et. al. is that the cross sectional data are sufficiently robust to choose groups of more or less efficient entities. The coefficients on the city dummies represent that city's efficiency relative to the reference city - Santa Barbara, CA. (Santa Barbara is the median city in terms of HOME allocation). The coefficients of all the cities are included in Appendix C. The top 20% of all cities (68 cities), which can be considered high performers, had coefficients greater than 1.67 and the bottom 20% had coefficients less than 0.48.

There is some concern that high performing jurisdictions may be categorized as such because they adopt a creaming strategy in which they serve only the higher income groups which are easier to house. The lower income group at 60-80% of median income requires fewer subsidies to house than those households with incomes below 60% of median income. To ensure that jurisdictions are not categorized as high performing simply because they target

higher income groups the production function model was re-estimated where the dependent variable is the total units produced for households below 60% of median income. This model, termed the low income production function, takes the same form as the production function with a different dependent variable.

Table 3.18 shows the results of the low income production function. In the low income model, all the expenditure variables are positive and significant as expected. In this case, low income housing tax credits are significant in increasing the number of units produced. HOME funding contributes less to total output than when all income groups are included. A 10% increase in HOME funding will produce only a 6% increase in total low income units. Other public resources are slightly more important while the productivity of private resources is half of what it was when considering all units. Low income housing tax credit proceeds can be expected on average to produce less than 1% increase in units when proceeds are increased by 10%. Again population and fair market rents are not significant. The year and city dummies have been omitted. 2000 is the only year that is statistically significantly different from 1996 suggesting that there has been some learning that increases the number of units produced.

Table 3.18: Low Income Production Function Results

Variable	Parameter Estimates	Std Error	t-value
Intercept	-0.81209	5.02066	-0.16
Population	-0.27707	0.41187	-0.67
FMR	-0.25712	0.28724	-0.9
HOME	0.5932 *	0.01411	42.04
Public	0.01053 *	0.0033	3.19
Private	0.01411 *	0.00351	4.02
Program Income	0.00868 *	0.00424	2.05
LIHTC	0.01965 *	0.00372	5.28
Adjusted R2 = .7908			

* statistically significant at the 5% level

When categorizing the jurisdictions by performance the top 20% had coefficients above 1.12 and the bottom 20% were less than 0.07. The groups (high performers are top 20%, low performers are bottom 20% and the remaining jurisdictions are average) are fairly stable between the production function model and the low income production function. When comparing the groups between the two models there are 15 (out of 68) jurisdictions considered high performing by the production function that are only average when evaluated with the low income production function. Similarly, there are 15 average performers under the production function that are elevated to high performers under the low income production function. With regard to the low performing group there are 21 low performers as evaluated by the production function that become average performers under the low income model and 21 average performers under the production function that become low performers under the low income model.

The rankings remain generally consistent between the two models as revealed in Appendix C.

Shortcomings of the Production Function

There is value in the ability to group the jurisdictions by performance but there are a number of shortcomings of the production function technique as applied to affordable housing. Several difficulties arise from the use of a panel data set. For one, control data on local housing market characteristics are not available for each of the ten years. Median income, an important control variable, is available from the 1990 Census and from the 2000 Census, but accurate estimates for the intervening years are not easily acquirable.

The second problem with the use of panel data stems from the fact that capital expenditures for affordable housing are lumpy. Resources invested in one year may not produce a completed housing unit until the next year or in some cases several years later. Thus, resources expended in any year are not necessarily related to the output produced in that year. In order to avoid this problem in the production function the data has been constructed such that resource inputs in a year are those that are directly related to the output in that year (i.e. the resources are the total cost of completed projects). The use of such data does not allow for an examination of project duration as an important explanatory factor. Since data on the timing of expenditures is not available it may be more appropriate to specify a cost function (discussed later) rather than a production function. Finally, the production function approach only provides information on the average performance of jurisdictions, a shortcoming that the

cost function shares. Neither approach provides any information on how that performance can be improved as the Substantively Weighted Analytic Techniques purport to do⁸.

Substantively Weighted Analytic Techniques (SWAT)

Substantively Weighted Analytic Techniques have been promoted by Kenneth J. Meier and Jeff Gill as a method that is superior to standard regression analysis for the study of program and policy analysis (Meier and Gill 2000). They argue that the goal of policy analysis is not to seek purely theoretical knowledge (how things are) but rather to find ways of improving system performance, that is, how things might be. To do so it is necessary to study those organizations that are unusual -- but the use of linear regression techniques in policy studies downplays the importance of the unusual and focuses on the typical or average organization (Meier and Gill 2000). The method they propose, substantively weighted least squares, puts more weight on the highest performing agencies. They conclude, "the method shows that some variables may be far more important for effective performance than normal linear regression techniques demonstrate" (Meier and Gill 2000).

⁸ Efficiency can also be measured using a cost function where total cost is a function of the outputs produced, housing market characteristics, input prices, year and city dummies, and an error term. The cost function has the advantage of being able to incorporate multiple outputs which the production function does not. While a cost function for affordable housing was specified (see Appendix D), data is not available on the input prices. This would be the cost of capital of the various resources in each jurisdiction. Estimating such prices is a daunting task although it might be possible to estimate the model by substituting an index of construction costs by jurisdiction for input prices. Such an approach assumes that the input prices (or at least the relationship between the input prices) are relatively stable across the jurisdictions but that differences in total costs can be attributed to differences in construction costs. This model was not estimated because the cost of acquiring the data on construction cost differences was beyond the means of this research.

Substantively Weighted Least Squares begins with a standard ordinary least squares (OLS) regression from which high performing organizations are identified as those with high jackknifed or externally studentized residuals. Weighted least squares is then used to iteratively reduce the weight given to all organizations other than the high performers (effectively increasing the weight of the high performers). The objective is then to examine how the slopes (coefficients) change over the course of the iterations. The changing slopes show which variables differentiate the high performers from the rest (Meier and Gill 2000). Several adjustments were made to the previous production function model in order to estimate a model for the SWAT analysis.

The Adjusted Performance Measure Model

In order to overcome some of the difficulties encountered with the production function model several modifications were made to the model before applying the SWAT analysis. Instead of estimating a model utilizing panel data, the model used for the SWAT analysis uses aggregate data for the ten year period. This model then becomes what Rubenstein et. al. refer to as the adjusted performance measure (APM). The model uses cross-sectional data and identifies outputs as a function of the various inputs with controls for entity characteristics, such as the local housing market. The APM was run on a dataset that aggregated inputs and outputs for the entire 10 year period because of the lumpiness of expenditures this is expected to present the most accurate picture of efficiency. Efficiency is measured by the residuals. The advantage of the APM is that it is easily estimated. The disadvantages according to Rubenstein et. al. are

uncertainty with regard to validity and reliability and each year must be estimated separately. The use of aggregated data is expected to overcome these disadvantages in the affordable housing case. A second modification was that the data were split in order to evaluate homeowner and rental activities separately and several variables to control for city housing strategy were included in the model.

Under the HOME program, different activities may be undertaken to produce different types of affordable housing that may have very different cost structures. The most important differences occur between categories of housing produced for renters and those produced for homeowners. Therefore each category was estimated under a separate model. The models assume that the number of affordable housing units produced is a function of expenditures and strategy controlling for differences in the housing market. Expenditures include expenditures from all sources including the HOME grant, other public resources, private resources, HOME program income and in the rental case Low Income Housing Tax Credits. Three variables which represent a city's strategy are included. The percentage of units produced by nonprofit organizations and the percentage of units produced by other entities measure the level of contracting out or "hollowness" in a city (percent of units produced by the local government is the reference); and the percentage of units that benefit households earning below 60% of the area median income represents a city's strategy for beneficiary targeting.

The homeowner model expressed in logarithmic form:

$$\ln \text{unitsh} = \beta_0 + \beta_1 \ln \text{home} + \beta_2 \ln \text{public} + \beta_3 \ln \text{privt} + \beta_4 \ln \text{prginc} \\ + \beta_5 \text{percou} + \beta_6 \text{peroeu} + \beta_7 \text{per60ami} + \beta_8 \ln \text{medvalue} + \beta_9 \ln \text{pop} + \\ \beta_{10} \ln \text{medinc} + \varepsilon$$

and

The rental model expressed in logarithmic form:

$$\ln \text{unitsr} = \beta_0 + \beta_1 \ln \text{home} + \beta_2 \ln \text{public} + \beta_3 \ln \text{privt} + \beta_4 \ln \text{prginc} + \\ \beta_5 \ln \text{lihtc} + \beta_6 \text{percoh} + \beta_7 \text{percoh} + \beta_8 \text{peroeu} + \beta_9 \text{per50ami} + \beta_{10} \ln \text{fmr} \\ + \beta_{11} \ln \text{pop} + \beta_{12} \ln \text{medinc} + \varepsilon$$

where:

unitsh - is the total number of homeowner units produced during the period 1992-2001

unitsr - is the total number of rental units produced during the period 1992-2001

home - is the total HOME program expenditures (in constant 2000 dollars) associated with the relevant HOME activities during the period (i.e. in the homeowner model only homeowner expenditures are included the same is true for all resources except lihtc which is unique to rental activities)

public - is the total public expenditures associated with (homeowner or rental) activities during the period

privt - is the total private investment in (homeowner or rental) activities during the period

prginc - is the total amount of HOME program income expenditures on (homeowner or rental) activities during the period

lihtc - is the total proceeds from the Low Income Housing Tax Credit Program contributed to HOME rental activities during the period

percou - is the percentage units produced by nonprofit organizations

peroeu - is the percentage units produced by other entities

medvalue - is the median house value in 1999

pop - is the 2000 population for the jurisdiction

medinc - is the 2000 median income

fmr - is the 2000 fair market rent

per60ami - is the percentage of units that benefited households with incomes below 60% of the area median income

per50ami - is the percentage of units that benefited households with incomes below 50% of the area median income

The mix of available resources reflects, to a certain extent, a jurisdiction's affordable housing strategy. For example, one jurisdiction may leverage more private resources while another contributes more public resources. Therefore, we would like to learn from the analysis whether a certain mix of resources is more productive than any other. Other strategies such as the level of decentralization (use of nonprofit and other partners) and income targeting may also play an important role in the number of affordable housing units produced.

The federal program encourages the use of nonprofit partners in order to increase the supply of affordable units but there is some evidence in the literature that nonprofit organizations face greater financing challenges that raise their development costs relative to for-profit developers (Herbert and Wallace 1998) and there is an on-going concern over the capacity of nonprofit partners to develop housing. Therefore, we expect that the greater the percentage of units produced by nonprofits and other entities will both be positively related to the number of units produced (indicating that decentralization is more efficient than centralized provision) but the size of the coefficient on the other entities will be larger than that for nonprofits. Further, all HOME resources must benefit households with incomes below 80% of the area median income. Any targeting below this is expected to reduce the number of units produced because it will

require greater subsidy amounts per unit. Therefore, the percent of units produced for beneficiaries with income levels below 60% of the area median income (below60ami) is expected to be negatively related to the number of units produced. The goal of the SWAT analysis is to identify whether higher producers have adopted different strategies as reflected in different mixes of resources, level of decentralization or income targeting than the other jurisdictions.

The remaining variables in the model are control variables. Population is intended to control for the size of the jurisdiction and its housing market. Population is expected to be positively related to the number of units produced. The median house value and the fair market rents are intended to control for the relative differences in housing costs across jurisdictions. These are both expected to be negatively related to the number of units produced. Median income is included to control for differences in area median incomes and is expected to be positively related to the number of units produced.

Application of the Substantively Weighted Least Squares Technique

After estimating each model, the high performing jurisdictions were identified as those with studentized residuals greater than 0.7. The 0.7 residual level is suggested by Meier and Gill as the level at which approximately 20% of the jurisdictions will be captured as high performing. A test of means was performed to test whether this group was statistically significantly different from the remaining jurisdictions on any of the variables. This test was performed to ensure that the high performing jurisdictions were not statistically different from average in terms of the control variables (i.e. that the high performers were not

jurisdictions that had larger populations or larger HOME allocations and thus were not actually 'better' but larger). The models were then rerun using weighted least squares such that the remaining "average" jurisdictions (those with studentized residuals less than 0.7) were counted as 0.9 case and the high performers as 1 case. Nine regressions were run, each time reducing the weight of the average jurisdictions by 0.1 until the final regression weighted the high performing jurisdictions at 1.0 and the average jurisdictions at 0.1. The slope from each regression iteration was divided by the original OLS slope in order to compare changes in percentage terms to the OLS model and to each other. The resulting changes in the slopes of the variables were then examined in order to determine what differentiates the high performing jurisdictions from the average.

SWAT Results

Table 3.19 shows the results of the original OLS and the last run of the Substantively Weighted Least Squares (SWLS). All of the variables have the expected sign except the percentage of units produced by nonprofits which is negative suggesting that contracting-out through nonprofits is less efficient than if the unit of local government produces the units itself. The HOME funding as expected is the most important resource in affordable housing production. The coefficient can be interpreted as an elasticity implying that a 10% increase in HOME expenditures would result in an 8.4% increase in the number of units produced. The amount of private resources committed is also bounded away from zero but is relatively inelastic. That is, a 10% increase in private resources would result in only about 0.65% increase in the number of units produced. Neither the

amount of public resources expended nor the amount of program income expended is different from zero. The median house value is an important determinant of the number of units produced. Increases in the median house value restrict the number of affordable units that are produced by a jurisdiction.

Table 3.19: Homeowner Model Results

Variable	Original OLS			SWLS		
	Parameter Estimate	95% Confidence Limits		Parameter Estimate	95% Confidence Limits	
intercept	-7.1049	-13.900	-0.3098	-5.7676	-11.855	0.3206
lnthome	0.8428	0.7058	0.9798	0.7691	0.6510	0.8872
lnthpublic	0.0108	-0.0141	0.0358	0.0081	-0.0138	0.0299
lnthprivt	0.0651	0.0398	0.0903	0.0314	0.0135	0.0494
lnthprginc	0.0142	-0.0074	0.0357	0.0067	-0.0137	0.0272
percou	-0.7193	-1.2789	-0.0160	-1.0291	-1.5351	-0.5230
peroeu	0.2278	-0.7447	1.2003	0.1406	-0.5528	0.8340
per60ami	0.4571	-0.0734	0.9877	-0.5814	-1.0611	-0.1017
lnmedvalue	-0.4208	-0.7108	-0.1307	-0.4597	-0.7107	-0.2087
lnpop	0.0441	-0.1202	0.2083	0.1043	-0.0439	0.2525
lnmedinc	0.2499	-0.4464	0.9462	0.3592	-0.2561	0.9744
Adj R-sq = 0.6134				Adj R-sq = 0.6261		

Note: Bold variables have confidence limits bounded away from zero.

Table 3.20: Rental Model Results

Variable	Original OLS			SWLS		
	Parameter Estimate	95% Confidence Limits		Parameter Estimate	95% Confidence Limits	
Intercept	-11.66624	-17.4267	-5.9057	-10.36034	-15.7848	-4.9358
Intothome	0.77361	0.68337	0.8638	0.73561	0.6621	0.8091
Intotpublic	-0.00724	-0.02731	0.0128	-0.00428	-0.02247	0.0139
Intotprivt	0.0509	0.02921	0.0725	0.04018	0.02031	0.0600
Intotprginc	0.02307	0.00409	0.0420	0.01489	-0.00185	0.0316
lnlihtc	0.00122	-0.01317	0.0156	0.00386	-0.00897	0.0166
percou	-0.1659	-0.43798	0.1061	-0.15266	-0.39011	0.0848
peroeu	-0.26202	-1.53803	1.0139	-0.34402	-1.67916	0.9911
per50ami	0.79863	0.48881	1.1084	0.6233	0.33977	0.9068
lnfmr	-1.17187	-1.72311	-1.6206	-1.12518	-1.64849	-0.6018
lnpop	0.22943	0.10209	0.3567	0.23274	0.11747	0.3480
lnmedinc	0.7835	0.054	1.5130	0.75667	0.05779	1.4555
Adj R2 = 0.8230				Adj R2 = 0.8411		

Note: Bold variables have confidence limits bounded away from zero.

Columns 1-4 of Table 3.20 show the results of the OLS rental model. In the rental model, HOME funding remains an important resource although it has less of an impact than in the homeowner model, where a 10% increase in HOME funding would result in a 7.7% increase in units produced. Private resources have a slightly smaller impact on rental production than in the case of homeownership but program income becomes important although its impact is very small. The rental model differs from the homeowner model in several respects. One, the level of contracting-out captured by the percent of units produced by nonprofit organizations or other entities is not a significant determinate of the number of units produced. Two, the percent below 50% ami variable has an unexpected sign

and is statistically significant. That is, jurisdictions that target lower incomes produce more rental units. Three, in the rental model population is important (in the homeowner model it is not statistically different from zero). A possible explanation is that there are urbanization economies that occur in rental housing but not in the development of housing for sale to homeowners. Reductions in per unit costs can be achieved through increased project size in areas where there is a large enough demand and higher densities but such savings are apparently not as significant for single family (homeowner) developments. Although the OLS regressions offer some interesting results about the production of affordable housing on average, much more can be learned from looking at the outliers, those that produce more than would be expected.

The process of separating the jurisdictions into different groups based on the difference between their actual production and that predicted by the model provides some interesting information in and of itself. In terms of homeowner activities, there were 328 jurisdictions that engaged in homeowner activities. Of these, 45 jurisdictions (14%) are in the high performing group, 249 are in the average group (76%), and 34 are in the low performing group (10%). Ideally the high performing group would be made up of approximately the top 20% or 65 jurisdictions but in this case there is little to distinguish the remaining 249 average jurisdictions⁹. A sensitivity analysis was performed to test the whether changing the selection criteria would result in significantly different entities being chosen as high performing. The groups remained stable even after reducing the residual

⁹ The 20% criteria is an arbitrary criteria suggested by Meier and Gill. Depending on the goals of the research any level could be utilized.

criteria from 0.7 to 0.3. In terms of rental activities, there were a total of 297 jurisdictions that engaged in rental activities. The groups included 70 jurisdictions (24%) in the high performing group, 164 in the average group (55%) and 63 in the low performing group (21%). A total of 327 jurisdictions engaged in homeowner activities while only 297 engaged in rental activities. These may be policy decisions that are meant to best meet the needs of the jurisdiction but they may also simply reflect the jurisdiction's inability or unwillingness to engage in these activities. This highlights one of the drawbacks of the SWAT method which is the inability to examine the efficiency of the allocation mix. Because each output must be evaluated separately, we are unable to examine the impact that choosing to forgo one activity for another has on the overall outcomes. Data Envelopment Analysis purports to overcome this shortcoming by examining multiple outputs at the same time.

Tables 3.21 and 3.22 compare the variables among the high, average and low performing groups for the homeowner and rental model respectively. A test of means was conducted to test whether in either model, homeowner or rental activities, those jurisdictions selected as high performers differed from the average group in terms of resource expenditure, strategy adoption, or variables outside the control of local managers and whether the low performers differed from the average group. In terms of homeowner activities, the high performing group produced statistically significantly more units in two out of the four income categories without a statistically significant difference compared to the average group in units for the remaining two income groups. The high performers did not

expend statistically significantly different amounts of resources. Also, the percentage of units produced for households below 60% of the area median income was significantly less than the average group. This could support the argument that high performer are "skimming" or "creaming" by assisting more moderate income households, but the fact that they produced no fewer units for the lowest income categories than the average group and spent no more in public resources discounts such a theory and lends support instead to the argument that a mixed income approach is more efficient than targeting of the neediest households.

Table 3.21: Test of Difference of Means - Homeowner Model

Variable	High Performers (n=45)		Average (n=249)	Low Performers (n=34)	
	Mean	t-value	Mean	Mean	t-value
Total Units	571.9111	2.54	245.4096	77.3529	-5.50
Units <30% AMI	46.7333	0.44	36.269	12.4117	-3.59
Units 31-50% AMI	116.2666	1.38	74.4819	25.5588	-4.50
Units 51-60% AMI	112.9111	2.57	46.7791	15.1176	-5.06
Units 61-80% AMI	271.1777	2.91	79.9638	22.3235	-5.60
Total HOME	\$3,608,580	-0.45	\$4,008,590	\$3,009,789	-1.02
Total Public	\$547,733	-0.19	\$598,414	\$1,005,576	0.64
Total Private	\$15,126,087	1.59	\$5,854,266	\$2,934,863	-1.88
Total Program Inc	\$224,797	0.63	\$176,879	\$157,232	-0.25
% Units nonprofit	6.85%	-1.18	10.74%	14.55%	1.01
% Units other entity	3.99%	0.76	2.02%	3.78%	0.60
% < 60% AMI	53.75%	-3.06	64.03%	60.10%	-0.73
Median Value	\$119,753	0.48	\$114,467	\$143,947	1.62
Median Income	\$52,062	-0.13	\$52,258	\$54,213	1.06
Population	220,994	-0.19	233,142	196,425	-0.68
Total allocation	\$13,417,528	-0.81	\$17,816,404	\$15,255,949	-0.42

Note: Bold variables have statistically significantly different means.

Table 3.22: Test of Difference of Means - Rental Model

Variable	High Performers (n=70)		Average (n=164)	Low Performers (n=63)	
	Mean	t-value	Mean	Mean	t-value
Total Units	244.0857	0.27	206.6524	31.6507	-4.55
Units <30 AMI	85.6857	0.04	84.6036	13.492	-4.28
Units 31-50% AMI	70.3285	0.23	65.6463	12.1904	-4.66
Units 51-60% AMI	18.8285	-0.65	22.3902	3.412	-4.18
Units 61-80% AMI	7.7142	0.38	6.9024	1.0158	-3.65
Total HOME	\$2,341,395	-1.95	\$5,357,355	\$1,444,291	-2.58
Total Public	\$1,772,251	-2.64	\$4,592,860	\$1,702,335	-2.57
Total Private	\$2,384,174	-2.03	\$3,917,239	\$1,752,621	-3.12
Total Program Inc	\$41,256	-0.83	\$75,577	\$24,441	-1.29
LIHTC Proceeds	\$1,954,106	-2.31	\$4,321,804	\$1,418,238	-2.92
% Units nonprofit	25.15%	0.08	24.81%	29.48%	0.98
% Units other entity	1.07%	-0.31	1.33%	1.43%	0.09
% <50% AMI	62.80%	-1.76	69.72%	71.66%	0.44
Fair Market Rent	\$655	0.43	\$645	\$665	0.75
Median Income	\$53,531	-0.25	\$53,885	\$53,805	-0.05
Population	184,641	-1.87	301,243	154,811	-2.37
Total allocation	\$12,588,232	-1.74	\$23,868,531	\$9,147,471	-2.30

Note: Bold variables have statistically significantly different means.

The low performing group in terms of homeowner activities produced statistically significantly fewer units but they expended similar amounts of resources. Although, information on the amount of resources that were available to a given jurisdiction is not available, the amount of HOME resources available to the jurisdictions measured by their total allocation over the ten year period was not statistically significantly different among the three groups. This figure represents to total amount of HOME funds available to the jurisdiction and does not take into account how the jurisdiction may have allocated those funds between

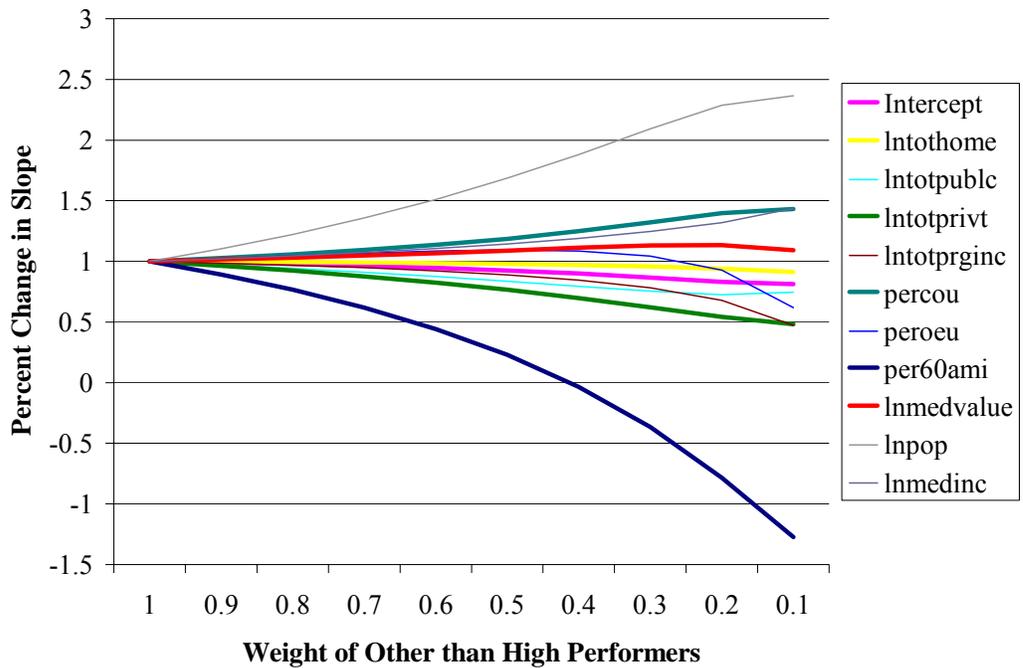
homeowner and rental activities. None of the factors seem to explain the poor performance of the low performing group.

In terms of rental activities, the number of units produced by high performing districts is not statistically significantly different from the average but the amount of resources they expended is statistically significantly less. The high performers are more efficient. It is interesting to note that the high performers' expenditures of public resources and of proceeds from the Low Income Housing Tax Credit Program were significantly less than the average (\$1.7 million compared to \$4.5million and \$1.9 million compared to \$4.3 million). One would expect that such drastically different levels of public expenditures would result in drastically different amounts of housing produced which is not the case. In fact the high performers did not adopt statistically significantly different strategies with regard to contracting out as revealed by the percentage of nonprofit or other entity units produced, or beneficiary income targeting as revealed by the percentage below 50% ami. Further, the high performers experienced no advantages in terms of the fair market rents, median incomes, population or total HOME allocations. The low performers, in terms of rental activities, have both produced less and expended fewer resources. The low performers are also constrained by the fact that they have statistically significantly smaller populations and received less HOME funds. Each of these is related to and supports the assumption that urbanization economies are present in rental housing and that larger population areas have an advantage in cost minimization by being able to build larger projects. The smaller HOME allocation could also indicate

that these jurisdictions have less low income housing need than the average or high performing jurisdictions.

Examining the changing slopes (coefficients) over the course of the SWLS iterations highlights those variables that are more important for high performing jurisdictions and thus suggests a focus for other jurisdictions to change in order to improve their performance. Figure 3.6 compares the slope changes of the key variables in the homeowner model. As the high performers gain more influence the slope of the per60ami variable reflecting an income targeting strategy becomes much more important in explaining outcomes. In fact this variable which is not bounded away from zero in the original OLS, becomes bounded away from zero in the negative direction with the SWLS. The last three columns of Table 3.19 provide the results of the high performer SWLS from the last iteration, which can be compared with the OLS in the first three columns. On the surface this could suggest that high performing entities are "creaming" by serving only higher income beneficiaries. This interpretation is problematic because the variable is a percentage of the total units. An entity that has a greater number of total units may have a smaller percentage of them in the lowest income category without producing any fewer low income units than an average performing entity that targets only low income beneficiaries. The previous test of means suggests that this is the case.

Figure 3.6: Homeowner Model Slope Change



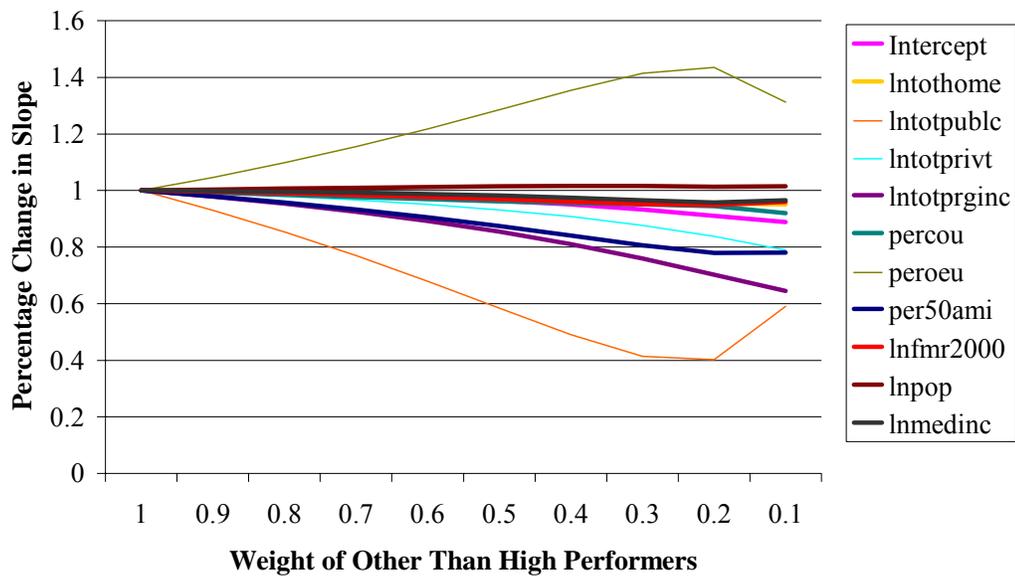
The percentage of units produced by nonprofit organizations also becomes more important with the high performers given more influence (as evidenced by its increasing slope change). The use of nonprofit organizations to produce homeowner units results in fewer units of output than if the local government provided the units themselves. There are several possible explanations for this result: either nonprofit organizations have less capacity than local governments and therefore are less efficient; the savings in contracting with nonprofits is less than the transactions costs of contracting (i.e. the cost of monitoring the nonprofit exceeds any benefit in improved production efficiency); or nonprofits are more likely to engage in new construction to assist homeowners while local

governments provide down payment and other financing subsidies for the purchase of existing housing stock.

The slope change graph also illustrates that the resource variables, HOME and private become less important in explaining outcomes for the high performers. This highlights that high performer's output is influenced less by the amount of and the mix of resources and more by other factors particularly the strategy embodied in income targeting and contracting out decisions. In other words housing strategy is more important explaining the difference in high performing and average performing jurisdictions than the availability of resources.

Figure 3.7 shows the slope changes in the rental SWLS model. With the exception of population which remains relatively stable, all of the remaining variables become less important for high performing jurisdictions as evidenced by the declining slope changes. The last three columns of Table 3.20 show the results from the last iteration of the SWLS in the rental model. This reveals that not only are high performers more efficient but that they are not constrained by fair market rent or median income levels to the same extent as average performers.

Figure 3.7: Rental Model Slope Change



Strengths and Weaknesses of the SWAT Technique

The focus on the unusual, which the SWAT brings to the analysis, is indeed an important one. There are several questions raised by examining the data in this fashion and new hypothesis that can be formulated for future empirical examination. First, it was expected that differences in performance were a result of differences in strategies reflected in the mix of resources. The analysis shows that the mix of resources used by the high performers is not statistically significantly different from the rest but that the high performer are

able to get more out of similar resources. The analysis suggests that there are one or more additional important factors which explain the output of rental units. These additional factors are what differentiate the high performers from the average. Two possible variables are: 1) the time it takes to complete a project (project duration); and 2) the choice of activity -- rehabilitation versus new construction.

Unfortunately in this limited model, the high performing districts do not appear to be very different than the average or even low performers in terms of the production function. It may be necessary to build a model of performance that includes not only factors of production but other variables that can capture the differences in technological innovation among the jurisdictions, governance structures, and policy choices in order to get the most out of the SWLS technique. Further, the insignificance of many of the variables raises a number of questions about the appropriateness of the model. Difficulties of properly specifying the model are a disadvantage of the SWAT technique as they are with regression.

Improving the model as suggested requires additional data gathering efforts in order to incorporate policy choice. There is, however, sufficient evidence to suggest that the performance of jurisdictions differs even if their allocation strategies are similar. This suggests technical inefficiency in that more efficient jurisdictions may be employing differing technology, hypothesized to be management mechanisms. An exploration of the relationship between these mechanisms embodied in governance type and performance is explored in the

next chapter. Before that however, a fourth method of evaluating efficiency is considered.

Data Envelopment Analysis

Data Envelopment Analysis, initially proposed by Charnes, Cooper and Rhodes in 1978, has been used in recent years to evaluate the performance of a great variety of entities in many different activities and contexts (Cooper, Seiford, and Tone 2000). DEA utilizes linear programming methods to evaluate the efficiency of organizational units based on the existing data. That is, it uses the data to establish what is possible from actual observation and evaluates organizations relative to that possibility frontier. Like SWAT, DEA focuses not on averaging all observations but on evaluating each decision making unit (DMU) according to the best observed performance with similar inputs and constraints. DEA estimates the sources and amounts of inefficiency in each input and output for every entity individually.

DEA also overcomes many of the problems of standard regression analysis including those encountered when utilizing the SWAT technique. With DEA multiple outputs can be evaluated at the same time, allowing for an evaluation of both technical efficiency and allocative or mix efficiency. DEA does not require that the researcher specify a functional form. This is particularly useful for exploratory analysis where there is an absence of theory to guide the model building process. Further, DEA data requirements are minimal. It is not necessary to have knowledge of unit prices and costs or other weights of the various inputs which, in the case of affordable housing, we do not have (Cooper,

Seiford, and Tone 2000). Finally, recent literature on DEA has shown how DEA can be used in conjunction with standard regression analysis to improve the analysis. Arnold et. al. and Bardhan et. al have shown that estimation of production functions with inefficient observations in the sample biases the results but that a two stage process whereby the efficiency status is determined with DEA and then an efficiency dummy variable is included in a standard regression model can greatly improve the estimates (Arnold et al. 1996) (Bardhan, Cooper, and Kumbhakar 1998).

Performance of the Data Envelopment Analysis requires defining decision-making units, identifying appropriate inputs and outputs, and choosing one of several models. In this case, the decision-making unit (DMU) is defined as the HOME participating jurisdiction (i.e. the city). A number of different combinations of inputs and outputs were considered. In evaluating the efficiency of cities under the HOME program, identifying HOME funds as the only input may be appropriate but because HOME funds are primarily used as gap financing and represent only a small proportion of the total cost of affordable housing it omits important information about the other sources. For example, other public resources that are used may include additional regulatory requirements which drive up the cost of producing housing. It may be possible to exclude private resources since we are primarily concerned with how efficient governments are with public resources but again there may be publicly dictated local practices which drive up the cost of housing production. Therefore, the total cost of producing housing should be included. Unfortunately the total cost of producing

housing under the HOME program is not available due to the way the data are collected. The primary input that is not available is administrative and predevelopment costs which may be covered by local resources either through nonprofits or by the local jurisdiction itself. Generally, these predevelopment costs such as preparing applications for funding or negotiating the purchase of land are not considered part of the project costs and therefore are not systematically collected although they may be significant. Resources expended on these activities would provide a better picture of spillover costs resulting from undue regulation or government delay. In their absence the inclusion of private resources may capture some of these variations among jurisdictions to the extent that private sector partners seek to recoup these costs through developer's fees.

One of the great benefits of DEA is the ability to incorporate multiple outputs. In this way we can attempt to examine the issues raised by the SWAT analysis in terms of the allocation decision among homeowner and rental activities and among different levels of beneficiary income. As was highlighted in the SWAT analysis the tenure choice (homeowner/rental) is highly correlated with beneficiary income targeting. Therefore, including outputs by income level will also capture outputs by tenure. Four outputs were included which were the total number of units produced by the four different income levels: less than 30% ami; 31-50% ami; 51 - 60% ami; and 61-80% ami.

The choice of models includes a number of models that conceptualize the measure of efficiency differently and incorporate various assumptions. One can either seek to minimize inputs, an input-oriented model, or maximize outputs, an

output-oriented model. Additionally, one can assume constant-returns-to-scale or variable-returns-to-scale. A number of different models were tested but the final model chosen was the uncontrollable, output-oriented, variable-returns-to-scale model (NCN-O-V) which allows for the inclusion of non-discretionary inputs such as housing market characteristics, is output-oriented because cities generally do not determine how many resources to dedicate to housing, and assumes variable-returns-to-scale which may capture the differences resulting from urbanization economies. The final model included: total HOME funds expended, total public funds expended, total program income expended, total LIHTC expended, and total private resources expended as inputs; median house value, population, fair market rent, and median income as uncontrollable inputs; and total units produced for the very-very low-income (<30%ami), total units produced for the very low-income (31-50% ami), total units produced for the low-income (51-60% ami), and total number of units produced for the moderate income (61-80% ami) as outputs. The model is as follows:

$$\begin{aligned}
 & \max && \sum_{i=1}^m s_i^- + \sum_{r=1}^s s_r^+ \\
 & && \sum_{j=1}^n x_{ij} \lambda_j + s_1^- = x_{i0}, i = 1, \dots, m \\
 & && \sum_{j=1}^n y_{rj} \lambda_j - s_r^+ = y_{r0}, r = 1, \dots, s \\
 & \text{subject to} && s_i^- \leq \beta_i x_{i0}, i = 1, \dots, m \\
 & && s_r^+ \leq \gamma_r y_{r0}, r = 1, \dots, s
 \end{aligned}$$

where:

x is an $(m \times n)$ matrix of outputs; x_{ij} is the amount of output i for DMU j ;

y is an $(s \times n)$ matrix of inputs; y_{rj} is the amount of input r for DMU j ;

β_i, γ_r represent parameters¹⁰;

s^-, s^+ are slack variables;

and all variables are constrained to be nonnegative.

The Data Envelopment Analysis assigns a score to each decision-making unit (jurisdiction) based on its efficiency relative to the best observed outcomes which make up the efficiency frontier. The score is the ratio of the radial measure from the origin to the observation over the radial measure from the origin to the frontier. A score of one is on the efficiency frontier meaning that no jurisdiction was able to produce better with similar inputs and outputs. Scores less than one indicate the level of relative inefficiency of a DMU. Those closer to one are closer to the efficiency frontier and thus less inefficient than those with lower scores that are further from the frontier.

DEA Results

The results from the Data Envelopment Analysis are included in tables 3.23 - 3.27 and Appendix E. Table 3.23 is a summary of the model. It includes the controllable inputs to the model but not the non-controllable inputs which were median value, population, fair market rents, and median income.

¹⁰ Assigning values from 0 to 1 accords different degrees of discretion to input i . $\beta_i = 0$ characterizes an input as completely non-discretionary.

Table 3.23 Summary of DEA Model

DEA model = Non-controllable (NCN-O-V)
 Problem = DMU (NCN-O-V)

No. of DMUs = 344
 No. of Input items = 5
 Input(1) = (I)tothome
 Input(2) = (I)totpublic
 Input(3) = (I)totproginc
 Input(4) = (I)totlihtc
 Input(5) = (I)totprivt
 No. of Output items = 4
 Output(1) = (O)totinc1
 Output(2) = (O)totinc2
 Output(3) = (O)totinc3
 Output(4) = (O)totinc4

Returns to Scale = Variable (Sum of Lambda = 1)

Table 3.24 shows the summary statistics for the input and output variables and Table 3.25 shows the correlation. There was no available solution for the DMUs listed in Table 3.26. There were 65 jurisdictions on the efficiency frontier. That is there were 65 jurisdictions that received an efficiency score of 1 meaning there are no other jurisdictions that performed better with similar inputs. These jurisdictions were then used to evaluate the efficiency of the remaining jurisdictions. Table 3.27 illustrates how often each jurisdiction was used to evaluate another. The efficiency scores for all 344 jurisdictions are included in Table E.1 in the appendix because of space considerations.

Table 3.24: Statistics on Input/Output Data

	(I)tothome	(I)totpublic	(I)totproginc	(I)totlihte	(I)totprivt	(O)totinc1	(O)totinc2	(O)totinc3	(O)totinc4
Max	224761282	101670249	10492840.1	86001728.66	235711011.4	1976	1760	906	2049
Min	5117.71	0	0	0	0	0	0	0	0
Average	7007689.53	3495443.3	225349.179	2724940.575	9349888.106	94.3924419	120.24419	66	102.36047
SD	15809529	10575944	704607.523	8556339.114	20235753.44	203.969104	204.32885	107.69061	206.87056

Table 3.25: Correlation

	(I)tothome	(I)totpublic	(I)totproginc	(I)totlihte	(I)totprivt	(O)totinc1	(O)totinc2	(O)totinc3	(O)totinc4
(I)tothome	1.0000	0.6649	0.3547	0.7781	0.3157	0.8329	0.6363	0.5637	0.2929
(I)totpublic	0.6649	1.0000	0.4136	0.8646	0.2128	0.5887	0.4695	0.3045	0.0812
(I)totproginc	0.3547	0.4136	1.0000	0.4133	0.2441	0.3324	0.4197	0.3973	0.3840
(I)totlihte	0.7781	0.8646	0.4133	1.0000	0.2312	0.6946	0.5495	0.3855	0.1221
(I)totprivt	0.3157	0.2128	0.2441	0.2312	1.0000	0.2662	0.5833	0.7139	0.6662
(O)totinc1	0.8329	0.5887	0.3324	0.6946	0.2662	1.0000	0.7506	0.5579	0.2646
(O)totinc2	0.6363	0.4695	0.4197	0.5495	0.5833	0.7506	1.0000	0.8431	0.5734
(O)totinc3	0.5637	0.3045	0.3973	0.3855	0.7139	0.5579	0.8431	1.0000	0.8444
(O)totinc4	0.2929	0.0812	0.3840	0.1221	0.6662	0.2646	0.5734	0.8444	1.0000

Table 3.26: DMUs with inappropriate data with respect to chosen model

No.	DMU
	None
75	WHITTIER, CA has no feasible solution
236	ROCKY MOUNT, NC has no feasible solution
No. of DMUs	342
Average	0.60999972
SD	0.26896394
Maximum	1
Minimum	0.09863079

Table 3.27: Frequency in Reference Set

Reference	Frequency to other DMUs
PINE BLUFF, AR	6
FRESNO, CA	10
RICHMOND, CA	4
SANTA CRUZ, CA	5
LONG BEACH, CA	94
SAN BERNARDINO, CA	9
ESCONDIDO, CA	0
MORENO VALLEY, CA	45
NORWALK, CA	38
AURORA, CO	40
FORT COLLINS, CO	5
BRIDGEPORT, CT	13
HARTFORD, CT	5
NEW BRITAIN, CT	4
MIAMI, FL	0
TALLAHASSEE, FL	2
POMPANO BEACH, FL	61
AUGUSTA-RICHMOND COUNTY, GA	1
MONROE, LA	3
BROCKTON, MA	18
KALAMAZOO, MI	2

Reference	Frequency to other DMUs
SAGINAW, MI	15
HATTIESBURG, MS	65
INDEPENDENCE, MO	7
BILLINGS, MT	62
CAMDEN, NJ	128
NEW YORK, NY	2
CANTON, OH	1
DAYTON, OH	14
YOUNGSTOWN, OH	3
TOLEDO, OH	0
CINCINNATI, OH	4
LIMA, OH	4
PHILADELPHIA, PA	93
YORK, PA	0
PITTSBURGH, PA	3
ALTOONA, PA	28
PAWTUCKET, RI	8
WOONSOCKET, RI	10
SIOUX FALLS, SD	7
MEMPHIS, TN	2
BEAUMONT, TX	11
DALLAS, TX	18
FORT WORTH, TX	14
HOUSTON, TX	33
AMARILLO, TX	49
EL PASO, TX	4
WICHITA FALLS, TX	17
TYLER, TX	83
SAN ANGELO, TX	1
BRYAN, TX	3
IRVING, TX	23
AUSTIN, TX	6
BROWNSVILLE, TX	13
CORPUS CHRISTI, TX	87
LAREDO, TX	11
MCALLEN, TX	1
SAN ANTONIO, TX	7
PORTSMOUTH, VA	13
LYNCHBURG, VA	15
BREMERTON, WA	2

Reference	Frequency to other DMUs
HUNTINGTON, WV	3
RACINE, WI	8
MILWAUKEE, WI	2
EAU CLAIRE, WI	16
No. of DMUs in Data =	344
No. of DMUs with inappropriate Data =	0
No. of evaluated DMUs =	342
Average of scores =	0.609999724
No. of efficient DMUs =	33
No. of inefficient DMUs =	309
No. of over iteration DMUs =	0

Appendix E also includes Table E.2 which provides each of the DMU's input projections and Table E.3 which provides output projections. The input projections highlight those inputs that differ significantly from the peer group and the extent to which those inputs should be adjusted. Similarly, the output projections highlight those outputs, primarily units per income group, which should be increased in order to bring a jurisdiction closer to the efficiency frontier.

Since DEA provides a measure of relative efficiency, assigning each DMU a score, it is somewhat difficult to summarize the results across jurisdictions. Instead it is important to look at individual jurisdictions to evaluate their relative efficiency or the sources of their inefficiency. Table 3.28 illustrates the efficiency scores from the sample cities. (For a discussion on city selection see Chapter 4).

Table 3.28 Sample City DEA Scores

Rank	DMU	Score
1	AUSTIN, TX	1
1	AURORA, CO	1
150	NASHVILLE AND DAVIDS	0.627738
193	LEXINGTON-FAYETTE, K	0.521866
226	COLORADO SPRINGS, CO	0.448633
260	ALBUQUERQUE, NM	0.356639

Austin and Aurora are both on the efficiency frontier. There are no jurisdictions that have produced more affordable units with similar amounts of resources. Nashville's score of 0.627738 indicates that it is 62% efficient compared to the efficiency frontier. Similarly, Lexington, Colorado Springs and Albuquerque are all less than efficient. (The scores for all 342 cities are included in the appendix). The projection tables give some indication of where the sources of inefficiency may lie.

Table 3.29 shows the input projections for the sample cities. Neither Austin nor Aurora has any projected changes because they are efficient. The other four cities though have expenditures that exceed what other cities have expended to produce similar outputs. Looking across the cities, the table reveals that in no case is a reduction in HOME funding projected. This is largely due to the marginal productivity of HOME program illustrated by the above production function. HOME funds have the lowest price (to the city) and result in the greatest number of additional units produced. Public resources on the other hand are more expensive and the DEA results project that three of the cities, Nashville, Colorado Springs and Albuquerque, should reduce their expenditures of public resources. For example, Nashville expended a total of \$5.3 million in public

resources but the analysis suggests that given the experience of their peer group they should have had expenditures of only \$255,000 in order to produce the same level of output. In other words they should have expended only 5% of what they actually expended - they should reduce their public expenditures by 95%. All four of the inefficient cities are projected to require less program income as well.

Table 3.29: Input Projections of Sample Cities (in Thousands)

DMU	(I)tothome		(I)totpublic		(I)totproginc		(I)totlihtc		(I)totprivt	
	Projection	Change	Projection	Change	Projection	Change	Projection	Change	Projection	Change
AUSTIN, TX	\$12,506	0.00%	\$341	0.00%	\$66	0.00%	\$	0.00%	\$16,821	0.00%
AURORA, CO	\$6,369	0.00%	\$75	0.00%	\$2,383	0.00%	\$	0.00%	\$	0.00%
NASHVILLE, TN	\$23,587	0.00%	\$255	-95.23%	\$1,192	-71.50%	\$	0.00%	\$19,314	0.00%
LEXINGTON, KY	\$6,248	0.00%	\$2,159	0.00%	\$76	-42.87%	\$4,881	-37.65%	\$12,991	-24.92%
COLORADO SPRINGS, CO	\$4,604	0.00%	\$465	-27.71%	\$57	-72.90%	\$	0.00%	\$4,050	0.00%
ALBUQUERQUE, NM	\$12,355	0.00%	\$310	-0.25%	\$466	-58.92%	\$	0.00%	\$7,704	0.00%

Table 3.30 Output Projections of Sample Cities

DMU	(O)totinc1		(O)totinc2		(O)totinc3		(O)totinc4	
	Projection	Change(%)	Projection	Change(%)	Projection	Change(%)	Projection	Change(%)
AUSTIN, TX	61	0.00%	250	0.00%	256	0.00%	564	0.00%
AURORA, CO	35	0.00%	154	0.00%	191	0.00%	740	0.00%
NASHVILLE, TN	575	22.08%	474.88	22.08%	315.352	111.65%	641.261	143.83%
LEXINGTON, KY	244.5	43.81%	223.32	44.08%	112.169	43.81%	136.616	43.81%
COLORADO SPRINGS, CO	134.2	67.76%	149.31	67.76%	77.1708	67.76%	126.664	111.11%
ALBUQUERQUE, NM	324.2	145.61%	319.77	116.06%	200.375	954.60%	336.82	999.90%

Lexington alone is projected to require fewer LIHTC proceeds and fewer private sector expenditures.

An alternative way to examine efficiency is to estimate the number of additional units a city would be expected to produce given their level of actual expenditures. Table 3.30 illustrates the projected outputs that each city would be expected to produce in order to be considered efficient. Again, Austin and Aurora are considered efficient and therefore no changes are projected. Given Nashville's level of expenditures and non-controllable inputs (median value, population, fair market rent and median income), the city is projected to need to produce an additional 22% of units at the lowest income (<30% ami) and the second lowest income group (31-50% ami) and to more than double the number of units produced for the two higher income groups.

Lexington is projected to need to increase their production of units in all income groups at approximately the same rate - 44%. Colorado Springs would need to increase their production in the first three income groups by 67% and more than double their production for the highest income group. Albuquerque is projected to need to drastically increase production in all income categories but especially the higher income groups. For example, the city would be expected to produce 200 units for the income group 61-80% ami, a group for which they have produced only 19 units. This is more than a 1000% increase.

SUMMARY

This analysis of HOME program outputs and outcomes has identified a number of trends in the use of HOME program funds as well as highlight some

interesting factors that affect the efficient use of affordable housing resources. Different types of jurisdictions have pursued different strategies with the HOME funds. Urban Counties and consortium have to a greater extent than other types of jurisdictions (states or cities) been able to leverage private resources for affordable housing but the total expenditures per unit in these jurisdictions is much greater than in other jurisdiction types.

Total expenditures per unit have been growing in all jurisdictions types although HOME funds expended per unit have remained relatively stable over the ten year period. This rise in expenditures per unit has occurred concurrent with a decline in the portion of funds expended for rehabilitation activities and a rise in the proportion of expenditures for new construction and acquisition activities. This demonstrates a period of learning whereby jurisdictions are transitioning to undertake affordable housing activities such as new construction and acquisition which these jurisdictions had not previously engaged in. While the number of units produced at all income levels has increased over time, the proportion of units produced for the lowest income group 0-30% ami has declined while the proportion of units produced for the highest income group 60-80% ami has increased. The greatest proportion of units continues to be for the low income group 30-50% ami. This too is related to the shift toward new activities such as acquisition which serves higher income households.

The models of efficiency are a means of evaluating how the outputs that have been produced under the HOME program translate into outcomes. The production function revealed that HOME resources have a much greater marginal

productivity than other resources expended for affordable housing. Although much effort is put forth to attempt to attract other resources for affordable housing utilizing the HOME funds as leverage, these other funding sources including other public funds, private funds, LIHTC proceeds and HOME program income do not contribute significantly to increasing the number of units. Other public resources contribute greater subsidies which allow for lower income households to be served but they do not appear to contribute additional units. Private resources are more important for increasing the number of units produced but their impact is still relatively small. This suggests that it may not be necessary to try to leverage private resources for affordable housing production but rather to rely on private resources to build housing and then utilize HOME funds to make that housing affordable through acquisition. The production function is limited in its ability to provide insight into how higher performing jurisdictions differ from the average. This is the major strength of the SWAT analysis.

The SWAT analysis revealed that with regard to homeownership activities there are two factors which distinguish the high performing jurisdictions from the average. The proportion of units produced for households below 60% of the area median income significantly reduces a jurisdiction's ability to produce additional units. Higher performing jurisdictions produce a smaller proportion of their total units for households below 60% of area median income. However, this does not necessarily mean that they have adopted a creaming strategy because the variable is a proportion of the total. The test of means revealed that high performing jurisdictions produce more units for the higher income groups but without

producing significantly fewer for the lowest income group. The second factor that is important for distinguishing between high performers and low performers in homeownership activities is the proportion of units produced by nonprofit organizations. High performing jurisdictions produce a greater proportion of units through direct expenditures than average performing jurisdictions. The greater the proportion of units produced by nonprofit organizations the few units a jurisdiction is able to produce.

With regard to rental activities the SWAT analysis was less informative. None of the factors included in the model were shown to be significant in differentiating high performers from the average. This suggests that other factors not included in the model are important. However, the model did reveal that population is a significant factor in explaining the number of rental units a jurisdiction is able to produce. Population was not significant in the homeowner model. This suggests that urbanization economies are present for rental housing development but not homeownership. As a result, larger cities have a cost advantage over smaller jurisdictions.

The SWAT model is limited in its ability to incorporate multiple outputs. Since the model can accommodate only one output -- total units, the percentage of units for the lowest income groups was included as a variable. This variable is important in differentiating high and average performers in the homeowner model. However it is not possible to determine if high performers have adopted a creaming strategy in which they serve higher income households before or instead of lower income households. Instead the analysis simply suggests that higher

performers do not target to specific incomes and are thus producing additional units for higher income households in addition to the units that are produced for low income households. In order to test the theory of creaming, it is necessary to incorporate multiple outputs by income into the model. This is done with the Data Envelopment Analysis.

The DEA incorporates four different outputs which are the number of units produced for each income group. Because DEA is Pareto efficient it is possible to conclude that the efficient cities are producing more total units without producing any fewer units at any income level. DEA also provides practical information on the specific inputs and outputs that differential a city from its peers. This information can be used by an individual city to attempt to improve its performance. However, the major shortcoming of this technique is that it is not possible to generalize the results to the entire population. Combining these three techniques has provided a multidimensional analysis that is superior to any analysis that could have been achieve with a single technique.

Chapter 4: Understanding Governance Empirically

While the previous chapter evaluated the performance of cities in producing affordable housing and highlighted certain factors that may explain differences in performance, the purpose of this chapter is to investigate in further detail the process which has produced the observed outcomes. The analysis of governance relies on the comparative method whereby specific elements of governance are compared across jurisdictions. This analysis required detailed data gathering on a number of elements of governance at each level -- institutional, managerial, and technical. The intensity of the data gathering effort meant that only a limited number of cities could be analyzed. Five cities were purposely selected for the analysis. Although governance is recognized at three different levels -- the institutional, the managerial and the technical, recent world-wide efforts to improve performance have emphasized managerial reforms. Therefore, managerial mechanisms were the original focus of this research.

It was hypothesized that an overarching governance type present in the cities would lead a city to choose management mechanisms consistent with that governance type. Utilizing the framework of governance derived from the literature in Chapter 2, the first step in the analysis of governance was to identify observable management mechanisms that could be identified with the different governance types and to categorize individual cities according to the mechanisms employed. As demonstrated below, this exercise revealed (contrary to our original hypothesis) that the choice of management mechanisms is not driven by an

overarching philosophy of governance. Instead management mechanisms consistent with at least two different governance types were observed to be employed in each of the cities. Further, governance type was directly related to different types of housing activity and governance of these activities was consistent across all six cities. Both owner-occupied rehabilitation and housing development activities were governed using hierarchical tools, while down payment assistance was governed through more informal means consistent with the network-style of governance. Therefore, it was necessary to further explore additional elements of governance that affect performance. These included factors that influence the choice of governance type and factors that influence the choice of housing activity. This chapter describes the process for selecting the cities, the data gathering, the application of the framework of governance to the cities' housing activities, an analysis of the choice of governing mechanisms, and an investigation into alternative factors affecting performance.

CITY SELECTION

Five cities were purposively selected for the comparative analysis. Cities were selected to control for differences in city characteristics and housing market characteristics but to maximize the variance in governance elements such as administrative structures, housing strategies, and decision-making processes and performance under the HOME program. The selection criteria included: 1) similar size measured by 1990 and 2000 population; 2) similar housing market characteristics measured by growth, median housing value in 1999, the RS Means construction cost index in 1998, and 2000 fair market rent; 3) differences in

performance measured by four models: a rental adjusted performance measure model, a homeowner adjusted performance measure model, a combined production function model; and data envelopment analysis; and 4) differences in administrative structure and or strategy measured by presence or absence of a separate independent housing agency, the proportion of units produced by nonprofit or other entities.

The HOME program covers a range of city sizes from New York City with a 2000 population over 8 million to the town of Islip, NY with little more than 20,000 people in 2000. Size is expected to have a large effect on city performance in producing affordable housing due to differences in need, resources, urbanization economies and government sophistication. Larger cities are expected to have a greater disparity between incomes of the poor and housing costs than smaller areas due to higher land prices, additional building code restrictions and zoning procedures. Larger cities are also expected to have greater resources in terms of private capital, proximity to material suppliers, a greater number of firms with expertise in development and a supply of labor than smaller areas. The ability to reduce housing costs through urbanization economies is also greater in larger urban areas where the larger population can support greater densities and larger developments thus reducing the land and fixed costs per unit by building large projects. Finally, larger cities are expected to have more experience in delivering government goods and services and are expected to have more experienced and educated staff that is paid more than those in smaller cities. In order to isolate the effects of various elements of governance on performance it

is necessary to control for these differences by eliminating them. Thus only cities of similar size were chosen for study.

The size of cities chosen must be narrow enough to eliminate major differences due to size but must be broad enough that generalizations about governance can be made to different city sizes. In deciding which size of city to study it was important to have not only similar cities but also interesting cities from which to maximize the learning. For these reasons, medium size cities were chosen in the hope that both larger and smaller cities could gain from at least some aspects of the medium size city. The HOME program covers cities with a total 2000 population of 78 million. After sorting cities in descending order of size, it was determined that the median 20% of the population covered by HOME resided in 40 cities with 2000 population between 590,000 and 260,000.

Several factors affect local housing markets such as land prices, availability of labor, existing housing stock, income levels and differences in supply and demand. The interaction among these factors can be very complicated especially when looking across many cities therefore for simplicity several proxies are used to measure not only these factors but also the interaction among them. Growth in a city's population is an important determinant of demand. Cities experiencing rapid population growth will experience upward pressures on housing development due to rising land prices, increased infrastructure needs and a shortage of supply. For these cities development of new housing units is important. On the other hand cities that have lost population experience very different problems such as deteriorating tax base which leads to deferred

maintenance of infrastructure. These cities may have a number of older buildings in need of repair and are more likely to need housing rehabilitation than new development. These differences can lead to very different outcomes in city affordable housing efforts. It was therefore necessary to choose one or the other in order to control for these differences. The choice will invariably affect the character and findings of the study but is necessary to ensure internal validity. Only high growth cities, which are cities with a population change between 1990 and 2000 of more than 10%, were chosen.

There are only 14 high growth cities in the size range 260,000 to 590,000. These two criteria alone have drastically narrowed the choice of cities. The effect of using size and growth as selection criteria is to eliminate all Eastern and Midwestern cities. Of the remaining 14 cities, five are in the South and eight are in the West and they represent 8 states. The 14 cities include: Albuquerque, NM; Anaheim, CA; Arlington, TX; Aurora, CO; Charlotte, NC; Colorado Springs, CO; Denver, CO; Fort Worth, TX; Fresno, CA; Lexington-Fayette, KY; Nashville and Davidson County, TN; Oklahoma City, OK; Raleigh, NC; and Santa Ana, CA. The remaining proxy variables for housing characteristics: median housing value in 1999, construction cost index and 2000 fair market rent are less decisive.

Median house value ranges from a low of \$71,100 in Fort Worth to a high of \$213,800 in Anaheim. Construction costs are lowest in North Carolina with an index value of 77 and 79 in Charlotte and Raleigh, respectively and highest in California with index values of 111, 113, 113 in Santa Ana, Anaheim, and Fresno. The 2000 fair market rents range from a low of \$469/month in Oklahoma City to

high of \$891 in Santa Ana and Anaheim. Both Santa Ana and Anaheim have higher median house values, higher construction costs and higher rent levels than any of the other cities. But Fresno, the other California city, despite having high construction costs has relatively lower median house value and rent. Whereas, the North Carolina cities, Charlotte and Raleigh both have low construction costs but relatively higher median house values, \$134,300 and \$156,000 and higher rents \$648/month and \$649/month. Santa Ana and Anaheim are dropped as being too extreme in terms of housing costs. The rest are fairly similar.

Five cities were chosen from the remaining 12 to ensure maximum variation in performance and elements of governance. The performance of the cities was previously determined utilizing the production function, the low income production function, the adjusted performance measure, and Data Envelopment Analysis. The models of performance are discussed in greater detail in chapter 3.

The production function model identified seven high performers: Fresno, Arlington, Fort Worth, Aurora, Oklahoma, Nashville and Charlotte. None of the cities were low performers. The low income model identified nine of the 14 cities as being in the top 20% of cities overall. These were Fort Worth, Fresno, Aurora, Nashville, Arlington, Oklahoma, Denver, Santa Ana, and Lexington. None of the cities in this size (260,000 - 590,000) and growth (>10%) range were low performers. The homeowner adjusted performance measure model identified three high performing cities: Aurora, Fresno, and Arlington. Albuquerque and Anaheim were low performers in the homeownership model. The rental adjusted

performance measure model identified three of the 14 high growth cities as high performing: Charlotte, Nashville, and Colorado Springs; two cities were low performing Aurora and Anaheim while Fresno did not engage in rental activities. The DEA Non-controllable (nondiscretionary) Output oriented variable-returns-to-scale (NCN-O-V) model identified only Fort Worth, Fresno, and Aurora as efficient. An additional criterion that the chosen cities should engage in both homeowner and rental activities, resulted in the elimination of Fresno. The following five cities were chosen for site visits: Aurora, Nashville, Colorado Springs, Albuquerque, and Lexington. Fort Worth was not chosen because of its very low housing values and Oklahoma similarly had very low rents. Santa Ana had high costs. Raleigh could have been chosen but in the interest of choosing two cities in one state to control for state effects Aurora and Colorado Springs were chosen instead. Nashville was chosen because it is unique in terms of having a separate independent authority deliver its housing programs. Lexington has the greatest reliance on nonprofits to deliver homeownership while Aurora has the greatest reliance on nonprofits for rental units. Albuquerque appears to do the most in terms of capacity building of nonprofits and has the lowest performance other than Raleigh.

A pilot study was conducted to test the questions, data collection techniques, and feasibility of the study of individual cities. The pilot study was conducted in Austin, TX from December 2002 through March 2003. The city of Austin meets all the selection criteria except city size, as it is slightly larger than the 590,000 upper bound at 656,562. Thus, the city of Austin represents an

interesting comparison and the information gathered during the pilot study can further illuminate the relationship between governance and performance. The following table for comparison includes Austin and all cities between 260,000 and 590,000 that have high growth from 1990 to 2000.

Table 4.1: City Selection Short List

City	ST	Population	growth	1998 Cost Index	Median value	Median Rent	Fair Market Rent	Median Income	Total Allocation	DEA Score	Rental Rank (out of 295)	HO Rank (out of 325)	combined rank (out of 342)	low rank (out of 342)
AUSTIN	TX	656562	25.76%	80	\$124,700	\$633	\$700	\$58,900	\$25,062,000.00	1.0000	95	33	3	29
FORT WORTH	TX	534694	16.09%	84	\$71,100	\$470	\$612	\$57,400	\$22,233,000.00	1.0000	84	106	15	8
FRESNO	CA	427652	13.25%	113	\$97,300	\$449	\$506	\$37,600	\$27,344,000.00	1.0000	-	26	6	13
AURORA	CO	276393	16.75%	98	\$144,600	\$636	\$728	\$62,100	\$6,770,000.00	1.0000	253	2	17	32
OKLAHOMA	OK	506132	11.82%	81	\$80,300	\$386	\$469	\$44,100	\$21,269,000.00	0.8478	83	88	20	40
ANAHEIM	CA	328014	19.15%	113	\$213,800	\$747	\$891	\$69,600	\$12,515,000.00	0.7782	268	295	233	215
ARLINGTON	TX	332969	21.79%	84	\$96,400	\$550	\$612	\$57,400	\$8,005,000.00	0.7678	122	45	13	35
NASHVILLE	TN	545524	10.52%	85	\$113,300	\$529	\$630	\$58,800	\$22,919,000.00	0.6277	53	174	26	34
CHARLOTTE	NC	540828	22.16%	77	\$134,300	\$596	\$648	\$57,100	\$17,098,000.00	0.6012	3	239	58	123
LEXINGTON	KY	260512	12.36%	89	\$110,800	\$464	\$524	\$52,700	\$11,091,000.00	0.5219	127	100	61	66
COLORADO SPRINGS	CO	360890	21.88%	93	\$147,100	\$594	\$634	\$51,300	\$11,125,000.00	0.4486	28	156	76	81
DENVER	CO	554636	14.57%	98	\$165,800	\$585	\$728	\$62,100	\$30,359,000.00	0.4257	222	126	75	46
SANTA ANA	CA	337977	14.36%	111	\$184,500	\$758	\$891	\$69,600	\$15,681,000.00	0.4165	232	197	102	58
ALBUQUERQUE	NM	448607	11.86%	89	\$127,600	\$501	\$585	\$48,300	\$17,386,000.00	0.3566	192	281	158	128
RALEIGH	NC	276093	19.09%	79	\$156,000	\$627	\$649	\$62,800	\$8,625,000.00	0.3524	181	253	159	140

DATA GATHERING

Data on governance in each city was gathered through a series of site visits conducted between April and June 2003. Each site visit was approximately two weeks in length and involved in-depth interviews and a review of documents. Interviews were conducted with city personnel and directors of their nonprofit and private sector partners. In some cases elected city officials and state level personnel were also interviewed. Interviewees were chosen through a snowball sampling technique which began with the director of the city agency responsible for the administration of the HOME program.

Each interviewee was asked for additional references of persons to contact. Documents such as the Consolidated Plan and annual Action Plans were also helpful in identifying relevant individuals to be interviewed. The interviews lasted from one to three hours and were conducted in the individual's place of business which provided the opportunity to examine the location and characteristics of the organization's facilities and to provide a sense of the organization in terms of size, level of business, and level of professionalism. Conducting the interviews in the place of business also improved access to various documents such as performance reports, financial statements, and marketing materials. Over 80 interviews were conducted including 80 in-person interviews in the six cities (including the pilot study) and an additional 2 of telephone interviews with individuals who were unavailable for in-person meetings. Each interviewee was asked to sign an informed consent form

consistent with the requirements of the Human Subjects Research policy of the University of Texas.

Each city was asked to provide a number of documents to be reviewed. The list of documents that were requested is included as Appendix F. None of the cities were able to provide all of the documents requested. Many of the cities did not maintain an archive of the older documents and were therefore only able to provide current documents for the 2002-2003 fiscal year. This made it difficult to assess trends or changes over the study period and required greater reliance on the interview data.

In addition to the interviews and documents review the site visits also involved a tour of the city's affordable housing projects. The tours ranged from extensive to cursory. In some cases, internal access to projects was provided while others involved just a drive by. Although the tours were invaluable in providing a sense of the characteristics of the housing projects being developed in each city they were subject to selection bias due to the fact that the city personnel chose which projects to include. Most tours included only the most recent projects and did not give a sense of the level of maintenance that has been achieved with older projects. The study protocol that was utilized in each city is included as Appendix G.

THE MANAGERIAL LEVEL OF LOCAL AFFORDABLE HOUSING

A first step in analyzing the governance type that may be present in each city was an evaluation of the attitudes of public managers in each city. Drawing on interview data from both public managers themselves and from private sector

partners' descriptions of public managers it was possible to identify different attitudes toward governance in each city. (A detailed characterization of the cities upon which this analysis is based is included as Appendix H). A full spectrum of attitudes was present across the cities expressed through the public manager's perception of their role in affordable housing. Managers within a city tended to share similar perceptions of their roles and similar attitudes toward governance. The attitudes expressed were consistent with one of the following governance types: hierarchical, network, market or enterprise.

Managerial Attitudes Toward Governance

The Community Development Division in Aurora was responsible for directly expending all HOME expenditures with the exception of the required 15% set-aside for Community Housing Development Organizations (CHDO). Thus public managers in Aurora operated not only at the managerial level but also at the technical level. That is, they played a direct role in implementing affordable housing activities as housing counselors, loan originators, and or rehabilitation specialists. Additionally, they were responsible for monitoring the activities of the sole CHDO in the city. Since public managers in Aurora were responsible for not only adopting an affordable housing strategy but also for implementing it, management of the programs operated entirely within the city hierarchy. Thus, the attitude of managers in Aurora can best be described as hierarchical.

Colorado Springs offered a contrasting view of the city's role in affordable housing. Managers in Colorado Springs expressed a need to balance their role as

funder and technical assistance provider. They perceive their role as multifaceted in that they were acting as a principal to many community development organizations but also as a partner in providing necessary assistance to those organizations. They are cognizant of the need and difficulty of continually balancing these two roles. Their partners recognize and appreciate the city's efforts to act not only as a distributor of monetary resources but also to act as a resource for training and technical assistance. In addition many managers were involved in the implementation of the city's rehabilitation program and thus were directly responsible for housing expenditures.

The city of Colorado Springs was the only city to have integrated the allocation of federal resources into the city budget process. Private sector and other public sector partners viewed the city as very willing to assist at the technical level of housing implementation although they were also known to negotiate strongly for greater output from their partners. For example, when the city's oldest CHDO began to face financial difficulties, the city hired a financial consultant to assess the nonprofit's assets and develop a plan for strengthening their financial position. The city of Colorado Springs is unique in its attitude toward governance which is consistent with Considine and Lewis's 'enterprise' governance type (Considine and Lewis 2003). Managers in Colorado Springs are more likely to emulate a corporate style of management when dealing with private and other public sector partners. They also rely to a greater extent than any of the other cities on strategic planning processes.

Lexington's Community Development Division is primarily responsible for all grant management activities in the city. The division staff are not actively involved in affordable housing provision although they do operate an owner-occupied rehab program. They primarily perceive their role as obtaining various resources including those for housing from the federal government and making them available to the community. Although the division does what is required to comply with the HOME program regulations, they do not feel that they have the time to go beyond the regulations. That is, any recommendations or suggestions of best practices that HUD promotes will not be implemented by the division unless they are codified in the regulations. Managers in Lexington act as agents to the federal government and as principals to other departments or nonprofits in the community that expend federal resources. Their attitudes are most consistent with a hierarchical governance type.

Public managers in the city of Albuquerque can also be said to favor a hierarchical governance type. The majority of staff views their role as contract administrators. The division director believes the city's role should be to act as a regulator rather than a deliverer of services. According to their private sector partners the managers know the regulations well but none have development experience. As one nonprofit director explained, "They are a watchdog for HUD which is one reason why the nonprofits have low capacity" (Kolker interview). Many of their partners and members of the community used words such as regulators or police to describe the city staff.

Albuquerque is unique among the cities with regard to the legal status of its public housing authority, which unlike most is not an independent public authority, but rather a separate division within the Family and Community Services Department. Albuquerque Housing Services owns and operates public housing units in the city and also administers the Section 8 program. The Community Development Division contracts with Albuquerque Housing Services (even though they are both divisions within the same city department) for the administration of its owner-occupied rehabilitation activities under the HOME program. The Community Development Division regularly monitors Albuquerque Housing Services in the same manner it monitors its nonprofit partners.

Similarly, the Community Development Division also contracts out the administration of down payment program activities under the HOME and CDBG programs to the Mortgage Finance Authority (MFA), an independent state authority that administers all of the state's housing programs. The Community Development Division regularly monitors the MFA in the same fashion that it monitors its private sector partners. In fact, city staff visited the MFA only two weeks after the initial signing of the contract to examine their procedures and files. This action was perceived by the director of the MFA as a lack of appropriate risk assessment on behalf of the city since the MFA is a state-wide entity that has been in existence since the late 1970s, has over \$1 billion in assets, administers the HOME program for the state and thus is regularly monitored by HUD, and has a team of both internal and external auditors.

The city of Nashville-Davidson County was the only city of the six that could appropriately be described as favoring a network style of governance. This is largely due to the fact that it is also the only city to have an entity outside the city-county bureaucracy responsible for the administration of its HOME program. Nashville's Metropolitan Development and Housing Agency (MDHA) was one of the first public housing authorities in the nation created in the 1930s. It is an independent public authority governed by a volunteer public board. The authority has since taken on additional roles including that of development authority for Nashville and Davidson County.

MDHA is responsible for the implementation of a number of housing and community development programs at the primary work level but the community development division works very closely with a number of community partners in its administration of the HOME program. Everyone interviewed in Nashville commented on the collaborative nature of the city. Several of these individuals attributed their ability to collaborate to the MDHA and its leadership.

The city of Austin is divided into several different organizational units responsible for housing and community development such that managers in different units expressed different attitudes toward governance. Overall the manager's expressed attitudes consistent with a market form of governance. The overarching strategy toward affordable housing envisioned by the managers in the Neighborhood Housing and Community Development Office is one that favors greater private sector involvement in the production of housing for lower income households coupled with greater public sector involvement in production of

housing for higher income households. This strategy termed 'the continuum of care' sees a complementary role for private and public sector actors in producing affordable housing.

As the public sector moves up the spectrum to serve higher income households it is able to generate greater resources to further subsidize the lowest incomes. Similarly, the private sector is perceived as having greater resources to move down the spectrum toward serving lower income households. Together the two move toward creating a seamless continuum of housing services that would allow an individual or household to move from homelessness, to public housing, to subsidized rental housing, to homeownership. Although this vision requires the efforts of both the private sector and the public sector it does not necessarily view them as collaborating partners in a network-like style of governance. That is, there is not joint production of housing but instead a blurring of the traditional roles each sector has played in providing housing services. This largely means that the public sector becomes more market-oriented while encouraging the private sector to become more socially responsible.

For managers in the city of Austin the private sector includes financially independent nonprofit organizations with the capacity to produce affordable housing but nonprofit organizations in general are not seen as vehicles for increasing the supply of affordable housing. Providing funds to small community housing development organizations is seen as "a nice thing to do." These organizations impact a local neighborhood and may preserve the culture of a

particular neighborhood but they are not perceived as capable of solving the city's affordable housing problems.

Managers expressed very different attitudes towards the governance of housing programs in each of the six cities. The expression of these attitudes was reinforced by comments from their private sector or nonprofit partners which were consistent with such attitudes. The range of different attitudes was great. Managers in Aurora expressed attitudes consistent with the traditional role of government in the provision of public goods and services. In Lexington and Albuquerque attitudes were consistent with more recent trends of government contracting-out where the government maintains control through principal-agent relationships. In Colorado Springs managers seemed to want to embrace strategic planning with greater attention to outputs similar to business managers. In Nashville, the managers existed at the managerial and technical levels and played an integral role in not only development but also the implementation of affordable housing strategies. These managers expressed a much greater willingness to work with and trust nonprofit and other private sector partners than any of the other cities. Finally, managers in Austin saw a need for affordable housing development to be driven by market forces and had little faith in either the public or the nonprofit sectors to significantly increase the supply of affordable housing. The categorization of attitudes expressed by managers in each of the six cities is summarized in Table 4.2.

Table 4.2: Manager's Attitudes by Governance Type

City	Governance Type		
	Hierarchy	Network	Market
Aurora	X		'Enterprise' variant
Colorado Springs			
Lexington	X		
Albuquerque	X		
Nashville		X	
Austin			X

Housing Programs and Management Practices in the Cities

It is one thing to say you favor a particular approach and another thing altogether to actually implement such an approach. Therefore, it is necessary to attempt to measure the extent to which manager's attitudes toward governance actually translated into the adoption of management mechanisms consistent with each governance type. To do so, it was first necessary to develop a set of questions which could be used to appropriately categorize various management mechanisms into the different governance types. Relying on the framework developed in Chapter 2 several questions were posed as a means for categorizing management mechanisms. These questions along with the conditions for placing a city into a certain governance category are illustrated in Table 4.2.

Table 4.3 Dimensions of Governance Type

Observable	Condition	Governance Type
Do more than three entities compete to provide a service?	Yes	Market
Does a formal agreement among partners exist?	No	Network
If there is a formal agreement, how specific is it?	Vague, not specific	Network
If a formal agreement exists and is specific what is the source of specificity?	Dedicated by govt Negotiated among parties	Hierarchy Market
Are the partners financial hostages to government? (i.e. more than 50% budget)	Yes	Hierarchy
What is the level of trust among partners?	High	Network
What is the nature of contract monitoring?	Frequent and thorough Milestones only When problems arise	Hierarchy Market Network
Is a product or service jointly produced?	Yes	Network or Market

These questions were applied to the affordable housing programs and the associated management mechanisms which were observed in each of the six cities. The result of this attempt to categorized cities into different governance types revealed that each of the cities employ mechanisms consisted with both hierarchical and network type governance. Further, the cities were very similar in

their housing programs despite differences in manager's attitudes toward governance. The major housing programs implemented in the cities include owner-occupied rehabilitation programs, down-payment assistance programs, and housing development activities.

Owner-Occupied Rehabilitation Programs

Each of the six study cities operates an owner-occupied rehabilitation program¹¹. Owner-occupied rehab is a means of preserving and maintaining existing housing stock which is owned by low-income households who may face difficulties in maintaining their homes. Illustrations 4.1 and 4.2 are examples of housing units rehabilitated under the owner-occupied rehabilitation programs.

Illustration 4.1: Example Owner-Occupied Rehabilitation, Aurora, CO



The main focus of these efforts is at correcting building code deficiencies. Often the owners are elderly or disabled and on fixed incomes. The rehabilitation activities of the six cities are very similar because they either originated with or

¹¹ Austin funds its owner-occupied rehab program with CDBG. Other cities allocate both HOME and CDBG for this activity.

were modeled after the HUD rehab program of the 1960s known as the Federally Assisted Code Enforcement (FACE) program. Most of the cities have been engaged in such activity at least since the 1970s and prior to HOME utilized Community Development Block Grant (CDBG) resources to fund the activity. Differences among the six cities occur in terms of the subsidy amount, whether it will be a loan or grant, the interest rates and amortization schedules. The cities also differ slightly in terms of the organizational structure within which the rehabilitation activities are administered.

Illustration 4.2: Owner-occupied Rehabilitation Before and After, Aurora, CO



A low-income homeowner seeks assistance through the administering agency. Once the eligibility of the homeowner has been determined, a rehabilitation specialist, often with private sector construction experience, performs an inspection and identifies the necessary work to be done. The rehab specialist prepares a detailed work write-up which specifies what is necessary to bring the home into code compliance. The agency also maintains a list of approved private sector contractors that can do the work. The contractors must be

licensed and insured with the relevant construction experience. Some agencies also require bonding and relevant certifications. The rehabilitation of the home is then put out to bid to the list of approved contractors. In most cases, the lowest bidder wins the right to perform the rehab although there are some interesting exceptions. In the city of Austin, the rehabilitation loan program is administered Austin Housing Finance Corporation. Since the agency is a nonprofit it is not subject to the city's procurement requirements. Further, the contract is between the homeowner and the contractor therefore the homeowner is free to choose the entity that will perform the work from among the agency approved contractors. The agency conducts two "contractor's breakfasts" a year in order to educate contractors on the program and any changes in the program.

Until just recently the city of Albuquerque program differed from the others in that they did not require a bidding process. Instead the rehabilitation specialist would determine the price for the job and provide the homeowner with a list of approved contractors. The homeowner was in charge of the procurement process and was free to choose any contractor that would do the work for the specified price. Following political pressure from some disgruntled contractors the city has changed its process to a modified bid process in which the lowest bidder is chosen as long as the bid is within 10% of the in-house estimate. Since the change the in-house estimates have been 3-5% lower than the lowest bid, meaning that changing to a modified-bid process has resulted in an increased cost of approximately \$9-10,000 per unit.

The owner-occupied rehabilitation programs have three important elements that differ from traditional contracting arrangements. First, there is no formal agreement between the agency and the contractor. Instead there is an agreement between the agency and the homeowner which is usually a loan agreement for repayment of the funds although in some cases the subsidy is a grant. There is then a contract between the homeowner and the contractor to perform the work. In a couple cases, the agency is listed on the contract as an agent for the homeowner. In each case the contractor is not paid until both the homeowner and the agency approve of the work. Second, there is a process of information sharing between the contractors and the agency which promotes cooperation. In each case the contractors must demonstrate to the agency their ability to perform the job satisfactorily and comply with the federal regulations of the program. This is done through applications which provide information on their previous work, licensing, certifications etc. and through negotiation during the project. Agencies also make some effort to provide training or education to the contractors on the program guidelines and federal regulations. Contractors that fail to perform are stricken from the contractor list and not able to compete for future jobs. Trust and reputation are important although the program maintains a competitive element through the use of competitive bidding.

Down Payment Assistance Programs

All of the study cities have at one time allocated a portion of their HOME program for down payment assistance to first-time homebuyers. The programs operate very similarly by providing a second mortgage to the homebuyer. The

specifics of the mortgages vary to meet local preferences in terms of maximum loan amount, amortizing or deferred loans, interest rate, and whether the loan is forgivable or not. The programs also differ in terms of the organizational arrangements within which they are administered. Table 4.4 illustrates the different characteristics of administering organizations.

Table 4.4: Characteristics of the Down payment Assistance Administrating Organizations

City	Administrating Agency	Legal Status	type of Agreement	Admin support	Other sources
Albuquerque	New Mexico Mortgage Finance Authority	Quasi-public independent authority state level	Subcontract - competitively bid	no	State HOME, MRB, Own sources, Las Cruces HOME
Aurora	Community Development Division	Division of Neighborhood Services Department (in-house city dept)	none	yes	CDBG, Housing Counseling Grant
Austin	Austin Housing Finance Corporation	City created nonprofit organization (board is made up of city council)	subcontract	yes	
Colorado Springs	Housing Authority of the City of Colorado Springs	Independent public authority	master subcontract 1998, amended annually	no	County loans, CHFA loans, State HOME
Lexington	Resources Education Assistance for Community Housing	Nonprofit (board is made up of 16 lenders)	informal	yes	State HOME, Federal Home Loan Bank
Nashville	Affordable Housing Resources	Nonprofit	MOU	no	Local funds
	Nashville Housing Fund	Nonprofit Community Development Financial Institution (CDFI)	MOU	no	U.S. Treasury Local funds

The different organizational arrangements derive in some cases from the local institutional structure or they may represent a form of innovation to the extent that the choice of administering organization influences outcomes. The extent to which differences in organizational structure influence the effectiveness of down payment programs is an important area for additional research. As is the need to understand how the choice of administering organizations is made. The differing organizational arrangements have the potential to affect performance in two ways: 1) through increased efficiency from economies of scale and consolidation of differing sources of funding; and 2) through increased effectiveness through homebuyer education services.

Comparison of the six cities suggests that despite differences in organizational arrangements the programs operate very similarly. A potential low income buyer seeks assistance through the agency, the agency determines whether the buyer can qualify for a loan, and provides homebuyer counseling for the buyer. This represents an important service for lenders in that it reduces the number of unqualified buyers that apply for mortgage loans saving mortgage lenders time and money. Often the agency will continue to work with the potential buyer until they can qualify for a loan (sometimes up to 2 years). The agencies maintain a list of participating lenders with which they have in some way shared information on their program and the lenders have agreed to participate. This is largely an informal process. The agency refers buyers to the participating lenders who ensure that the necessary loan application materials are completed. The lender then sends the loan application to the agency which uses

the same paperwork in support of the second mortgage. This reduces the need for both entities to collect data on the buyer and makes the process easier for the buyer. The lender, agency, and buyer all appear at the closing table together to close both the first and second mortgage loans. There are two loan agreements one between the buyer and the lender and one between the buyer and the agency.

There is no formal agreement between the lender and the agency. Either can choose not to cooperate at any time or on any particular loan. Cooperation is made possible through the mutual benefit that each receives from cooperating and is facilitated by frequent information sharing. The agency will often put on periodic lender training sessions to inform lenders of their program requirements and keep them up to date on program changes. Agencies may also provide lenders with a "lender packet" with all the relevant information on their program. These programs represent interesting examples of cooperation between the public and private sectors in the absence of formal mechanisms of accountability. This cooperation occurs despite the potential for opportunistic behavior on the part of the lender. The lender charges a fee for originating the loan as part of the closing costs and the second mortgage is often intended to cover down-payment and closing costs which creates a situation that is ripe for opportunistic behavior on the part of the lender who may increase his fee on these loans. Agencies have been successful at controlling such opportunistic behavior by negotiating maximum fee limits with the lenders that ensure a fair price while keeping costs down. Lenders have the incentive to cooperate because of Community Reinvestment Act requirements which ensure that they invest a certain amount in

low income residents of the community. An important component of such cooperation is the institutional arrangements of the existing mortgage market which create the rules and norms by which both parties participate.

Housing Development

Housing development is undertaken by cities in a number of ways including new construction for homebuyers or renters, acquisition/new construction, and rental rehabilitation. Illustrations 4.3, 4.4, and 4.5 provide examples of these different activities.

Illustration 4.3: Example of Homebuyer Development, Nashville, TN



Illustration 4.4: Example of Rental Development, Lexington, KY



Illustration 4.5: Example of Rental Rehabilitation, Nashville, TN



Cities that are participating jurisdictions under the HOME program have largely pursued efforts to partner with private sector and nonprofit organizations in carrying out their housing development activities consistent with both the known characteristics of the hollow state and the design of the HOME program itself. The most frequently cited regret by public managers in the six mid-sized cities was the limited number of potential nonprofit and other private sector organizations with which to cooperate. Many have undertaken efforts to improve the capacity of small nonprofit organizations and to develop new nonprofit community housing development organizations (CHDOs). Despite such efforts, there remain a relatively small number of organizations in each city that have utilized HOME funds for housing development. Table 4.5 shows the number of nonprofits that have received HOME funding in the first ten years of the HOME program and the proportion of a city's total completed units and total HOME expenditures for completed projects that the CHDO activity represents.

Table 4.5: Community Housing Development Organizations' role in HOME

City	# CHDOs rec'd HOME	Share of total completed units (%)	Share of total HOME exp on complete projects (%)
Albuquerque	1	9.04	11.84
Aurora	1	0.27	1.92
Austin	9	1.74	3.17
Colorado Springs	3	20.57	15.52
Lexington	1	10.04	15.99
Nashville	11	7.81	10.10

Under the HOME program each city is required to spend a portion of their grant for housing development in cooperation with a Community Housing Development Organization. While federal program regulations largely require that this relationship be governed hierarchically, there are several variations in the city/CHDO relationship which serve to highlight important differences between hierarchical governance and network governance.

There is little competition for HOME CHDO funding within the cities. Although there may be some competition for the HOME resource, there are few entities that propose to serve the same community needs. That is each CHDO creates a niche to serve within the community and the extent to which the goals of the city are contained within that niche that CHDO will receive priority for funding. In the early years of the program many of the cities issued RFPs for the distribution of funds, but now all of the cities have moved toward a more open ended process. Funds are available throughout the year and city staff will entertain proposals for housing projects on a first-come, first-serve as ready basis. If a proposed project fills a city need or is consistent with the cities goals and priorities then the project is awarded funding. The level of contract specification varies widely among the cities. Aurora and Nashville have the least specific contracts with their CHDOs. These cities' contracts do not exceed two pages and are written by program specialists while the City of Albuquerque's contract is almost 35 pages and is a boiler plate contract that has been approved by the legal department. Austin and Colorado Springs both have an open review process such

that the details of the contract are more likely to be negotiated between the city and the developer.

Analysis of Housing Program Governance

The HOME program activities of the six cities can be categorized into different governance types based on the dimensions outlined in Table 4.4

Owner-Occupied Rehabilitation Programs: A Hierarchical Example

The owner-occupied rehabilitation programs are the best example of hierarchical governance in the hollow state environment. Although there are several degrees of separation between the source (federal government) and the expenditure of funds (private contractors) there are substantial formal controls at each stage. In each of these programs there is competition but it is restricted competition in that the administering agency first certifies the qualifications of competing contractors. The list of qualified contractors competes only on price in most cases. Further, the administering agency maintains expertise in the product to be "purchased" by government and provides detailed specifications to be followed by the contractor. The contractors are not financially tied to the agency but are independent private entities. Any trust that exists between the agency and the contractor derives from the sharing of information, the qualifications and or reputation of the contractor, and previous performance of the contractor under the program. The agency does not rely solely on trust to control opportunism but instead relies on specific formal contracts between the homeowner and the contractor and between the agency and the homeowner. If the contract is not fulfilled to the satisfaction of both the homeowner and the agency the contractor

does not get paid. The contractor is not paid until all work is completed although they may be paid based on progress as approved by the agency staff. There is, in other words, detailed monitoring of the contractor by the agency. Despite the fact that there is no direct agreement between the agency and the contractor there are formal agreements that link the two through the homeowner. It is expected that neither would cooperate in the absence of these formal agreements. Finally, the nature of the work is such that for the most part the contractors engaged have the capacity to complete the entire job and do not need to rely on additional parties to get the job done. While there may be some cases in which a contractor hires a subcontractor, the contractor remains responsible to the agency and the agency does not need to ensure cooperation among multiple entities to ensure the job is complete.

While this program could be seen as governed by market mechanisms given that there is competition and the contractors are independent private organizations. It fails to gain the benefits of market governance in that it does not allow for flexibility and innovation in the provision of service. Contractors are held to tight standards defined by the administering agency. Further, the competition is not perfect in that it is restricted by the agency and the same contractors compete in the program for future jobs. Again, this relationship more closely resembles a labor contract consistent with hierarchical control. It may look like a network in that the service is provided by entities beyond the hierarchy, there is an element of trust and reputation involved, there is an expectation of future interaction if the work is performed satisfactorily, and there

is no formal agreement between the agency and the contractor. Yet despite these appearances of a network, governance is ensured primarily through command and control on behalf of the agency. This illustrates an important aspect of the hollow state, which is that despite the apparent hollowness, the state can and does still maintain hierarchical control over some goods and services which can be clearly defined. This is a case of traditional government contracting-out and meets the requirements for contracting-out, primarily, low task complexity, high contestability, and low asset specificity (Globerman and Vining 1996).

The complexity of the task is reduced by the fact that the agency rehabilitation specialist defines the task specifically. Any decisions that must be made as to what or how something should be done is made by the agency not the contractor. Complexity is also lowered by the fact that a single entity can usually perform the work and there is no need for coordination of additional organizations. There is high contestability due to the fact that 10 to 20 contractors compete on each job. Although there is a need for a certain amount of asset specificity in terms of contractor qualifications these are relatively broad and asset specificity is minimized by the fact that the agency rehab specialist knows both the local building code and the regulations of the HOME program and create a plan of work that meets both of these such that the contractor does not have to have specific knowledge of either. Finally, consistent with Dryer's use of in-house production as a measure of hierarchical governance, the owner-occupied rehabilitation programs are administered "in-house" by the housing agency.

Down-Payment Assistance Programs: A Network Example

The down-payment assistance programs operated in each of the cities are the best example of network governance. A number of different entities cooperate in the absence of formal linkages to ensure that these programs work. Aurora is the only city of the six to administer this program in-house. In three of the cities, the down payment program is administered by a nonprofit organization under a memorandum of understanding or an informal contract. The remaining two are administered by other governmental entities. Albuquerque is the only city that competitively bids the administration of this program. The nonprofits then cooperate with private sector lenders and realtors in order to assist first-time low-income homebuyers in their housing purchase.

There is no competition among agencies that seek to administer the program. Even in Albuquerque where administration of the program was put out for competitive bid there were fewer than three entities which applied and two of these agreed not to compete but to cooperate in the administration of the program. There is also no real competition among entities that cooperate in the programs. The agreements between the city and the administering agency are less specific and leave many of the design details of the program to the discretion of the administering agency. Further, there are no formal agreements between the administering agency and the private sector partners with which they cooperate. Cooperation between the administering agencies and their private sector partners is facilitated by information sharing and reciprocity and there is an absence of formal agreements. Most of the administering agencies are not financial hostages

to the city and all of the private sector partners are independent entities. With the exception of Albuquerque the contract monitoring is minimized and only what is required by the HOME program is undertaken. Finally, joint production is necessary in order to ensure that the homebuyer receives counseling, a first-mortgage, down-payment assistance and assistance in locating an appropriate home. This requires the cooperation of the administering agency, lenders, and realtors.

This program represents the "most problematic environment in which to contract out, because all forms of bargaining and opportunism costs are present" (Globerman and Vining 1996). That is, the program exhibits high task complexity, low contestability, and high asset specificity. Although the individual tasks required such as making a loan, providing counseling or finding a home may not be complex, the complexity arises from having to coordinate all these tasks together. Usually this coordination is accomplished by the homebuyer themselves and can take a great deal of time and effort. The process of home buying can be very intimidating for the first-time buyer and often represents a significant barrier to the low-income first-time homebuyer. The service that the city is ultimately providing is that of coordinating the process and thus reducing the barriers to homeownership for the low-income buyer. Complexity arises from the need to coordinate the various tasks of education, financing, and real estate purchase.

As has been demonstrated there is low contestability to provide such service both among administering agencies and among lenders and realtors.

There is no competition to administer the program in any of the cities. Lenders and realtors are paid based on a percentage of the loan amount or sales price such that smaller homes for low-income homebuyers which take similar amounts of work (perhaps more) net them a smaller return than working with middle class or wealthy clients. As a result there are few lenders and realtors that will compete for such business. There is also relatively high asset specificity in that lenders must have specific knowledge of the various loan products that are available and the requirements of secondary mortgage market purchasers. Realtors must have specific knowledge of real estate and of local laws and usually must be certified. Counselors must understand the entire process and be able to communicate the process to potential buyers.

Globerman and Vining argue that contracting out in this worst-case environment requires that a relational exchange "be structured so that both parties behave as though they share a common objective." This can be done through *de jure* "quasi-integration" which involves sharing of administration and management (Globerman and Vining 1996). In the case of the down payment programs, *de jure* "quasi-integration" is achieved through extensive information sharing. Further, the entities involved do share a common objective in that by cooperating lenders and realtors can lower the costs of serving the lower-income clients while also increasing the volume of such loans which can increase their income. The Community Reinvestment Act which requires investment into low-income areas of the community by lenders serves to reinforce this common objective.

Contrary to Globerman and Vining's assertion that quasi-integration also requires contractual limitations on the ability of one or both parties to "break" the contract, the down payment programs (with the exception of the relationship between the city and the administering agency) operate in the absence of formal contracts and parties are free to not cooperate at any time. Cooperation in the down payment assistance programs is largely made possible by the institutional structure of the existing mortgage market. The mortgage market that is created by the presence of FHA and VA mortgage guarantees and government sponsored enterprises, Fannie Mae and Ginnie Mae define the parameters within which the players operate. The rules set by these institutions as well as the requirements under the Community Reinvestment Act define the parameters for cooperation in the absence of formal agreements. This network operates similarly to those identified by Milward and Provan in that a Network Administering Organization (NAO) maintains expertise in service provision and therefore is able to facilitate effective joint production of a complex service (Milward and Provan Managing the hollow state: Colloboration and contracting 2001). In this case, network governance provides a workable solution to a contracting environment which would otherwise be difficult to govern.

Tax Credits and SMART Housing: Market Examples

Within the HOME program no examples of market governance were found among the six sample cities. A possible explanation for the lack of market governance is the regulatory role of HUD which has imposed a number of regulations on the HOME program. There are two reasons the regulations may

prevent market governance under the HOME program. One is that the regulations impose a cost on local governments for noncompliance such that they are unwilling to rely on market forces to ensure compliance. Problems of opportunism that exist in the market result in noncompliance. Thus local governments are unwilling to rely solely on competition as a means for governing private sector partners. The second reason is that the regulations make the HOME money less attractive as a resource and therefore significantly reduce the amount of competition that exists for the resource. After factoring in the cost of compliance the resource retains little value in the competitive market. Without competition for the resource, market governance is impossible.

Although no examples of market governance were found to exist in the HOME program, two other programs, the Low Income Housing Tax Credit Program and the City of Austin's S.M.A.R.T. Housing program, were found to represent examples of market governance. These are the Low Income Housing Tax Credit Program and the City of Austin's S.M.A.R.T. Housing program. In both of these programs competition from a large number of independent firms is present and serves to govern the relationship. Formal contracts represent important linkages and are relatively specific but the details of the contract flow from project proposals initiated by developers in a competitive proposal process not by the state. There is no trust or reciprocity present in these initiatives nor is there evidence of informal linkages. There is regular contract monitoring. Although joint production is present, coordination is managed by the contractor and the state plays no role in that coordination.

What is important to note about these programs is that in both cases the government is able to use competition as a governing mechanism because it has something of value to *sell* to the market not because it procures a service from the market. That is, in both cases the regulatory environment created by the state imposes costs on the market players such that they are willing to engage in activities that minimize or eliminate those costs. In the tax credit program the cost is federal income taxes imposed on private sector firms, the program allows states to basically sell credits or means for avoiding that cost to the highest bidders. The highest bidder is the entity that best meets the affordable housing needs as defined by the state. The tax credits are so valuable in the market that developers are willing to pay application fees up front simply for the right to compete for those credits.

Similarly, the local development process in Austin imposes several costs on developers due to delays in the process. These delays are so costly that developers are willing to 'purchase' waivers of those costs by meeting greater standards than are normally required by the city. In exchange for higher standards in terms of affordability, accessibility, transit orientation, and green building the city reduces the costs of the development process. While both of these programs have been successful in creating incentives for the private sector to pursue public goals consistent with the ideas of 'reinventing government' and Osborne and Gaebler (Osborne and Gaebler 1992) it is important to note that these incentives are only possible within the existing regulatory structure which imposes various costs in the market. Without those costs, the incentives would not work

The development of affordable housing which is achieved under both the tax credit program and the SMART Housing program, like the down payment programs, also represent the worst case environment for government contracting out in that high task complexity, low contestability, and high asset specificity are present. Housing development is complex in that it requires a coordination of multiple players and navigation of multiple processes. There is little to no competition to produce affordable housing due to the lack of profit involved and the process involves a great deal of knowledge and experience as well as access to sufficient financial assets. Unlike the network governance solution which relies on quasi-integration, the market solution attempts to govern this environment by raising the level of contestability. Further, the task complexity and asset specificity are only high when this activity is considered in isolation, but when viewed as part of a larger market for residential development both are relatively lower. That is, by relying on existing private sector developers who are regularly engaged in residential housing development to produce affordable housing the relative complexity of the task is reduced and the specific assets can be borrowed from the private market thus reducing the affect of asset specificity requirements.

Affordable Housing Development under HOME: Variations of Governance

Affordable housing development under the HOME program is the same activity that is achieved through tax credits or SMART housing but it is primarily governed hierarchically although there are variations among the cities. While the down payment programs demonstrated that the worst case contracting out environment could be solved through network governance and the tax credits and

SMART housing programs demonstrated a market solution, development under the HOME program illustrates the problems of traditional government contracting in such an environment.

A city that chooses to utilize HOME funds for affordable housing development is free to partner with a variety of different types of entities including: nonprofit Community Housing Development Organizations (CHDO); private for-profit developers; and other entities (often nonprofit service organizations). Although for-profit developers engaged in affordable housing development were present in each city, only Nashville and Lexington had partnered with such entities utilizing HOME resources. And while city staff in Lexington indicated that these entities were not treated differently than nonprofit entities, they did state that they trusted nonprofit organizations more and felt that for-profit developers benefited from information asymmetry in terms of the real cost of the project making monitoring of for-profit entities more difficult. Some of the cities partnered with other entities such as social service organizations providing mental health or substance abuse services to develop housing for their clients. But the majority of housing development under the HOME program is aimed at partnering with nonprofit Community Housing Development Organizations whose primary mission is affordable housing development.

There is no real competition for affordable housing development with HOME resources. Even in cities where there are a number of CHDOs, competition is minimized through geographic or niche service areas such that if a city wishes to develop a particular type of housing in a specific part of town they

have no choice among CHDOs. The level of detailed specification in the contracts varies from city to city. For some, such as Albuquerque, the contract is very detailed and specific, for others, such as Aurora the contract is more vague. The extent to which a nonprofit housing development organization is a financial hostage also varies from city to city and within each city. The level of trust varies as well but is generally reversely correlated with whether or not a nonprofit is a financial hostage. Surprisingly, city staffs appear to have a greater amount of trust for nonprofits that are not financial hostages but independent and financially stable entities than they do for those that are financial hostages. This is due to the perception that financially dependent nonprofits have less capacity to develop housing and are more likely to fail than independent organizations.

There are few informal linkages under the housing development activity and there is specific and regular compliance monitoring in each city. This is largely due to the federal regulations which require annual long-term monitoring. Finally, joint production is present in each case but the level of successful coordination varies among the cities based on the ability of the nonprofit organization to link to other community resources. The lack of competition, lack of trust and informal agreements and the presence of specific contract monitoring all suggest that these activities are primarily governed hierarchically and that opportunism is controlled through command and control efforts exercised through clear principal-agent relationships.

Partnering with nonprofit or other entities for the development of affordable housing, like other affordable housing activities, represents the most

problematic contracting environment due to high task complexity, low contestability, and high asset specificity. According to Globerman and Vining, any solution to this difficult environment approximates the firm performing the activity. That is, internalization must occur through either de facto or de jure quasi-integration.

De facto quasi-integration occurs when the contractor is financially dependent upon the contract. This represents a mutual hostage situation such that if the organization fails the government also suffers (Globerman and Vining 1996). As a result it is in the government's best interest to see that the nonprofit development organization is successful. This financial dependence has taken slightly different forms in different cities. In Albuquerque, the nonprofit organizations receive operating revenues from the city. Several problems are created in this situation. Two of Albuquerque's most productive nonprofits have failed or gone bankrupt. This results in a loss of capacity to build affordable housing in the city and it also means that specific human capital assets in each organization which the city invested in by providing operating assistance and training are lost. The city cancelled a contract with a third nonprofit whose director had embezzled funds. With the canceling of this contract, this nonprofit would have also failed but it was bailed out by the state housing finance agency and now is the city's most productive nonprofit housing development organization under HOME. In Colorado Springs, the main nonprofit with the most assets is facing financial problems and the city has had to hire a consultant to assist the

organization. The sale of several affordable housing properties and loss of those units as affordable housing has been required to save the nonprofit.

In Aurora and Lexington, only one nonprofit housing development organization is certified as a CHDO to receive HOME funds and in each case the nonprofit is financially dependent not on the city but on another entity. In Aurora the nonprofit was created by the public housing authority and has no staff but is staffed by the housing authority. In Lexington the CHDO has a single staff member which is shared with the Urban League. Neither of these has produced very many affordable housing units. Each of these examples fails to meet one of the primary goals in contracting out under the HOME program which is to leverage other private sector resources. Their dependence on the city and other entities prohibits these organizations from being very successful at linking to other community resources.

De jure quasi-integration occurs because both parties share a common objective. The process of identifying and certifying organizations as CHDOs ensures that the missions and goals of such entities are consistent with the objectives of the city and the HOME program. The more successful CHDOs that are able to produce greater numbers of affordable housing units are linked to other community resources including banks, foundations and national intermediary organizations. Because these organizations are not financial hostages to the city, the city is less able to control their actions and insure their performance under contracts. The contracting relationship therefore is based primarily on the trust that the government has in these organizations which derives from their mission

to deliver affordable housing consistent with the city's objectives and the fact that they meet certain criteria for becoming a certified city CHDO including community presence and board make up. In this relational contracting situation, contract design and the process of negotiating what is to be delivered becomes much more important than contract monitoring. Contract monitoring in such a situation becomes nearly irrelevant because the city has little recourse.

An important phenomenon observed in two of the cities which serves to mitigate some of the problems of the contracting environment was the presence of a cooperative environment which allowed for cooperation among the nonprofits. In Colorado Springs and Nashville, different institutional factors served to promote cooperation among nonprofit organizations. This increased cooperation eases the problem of task complexity by coordinating activities and expanding the links to additional leveraged resources. Cooperation also reduces the problem of asset specificity by sharing of knowledge (assets) among the organizations.

Cooperative environments were created in each city through different means although trust was a key ingredient in both situations. In Colorado Springs, cooperation was made possible by the presence of social capital that existed due to the shared history of affordable housing personnel as retired military officers. Their common history and military background allowed nonprofit housing directors to trust each other in affordable housing development initiatives. In Nashville, the long-term leadership provided by the executive director of the Metropolitan Housing and Development Authority which not only administered the housing programs but was also largely responsible for policy-

making created an environment of consistency and reliability which promoted trust or reciprocity among community entities. Thus to the extent that a city can create such an environment the difficulties of contracting out can be minimized.

These two different solutions to affordable housing development under the HOME program highlight certain inconsistencies in the design of the program. Unlike many contracting-out situations where production-cost savings are an important objective of contracting out, contracting out for housing development is primarily done for two reasons: 1) to improve the quality and effectiveness of the housing by utilizing community organizations to develop them; and 2) to leverage private sector resources for affordable housing development. The first solution to the contracting out problem, *de facto* quasi-integration through financial hostages creates a situation which is a poor solution to achieving the two objectives of improved effectiveness and private sector leverage. A financial hostage is less capable of developing housing and less able to be creative and innovative in housing development because of their reliance on government for resources. These agencies also have less access to private financing and capital markets because of their government dependence.

The second solution, *de jure* quasi-integration, achieved here through relational contracting is capable of improving the effectiveness of affordable housing solutions and of leveraging private capital but because of the independence of these organizations they are less likely to be influenced by government. Therefore, the federal requirements of HOME for long-term monitoring impose costs on the city which could otherwise be avoided. If the city

is engaged in a relational contracting situation with a nonprofit housing development organization whose mission is to develop affordable housing then the city trusts the organization to meet that objective. Monitoring of the organization is irrelevant because the only recourse the city has is to require that the HOME funds be repaid in which case the housing may revert to market rates or refuse to provide additional funds to the CHDO but because there are no other entities competing for the resource the city then has no avenue for investing in affordable housing.

The result of this analysis is that none of the cities could be definitively categorized into a governance type because they each utilize mechanisms consistent with the hierarchy and the network. Governance type is directly related to the housing activity being undertaken. Owner-occupied rehabilitation is largely governed hierarchically while down payment assistance is governed according to network governance. These relationships between governance and housing activity are consistent across the six cities. Management of development activities varies across the cities but federal program regulations largely require close monitoring favoring hierarchical governance. Since governance type is closely related to housing activity it is not possible to separate the affects of governance and choice of activity on performance. Clearly, the choice of housing activity affects a city's efficiency because of the different cost structures associated with each activity and the ease or difficulty of administering differing activities but do public manager's attitudes toward governance type influence the choice of housing activities undertaken?

Relationship between Attitudes, Plans, and Actual Expenditures

Each of the six cities allocates its HOME funding differently. Table 4.6 illustrates the proportion allocated in their most recent Action Plan to a variety of HOME eligible activities. In many ways these numbers are difficult to compare. Each city is free to choose the start and end date of their program year so none of the years correspond. Further, the Action Plans that were available from the cities were different years. The cities are also free to develop the plans in a manner that fits their needs which means the resources that are included or excluded differ. To the extent possible only HOME funds for a single year were pulled for comparison. In some cases carry over funds from prior years, matching funds, and program income could not be separated from the HOME allocation. This was the case in Colorado Springs and Lexington. Regardless, the proportions give an indication of the relative allocation of HOME resources by city.

Table 4.6: Sample City Allocation of Resources According to Action Plan (%)

	Aurora	Colorado Springs	Lexington	Albuquerque	Nashville	Austin
Owner Occupied Rehabilitation	42.32	21.82	0.00	56.67	31.46	0.00
Down Payment Assistance	39.22	0.00	29.62	0.00	0.31	43.95
CHDO	8.86	10.85	19.75	10.17	12.83	20.43
Homebuyer Dev.	0.00	0.00	17.28	0.00	0.00	0.00
Rental Dev.	0.00	0.00	0.00	0.00	0.00	22.20
Rental Rehab	0.00	43.21	4.94	0.00	14.48	0.00
Not Designated	0.00	12.04	13.62	26.38	27.49	0.00
Total Development	8.86	66.11	55.58	36.55	54.80	42.63
TBRA	2.48	4.46	4.94	0.00	0.00	3.42
CHDO OE	0.00	2.19	2.47	0.00	3.21	0.00
Admin	7.13	5.42	7.39	6.77	10.23	10.00
Total	100.00	100.00	100.00	100.00	100.00	100.00

Aurora, Albuquerque and Nashville allocate the greatest share of their HOME dollars to owner-occupied rehab, while Colorado Springs and Lexington allocate the most to development activities, and Austin allocates the most to down payment assistance. Albuquerque and Colorado Springs plan to allocate none to down payment assistance while Aurora allocates nothing to development activities. Only Colorado Springs, Lexington and Nashville provide operating expenses to their CHDOs although Albuquerque does this through CDBG. Also, only Lexington and Nashville allocate any funds to rental rehabilitation. The cities also differ in their ability to recycle the HOME funds by generating program income. According to estimates in their Action Plans, Austin had program income available to spend in 2001 equal to 41% of its annual HOME allocation while Colorado Springs had only 3% in program income.

Table 4.7: Estimated HOME Program Income as a Percentage of Allocation

City	Program Income (%)
Aurora	28
Colorado Springs	3
Lexington	12
Albuquerque	22
Nashville	21
Austin	41

The ways in which cities meet their local match requirements differ as well Albuquerque, Aurora and Lexington meet their match with an allocation

from their General Fund. Austin meets its match with bond proceeds and other local resources which include the Housing Trust Fund and Housing Assistance Fund. These sources include the general fund and revenues generated by AHFC through its bond activities.

There is no discernable relationship between the attitudes held by public managers towards governance and the types of housing activities that they plan to undertake as indicated in their most recent Action Plan. Table 4.8 compares governance attitudes (in the first column) with the various housing programs.

Table 4.8: Comparison of Governance Attitudes and Action Plan Allocations (%)

	City	OO Rehab (hierarchy)	Development (varies)	DPA (network)
Hierarchy	Aurora	42.32	8.86	39.22
	Lexington	0.00	55.58	29.62
	Albuquerque	56.67	36.55	0.00
Network	Nashville	31.46	54.80	0.31
Market	Austin	0.00	42.63	43.95
	Colorado Springs	21.82	66.11	0.00

However, the Action Plans are only plans that have not yet been implemented and may differ from actual expenditures. Actual expenditures differ from allocations for several reasons. The allocations represent what is planned for the next few years while expenditures depict the picture of what has actually occurred over the past ten. Because goals and strategies change only incrementally, these are not expected to be drastically different. However, the actual expenditures only include expenditures for completed projects and may reflect inexperience in certain activities which over time will improve with

experience and learning such that more difficult activities and activities that rely to a greater extent on building a network of partners such as development activities will increase in future years. Actual expenditures by program category for the six cities from the IDIS database are included in Table 4.9.

Table 4.9: Actual HOME Program Expenditures by Program 1992-2001 (%)

	Aurora	Colorado Springs	Lexington	Albuquerque	Nashville	Austin
Owner Occupied Rehabilitation	73.72	56.32	3.17	66.17	28.55	8.93
Down Payment Assistance	24.35	24.99	44.48	5.01	14.45	29.63
Homebuyer Dev	0.00	0.00	4.85	14.52	31.59	45.03
Rental Rehab	0.00	2.06	8.14	0.00	20.68	2.74
Rental Dev	1.92	12.21	26.40	11.22	2.91	11.16
Total Development	1.92	14.27	39.38	25.74	55.18	58.93
Other	0.00	4.43	12.97	3.08	1.82	2.51

Comparing actual expenditures to manager attitudes is slightly more difficult because data were gathered on attitudes in 2003 and the actual expenditures occurred over a ten-year period from 1992 to 2001. Attitudes may change over time rendering such a comparison of little value. Further, public managers may also change over time although the managers in most of the cities have very long tenures and appear to have held similar attitudes over time. The exceptions are Austin and Aurora which have had a change of personnel during the study period. There also is no discernable relationship between attitudes toward governance and actual housing program expenditures from 1992 -2001 as illustrated in Table 4.10.

Table 4.10: Comparison of Governance Attitudes and Actual Expenditures (%)

	City	OO Rehab (hierarchy)	Development (varies)	DPA (network)
Hierarchy	Aurora	73.72	1.92	24.35
	Lexington	3.17	39.38	44.48
	Albuquerque	66.17	25.74	5.01
Network	Nashville	28.55	55.18	14.45
Market	Austin	8.93	58.93	29.63
	Colorado Springs	56.32	14.27	24.99

These comparisons coupled with the fact that attitudes toward governance were very different across the cities but the type of management mechanisms employed was consistent across cities provides evidence contrary to the original hypothesis that attitudes towards governance influence the choice of management mechanisms employed. Instead public managers have employed management mechanisms appropriate to a specific activity. Further exploration into additional elements of governance is necessary in order to explain the choice of management mechanisms and housing activities.

THE INSTITUTIONAL AND TECHNICAL LEVELS OF LOCAL HOUSING PRODUCTION

Comparisons among the sample cities on additional elements of governance were made in order to investigate the choice of governance type and housing activity. The cities were analyzed at the institutional level and technical levels of governance. At the institutional level elements including context and environment were examined. These included intergovernmental relations, demographics and culture, and inter-jurisdictional competition. Also at the institutional level, comparisons were made with regard to the form and structure of government and the organization of departments. The investigation into the

technical level of governance involved comparing the housing networks - the nonprofit organizations and other entities involved in affordable housing production in each city. The cities were compared on elements of governance and patterns between governance and housing activity expenditures from the IDIS database which represent the housing output produced and to some extent the strategies adopted by managers. A detailed characterization of the institutional and technical levels of governance for the sample cities is included in the appendix.

Influences of the Choice of Governance Type

Several inferences can be made from the comparative analysis about the choice of governing mechanisms. National institutional structures facilitate local governance in the hollow state environment although they may also present barriers. These national institutions also explain why the choice of governance is consistent across cities. These national institutions include historical patterns of interaction, the market for mortgages, and the overarching program design of the HOME program and HUD monitoring of local activities. In the absence of such national institutions, variations in governance are more likely to occur.

Historical Patterns of Interaction

The design of owner-occupied rehabilitation programs operated in each of the six cities follows from previous federal housing programs of the 1970s, primarily the Section 312 and Section 115 programs together known as the FACE (Federally Assisted Code Enforcement) program. Section 312 provided loans of up to \$15,000 to property owners at 3 percent interest for 20 years. The Section

115 program made grants of up to \$3,500 to owners with incomes too low to support a loan and grants of up to \$3,000 were made to as supplements to Section 312 loans (Hays 1995). Hays identifies two patterns established by these programs which carried over to the CDBG program. Under the Section 312 program there was a strong preference for loans to homeowners rather than loans to investor owners. Under both programs there was an emphasis on neighborhoods with moderate levels of decay rather than areas with structurally unsound housing stock. Section 115 was folded into the block grant when CDBG was created while Section 312 continued until the creation of HOME.

The owner-occupied rehabilitation programs developed by localities under the HOME program are very similar. They utilize a combination of grants and loans to homeowners (not investor owners). Grants are available to lower income households. The interest rates on the loans are 3-5% and there are caps on the amount of rehabilitation that will be undertaken. Households whose housing can not be rehabilitated within the defined caps are usually declined and the city chooses not to try to rehabilitate these units. The city of Austin funds its owner-occupied rehabilitation program entirely from CDBG while the remaining cities utilize both CDBG and HOME to fund their programs. The governance of these programs has evolved over the last 30 years and although it appears to be a different approach than traditional government contracting, it is simply a modified/improved version with increased information sharing and a resident in-house expert that reduces the task complexity and improves the city's ability to monitor the contractor.

The National Mortgage Market

The existing mortgage market, as mentioned previously, is an important prerequisite for the adoption of a network-style of governance in the operation of local down payment assistance programs. The constraints created by the mortgage market define the actions of individual players and establish a predictable behavior pattern upon which public managers can rely. Federal government sponsored enterprises (GSEs) including the Federal National Mortgage Association (Fannie Mae), the Federal Mortgage Assistance Corporation (Freddie Mac), and the Government National Mortgage Association (Ginnie Mae) as well as the Federal Housing Administration and the Veteran's Administration establish the rules which govern the mortgage market.

Fannie Mae is particularly important because they purchase loans from local mortgage lenders, pool them in order to reduce their risk, and make mortgage-backed securities available to investors. Not only is this role important for making additional private resources available for mortgages but the rules they establish for the purchase of loans creates constraints and consistent behavior on the part of lenders. Local public managers rely on these constraints as a means for trusting lenders to collaborate in terms of their down payment assistance. It is the presence of these national institutions which allow local governments to network with private sector partners without formal agreements.

Design and Regulations of the HOME Program

One of the most striking aspects when comparing the HOME program among cities is the similarity among them. The differences that exist among the

cities are primarily in the details such as defining maximum subsidy limits and allocation of resources to meet local needs. The strategies and policies being pursued at the local level are surprisingly similar due to reliance on model programs promoted by HUD. Beyond the ability to adapt small details to the local needs, the great advantage of a devolved program is its ability to generate innovations.

Steven D. Gold has identified diversity of production technology as an important issue raised by devolution. That is, with greater freedom to design programs we should expect increased variation in how states and localities structure and operate the delivery of services (Gold 1999). Yet after ten years of the HOME program there are relatively few innovations at the local level. This is even more surprising given the fact that there has been a good deal of innovation at the state level following housing devolution. States control a more diverse set of resources for housing than localities and it is these other resources that give them greater flexibility in developing policies and strategies.

States receive the low income housing tax credit (LIHTC) and private activity bond volume cap that can both be used to address affordable housing in addition to their HOME resources. They have combined HOME funds with LIHTC and bonds in innovative ways that are not available to cities. States have also developed their own revenue sources for housing in the form of general fund revenues and housing trust funds with designated revenue sources (Brassil 2002). Affordable housing policy might actually be better served if devolved to the state level for these reasons. However it would appear from the attitudes of local

actors towards the state, that the history of federal-city relations in the area of community and economic development has severely damaged the state-city relationship. This relationship would need to be strong in order for affordable housing policy to be effectively managed at the state level.

Differences in innovation between the state and local levels could possibly be explained by the additional constraints faced by cities due to citizen mobility and the competition among local jurisdictions. Paul Peterson has argued that cities will not engage in redistributive policy for these reasons. It is possible to imagine that states being less constrained are more likely to engage in such policies. But this explanation is inadequate since many cities actually view affordable housing development at least as part of a larger economic development policy. In fact in the six sample cities, although there was little evidence of innovation in the use of HOME funds there was evidence of innovation in affordable housing with other resources. For example, the city of Aurora is using private activity bonds, low income housing tax credits, and city property to develop an affordable housing project to anchor a much larger community redevelopment effort that will involve the use of much greater local resources.

The city of Austin has developed a program called SMART housing to stimulate affordable housing development. SMART housing has cost the city over \$2 million in waived development fees over two years and resulted in more affordable units being produced than all ten years of their HOME funding combined. Nashville-Davidson County is using local resources to fund a program of down payment assistance for metro government employees and provides funds

to nonprofit developers for projects in which existing federal resources have been unsuccessful. These other resources at both the state and local levels provide for much greater flexibility and creativity than the HOME funds and they are subject to less stringent monitoring and oversight even in the case of the federal resources. The federal programs are authorized by the tax code and therefore overseen by the Internal Revenue Service (IRS) instead of HUD. This difference is significant.

Any real estate development involves a certain amount of risk and the production of low-income housing is more risky than other types of development. The propensity of public managers to 'invest' in low-income housing is dependent upon their perception of the risk involved. HUD's requirement of repayment of HOME funds for inappropriate expenditure which includes the failure of an otherwise legitimate low-income housing development increases the risk born by the public manager. Whereas if the penalty for inappropriate expenditure is loss of future federal funding the public manager may be willing to take that risk for the potential benefit of increasing the supply of affordable housing in the community, but if the penalty is loss of own-source (local) revenues which must be repaid to HUD then the risk is much greater because the cost of local resources is much higher than federal resources. The repayment requirement distorts the benefit-cost analysis however informally performed by the local decision-maker. The additional federal regulations included in the HOME Final Rule also create distortions in the local decision-making process. Other federal regulations which include the Davis-Bacon Wage requirements, Lead-Based Paint requirements,

Woman and Minority Owned Business Enterprises, and the Uniform Relocation Act all create examples of allocative inefficiency and spillover costs which are born at the local level.

In the early 1990s amid stories of corruption and scandal, HUD was slated for elimination by some members of Congress. The "Reinventing Government" report prepared by Vice President Al Gore's task force portrayed HUD as "the epitome of the smothering of local flexibility and innovation by excessive 'top-down' regulation"(Hays 1995). Thus, facing elimination and in the midst of a call for a "devolution revolution" by the Republican controlled Congress, HUD sought to 'reinvent' itself by down-sizing the bureaucracy and focusing on performance evaluation. Although Secretary Cisneros' "Blueprint for a Reinvented HUD" was sufficient to convince Congress to allow it to continue, it did little to eliminate the 'the smothering of local flexibility and innovation'. In fact, as the reinvented HUD has less of a role in program administration, its role in oversight of devolved local programs has become perhaps even more prominent.

The Consolidated Planning process which was part of the reinvented HUD's strategy was intended to not only streamline the application process by consolidating the process for several programs but to create a greater focus on performance at the local level. The Consolidated Plan process, although initially promising has not in subsequent years produced the kind of continued dialogue on local community issues that it was intended to do. None of the study cities were able to generate a great deal of citizen participation in the process in subsequent years despite various creative efforts. Further, the local jurisdictions remain

reluctant to state specific housing goals and strategies to meet them as required by the Action Plans and HUD has not been willing or able to enforce greater efforts in this area. A review of several Action Plans of the study cities reveals few specific and measurable goals. Instead they are more likely to use language such as "priorities" and "expected" or "anticipated" with reference to outcomes. The Action Plans read more like a summary of projects underway and anticipated completion dates than goals to strive for. Few of the Performance and Evaluation Reports identify a jurisdiction's failure to meet its "priorities".

Further, none of the results from HUD's monitoring efforts focused on or penalized jurisdictions for poorly establishing or not meeting their goals. Instead, of the study jurisdictions that had HUD audit findings, all of them were process-oriented. For example, the City of Albuquerque was cited for not having entered program income into the IDIS system properly and the State of New Mexico was cited as having too many employees engaged in the administration of the HOME program. Until just recently, HUD's evaluation of a jurisdiction's performance has focused primarily on process, rule compliance, and the committing and expending of funds. These are all consistent with a traditional bureaucratic or 'procedural' governance regime and are inappropriate in a hollow state environment such as is promoted by the HOME program. HUD's focus on process and bias toward certain housing strategies continues to stymie local innovative efforts. A more detailed examination of their concept of performance helps to illustrate this point.

In June of 2003, HUD came out with their "HOME Program Performance SNAPSHOT" which evaluated the performance of each participating jurisdiction relative to their peers under the HOME program. Each jurisdiction was given a percentile ranking compared to all other jurisdictions. The resulting rankings were significantly different from independently created efficiency rankings developed by the author utilizing HUD's database. The differences between the SNAPSHOT rankings and the efficiency rankings are rather stark. An example of the differences is provided by comparing the rankings for the sample cities. If the top 25% of participating jurisdictions is used as a means of identifying the best performers, then three of the cities - Lexington, Albuquerque, and Colorado Springs - would be considered top performers nationwide under the SNAPSHOT. As Table 4.11 illustrates, these cities are the least efficient of the six. Further, Aurora which is identified as a relatively low performer by the SNAPSHOT (27% nationally) is the most efficient. These differences in performance measurement, although disturbing, (especially for the author) are easily explained by looking at their construction. A comparison of the differences among the performance rankings illustrates not only the limitations and difficulties of performance measurement but reveals HUD's particular housing policy bias' and highlights ways in which HUD influences local government implementation.

Table 4.11: Comparison of SNAPSHOT and Efficiency Measures

City	HUD Rank	Efficiency Rank
Lexington	89%	44%
Albuquerque	81%	24%
Colorado Springs	78%	34%
Austin	66%	100%
Nashville	40%	56%
Aurora	27%	100%

First, there are several unimportant reasons that the rankings may differ: 1) the SNAPSHOT includes HOME data from program implementation through June 30, 2003 while the efficiency measures were constructed utilizing data from program implementation through October 31, 2001; 2) the SNAPSHOT ranks all local participating jurisdictions which include not only cities but also counties and local consortiums totaling 505 jurisdictions while the efficiency measure evaluates only city jurisdictions which make up 351 of the 505 but only 344 of them had expended HOME funds at the time of the study and two had no mathematical solution; 3) although both measures were constructed utilizing the same database - HUD's Integrated Disbursement and Information System - there are several data anomalies and problems in the dataset due to conversion from a previous system and/or inconsistencies in data entry by local jurisdiction personnel. As a result HUD has undertaken a major effort to clean-up and improve the data between 2001 and 2003 meaning that the data may have changed since the efficiency measure was created. These differences although

they may be substantial for some jurisdictions are not likely to significantly explain the vast differences between the rankings.

Second, there are several more important reasons that the rankings differ due to the ways in which they were constructed. The SNAPSHOT ranking is constructed from eight performance measures which purport to measure program progress, low-income benefit, and lease-up. The efficiency measure is a single measure that compares the number of units produced or households housed with the total resources (from all sources) expended. This measure was chosen based on the primary objective of the HOME program as defined in the legislation which is to increase the supply of decent, safe, and sanitary affordable housing. It is measured in three different ways: 1) utilizing a production function; 2) utilizing separate Adjusted Performance Measures (APM) for homeowner and rental activities; and 3) utilizing Data Envelopment Analysis (DEA) to evaluate multiple outcomes together. The performance measures from which the SNAPSHOT rankings are derived have a number of weaknesses. The first weakness is that they suffer from a problem of inadequate normalization. The measures are based on percentages instead of absolute numbers. Although this is done to minimize differences due to jurisdiction size it provides an inaccurate picture in many cases. The best example is one that examines the low-income benefit of program resources. This can basically be conceived as the ratio of low income households served to all households served. A jurisdiction that has served a total of two households both of which are low income households would receive a 100% ranking while a jurisdiction that has served 2000 households, 500 of which are

low income would receive a significantly lower (25%) ranking. At some point absolute numbers need to be considered. This problem is further exacerbated in HUDs measure because it is constructed as the ratio of low income renters to all renters. In most cases the cities have developed housing strategies which seek to provide rental housing for low income households and homeownership opportunities to moderate income households. In such a situation most renters would be low income. This is the second weakness in HUD's measures which is that they are biased toward rental housing and virtually ignore homeownership activities.

While the HOME legislation does specify a preference for rental housing the IDIS data (Table 3.13) reveal that HOME expenditures by cities have been almost equally divided between homeownership and rental activities over the ten year period and in fact homeownership activities were more prominent in the earlier years. By emphasizing rental activities to the exclusion of homeownership activities the SNAPSHOT reflects only half of the picture. Again this is exacerbated by the fact that homeownership activities require on average smaller subsidies resulting in more homeownership units produced as a percentage of total units than rental units given a 50/50 breakdown of rental/homeowner expenditures.

The third weakness of the SNAPSHOT measures is their focus on process to the exclusion of outcomes. Although it is often very difficult to measure outcomes, the case of housing is relatively more easily quantified than almost any other publicly provided good. There is after all a physical unit produced or a

household that finds a place to live. But the SNAPSHOT rankings do not even attempt to measure outcomes, in that none of the measures making up the overall ranking measure the number of units produced! Instead the measures are concerned with process, what HUD refers to as "program progress". These measures include the percentage of funds committed, the percentage of funds disbursed (expended), the ratio of private resources to HOME dollars (leverage), the percentage of rental disbursements of completed projects to rental commitments (rental), and the percentage of CHDO disbursements of completed projects to CHDO reservations (CHDO). All of these measures focus on the process of spending money, not on the production of affordable housing. In addition the latter two measures are double-weighted in compiling the overall rankings. There are some serious problems with these measures. For example the percentage of funds disbursed measure is the ratio of funds disbursed to total allocations through 2002 not including any "deobligations". That means that if a city lost part of their allocation because it was not spent within the five year time limit that is not reflected in the measure. A city could lose an entire year's allocation but if they have spent the allocation from all other years then they would still receive a 100% score.

Although they too have several limitations, the efficiency measures have some significant advantages over the SNAPSHOT ranking. First, the efficiency measure utilizes actual figures and controls for differences in the local housing market including population, rent levels or housing costs, and median incomes. Second, the efficiency measure focuses on outcomes rather than outputs. That is

it evaluates units produced as a result of expenditures rather than solely evaluating expenditures. Third, the measure is evaluated using different methods in order to overcome any shortcomings in the evaluation process.

The review of HUD's performance measures highlights a bias for particular strategies which deters local governments from adopting other affordable housing strategies. The strategies favored by HUD include gap financing, rental housing development, and income targeting. Gap financing translates into layering of subsidies within a project. HUD promotes a city's ability to "leverage" other resources for affordable housing. The utilization of HOME funds as gap financing places nonprofit developers in the position of having to find multiple layers of subsidy to make a project financially feasible. In some cases the number of layers of financing can exceed ten. The cost in terms of time and money of securing several layers of financing is significant. The analysis of efficiency suggest that since the marginal productivity of HOME funds is so great, efforts to secure addition subsidy layers do not significantly contribute to the production of additional units. While additional subsidies may contribute to a city's ability to serve lower incomes reducing delays in project develop could generate savings sufficient to reduce necessary rent levels. This coupled with a mixed-income strategy that allows for cross-income subsidization could possibly achieve similar results.

HUD has also shown a propensity to favor rental housing development over homeownership activities by virtue of the complete absence of homeownership activities in its performance measures. Again, this derives from

theoretical notions which may not be appropriate in all situations. That is, the notion that low income households can not be successful homeowners until they have reached a certain level of income. Such a belief leads to the conclusion that rental housing is the best option for the lowest income groups. Many believe that providing homeownership opportunities to the lowest income groups sets them up for failure and foreclosure because they will be unable to afford to maintain a home. Although this may be true in many cases, the experience of a number of cities and nonprofits has shown that other factors are important for determining when a household may be ready for homeownership. Many entities providing homeownership resources have found that detailed screening of clients, homebuyer counseling, and the appropriate financing tools can not only make homeowners out of the lowest income group but that they also experience lower delinquencies and foreclosure rates than their local mortgage lender. Such options should be readily adopted by local jurisdictions especially those that have a good housing stock and a recession-resistant economy based on a number of steady low-wage jobs.

Finally, HUD has favored a strategy of income targeting which may be misguided. The analysis of efficiency demonstrates that income targeting is not an efficient strategy with regard to homeownership activities. By serving all eligible income groups the efficient jurisdictions have been able to serve similar number of the lowest income households along with significantly more in the low and moderate income groups. The presence of a strong and vital down payment program provides access to the lowest income households that are ready for

homeownership and the inclusion of more moderate income households creates a solid core of eligible clients. By providing homeownership activities to all eligible income groups a relatively larger volume of activity will create greater opportunities for the lowest income households to gain access to the programs. Further, since homeownership activities are interest bearing loans including higher income households produces a greater return on the investment and makes additional resources available.

The analysis of efficiency is less clear on the issue of income targeting with regard to rental housing activities. However, a comparison of the experiences of the several nonprofit developers in the six study cities provides evidence that income targeting is not an efficient strategy even in rental developments. Those nonprofits that limit the extent to which they target the lowest income groups when developing rental projects are more financially stable and more likely to be able to maintain the units in the long-term than those nonprofits that either chose or have been pressured to serve the lowest income groups with their housing development.

One example is Greccio Housing, Inc. a nonprofit housing developer in Colorado Springs which until recently had been fairly successful at developing rental housing stock through acquisition and rehabilitation. With each new project the city of Colorado Springs pressured the organization to set-aside more units for the extremely low income households which has created the situation where the nonprofit is now facing financial difficulties. The revenue generated from their several properties is not enough to cover the maintenance costs. The

nonprofit has been forced to sell off some of its rental units forever losing them to affordable housing for any low income group. Further, the city has hired a consultant to analyze the assets of the nonprofit and try to mitigate any further loses. This is in contrast to YES Housing, Inc. in Albuquerque which has not targeted its units and has even built a number of mixed income projects (projects that include units that are available at market rates to households above the 80% of area median income HOME limit) utilizing a variety of different financing options. In 1999 when the organization was in its infancy and began receiving operating assistance from the city, the executive director told the city that their goal was to be self-sufficient in five years. In 2003 because of budget constraints the city has suspended the organization's support a year early and there is every indication that the nonprofit will continue to be successful.

Influences on the Choice of Housing Strategy

Inferences can also be made from the comparative analysis about factors affecting local government choice. Efficiency as measured in the previous chapter is directly related to choice of housing activity because of the differences in cost structures. Thus, the choice of housing strategy adopted by local managers directly affects housing outcomes. Local institutional structures explain differences in the choice of housing activities. Like the national structures, local institutional structures can both facilitate or present barriers to the adoption of certain housing strategies. The important local institutions include the local development process, the structure of decision-making embodied in form of government, the organization of departments, and the local society. Also,

differences in the assets contained at the technical level, in terms of nonprofits and other private sector entities, are affected by local institutional structures and in turn affect local choice.

The Local Development Process

In the absence of a national institution to guide the development process, there are a myriad of institutions at the local level that control this process. The local development process involves approvals of planning and zoning, engineering, and building permitting. The majority of developers interviewed cited the development approval process as the single most important factor affecting the cost of residential housing. The approval process presents a substantial barrier to the development of residential housing which significantly raises the cost of such housing.

The primary complaint by developers was not, as one might expect the fees that are charged at each stage of the approval process, but the delays in the approval process. This is because the greatest expense in the development process is the cost of holding the land. Cities generally require site control before any planning or zoning approvals are made. Therefore, developers are required to hold the land throughout the entire process and delays can drastically increase the overall cost of a project. One developer provided the following example: The interest on the loan used to acquire a developable property was \$10,000 a month. The process of getting approval from the city took 24 months which translates into a cost of \$240,000 not including development fees or other project costs.

Worse (in terms of governance of affordable housing programs) than the increased cost resulting from the local development process, the process is unpredictable. This lack of predictability increases the risk of housing development and creates a situation which deters cooperation. A manager in the community development department implementing affordable housing strategies under HOME may provide some level of subsidy in order to make a development project affordable. Since the community development department is unrelated and has little influence over development approvals it is not possible to estimate the time it will take to get the project complete or the total cost of the project. If delays increase the cost the developer may still be required to make the units affordable although he maintains little control over the cost imposed by the approval process. There is little incentive for a developer to cooperate and strict contractual arrangements must be utilized to ensure that housing that is developed with HOME subsidies remains affordable. Thus in the absence of a national institution to govern housing development, local institutions are likely to present barriers to the adoption of a management mechanisms consistent with a network-style of governance.

Structure and Form of Government

The local institutions for decision-making and policy implementation are important for explaining differences in choice of housing strategy. Three of the cities had a council-manager form of government and a fourth although a strong-mayor form had delegated responsibility for implementation of housing programs to an independent quasi-public entity. In these four cities managers were more

likely to try to think creatively about housing strategy development. They were more likely to suggest new approaches because they were not subject to high powered elective incentives and received greater support for their efforts from elected officials. The two mayor-council cities were more likely to maintain the status quo or to rely on federal program requirements to defend their strategies to local elected officials.

The two mayor-council cities, Albuquerque and Lexington, to a greater extent than any other city pursued multiple often competing objectives with the HOME program funds. Production of affordable housing units was only one goal among many. For example, efforts in Albuquerque included serving lower incomes, preserving the character and culture of traditional neighborhoods, revitalizing areas of the city, and producing housing that was architecturally attractive with features that would lower maintenance costs and increase long-term affordability. While all of these may be viable objectives it is difficult to achieve them all as well as the primary national objective of the HOME program which is to increase the supply of affordable housing.

Serving lower incomes requires additional subsidies which reduces the number of units the city can produce with a given amount of HOME funds. Both Albuquerque and Lexington pursued strategies which sought to serve special populations including the homeless, the elderly, substance abusers, and the mentally ill. As a result both cities have higher total per unit costs than the other cities as illustrated in Table 4.12. In terms of rental housing, both Albuquerque and Lexington are able to leverage greater amounts of other resources than the

other cities. Thus, these cities are utilizing the federal money to pursue additional local goals.

Table 4.12: Total Expenditures per Unit by Housing Program for Sample Cities

	DPA	OO Rehab	Rental Rehab	Homebuyer Development	Rental Dev	Other	Average
Aurora	2,651	26,884			40,848		7,881
Colorado Springs	56,674	21,232	41,933		21,049	18,996	30,082
Lexington	70,947	12,364	12,751	84,740	68,116		67,613
Albuquerque	54,316	45,934		64,976	127,750	23,814	64,767
Nashville	40,176	24,040	21,989	62,953	47,264	42,219	31,007
Austin	12,946	44,564	9,400	36,219	56,184	46,495	17,869

Nashville the mayor-council city that utilizes an independent public authority to administer its housing programs also pursues multiple objectives but has the added advantage of a consolidation of housing resources. Thus, Nashville is also able to leverage a number of additional resources while maintaining relatively lower total expenditures. That is they are able to pursue multiple objectives more efficiently than the mayor-council cities but not as efficiently as the council-manager cities of Aurora and Austin which to a greater extent have emphasized the pursuit of additional units to all other objectives.

The form of government seems to influence the number of objectives that a city pursues with its HOME funding. The pursuit of multiple objectives reduces a city's efficiency at achieving any one goal although it does not necessarily mean they are less effective. Cities can be effective at pursuing multiple goals related to housing development but it is considerably more costly than pursuing a fewer closely related objectives. Further, an independent public authority designed to pursue multiple related objectives can improve the level of efficiency possible.

The most efficient cities are those that pursue fewer public goals. Unfortunately, it is not possible to know from this research whether these cities are also pursuing the additional objectives with other funding sources. If so, these additional resources should be included in the analysis of efficiency.

Community Assets and the Housing Network

The presence of certain community assets embodied in nonprofit organizations or other public serving entities is advantageous to a city pursuing affordable housing. These assets can both affect the choice of housing strategy and be affected by the implementation of such strategy. Feedback into the political system is an important element in the choice of housing activity. Managers are less willing to engage in an activity that has previously failed for what ever reason. Three of the cities had effective nonprofit developers that were linked to national intermediary organizations. This link was important not only in the financial stability of the organization but also in its ability to attract external resources to the community. These organizations however were only present in the larger three cities.

City efforts to facilitate the creation of effective nonprofit organizations have met with differing success. The cities of Albuquerque and Colorado Springs have both provided operating support to grass roots organizations in an effort to create these entities. In both cases the organizations have faced financial difficulties because their dependence on the city for resources has prevented them from obtaining a diversified set of financial supporters.

Nashville on the other hand has been the most successful at facilitating the creation of nonprofit organizations by eliminating the competition for resources and providing HOME funds to nonprofit developers on an as-needed basis. This has been coupled with creating an environment that encourages organizations to cooperate which produces organizational learning. Further, the Metropolitan Housing and Development Authority has also spun off a Community Development Financial Institution which has acquired funding from the U.S. Treasury and local banks in order to make capital readily available to nonprofit developers. This has been significantly more successful than Albuquerque's efforts to fund nonprofits directly.

The presence of an effective nonprofit entity can affect the type of housing activity a city engages in. For example, Nashville is the only city to provide a significant portion of HOME funds for rental rehabilitation. This is primarily due to the presence of an effective nonprofit organization which purchases existing motel buildings and then utilizes HOME funds to rehabilitate them for single room occupancy housing for the homeless. Aurora on the other hand has developed a rental rehabilitation program but lacking trust in any organization to implement the program, it has required a significant investment by private landlords -- an investment they are not willing to make. Thus, Aurora's program exists in design only and has not been implemented.

SUMMARY

The analysis of governance involved detailed comparisons of the various elements of governance among six mid-sized cities. The cities were selected in

order to maximize the variation in performance and institutional structures but to minimize the variations in housing markets. Five mid-sized cities that have experienced high growth during the study period 1992-2001 were purposely selected. In addition, a pilot study was conducted in Austin, TX and data gathered during the pilot study was included in the analysis. Data were gathered through site visits which included in-depth interviews, housing tours and a review of documents. A detailed characterization of the six cities is included in Appendix H.

This analysis tested the hypothesis that an overarching philosophy of governance (captured by a variable called governance type) affects the choice of management mechanisms employed at the local level. Thus, it was necessary to identify the governance type employed in each city. While managers in each city expressed different attitudes toward governance, the management mechanisms employed in the cities did not vary according to such attitudes. The mechanisms employed were consistent with both the hierarchical governance type and the network governance type. The choice of management mechanisms was directly related to the housing activity being undertaken and this choice was consistent across all six-cities. Thus, the hypothesis that the choice of management mechanisms is driven by an overarching governance philosophy was shown to be false.

One of the goals of this research was to examine the relationship between governance and performance. However, the lack of variation among the cities in terms of governance type for each activity made it impossible to draw conclusions

on the relationship between governance type and performance. Therefore it was necessary to further investigate the factors affecting the choice of governance type and housing activity as well as factors affecting performance. This investigation revealed that governance type and housing activity are both largely influenced by institutional structures. National institutions including historical patterns of interaction, the national mortgage market, and the HOME program were shown to affect the governing mechanisms that are utilized at the local level. Because national institutions relate to specific housing activities, the influence of national institutions over governance choice explains why each of the cities employs the same governance type for similar activities. While national institutions are important for explaining the choice of governing mechanisms employed to manage a specific activity, the choice of housing activity is influenced by local institutions.

Local institutions especially the form and structure of government affect the variety of public objectives that are pursued and thus the housing strategies that are adopted. Local assets in terms of nonprofit entities with which to partner for the delivery of affordable housing are important to a city's success but efforts to facilitate the creation of such entities have been less successful.

Chapter 5: Governance and Performance

The purpose of this research was to gain a better understanding of governance in the hollow state environment. It has sought to understand how regimes of laws, rules, judicial decision, and administrative practices constrain, prescribe, and enable the provision of publicly supported goods and services. It further examined how key elements of governance affect performance. It was hypothesized that managerial level factors especially mechanisms used to manage private sector partners are significant explanatory factors. It was also hypothesized that the choice of such mechanisms are influenced by certain institutional level factors such as the structure of authority and control of resources.

A review of the literature revealed that government's role has changed in the last twenty years with the growth of both nonprofit organizations and quasi-governmental entities which has been referred to as "the hollow state"(Milward and Provan 1993) and the "fragmented and disarticulated state"(Frederickson 1999). The hollow state poses new challenges for governing because neither market-style management mechanisms which rely on competition nor hierarchical mechanisms which govern according to principal-agent relationships are expected to be effective management tools in the hollow state. Lack of competition renders market mechanisms ineffectual while joint production involving multiple entities makes defining clear principal-agent relationships impossible. Instead a network-style of governance based on trust and reciprocity is theorized to be a better

alternative for managing the hollow state. Many scholars believe that local public managers do not know how to govern in this new environment and they argue that new tools are needed to govern the hollow state. Thus a major question posed by this research is what mechanisms have local public managers adopted to govern in this new environment? Why? and with what consequences?

MECHANISMS EMPLOYED TO GOVERN IN THE HOLLOW STATE

Local public managers involved in governing the hollow state of affordable housing production have employed a range of mechanisms from traditional hierarchical mechanisms, to market-type mechanisms, to network-style mechanisms. Contrary to the literature that argues local public managers do not know how to manage in the hollow state and need new governing tools, the case of affordable housing has shown that managers have a variety of tools with which to manage relationships with their private sector partners, both nonprofit and for-profit. Local public managers have adopted new and different tools to manage in the hollow state. They have found ways to improve the traditional contracting relationship by simplifying the contracting environment through either increased competition, or decreased task complexity and asset specificity. They have also collaborated with private sector entities consistent with network-style of governance utilizing information sharing and informal agreements and relying on reciprocity and repeated interaction as means for governing the relationship. Finally, they have demonstrated a willingness to employ relational contracting although these efforts proved more difficult to implement. They have, to a lesser

extent, also utilized market-type governance by creating a framework for private sector competition.

Owner-occupied rehabilitation programs have demonstrated that traditional hierarchical controls embodied in a specific and detailed contractual relationship can be effective when task complexity is low and asset specialization can be minimized. Employing rehabilitation experts has allowed the cities to reduce the asset specialization requirements (primarily knowledge requirements) for rehabilitating housing under the HOME program. This has in turn increased competition and improved the city's ability to monitor rehabilitation contractors. In addition increased information sharing between the city and the contractors through a certification process and frequent educational events has further improved the contracting relationship. Information sharing has also been an important mechanism in facilitating partnerships among a variety of entities involved in the down payment assistance programs and information sharing is an important new tool adopted to manage nonprofit housing developers as well.

The down payment assistance programs demonstrated that local managers are knowledgeable of and willing and able to implement management mechanisms that rely on trust and reciprocity. In these programs there were few formal agreements among a variety of collaborating entities and the need for monitoring was absent. Two important elements made network governance possible with these programs. First, the existing institutional structure of the mortgage market created the boundaries within which the players operated. This made trust among them possible. Second, the presence of information sharing

enhanced the level of trust and reciprocity. While the presence of the mortgage market facilitated the adoption of network-style cooperation in the cities down payment programs, the absence of a similar type institutional structure for real estate development has made governing affordable housing development activities more difficult.

Local public managers have demonstrated a willingness to adopt governing mechanisms consistent with both the market-type and network-type governance to manage housing development activities. Open application processes which provide funds on a first-come first-serve basis encourage competition and creativity among private sector entities in the manner of market mechanisms. State implementation of the Low Income Housing Tax Credit program and the development of housing programs utilizing local resources such as Austin's SMART housing reflect efforts to invoke the market and competition as governing mechanisms. These efforts are less prevalent than efforts to employ network-style governance. The certification of CHDOs, provision of operating expenses and technical assistance, as well as the utilization of vague agreements with these entities signals a willingness to move toward a relational contracting arrangement. Many of these efforts however fall short of network or market governance because of requirements in the HOME program for long-term monitoring of projects and other regulations that are related to alternative objectives. The HOME program regulations make it difficult for local managers to adopt anything but a hierarchical type of governance mechanism despite the fact that such mechanisms may be less effective in the hollow state environment.

Local public managers have a variety of tools with which to manage in the hollow state. Contrary to the literature which suggest there is a need for new tools, this research has demonstrated that the tools for managing the hollow state exist but that public manager's abilities to implement such tools may be constrained by certain institutional structures. Rather than searching for new tools to manage the hollow state, what is needed is institutional change that enables governance of this new environment.

EXPLAINING THE CHOICE OF GOVERNANCE MECHANISMS: INSTITUTIONAL STRUCTURE

Local public managers in each of the six sample cities expressed differing attitudes toward management approaches. However, the governing mechanisms adopted for specific activities were consistent across all six cities. Managers in different cities with different attitudes adopted similar mechanisms for governing similar activities. The choice of governing mechanism and the choice of housing activity are directly related. There are, therefore, two dimensions of the choice of governance type that were explored: 1) the choice of management mechanism given a particular activity; and 2) the choice of housing activity. The findings showed that both the choice of management mechanisms and the housing activity were influenced by institutional structures.

This research has demonstrated that the adoption of mechanisms to govern the hollow state at the local level is facilitated by existing national institutional structures. The fact that these national institutions are common to each of the six cities explains why there is little variation in the choice of governing mechanism for specific activities. Local public managers are constrained by national

institutions such that they choose management mechanisms for specific activities based on the existing institutional structure. Further, the absence of such national institutions can make governing the hollow state at the local level difficult especially if local institutional structures are not conducive to cooperation. In the case of affordable housing production, the local development process acts as a barrier to governing the hollow state. There are however, examples, of counter balancing local institutions which have promoted successful housing development. Further, local institutional arrangements embodied in the structure and form of governments influence housing policy choice which is directly related to the adoption of certain governance types.

National Institutional Structures

Historical patterns of interaction and the existing mortgage market have been shown to be important national institutions which facilitate governance of owner-occupied rehabilitation and down payment assistance in the hollow state. These institutions are frameworks that include both formal (constitutions, statutes, judiciary rulings) and informal (norms of behavior, cultural traditions, and codes of conduct) constraints within which human interactions take place. These institutions establish stable patterns of human interaction which can be relied upon by local public managers in the process of managing beyond the boundaries of government. There is however no national institution to facilitate local governance of the third broad category of activity -- housing development. In the absence of such an institution the design of the HOME program establishes the

constraints within which local public managers must operate in managing affordable housing development.

The overarching HOME program and its administration by HUD are important national institutional structures which influence how local managers govern. The regulations of the HOME program differ according to activity. Activities such as owner-occupied rehabilitation and down payment assistance have fewer requirements than development activities, perhaps due to the presence of the previous two institutions. In the absence of a national institution that guides the development process, the HOME program regulations attempt to create predictable behavior on behalf of localities in order to ensure the intended use of federal funds. Thus, the HOME program makes it easier for local managers to engage in owner-occupied rehabilitation or down payment assistance than development activities. While the program allows local managers to adopt a network-style of governance to govern down-payment assistance, it creates barriers to the adoption of a similar means of governing development activities. The requirements for long-term monitoring alone dictate the use of formal hierarchical, principal-agent, type controls on behalf of local managers. Therefore, despite local managers' preferences for a market or network-type style of governance they are prevented from adopting such mechanisms under the constraints of the HOME program. While these national institutions are important for understanding why a particular governance type is employed to govern specific activities, local institutions are important for explaining the choice of housing activity.

Local Institutions

The choice of governance mechanisms is largely influenced by the type of activity undertaken and the institutional arrangement surrounding that activity. Thus the choice of housing activity is an important factor affecting the choice of governance mechanisms. Consistent with Dyer's assertion that "there may be an optimal mix of governance structures for certain types of activities which may change from industry to industry and country to country" (Dyer 1996) the sample cities selected governance mechanisms that were appropriate for the given activity with the exception of the housing development activity in which both national and local institutional structures created barriers to adopting a network-style of governance.

The local development process creates barriers to governing the hollow state of affordable housing development. The lack of predictability in the process prevents local actors from being able to establish relationships based on trust or reciprocity. This makes governing the hollow state more difficult for public managers. While the uncertainty of the development process in the past created a difficult contracting environment, the difficulties of governing in such an environment are exacerbated by the growth in the number and type of different entities involved in the provision of public goods. However, this research has shown that it is possible to overcome these difficulties through the creation of alternative institutions at the local level. The most successful cities in the area of housing development were Nashville and Colorado Springs both of which, unlike any other city, had established a cooperative environment for such activity. In

addition, managers in Nashville were much more likely to establish partnerships based on trust, reputation, and past experience than on formal contracts. The most important factor was that these cities were able to establish rules and procedures upon which their private sector partners could rely. Although the approaches of the two cities' differed, one established trust in a powerful independent authority; the other through social capital, the result was similar in that private sector entities were able to pursue affordable housing goals with less risk. This is an important finding in that it demonstrates contrary to the literature on new public management and networks that it is not necessary for government to steer the private sector. Osborne and Gaebler argue that government should 'steer not row' (Osborne and Gaebler 1992) and Milward and Provan find that networks are more effective when coordinated by a strong core agency (Milward and Provan 2000). Yet neither Nashville nor Colorado Springs was shown to be 'steering'. Instead they simply established the constraints within which affordable housing should be pursued and provided a small amount of resources toward that end.

Choice of housing activity is influenced by the form and structure of government at the local level. Organizational arrangements which attempt to separate politics from administration have several benefits over traditional government hierarchies in the provision of complex public goods and services. These cities include the council-manager cities of Austin, Aurora, and Colorado Springs as well as the strong-mayor city of Nashville which administers housing through an independent authority. Each of these cities has, to a greater extent than either Albuquerque or Lexington, public managers with expertise in housing

development on staff. That is, they are more professional. These professional managers exert a greater level of influence over policy choices than managers in the strong-mayor cities. While the city council maintains final authority in approving policy choices, in the professional cities elected officials are more likely to accept recommendations from managers whereas in the political cities, elected officials are influenced to a greater extent by special interest groups.

Further, managers in the professional cities are more likely to take the time and risk to develop new approaches and to promote new policies than those in political cities because of the greater influence they enjoy. Also, important in the professional cities, but especially in Nashville, is the ability of managers to engage in long-term planning. This is an advantage not available in Albuquerque and Lexington since the turnover of elected officials regularly results in policy change. Finally, the independent public authority in Nashville has been instrumental in creating a cooperative environment through its leadership role in housing. Because decision-makers at MHDA share common interests and are not subject to compromises of multiple constituencies, they are able to develop coherent plans which most importantly can be trusted by the private sector not to be changed.

The two mayor-council cities, Albuquerque and Lexington, have shown little interest in affordable housing on the part of decision-makers. Managers in these cities are less likely to propose new approaches or strategies because they lack support from elected officials. Political interest groups including private landlords, developers and neighborhood groups exert a greater influence over

housing policies than the public managers. As a result these cities, and Nashville to a certain extent, did not exclusively pursue the goal of increasing the supply of affordable housing with their HOME monies. They pursued a number of additional goals such as community revitalization and solving the problems of homelessness. Yet surprisingly these two cities have pursued to a much greater extent than any others rental development activities consistent with HUD preferences. That is, in the more political cities the housing policy that has been adopted is influenced more by the preferences of federal decision-makers than any of the other cities. Managers in these cities, lacking support from local elected officials, tend to rely on federal regulations to support their actions. Managers in these cities have no development experience and play the role of regulator or contract administrator. They have not been as successful in their attempts to develop nonprofit community housing organizations but they have effectively developed attractive high-quality affordable housing that primarily serves households below 60% of the area median incomes. In the absence of local opposition, these hierarchical cities are effective at pursuing federal goals.

In contrast, the council-manager cities, Aurora, Austin, and Colorado Springs have to a greater extent pursued homeowner activities. Aurora and Colorado Springs have expended the majority of their HOME funds for owner-occupied rehab while Austin has expended the majority of its funds on down payment assistance. Austin and Aurora have preferred to serve greater numbers of beneficiaries over either housing production or income targeting. Both have undertaken activities largely in-house and have done little to encourage the

development of CHDOS. These cities are more likely to pursue local objectives rather than federal objectives. Nashville which is administered by an independent authority has pursued the most balanced approach and more than any other city has been successful in rental rehabilitation. Nashville has also developed the greatest number of CHDOs. The independent nature of Nashville's authority allows it to pursue both federal and local objectives and appropriately balance these goals given political pressure from both.

Institutional arrangements at both the national and local levels play a significant role in the choice of governing mechanisms employed to manage the hollow state. National institutions can either facilitate effective network-style governance or they can create barriers to the adoption of such governing mechanisms. Local institutions are important in two respects. In the absence of national or regional institutions to govern the hollow state, local institutions can similarly either facilitate governance or create barriers to different types of governing. In addition, local institutions influence the objectives that are pursued and the strategies that are adopted. These decisions are important factors in explaining government performance.

DECISIONS AND PERFORMANCE

What are the consequences of the choice of governance type? The original research design included comparisons of the effect of different governance types on performance. Unfortunately, due to the direct correlation between governance type and housing activity it has not been possible to draw conclusions on the relationship between governance type and performance

because it is not possible to isolate the effects of governance type from the effects of the choice of activity. Theoretically, this problem might be overcome by increasing the number of observations and developing a multi-equation model. However, such an approach is not expected to provide a solution in this case because as the study of governance has shown the lack of variation of governance types is due to the influence of national institutions which are common to all cities. Regardless of this shortcoming, a considerable amount can be learned from the analysis of performance. The analysis employed several relatively new techniques for measuring performance. The application of these techniques to the affordable housing case illustrates the strengths and weakness of each. In addition, a number of conclusions can be drawn about the efficiency of specific affordable housing strategies. Finally, the analysis reveals the difficulties of evaluating government performance.

Methodological Contributions

This research has demonstrated the importance of utilizing a multiple technique approach for evaluating performance. Each of the various techniques utilized for performance evaluation emphasize different aspects of performance and are therefore limited. However, combining techniques allows for a thorough investigation into government performance. Three different techniques were employed to evaluate the efficiency of cities' affordable housing activities under the HOME program. The first of these techniques was to estimate a production function using standard regression analysis.

The production function provided some insight into the relative prices of the various affordable housing resources. It demonstrated that HOME funds with a significantly lower price (from the perspective of the local government) than any other resource, has the highest marginal productivity. Since the resources are perfect substitutes for each other this would suggest that the amount of HOME funds invested should be maximized. This is contrary to efforts by HUD to minimize the amount of HOME funds utilized and maximize the amount of other types of funds.

Jurisdictions are encouraged to leverage additional resources for affordable housing production because HOME funds are limited. Therefore, although the marginal productivity of other public resources, private resources, and program income are significantly less than HOME the use of such resources is significant in explaining the number of affordable housing units produced.

An interesting finding was made when the dependent variable was changed from total units produced to total units produced for households below 60% of area median income. While the proceeds from Low Income Housing Tax Credits were not shown to be significant in explaining the total number of units produced they become significant in the low income model. Thus, a strategy of contributing HOME funds to LIHTC projects does not increase the number of units that the city is able to produce with HOME money but does lower the income level of the beneficiaries that are being served. Because both HOME and Tax Credits are limited resources combining them does not increase the number

of units that are produced, although the combination does provide greater subsidies allowing lower and lower income households to be served.

The production function also provided a ranking of the cities based on the coefficients on the city dummy variables. While this ranking could be used to group jurisdictions into high and average performing groups, this technique provides only an assessment of the overall performance of the HOME program based on an average of the jurisdictions. It does not provide any information on how that performance can be improved. This is the major weakness in utilizing standard regression analysis to evaluate performance. However, extending the analysis utilizing Substantively Weighted Analytic Technique provides information on the variables which differentiate the high performing jurisdictions from the average.

Substantively Weighted Least Squares is an exploratory technique which gives greater weight to the high performing jurisdictions in order to identify areas where performance can be improved. This technique was applied to two different models -- a homeowner model and a rental model. The results of the homeowner model highlighted two variables which distinguish high performing jurisdictions from the average. These variables were the percent of units produced for households below 60% of the area median income and the percent of units produced by nonprofit organizations.

The SWLS suggests that the greater the percentage of units produced for the lowest income groups the fewer total units will be produced. While such a finding might seem to support the contention that high performing jurisdictions

are "creaming" or serving only the higher income groups, this conclusion can not be made by examining only the percentage of units produced for the lower income groups. A test of means between the high performing and average performing groups reveals that the high performing group is able to produce more units, albeit for higher incomes, but without producing fewer units for the lowest income groups. Such a finding suggests that income targeting is not an efficient strategy with regard to homeownership activities because a jurisdiction can produce significantly more affordable units (more than double the amount produced by the average jurisdiction) and no fewer units for the lower income groups by not targeting those groups. It is difficult to conclusively test for this in the model because of an inability to examine multiple outputs at one time but this conclusion is supported by the evidence provided by the Data Envelopment Analysis which does consider multiple outputs simultaneously. As discussed below, income targeting is not efficient because serving all eligible income levels allows for cross-subsidization.

The SWLS also suggests that the use of nonprofit organizations to produce affordable homeownership units is less efficient than if the local government provides those subsidies directly. The use of other entities to provide such subsidy is not significantly different than if the local government did it themselves. Thus there is no efficiency advantage to contracting-out HOME funds for producing affordable homeownership units. While the SWAT does not provide any additional evidence to explain this finding, it is possible to speculate from the interview data that there may be two reasons for this finding. One, the additional

transaction costs required to monitor a nonprofit contractor exceed any efficiency benefits that may be gained from such an arrangement. Two, nonprofit organizations may be pursuing additional objectives with the HOME money beyond simply maximizing the number of units produced. They may be more likely to target lower incomes and to engage in new construction activities in order to revitalize a neighborhood. Thus, a jurisdiction that chooses to contract out its production of affordable homeownership units does so for reasons other than efficiency.

With regard to rental activities, the SWAT techniques provide less information. None of the variables included in the model were identified as important factors distinguishing the high performers from the average. In fact, all of the significant variables become less important in explaining the outcomes achieved by the high performing groups. The test of means did, however, reveal that the low performing group was statistically significantly smaller in terms of population and HOME allocation. This suggests that urbanization economies are present in the development of rental units. Larger cities can reduce the per unit cost of producing affordable rental units by producing larger projects -- an option that is not viable for smaller jurisdictions.

The SWAT analysis for the rental model suggests that additional factors not included in the model are important. Evidence from the interviews suggests that additional factors to be considered are project duration. Also important is the choice between rehabilitation of existing rental units versus new construction of rental units. The SWAT analysis has provided important information about how

performance might be improved but neither the question of creaming raised by the homeowner model nor the question of choice of rehabilitation or new construction posed by the rental can be adequately addressed without the ability to examine multiple outputs. The rental analysis also suggests that there are other factors that explain rental housing outcomes that are omitted from the model. These are two important weaknesses of the SWAT technique -- the inability to incorporate multiple outputs and the difficulty of properly choosing the function form and specifying the model. Data Envelopment Analysis purports to overcome these weaknesses.

DEA provides a different perspective on the measure of efficiency. Instead of measuring efficiency as the distance from the average, DEA compares decision-making units (DMUs) to their closest peers in terms of resource expenditures. Those jurisdictions that have produced the most outputs with a given level of inputs are deemed efficient and make up an efficiency frontier against which all other jurisdictions are evaluated. This analysis confirms that efficient jurisdictions are those that produce greater numbers of units for the higher income groups without producing fewer units for the lowest income groups.

Income targeting is not an efficient strategy. This is true for both homeowner and rental activities. In terms of homeowner activities, serving more moderate income groups allows the jurisdiction to produce more units and in some cases generate additional program income by charging interest or making due on sale loans. In terms of rental units, including more moderate income

households in a rental project and charging appropriate rents makes the project financially more stable and allows for cross-subsidization of lower income groups. This cross-subsidization ensures that rents will remain affordable and that the units can be maintained in the long-term. DEA provides specific recommendations for each jurisdiction which is valuable information for improving the performance of those specific jurisdictions. However, it is difficult to generalize the results of the DEA to the whole of the HOME program.

The application of these three techniques -- production function, SWAT, and DEA, has demonstrated the major strengths and weakness of each. The production function is important for analyzing the overall performance of the HOME program but does not indicate how it can be improved. The SWAT suggests areas of improvement but can not appropriately deal with multiple outputs. The DEA incorporates multiple outputs and provides specific recommendations for each jurisdiction but it is difficult to generalize the results to the entire population.

A future direction for this research includes further combining these techniques by including a dummy variable in the production function for whether a jurisdiction is efficient or not as determined by DEA. This would improve the estimates provided by the production function by controlling for those jurisdictions that are inefficient. Another important step is to gather data on construction costs in order to estimate the cost function which also incorporates multiple outputs. The coefficients on the output variables can provide an estimate of the effect of activity choice. Combining these three techniques has made

drawing several conclusions regarding the efficiency of affordable housing policies possible.

The Efficiency of Local Affordable Housing Policy

What are the consequences of local affordable housing policy choices? Policy outcomes were evaluated based on a measure of the efficiency of the various activities in the production of affordable housing. The results from the efficiency measures supplemented with comparisons from the six sample cities suggest several conclusions:

1. neither gap financing nor income targeting is an efficient strategy;
2. the choice of activities is an important determinant of efficiency;
and
3. a collaborative environment produces better outcomes but the level of privatization or contracting out is neither more efficient nor more effective in the absence of collaboration. Further, collaboration is negatively affected by the use of command and control mechanisms to ensure accountability.

The majority of cities provide HOME funds as gap financing in order to make a housing project financially feasible. The analysis of outcomes provided by the production function suggests that this strategy is less important than may be believed. Many efforts by HUD as well as the local governments encourage developers to "leverage" additional resources. Yet because of the prices of these resources relative to the price of HOME funds, they do not substantially contribute to increasing the amount of affordable units produced. In addition

combining different types of resources creates more difficult financing arrangements and potentially creates delays in the process. Since delays in a project can contribute to increased costs, minimizing such delays may be more important than leveraging additional resources. Instead it may be possible to provide 100% HOME financing for a project which is then "sold" below market such that the HOME funds represent only a small portion of the overall cost after the sale of the project.

The analysis has also shown, as discussed previously, that income targeting is not an efficient strategy. Providing housing services to higher income groups creates a means for cross-subsidizing the housing costs of the lowest income groups in terms of both homeownership and rental activities. Thus, strategies which tend to serve all income levels are more efficient.

Different housing activities have very different associated costs and therefore the choice of activity is an important factor in determining efficiency. The analysis of overall program efficiency demonstrated that finding the appropriate mix of activities is an important part of a local housing strategy. Those cities that allocate a significant portion (20-35%) of their HOME resources to down payment assistance programs are overall more efficient. There are several reasons for this. First, down payment assistance is the most cost effective means of providing for affordable housing. It requires the least amount of HOME dollars per unit and has the least total cost of any activity other than owner-occupied rehab. Further, it has provided the most units of affordable housing at each income level except for the extremely-low.

Second, down payment assistance programs are the easiest to administer given the existing institutional structure of the mortgage market. Because the existing mortgage market largely defines and constrains how private sector partners such as realtors and lenders behave it creates an environment necessary for local governments to trust these partners and to cooperate with them in the absence of additional mechanisms of control such as contracts and monitoring. Eliminating the need to control these third-parties significantly reduces the cost of subsidizing affordable housing for low income households. The existing institutional structure also allows the federal government to trust local governments in this arena and thus fewer regulations are imposed under the HOME program for this activity.

Third, down payment assistance has largely been designed as loans to low-income buyers. These are either due on sale loans, 0% amortizing loans, or interest-bearing loans. In each case, the local government is able to guarantee that the subsidy is serving to maintain the long-term affordability of the housing unit without the need for annual monitoring. Again, this is largely due to the existing institutional structure. As the loans are repaid the local government generates program income which is then available for additional affordable housing.

Fourth, the housing market theory of filtering would suggest that every low-income household the local government is able to assist with homeownership releases an affordable rental unit for other low-income households not yet ready for homeownership. The extent to which this is true depends on the existing housing market. This is an important area for future research. Do households that

receive down payment assistance under HOME, vacate affordable units that are then subsequently filled by other low-income households? What down payment assistance does not do (unless it was done on a much larger scale), however, is increase the supply of existing housing. Thus, it is may be necessary for the local government to engage in policies that promote the development of additional housing either through rehabilitation of existing housing or through new construction.

The models of efficiency also revealed that contracting out the delivery of housing services does not contribute a greater number of affordable units being produced. In fact contracting out for homeownership activities actually reduces the number of units produced. This is consistent with the findings on governance which revealed that governments can collaborate with private sector entities without entering into contracts with them. Arrangements which allow government to invest in a project without granting funds to a nonprofit entity enable the public manager to maintain control of public resources and are more efficient. The ability to collaborate to produce affordable housing is paramount to being successful. Those cities that are more collaborative are more efficient and more effective at producing affordable housing. None of the cities that engage in traditional principal-agent relationships expressed a sense of collaboration.

The Problem of Multiple Objectives: Some Caveats

The analysis of performance has emphasized a measure of efficiency based on the objective of maximizing the number of affordable housing units that are produced. While this measure is consistent with the primary purpose of the

HOME program, which is to increase the supply of decent, safe and sanitary affordable housing, it fails to incorporate many additional objectives which are pursued under the HOME program. This highlights a major challenge in any evaluation of government performance. This research has shown that the cities that are most efficient are those that are most closely pursuing the objective as defined in the creation of the performance measure. That is, Austin and Aurora which have pursued a policy of maximizing the number of units that are produced are shown to be efficient under this evaluation while Albuquerque and Lexington which have pursued alternative objectives are shown to be less efficient. Nashville which seems to balance the need to maximize number of units with competing objectives is evaluated as less efficient than Austin or Aurora but more efficient than both Albuquerque and Lexington.

The pursuit of multiple objectives creates the greatest challenge to any attempt to measure government performance. For the current research, an attempt was made to develop additional performance measures based on program effectiveness. Effectiveness was defined as the difference between the objective and the outcome but because no two cities pursued similar objectives there was no basis for comparison. In order to incorporate multiple measures based on multiple objectives it would be necessary to develop an index of the measures with which to compare the cities overall. The development of an index would require giving weight to the various objectives which is difficult and would ultimately be fairly arbitrary given the very different perspectives of actors involved in affordable housing policy. Some believe the HOME program should

be utilized to serve only the lowest income group. Others believe it should be used primarily for rental housing, while others still promote the use of HOME funds for housing development activities. These different perspectives exist not only across cities but within each of the cities. Therefore, incorporating additional objectives into the analysis of performance may teach us something about how to achieve those objectives but it would provide little additional information about the relationship between governance and performance than has been provided here. Those cities that prioritize the objectives most consistent with the priorities assigned to the index would perform the best, while cities with different priorities would be deemed lower performers.

Thus, knowing that multiple objectives exist helps to explain why Albuquerque and Lexington are less efficient than Austin or Aurora and why Nashville is in the middle. It does not however help to explain Colorado Springs poor performance. No reason was found for why Colorado Springs is not more efficient. It also does not explain why the City of Aurora is pursuing an objective of maximizing the number of units produced when there is broad consensus among council members that they "have enough affordable housing." Instead the city might pursue an objective similar to the City of Albuquerque that would allow them to utilize their HOME funds to revitalize Original Aurora which is a higher priority for the city council.

CONCLUSIONS

The hollow state environment differs from the previous contracting-out environment primarily with regard to the need for joint production. While some

of the "hollowness" that exists is consistent with traditional contracting scenarios in which a single entity contracts with government to provide a good or service, the trend is that more goods and services require the cooperation of different types of entities from different sectors of the economy.

Traditional hierarchical governance remains an important means for governing goods and services that can be produced by a single entity. Even in a difficult contracting environment with low contestability, high task complexity and high asset specificity, hierarchical governance can be effective if efforts to mitigate the difficult environment are made. Such efforts include decreasing the task complexity or asset specificity either of which may also increase the contestability. Thus traditional principal-agent relationships remain an important management tool in the hollow state.

The key element, however, that differentiates this new environment from more traditional government contracting is the presence of joint production. As government becomes more fragmented and the growing nonprofit sector contributes more public goods and services, the need for coordination becomes more important. It is difficult for a single, in this case, local government to exert sufficient influence over the multiple entities that must be arranged to accomplish public goals in this new environment. Beyond the traditional contracting tools available to public managers are the newer tools of increased information sharing, relational-contracting, and trust. The implementation of these tools however requires that the proper institutional arrangements exist.

Recent efforts to improve government performance have emphasized managerial reforms. However, the major finding of this research is that while management reforms may be necessary they are not sufficient to overcome the challenges of the new hollow state. Institutional change is needed that will define the constraints within which the various actors participate. In some areas this change may require more specific constraints while in other areas it may require the development of flexibility to allow the various sectors to cooperate. There is some evidence provided here that reliance on traditional principal-agent controls by a local government hinders their ability to establish the means for continued cooperation among players.

In the absence of the proper institutional arrangements it may still be possible for a single local government to promote cooperation in the pursuit of its objectives but it requires that the local government take on a greater degree of risk, at least initially, in order to create the means for repeated interaction and reciprocity. The most important thing that a local government can do is to create consistency in its actions. This, however, may be the most difficult thing to do given the existing structure of government which turns over its decision-makers every few years. That is, why the creation of dedicated quasi-public entities with longer horizons may be more efficient at providing certain types of goods and services. The activities of such government created enterprises can still be overseen and approved by the general purpose government but their day-to-day activities may be more focused if overseen by a public board with expertise and interest in the area that are not responsible to multiple constituencies.

Several recommendations can be derived from this research with regard to both governance and housing policy. While this research has highlighted some successful examples of local governments cooperating with the private and nonprofit sectors in the absence of formal agreements, successful informal cooperation between governmental entities was less prevalent. This is true both horizontally among government at the same level and vertically among governments at different levels. Various government entities have a number of strengths that can be united to improve the ability of each to achieve its goals. However, governments are more likely to rely on formal hierarchical agreements which may hinder their ability to cooperate successfully. Governments need to find a way to trust other governments as they both pursue related objectives.

Particularly there is a need for the federal government to cooperate with state and local governments beyond the traditional grantor-grantee relationship. In the case of affordable housing each entity has a strength that can be mobilized to produce better outcomes. The federal government provides the resources. The local government provides the expertise on the need and best strategy to adopt. The private sector can produce the units most efficiently and the nonprofit sector can own and manage affordable housing maintaining the quality and affordability over time. Better cooperation requires each to focus on its role and trust the others to succeed in their roles.

The federal nature of our institutions has been a constant feature of American democracy since its inception but as many scholars have noted, federalism is constantly being adapted and change. We have over the course of

200 years experienced "layer-cake federalism"; "marble-cake federalism"; "cooperative federalism"; "picket-fence federalism"; and "fend-for-yourself federalism". Now it is time to find a new way for the state and local governments to relate to the federal government through "partnership federalism." This research should begin by examining governance and performance of other substantive areas such as economic development or transportation.

There are also a number of directions that research on affordable housing can build on the current research. The first is to complete a similar examination of state HOME programs. This is more difficult because it is difficult to identify a housing market that exists state-wide and thus to control for various income and cost factors but since a look at what and how states are using their HOME funds is an important next step. Also, the models developed here can be improved by adding a number of governance variables such as form of government, separate administering agency, size of local housing budget etc. Additional data on construction costs and median incomes for each city and each year would make it possible to run the cost function model and ask additional questions about the optimal mix of housing activities and tenures. Similarly, if the relative costs of certain activities can be estimated the Data Envelopment Analysis can be improved and also used to explore issues of mix or allocational efficiency.

The literature on government performance has emphasized the study of individual governmental entities over time. These studies are subject to threats of internal validity from maturation and history such that there is a call in the literature for more cross-sectional studies of government performance (Lynn,

Heinrich, and Hilt 1999). This dissertation has answered that call and demonstrated that by combining several analytical techniques it is possible to thoroughly analyze government performance for a population of governments that share a similar set of objectives. However, if governments prioritize these objectives differently, and they do, then the best performers will be those whose priorities match that of the performance measure. The great challenge facing performance researchers is not only incorporating multiple objectives but also accounting for differences in the prioritization of those objectives.

A major contribution made by this research is the finding that federal level institutions impose the governance type on local level managers. Federal institutions vary across activities such that they affect each policy area, even each activity, differently. In some cases the federal institutions may constrain local managers' choice of governing tools. In other cases federal institutions may enable the use of more flexible governing tools. Thus, managerial reforms at the local level are not sufficient for improving government performance. In some cases, improved governance may require institutional change at multiple levels.

Finally, the most important factor affecting government performance is the choice of strategy. Local institutional arrangements which place responsibility for strategy development in the hands of professional managers with expertise in the policy area facilitate the adoption of specific strategies, because professional managers are not subject to the same high-powered incentives as elected officials. This finding is consistent with the New Public Management theories that claim that separation of politics and administration improves government performance.

Appendices

APPENDIX A: DATA AGGREGATION

The IDIS database consists of several tables four of which are used in the data analysis: Table 1 includes the grantees and their addresses, Table 4 includes financial variables such as other financing that went into each project, Table 5 includes unit level information especially beneficiary characteristics, and Table 8 includes project specific variables such as type of activity, HOME money disbursed, completion date etc. In order to create a useable dataset it is necessary to link data from each of the tables. Further there are basically four levels of analysis: unit level, project level, recipient(grantee) level and jurisdiction level. These are hierarchical and are therefore it is necessary to combine the tables and aggregate to the jurisdiction level. Each table contains a grant_num which identifies the jurisdiction level, they also include a grantee_id - recipient level; an act_id which identifies the project but is only unique within grantee and a unit number again which is only unique within the grantee, act_id.

Tables 8 and 4 are project level tables which are merged together. One problem with the database is that the tables do not match exactly. There are projects in Table 8 that do not appear in Table 4 and there are projects in Table 4 that do not appear in Table 8. [Table 8 has 261481 observations] [Table 4 has 247568 observations some of which are outside the study period] Because the mismatch goes both ways it is not possible to estimate the missing values. Therefore, the tables are merged assuming that each grantee_id/act_id exists and

is unique. That is, all projects are real and no two act_ids represent the same project. This results in a dataset in which some projects have missing financial variables and some projects have missing project variables. [the merged dataset has 270601 observations] In some cases the project variables exist in both table 4 and table 8 and therefore can be filled in.

It is necessary to aggregate Table 5, the unit data, to the project level. [table 5 has 382804 observations] This is done by creating dummy variables for beneficiary income levels and summing the income categories and units by grantee_id and act_id creating a dataset that is at the project level of analysis. [this dataset has 257444 after aggregation] This data set is then merged with the project level dataset created from merging tables 8 and 4. Some of the missing variables exist in the Table 5 dataset and thus can be updated from there but the problem persists in that there are projects in table 5 that do not exist in either table 4 or 8 and there are projects in table 8 and 4 that do not exist in table 5. The same assumption is made in order to merge table 5 with tables 8 and 4. [the resulting dataset has 270648 observations]

There are problems with the dates some are missing or bad. If the completion date is missing or bad the setup date is used to update it. If the setup date is bad the completion date is used to update it. If both the setup and completion dates are bad then the initial funding date is used to update them. Projects with completion dates outside the study period 1/1/1992 - 10/30/2002 are dropped. The timing of the expenditures is not known so it is difficult to convert dollar figures to constant dollars. This is done by calculating a midyear of the

project as the midpoint between the setup date and the completion date. The midyear is used as the adjustment year for constant dollar adjustments. If expenditures were smooth throughout the project duration and the inflation rate was relatively constant this should approximate the appropriate average. But expenditures are more likely front loaded, that is, project expenditures are probably greatest at the beginning of the project. On the other hand funds are awarded based on project estimates prior to the setup date and funds are disbursed only on a reimbursement basis therefore the timing of the expenditures is not as important as may be expected and the midpoint is a good estimate. Further, many projects have a duration of less than one year in which case the inflation adjustment is accurate. 72% of the projects have a duration of less than one year and 88% of the projects have durations less than 2 years and 97% of the projects have durations of less than 3 years, which should minimize the effects of inflation. The housing portion of the CPI is used to adjust all expenditures to constant 2000 dollars.

The year variable of the project is the calendar year in which the project is completed. This will differ from HUD and local government reports which are based on fiscal years all of which vary by jurisdiction. Also the reporting here is such that expenditures for a project are reported in the year that project is completed as opposed to the year the expenditures were actually made. This is necessary in order to tie completed units to their appropriate expenditures. Mylib.constant dataset has 262821 observations.

There are 3332 observations that have missing unit data. These projects have expenditures but no associated units produced. They appear in table 4 but not in 8 or 5. This may or may not represent missing data because administrative expenditures and CHDO operating expenses can be incurred without producing units. From the given data it is not possible to distinguish whether these have missing unit data or represent other types of expenditures. Therefore these expenditures are aggregated with other expenditures to represent total expenditures by a jurisdiction. These observations represent 1.27% of the total.

There are 23073 observations that have missing financial data. Again it is difficult to distinguish between those that are actually missing data and those that are missing because the other funding sources equal zero. There are 3285 observations that have both missing public expenditures and missing units but there has been home money disbursed therefore these too are included. These represent 1.25% of all observations.

There are 5404 observations that have missing beneficiary data but they do have home expenditures and other expenditures. These could represent administrative or CHDO expenses or additional expenditures for projects that are identified separately. Therefore these too are included in the aggregation. This represents 2% of the total observations. This data set mylib.constant is then aggregated to the jurisdiction level by the grant_num.

Data on HOME program allocation comes from a separate HUD file, an access database available on their webpage entitled History 1993 to 2001. This file includes data on other grant programs as well as HOME. This file is utilized

for data on allocation levels but coding for jurisdiction type differs between this file and IDIS. Over time a jurisdiction may have changed designations for example from an urban county to a consortium also a jurisdiction may have a different designation for different grant programs. In IDIS the jurisdiction type is determined by a two-digit identifier in the HOME grant number. This identifier was used to differentiate jurisdiction types with regard to HOME expenditures. The allocation file on the other hand differs in its categorization of jurisdiction types - for example a consortium may have a grant number consistent with a metro city, a state, an urban county or a consortium. The result is that tables reporting expenditures by jurisdiction type may incorrectly categorize some jurisdictions especially those that may have changed designations within the period. Although here is not the place to solve such data anomalies, it is suggested that HUD adjust its data base to more accurately reflect these designations and to link grant allocations to the IDIS system.

APPENDIX B: COMPARISON OF MODELS OF EFFICIENCY

Adjusted Performance Measure	Production Function	Cost Function	DEA
$Y_{irt} = \alpha + \beta_1 H_{irt} + \beta_2 X_{irt} + \varepsilon$	$Y_{irt} = f(Y_{irt-1}, H_{irt}, X_{irt}, ST_{irt}, I_{irt})$	$C_{irt} = f(Y_{irt}, H_{irt}, W_{irt}, ST_{irt}, I_{irt}, S_{irt}, T_{irt}, \varepsilon)$	
<p>Measure of performance: residuals</p> <p>*if the city controls a resource that resource should be excluded from regression (but what if want to control for levels of support for program?)</p> <p>Advantages: easily estimated</p>	<p>Measure of performance: Coefficient on the city dummies measures relative efficiency Coefficient on resources measure marginal productivities</p> <p>Advantages: cross-sectional sufficiently robust to choose groups of more and less efficient panel data may minimize problems caused by large changes in data from year to year</p>	<p>Measure of performance: Coefficient on city dummies Coefficient on the output variables measure effect of policy decisions?</p> <p>Advantages: multiple output measures may be incorporated</p>	<p>Measure of performance: Technical efficiency is measured relative most efficient (as opposed to average)</p> <p>Advantages: multiple output measures specification of functional form not required allows weights of inputs to vary</p>
<p>Disadvantages: uncertainty with regard to validity and reliability (does it only measure differences in cities?) Must estimate each year separately Specific problems: Lack of residual variation</p>	<p>Disadvantages: Only one output can be accommodated</p> <p>Specific problems: Lumpiness of expenditures</p>	<p>Disadvantages: Do cost variables really measure cost or politically driven allocation? (perhaps not so significant in this case)</p> <p>Specific problems: Lack of price variables</p>	<p>Disadvantages: None identified in literature</p> <p>Specific problems: Access to Software</p>

Where,

Y_{irt} = affordable units produced in city I , region r in year t (or in cost function a vector of output measures)

Y_{irt-1} = units produced in the previous year

H_{irt} = a vector of housing market characteristics (uncontrollable factors)

X_{irt} = a vector of resource variables (controllable factors)

ST_{irt} = a vector of state characteristics

I = a vector of city dummies

S = a vector of state dummies (or perhaps HUD field offices)

T = a vector of time (year) dummies

W_{irt} = a vector of the prices of the inputs in city i, region r, in year t

C_{irt} = cost

ε = error term

Based on Rubenstein, Ross, Amy Ellen Schwartz and Leanna Stiefel, “Conceptual and Empirical Issues in the Measurement of School Efficiency” *National Tax Association Proceedings*, 91st Annual Conference on Taxation, p. 267-273.

APPENDIX C: PRODUCTION FUNCTION RESULTS

Table C.1: City Coefficients and Rankings from Production Function Models

Grant Number	Jurisdiction	State	Population	Coefficient	Rank	Low Coefficient	Low rank
MC420203	PHILADELPHIA city	PA	1,517,550	3.5428	1	2.8642	1
MC480203	DALLAS city	TX	1,188,580	3.0938	2	2.6964	2
MC480500	AUSTIN city	TX	656,562	3.0014	3	1.4767	29
MC480206	HOUSTON city	TX	1,953,631	2.9145	4	2.3545	4
MC060519	LOS ANGELES city	CA	3,694,820	2.7920	5	1.9818	6
MC060204	FRESNO city	CA	427,652	2.7028	6	1.7874	13
MC480502	CORPUS CHRISTI city	TX	277,454	2.6632	7	1.5627	23
MC360204	NEW YORK city	NY	8,008,278	2.6470	8	2.1290	5
MC060518	LONG BEACH city	CA	461,522	2.5253	9	2.5050	3
MC550204	MILWAUKEE city	WI	596,974	2.4753	10	1.9120	9
MC480508	SAN ANTONIO city	TX	1,144,646	2.4681	11	1.9507	7
MC480211	AMARILLO city	TX	173,627	2.4004	12	1.5651	22
MC480212	ARLINGTON city	TX	332,969	2.3891	13	1.4325	35
MC170201	CHICAGO city	IL	2,896,016	2.3845	14	1.8380	10
MC480204	FORT WORTH city	TX	534,694	2.3628	15	1.9232	8
MC060213	SAN FRANCISCO city	CA	776,733	2.3341	16	0.6732	162
MC080201	AURORA city	CO	276,393	2.3005	17	1.4610	32
MC080209	FORT COLLINS city	CO	118,652	2.2969	18	1.3670	41
MC360502	BUFFALO city	NY	292,648	2.2905	19	1.6512	16
MC400203	OKLAHOMA city	OK	506,132	2.2752	20	1.3726	40
MC470202	MEMPHIS city	TN	650,100	2.2404	21	1.8310	11
MC400202	TULSA city	OK	393,049	2.2383	22	1.4721	30
MC060551	MORENO VALLEY city	CA	142,381	2.2297	23	1.5872	21
MC390210	COLUMBUS city	OH	711,470	2.2202	24	1.7405	14
MC480218	TYLER city	TX	83,650	2.1963	25	1.3567	43
MC470203	NASHVILLE AND DAVIDSON COUNTY city	TN	545,524	2.1873	26	1.4334	34
MC390213	CINCINNATI city	OH	331,285	2.1855	27	1.7941	12
MC290207	INDEPENDENCE city	MO	113,288	2.1840	28	1.1074	71
MC060210	SACRAMENTO city	CA	407,018	2.1787	29	1.4984	26
MC240200	BALTIMORE city	MD	651,154	2.1722	30	1.5897	20
MC390206	AKRON city	OH	217,074	2.1643	31	1.7085	15
MC060533	SAN DIEGO city	CA	1,223,400	2.1508	32	1.4623	31
MC200204	WICHITA city	KS	344,284	2.1446	33	1.5065	25

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MC290500	ST LOUIS city	MO	348,189	2.0889	34	1.3299	45
MC120229	POMPANO BEACH city	FL	78,191	2.0835	35	1.3220	48
MC370204	GREENSBORO city	NC	223,891	2.0508	36	1.4173	37
MC390209	YOUNGSTOWN city	OH	82,026	2.0384	37	1.5534	24
MC120209	JACKSONVILLE city	FL	735,617	2.0099	38	1.2955	50
MC040228	PHOENIX city	AZ	1,321,045	1.9823	39	1.3531	44
MC130200	ATLANTA city	GA	416,474	1.9777	40	1.5917	19
MC130207	COLUMBUS city	GA	186,291	1.9715	41	1.3259	47
MC390207	CLEVELAND city	OH	478,403	1.9547	42	1.4799	28
MC530200	SEATTLE city	WA	563,374	1.9482	43	1.4110	38
MC300213	BILLINGS city	MT	89,847	1.9306	44	1.6418	17
MC180205	INDIANAPOLIS city	IN	791,926	1.9292	45	1.2507	55
MC120220	ST PETERSBURG city	FL	248,232	1.9150	46	1.4958	27
MC550203	RACINE city	WI	81,855	1.8991	47	0.9682	93
MC480213	EL PASO city	TX	563,662	1.8954	48	1.4499	33
MC200200	KANSAS CITY city	KS	146,866	1.8501	49	1.2879	51
MC280201	HATTIESBURG city	MS	44,779	1.8410	50	1.0439	83
MC060503	BAKERSFIELD city	CA	247,057	1.8407	51	1.0043	87
MC250201	BROCKTON city	MA	94,304	1.8376	52	1.1114	70
MC490216	OGDEN city	UT	77,226	1.8207	53	1.1631	62
MC390205	DAYTON city	OH	166,179	1.8143	54	1.0013	88
MC440200	PAWTUCKET city	RI	72,958	1.8083	55	0.8836	110
MC420501	PITTSBURGH city	PA	334,563	1.7780	56	0.7240	147
MC270202	ST PAUL city	MN	287,151	1.7545	57	1.4295	36
MC370201	CHARLOTTE city	NC	540,828	1.7511	58	0.8082	123
MC190204	CEDAR RAPIDS city	IA	120,758	1.7260	59	0.9923	89
MC340208	PATERSON city	NJ	149,222	1.7202	60	0.5174	190
MC210201	LEXINGTON-FAYETTE city	KY	260,512	1.7172	61	1.1264	66
MC060542	ESCONDIDO city	CA	133,559	1.7152	62	0.5805	178
MC510207	VIRGINIA BEACH city	VA	425,257	1.7152	63	1.0624	78
MC180203	GARY city	IN	102,746	1.7099	64	1.2022	60
MC250204	LAWRENCE city	MA	72,043	1.6937	65	1.3167	49
MC180202	FORT WAYNE city	IN	205,727	1.6904	66	1.2380	57
MC290201	KANSAS CITY city	MO	441,545	1.6827	67	0.7422	141
MC320226	RENO city	NV	180,480	1.6739	68	1.1236	68
MC260206	GRAND RAPIDS city	MI	197,800	1.6545	69	1.1387	64
MC090201	HARTFORD city	CT	121,578	1.6539	70	1.2734	53
MC550207	EAU CLAIRE city	WI	61,704	1.6515	71	0.8055	124
MC060236	SANTA CRUZ city	CA	54,593	1.6465	72	1.3573	42

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MC050201	PINE BLUFF city	AR	55,085	1.6419	73	1.2574	54
MC120214	ORLANDO city	FL	185,951	1.6302	74	1.0611	79
MC080204	DENVER city	CO	554,636	1.6257	75	1.3287	46
MC080203	COLORADO SPRINGS city	CO	360,890	1.6227	76	1.0510	81
MC260204	FLINT city	MI	124,943	1.6225	77	0.9785	91
MC510205	RICHMOND city	VA	197,790	1.6205	78	1.2391	56
MC480231	IRVING city	TX	191,615	1.6198	79	1.6188	18
MC260202	DETROIT city	MI	951,270	1.5954	80	1.0536	80
MC170216	JOLIET city	IL	106,221	1.5928	81	1.3947	39
MC460215	SIOUX FALLS city	SD	123,975	1.5882	82	1.0506	82
MC510204	PORTSMOUTH city	VA	100,565	1.5590	83	1.1870	61
MC270201	MINNEAPOLIS city	MN	382,618	1.5440	84	1.0695	75
MC480202	WACO city	TX	113,726	1.5312	85	0.8618	117
MC250209	SPRINGFIELD city	MA	152,082	1.5288	86	0.7807	132
MC010201	HUNTSVILLE city	AL	158,216	1.5217	87	0.8991	105
MC360504	ROCHESTER city	NY	219,773	1.5168	88	0.9500	97
MC370208	WINSTON SALEM city	NC	185,776	1.5151	89	0.7734	134
MC250205	LOWELL city	MA	105,167	1.5107	90	1.0267	85
MC480226	GRAND PRAIRIE city	TX	127,427	1.5077	91	1.0368	84
MC010200	BIRMINGHAM city	AL	242,820	1.5007	92	0.8962	106
MC260208	LANSING city	MI	119,128	1.4948	93	1.0942	72
MC250210	WORCESTER city	MA	172,648	1.4850	94	0.9451	99
MC480505	LAREDO city	TX	176,576	1.4764	95	0.7700	136
MC310203	OMAHA city	NE	390,007	1.4647	96	1.1283	65
MC310202	LINCOLN city	NE	225,581	1.4483	97	0.7620	138
MC440202	WOONSOCKET city	RI	43,224	1.4440	98	1.1491	63
MC180201	EVANSVILLE city	IN	121,582	1.4427	99	0.9762	92
MC120227	HOLLYWOOD city	FL	139,357	1.4375	100	0.7955	127
MC480214	WICHITA FALLS city	TX	104,197	1.4313	101	0.5734	180
MC060535	SANTA ANA city	CA	337,977	1.4207	102	1.2353	58
MC490208	SALT LAKE city	UT	181,743	1.4179	103	0.8282	122
MC080202	BOULDER city	CO	94,673	1.4072	104	1.0637	77
MC120205	FORT LAUDERDALE city	FL	152,397	1.3975	105	0.9555	94
MC480201	BEAUMONT city	TX	113,866	1.3868	106	0.9254	102
MC210202	LOUISVILLE city	KY	256,231	1.3837	107	0.5711	181
MC320225	LAS VEGAS city	NV	478,434	1.3821	108	0.6987	154
MC220201	NEW ORLEANS city	LA	484,674	1.3807	109	0.4418	206
MC390203	CANTON city	OH	80,806	1.3789	110	0.8736	113
MC060215	SAN JOSE city	CA	894,943	1.3778	111	1.2753	52

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MC340201	CAMDEN city	NJ	79,904	1.3739	112	1.1257	67
MC420205	SCRANTON city	PA	76,415	1.3646	113	0.7251	146
MC220204	BATON ROUGE city	LA	227,818	1.3644	114	0.9488	98
MC360505	SYRACUSE city	NY	147,306	1.3601	115	1.0692	76
MC060552	NORWALK city	CA	103,298	1.3599	116	0.6410	169
MC060209	RICHMOND city	CA	99,216	1.3415	117	1.2108	59
MC060526	OXNARD city	CA	170,358	1.3384	118	0.8303	121
MC550201	MADISON city	WI	208,054	1.3383	119	0.7162	151
MC480205	LUBBOCK city	TX	199,564	1.3357	120	0.9348	101
MC510202	NEWPORT NEWS city	VA	180,150	1.3317	121	0.7353	143
MC480501	BROWNSVILLE city	TX	139,722	1.3196	122	0.3368	229
MC050202	FORT SMITH city	AR	80,268	1.3070	123	0.5376	184
MC060221	STOCKTON city	CA	243,771	1.3018	124	0.1309	266
MC530201	SPOKANE city	WA	195,629	1.3012	125	1.0761	74
MC120221	TALLAHASSEE city	FL	150,624	1.2961	126	0.9517	95
MC480225	GARLAND city	TX	215,768	1.2847	127	0.5201	188
MC280200	JACKSON city	MS	184,256	1.2833	128	0.7879	129
MC530205	BREMERTON city	WA	37,259	1.2804	129	0.8882	107
MC510201	HAMPTON city	VA	146,437	1.2778	130	0.7703	135
MC370203	FAYETTEVILLE city	NC	121,015	1.2739	131	0.9186	104
MC450204	NORTH CHARLESTON city	SC	79,641	1.2706	132	0.7739	133
MC390212	TOLEDO city	OH	313,619	1.2673	133	1.0189	86
MC130206	AUGUSTA-RICHMOND COUNTY city	GA	195,182	1.2668	134	0.8345	120
MC480229	BRYAN city	TX	65,660	1.2564	135	0.0006	287
MC480228	KILLEEN city	TX	86,911	1.2503	136	0.7395	142
MC410204	SALEM city	OR	136,924	1.2242	137	0.4112	211
MC420204	READING city	PA	81,207	1.2194	138	0.5058	193
MC060208	OAKLAND city	CA	399,484	1.2186	139	0.7340	144
MC060521	LYNWOOD city	CA	69,845	1.1951	140	1.1150	69
MC360205	YONKERS city	NY	196,086	1.1922	141	0.2663	243
MC090205	WATERBURY city	CT	107,271	1.1800	142	1.0890	73
MC120211	MIAMI city	FL	362,470	1.1718	143	0.7870	130
MC120228	LAKELAND city	FL	78,452	1.1668	144	0.4208	209
MC170207	PEORIA city	IL	112,936	1.1662	145	0.7846	131
MC220206	MONROE city	LA	53,107	1.1627	146	0.5143	191
MC360500	ALBANY city	NY	95,658	1.1503	147	0.4552	203
MC480217	PORT ARTHUR city	TX	57,755	1.1500	148	0.2171	251
MC470201	KNOXVILLE city	TN	173,890	1.1452	149	0.6765	160

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MC200203	TOPEKA city	KS	122,377	1.1451	150	0.7534	139
MC250203	FALL RIVER city	MA	91,938	1.1445	151	0.8780	111
MC220200	SHREVEPORT city	LA	200,145	1.1205	152	0.5368	185
MC420507	ALTOONA city	PA	49,523	1.1187	153	0.8844	109
MC270200	DULUTH city	MN	86,918	1.1130	154	0.7999	125
MC250206	LYNN city	MA	89,050	1.1076	155	0.6593	164
MC480227	LONGVIEW city	TX	73,344	1.0980	156	0.6090	171
MC170209	SPRINGFIELD city	IL	111,454	1.0916	157	0.8870	108
MC350209	ALBUQUERQUE city	NM	448,607	1.0908	158	0.7884	128
MC370206	RALEIGH city	NC	276,093	1.0905	159	0.7449	140
MC060511	GARDEN GROVE city	CA	165,196	1.0776	160	0.9869	90
MC060507	COSTA MESA city	CA	108,724	1.0740	161	0.9404	100
MC300218	GREAT FALLS city	MT	56,690	1.0688	162	0.1022	270
MC450201	CHARLESTON city	SC	96,650	1.0650	163	0.6745	161
MC250200	BOSTON city	MA	589,141	1.0566	164	0.9514	96
MC120206	GAINESVILLE city	FL	95,447	1.0469	165	0.3383	228
MC420214	YORK city	PA	40,862	1.0456	166	0.5277	187
MC060223	VALLEJO city	CA	116,760	1.0448	167	0.3938	216
MC010203	MOBILE city	AL	198,915	1.0409	168	0.7164	150
MC130204	SAVANNAH city	GA	131,510	1.0404	169	0.3007	235
MC390219	LIMA city	OH	40,081	1.0335	170	0.7039	153
MC420200	ALLENTOWN city	PA	106,632	1.0269	171	0.4999	194
MC470200	CHATTANOOGA city	TN	155,554	1.0207	172	0.4186	210
MC090203	NEW HAVEN city	CT	123,626	1.0176	173	0.6414	168
MC550200	GREEN BAY city	WI	102,313	1.0079	174	0.6537	167
MC510206	ROANOKE city	VA	94,911	1.0038	175	0.5186	189
MC060219	SANTA ROSA city	CA	147,595	0.9980	176	0.7288	145
MC180200	BLOOMINGTON city	IN	69,291	0.9980	177	0.6916	157
MC290502	COLUMBIA city	MO	84,531	0.9956	178	0.4792	198
MC370209	GOLDSBORO city	NC	39,043	0.9887	179	0.2811	238
MC060531	SAN BERNARDINO city	CA	185,401	0.9791	180	0.8487	118
MC060506	COMPTON city	CA	93,493	0.9774	181	0.2805	239
MC060512	GLENDALE city	CA	194,973	0.9747	182	0.8752	112
MC550208	LA CROSSE city	WI	51,818	0.9740	183	0.4218	208
MC480208	GALVESTON city	TX	57,247	0.9672	184	0.6553	166
MC360501	BINGHAMTON city	NY	47,380	0.9619	185	0.0579	276
MC050200	LITTLE ROCK city	AR	183,133	0.9555	186	0.3227	230
MC330200	MANCHESTER city	NH	107,006	0.9535	187	0.7991	126
MC120224	WEST PALM BEACH city	FL	82,103	0.9532	188	0.4034	214

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MC510203	NORFOLK city	VA	234,403	0.9523	189	0.2788	240
MC290208	ST JOSEPH city	MO	73,990	0.9514	190	0.6573	165
MC150201	HONOLULU city	HI	371,657	0.9510	191	0.3463	225
MC230200	PORTLAND city	ME	64,249	0.9411	192	0.7698	137
MC370202	DURHAM city	NC	187,035	0.9376	193	0.8667	114
MC340206	NEWARK city	NJ	273,546	0.9364	194	0.9247	103
MC190201	DES MOINES city	IA	198,682	0.9350	195	0.8630	116
MC360513	ELMIRA city	NY	30,940	0.9337	196	0.0138	283
MC120203	DAYTONA BEACH city	FL	64,112	0.9323	197	0.5349	186
MC510211	LYNCHBURG city	VA	65,269	0.9300	198	0.7104	152
MC060207	MODESTO city	CA	188,856	0.9247	199	0.3199	232
MC260207	KALAMAZOO city	MI	77,145	0.9198	200	0.6608	163
MC250208	SOMERVILLE city	MA	77,478	0.9122	201	0.6333	170
MC170208	ROCKFORD city	IL	150,115	0.9080	202	0.6894	158
MC260201	ANN ARBOR city	MI	114,024	0.9037	203	0.8636	115
MC420500	ERIE city	PA	103,717	0.8935	204	0.4098	213
MC090202	NEW BRITAIN city	CT	71,538	0.8895	205	0.4439	205
MC060548	FONTANA city	CA	128,929	0.8884	206	0.5454	183
MC510501	ALEXANDRIA city	VA	128,283	0.8605	207	0.3865	219
MC120222	TAMPA city	FL	303,447	0.8555	208	0.2846	237
MC470206	CLARKSVILLE city	TN	103,455	0.8428	209	-0.0454	296
MC340207	PASSAIC city	NJ	67,861	0.8393	210	0.5496	182
MC260218	WESTLAND city	MI	86,602	0.8387	211	0.4953	195
MC260214	JACKSON city	MI	36,316	0.8350	212	0.6067	172
MC060523	OCEANSIDE city	CA	161,029	0.8325	213	0.1376	264
MC340202	EAST ORANGE city	NJ	69,824	0.8309	214	0.5945	175
MC160200	BOISE city	ID	185,787	0.8292	215	0.3114	233
MC100200	WILMINGTON city	DE	72,664	0.8222	216	0.5972	174
MC510210	DANVILLE city	VA	48,411	0.8174	217	0.4758	199
MC090204	STAMFORD city	CT	117,083	0.8112	218	0.6983	155
MC060230	VISALIA city	CA	91,565	0.8088	219	-0.2843	324
MC480506	MCCALLEN city	TX	106,414	0.7916	220	-0.0392	295
MC340203	ELIZABETH city	NJ	120,568	0.7911	221	0.7234	148
MC060529	RIVERSIDE city	CA	255,166	0.7900	222	0.0028	286
MC060202	BERKELEY city	CA	102,743	0.7898	223	0.8452	119
MC360514	JAMESTOWN city	NY	31,730	0.7839	224	0.3423	226
MC060556	WESTMINISTER city	CA	88,207	0.7797	225	0.3877	218
MC060212	SALINAS city	CA	151,060	0.7796	226	0.3392	227
MC010204	MONTGOMERY city	AL	201,568	0.7751	227	0.1475	261

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MC480210	ABILENE city	TX	115,930	0.7668	228	0.3927	217
MC060524	ONTARIO city	CA	158,007	0.7657	229	0.3227	231
MC400204	NORMAN city	OK	95,694	0.7603	230	0.3109	234
MC170203	DECATUR city	IL	81,860	0.7486	231	0.2130	252
MC390200	EAST CLEVELAND city	OH	27,217	0.7387	232	0.6921	156
MC060502	ANAHEIM city	CA	328,014	0.7364	233	0.3997	215
MC370205	HIGH POINT city	NC	85,839	0.7301	234	0.4920	196
MC190205	IOWA CITY city	IA	62,220	0.7232	235	0.3478	224
MC480207	ODESSA city	TX	90,943	0.7197	236	0.3689	222
MC390215	HAMILTON city	OH	60,690	0.7000	237	0.4368	207
MC180204	HAMMOND city	IN	83,048	0.6873	238	-0.0939	303
MC220205	ALEXANDRIA city	LA	46,342	0.6847	239	0.4574	202
MC440201	PROVIDENCE city	RI	173,618	0.6799	240	-0.0727	300
MC120207	HIALEAH city	FL	226,419	0.6797	241	0.0162	282
MC060547	BELLFLOWER city	CA	72,878	0.6593	242	0.2399	246
MC530202	TACOMA city	WA	193,556	0.6580	243	0.2308	249
MC480223	DENTON city	TX	80,537	0.6576	244	0.1889	256
MC220202	LAFAYETTE city	LA	110,257	0.6576	245	0.4617	201
MC010205	TUSCALOOSA city	AL	77,906	0.6509	246	0.2201	250
MC130202	MACON city	GA	97,255	0.6495	247	-0.5393	335
MC180206	MUNCIE city	IN	67,430	0.6461	248	0.3783	220
MC480224	SAN ANGELO city	TX	88,439	0.6449	249	0.5787	179
MC060546	BALDWIN PARK city	CA	75,837	0.6447	250	-0.0297	293
MC420201	HARRISBURG city	PA	48,950	0.6415	251	0.6875	159
MC290202	SPRINGFIELD city	MO	151,580	0.6227	252	0.2126	253
MC540502	HUNTINGTON city	WV	51,475	0.6220	253	0.2348	248
MC060232	CHICO city	CA	59,954	0.6192	254	-0.2095	319
MC420217	BETHLEHEM city	PA	71,329	0.6042	255	0.5110	192
MC060227	MERCED city	CA	63,893	0.5986	256	0.0441	279
MC130203	ATHENS-CLARKE COUNTY city	GA	100,266	0.5980	257	0.5866	176
MC200205	LAWRENCE city	KS	80,098	0.5902	258	0.1068	269
MC260216	WARREN city	MI	138,247	0.5893	259	-0.0209	291
MC090200	BRIDGEPORT city	CT	139,529	0.5846	260	0.5818	177
MC510200	CHESAPEAKE city	VA	199,184	0.5729	261	-0.1094	306
MC060509	EL MONTE city	CA	115,965	0.5656	262	0.1562	259
MC340205	JERSEY CITY city	NJ	240,055	0.5498	263	0.1532	260
MC060541	DOWNEY city	CA	107,323	0.5470	264	-0.1195	307
MC470207	JACKSON city	TN	59,643	0.5325	265	0.1320	265
MC120212	MIAMI BEACH city	FL	87,933	0.5227	266	0.4104	212

Grant Number	Jurisdiction	State	Population	Coefficient	Rank	Low Coefficient	Low rank
MC480219	COLLEGE STATION city	TX	67,890	0.4963	267	-0.1354	309
MC250202	CAMBRIDGE city	MA	101,355	0.4959	268	0.2873	236
MC190206	WATERLOO city	IA	68,747	0.4917	269	0.1999	254
MC420508	JOHNSTOWN city	PA	23,906	0.4915	270	0.3550	223
MC060528	POMONA city	CA	149,473	0.4861	271	0.4519	204
MC060522	NATIONAL CITY city	CA	54,260	0.4789	272	0.0053	285
MC480220	PASADENA city	TX	141,674	0.4711	273	-0.0032	289
MC340200	ATLANTIC CITY city	NJ	60,517	0.4406	274	0.0061	284
MC480504	HARLINGEN city	TX	57,564	0.4318	275	-0.8935	340
MC420202	LANCASTER city	PA	56,348	0.4242	276	0.2378	247
MC170212	EAST ST LOUIS city	IL	31,542	0.4198	277	0.4903	197
MC060544	ORANGE city	CA	128,821	0.4194	278	0.3754	221
MC550206	KENOSHA city	WI	90,352	0.4171	279	-0.0459	297
MC060513	HAWTHORNE city	CA	84,112	0.4112	280	-0.1674	312
MC370207	WILMINGTON city	NC	75,838	0.4079	281	0.1183	268
MC050203	NORTH LITTLE ROCK city	AR	60,433	0.4062	282	0.1570	258
MC060558	PARAMOUNT city	CA	55,266	0.4015	283	0.7205	149
MC360503	NIAGARA FALLS city	NY	55,593	0.4010	284	-0.2369	322
MC390220	LORAIN city	OH	68,652	0.3930	285	0.2612	244
MC250207	NEW BEDFORD city	MA	93,768	0.3877	286	0.2542	245
MC060501	ALHAMBRA city	CA	85,804	0.3571	287	0.1409	263
MC260212	SAGINAW city	MI	61,799	0.3569	288	0.1726	257
MC060508	EL CAJON city	CA	94,869	0.3483	289	-0.3143	328
MC020200	ANCHORAGE city	AK	260,283	0.3451	290	0.6029	173
MC350222	LAS CRUCES city	NM	74,267	0.3444	291	0.0476	278
MC390218	SPRINGFIELD city	OH	65,358	0.3380	292	0.0802	272
MC130205	ALBANY city	GA	76,939	0.3259	293	-0.3801	331
MC220208	LAKE CHARLES city	LA	71,757	0.3212	294	0.2734	241
MC210204	OWENSBORO city	KY	54,067	0.3133	295	-0.2683	323
MC180210	EAST CHICAGO city	IN	32,414	0.2947	296	0.2690	242
MC540201	CHARLESTON city	WV	53,421	0.2808	297	-0.1808	315
MC060527	PASADENA city	CA	133,936	0.2603	298	-0.1005	305
MC060505	CHULA VISTA city	CA	173,556	0.2534	299	0.4751	200
MC190200	DAVENPORT city	IA	98,359	0.2532	300	0.0494	277
MC420218	WILLIAMSPORT city	PA	30,706	0.2482	301	0.0589	275
MC120230	CLEARWATER city	FL	108,787	0.2372	302	-0.0483	298
MC340210	TRENTON city	NJ	85,403	0.2312	303	0.1954	255
MC260203	BATTLE CREEK city	MI	53,364	0.2069	304	-0.0749	301
MC390221	MANSFIELD city	OH	49,346	0.1973	305	-0.0317	294

Grant Number	Jurisdiction	State	Population	Coefficient	Rank	Low Coefficient	Low rank
MC400201	LAWTON city	OK	92,757	0.1916	306	0.0229	281
MC530203	YAKIMA city	WA	71,845	0.1553	307	-0.4088	333
MC060516	INGLEWOOD city	CA	112,580	0.1520	308	-0.0152	290
MC210200	COVINGTON city	KY	43,370	0.1510	309	-0.1255	308
MC450203	GREENVILLE city	SC	56,002	0.1281	310	0.0686	274
MC360202	MOUNT VERNON city	NY	68,381	0.1061	311	-0.9899	341
MC530204	BELLINGHAM city	WA	67,171	0.1014	312	-0.0926	302
MC260215	MUSKEGON city	MI	40,105	0.1009	313	-0.1798	314
MC180209	ANDERSON city	IN	59,734	0.0794	314	-0.6567	336
MC260211	PONTIAC city	MI	66,337	0.0734	315	0.0959	271
MC060510	FULLERTON city	CA	126,003	0.0327	316	-0.2873	325
MC180211	TERRE HAUTE city	IN	59,614	0.0220	317	-0.0256	292
MC450202	COLUMBIA city	SC	116,278	0.0080	318	-0.0948	304
MC360200	LINDENHURST city	NY	27,819	0.0048	319	-0.4037	332
MC060222	SUNNYVALE city	CA	131,760	-0.0117	320	0.1423	262
MC360506	UTICA city	NY	60,651	-0.0409	321	-0.2123	320
MC060235	REDWOOD city	CA	75,402	-0.0756	322	-0.2928	326
MC060537	SANTA MONICA city	CA	84,084	-0.0841	323	-0.0582	299
MC060538	SOUTH GATE city	CA	96,375	-0.0971	324	-0.3011	327
MC060515	HUNTINGTON PARK city	CA	61,348	-0.0984	325	-0.1602	310
MC260219	BAY CITY city	MI	36,817	-0.1232	326	-0.1993	317
MC450207	SPARTANBURG city	SC	39,673	-0.1295	327	-0.1670	311
MC340209	PERTH AMBOY city	NJ	47,303	-0.1504	328	0.1208	267
MC080217	GREELEY city	CO	76,930	-0.1813	329	0.0695	273
MC060504	BURBANK city	CA	100,316	-0.1846	330	-0.1873	316
MC170218	EVANSTON city	IL	74,239	-0.2036	331	-0.2128	321
MC060229	SAN MATEO city	CA	92,482	-0.2113	332	-0.0017	288
MC060217	SANTA CLARA city	CA	102,361	-0.2337	333	0.0247	280
MC060543	MONTEBELLO city	CA	62,150	-0.3708	334	-0.1995	318
MC060233	MOUNTAIN VIEW city	CA	70,708	-0.4130	335	-0.3498	329
MC060514	HUNTINGTON BEACH city	CA	189,594	-0.5346	336	-0.1763	313
MC420219	STATE COLLEGE city	PA	38,420	-0.5480	337	-0.4429	334
MC260217	PORT HURON city	MI	32,338	-0.6053	338	-0.3589	330
MC080210	LAKEWOOD city	CO	144,126	-0.6258	339	-0.7227	338
MC060557	WHITTIER city	CA	83,680	-0.9007	340	-0.7560	339
MC370210	ROCKY MOUNT city	NC	55,893	-1.3713	341	-0.7209	337

APPENDIX D: COST FUNCTION SPECIFICATION

Cost function for Affordable Housing

$$C_{irt} = f(U_{irt}, H_{irt}, W_{irt}, R_{irt}, T, R, C, \varepsilon)$$

Where,

C_{irt} is the total cost of producing affordable housing in city i in region r at time t .

U_{irt} is a vector of outputs of affordable units produced (or households housed)

H_{irt} is a vector of housing market characteristics

W_{irt} is a vector of input prices

R_{irt} is a vector of regional characteristics

T is a vector of time dummies

R is a vector of region dummies (or Field Office dummies)

C is a vector of city dummies

ε is an error term (or several error terms)

Utilizing the given data the following initial model can be specified in logarithmic form:

$$\begin{aligned} \ln TotExp = & \beta_0 + \beta_1 \ln inc1 + \beta_2 \ln inc2 + \beta_3 \ln inc3 + \beta_4 \ln inc4 + \beta_5 fmr \\ & + \beta_c medinc + \beta_7 pop + \beta_8 RSM + \beta_9 Yr_1 + \dots + \beta_{18} Yr_{10} + \beta_{19} City_1 + \dots \\ & + \beta_{360} City_{342} + \varepsilon \end{aligned}$$

Where:

TotExp = Total expenditures (HOME + public + private + program income + LIHTC)

Inc1 = number of units produced for households below 30% AMI

Inc2 = number of units produced for households 30% - 50% AMI

Inc3 = number of units produced for households 50% - 60% AMI

Inc4 = number of units produced for households 60% - 80% AMI

FMR = fair market rent

Medinc = median income

pop = population

RSM = RS Means construction cost index

Yr = Year dummies

City = City dummies

ε = error term

The data for median income in each year and the RS Means construction cost index for each city for each year is required in addition to the available data. The cost of acquiring this data has made running this model infeasible at this time. This model has the advantage over the production function of being able to incorporate multiple outputs (in terms of income levels). The coefficients on these outputs may provide further insight into the optimal mix of income levels to be served.

APPENDIX E: DATA ENVELOPMENT ANALYSIS RESULTS

Table E.1: City Rank and Efficiency Score

Rank	DMU	Score
1	EAU CLAIRE, WI	1.0000
1	MILWAUKEE, WI	1.0000
1	RACINE, WI	1.0000
1	HUNTINGTON, WV	1.0000
1	BREMERTON, WA	1.0000
1	LYNCHBURG, VA	1.0000
1	PORTSMOUTH, VA	1.0000
1	SAN ANTONIO, TX	1.0000
1	MCALLEN, TX	1.0000
1	PINE BLUFF, AR	1.0000
1	LAREDO, TX	1.0000
1	CORPUS CHRISTI, TX	1.0000
1	BROWNSVILLE, TX	1.0000
1	FRESNO, CA	1.0000
1	AUSTIN, TX	1.0000
1	IRVING, TX	1.0000
1	RICHMOND, CA	1.0000
1	BRYAN, TX	1.0000
1	SAN ANGELO, TX	1.0000
1	TYLER, TX	1.0000
1	WICHITA FALLS, TX	1.0000
1	EL PASO, TX	1.0000
1	AMARILLO, TX	1.0000
1	HOUSTON, TX	1.0000
1	FORT WORTH, TX	1.0000
1	DALLAS, TX	1.0000
1	BEAUMONT, TX	1.0000
1	MEMPHIS, TN	1.0000
1	SIoux FALLS, SD	1.0000
1	WOONSOCKET, RI	1.0000
1	PAWTUCKET, RI	1.0000
1	ALTOONA, PA	1.0000

Rank	DMU	Score
1	SANTA CRUZ, CA	1.0000
1	PITTSBURGH, PA	1.0000
1	YORK, PA	1.0000
1	PHILADELPHIA, PA	1.0000
1	LIMA, OH	1.0000
1	CINCINNATI, OH	1.0000
1	TOLEDO, OH	1.0000
1	YOUNGSTOWN, OH	1.0000
1	DAYTON, OH	1.0000
1	CANTON, OH	1.0000
1	NEW YORK, NY	1.0000
1	CAMDEN, NJ	1.0000
1	BILLINGS, MT	1.0000
1	INDEPENDENCE, MO	1.0000
1	HATTIESBURG, MS	1.0000
1	SAGINAW, MI	1.0000
1	KALAMAZOO, MI	1.0000
1	LONG BEACH, CA	1.0000
1	BROCKTON, MA	1.0000
1	MONROE, LA	1.0000
1	AUGUSTA-RICHMOND COU	1.0000
1	POMPANO BEACH, FL	1.0000
1	TALLAHASSEE, FL	1.0000
1	MIAMI, FL	1.0000
1	NEW BRITAIN, CT	1.0000
1	HARTFORD, CT	1.0000
1	BRIDGEPORT, CT	1.0000
1	SAN BERNARDINO, CA	1.0000
1	FORT COLLINS, CO	1.0000
1	AURORA, CO	1.0000
1	NORWALK, CA	1.0000
1	MORENO VALLEY, CA	1.0000

Rank	DMU	Score
1	ESCONDIDO, CA	1.0000
66	ANCHORAGE, AK	0.9895
67	GARY, IN	0.9868
68	ST JOSEPH, MO	0.9860
69	NATIONAL CITY, CA	0.9758
70	SPRINGFIELD, IL	0.9744
71	GALVESTON, TX	0.9696
72	COVINGTON, KY	0.9651
73	WATERBURY, CT	0.9407
74	AKRON, OH	0.9400
75	KANSAS CITY, KS	0.9339
76	LAWRENCE, MA	0.9157
77	LOS ANGELES, CA	0.9123
78	SACRAMENTO, CA	0.9000
79	OGDEN, UT	0.8939
80	EAST CLEVELAND, OH	0.8892
81	HAMMOND, IN	0.8732
82	ELMIRA, NY	0.8688
83	LYNWOOD, CA	0.8622
84	JACKSON, MS	0.8605
85	CHICAGO, IL	0.8602
86	GRAND PRAIRIE, TX	0.8522
87	SCRANTON, PA	0.8491
88	OKLAHOMA, OK	0.8478
89	FAYETTEVILLE, NC	0.8453
90	FORT WAYNE, IN	0.8422
91	GREENSBORO, NC	0.8411
92	CEDAR RAPIDS, IA	0.8339
93	ATLANTA, GA	0.8338
94	NORFOLK, VA	0.8242
95	JOHNSTOWN, PA	0.8154
96	DAYTONA BEACH, FL	0.8097
97	GLENDALE, CA	0.8078
98	ALEXANDRIA, LA	0.8043
99	BINGHAMTON, NY	0.8002
100	SHREVEPORT, LA	0.7992
101	COLUMBUS, OH	0.7933
102	PEORIA, IL	0.7920

Rank	DMU	Score
103	ANAHEIM, CA	0.7782
104	BOULDER, CO	0.7764
105	HARLINGEN, TX	0.7743
106	PASSAIC, NJ	0.7741
107	ARLINGTON, TX	0.7678
108	LYNN, MA	0.7666
109	COSTA MESA, CA	0.7634
110	ST PETERSBURG, FL	0.7594
111	KILLEEN, TX	0.7546
112	FORT LAUDERDALE, FL	0.7524
113	LANSING, MI	0.7478
114	DECATUR, IL	0.7475
115	ST PAUL, MN	0.7432
116	CLARKSVILLE, TN	0.7421
117	JOLIET, IL	0.7391
118	ORLANDO, FL	0.7345
119	FORT SMITH, AR	0.7285
120	NEW ORLEANS, LA	0.7277
121	PARAMOUNT, CA	0.7085
122	COLUMBUS, GA	0.7068
123	EVANSVILLE, IN	0.7067
124	ATHENS-CLARKE COUNTY	0.7048
125	EAST CHICAGO, IN	0.7045
126	HARRISBURG, PA	0.7037
127	WICHITA, KS	0.6847
128	JAMESTOWN, NY	0.6842
129	TULSA, OK	0.6832
130	BERKELEY, CA	0.6794
131	NORMAN, OK	0.6772
132	ALBANY, NY	0.6769
133	RICHMOND, VA	0.6737
134	ST LOUIS, MO	0.6681
135	NEWPORT NEWS, VA	0.6656
136	BAKERSFIELD, CA	0.6642
137	BALTIMORE, MD	0.6635
138	ROCHESTER, NY	0.6620

Rank	DMU	Score
139	PASADENA, TX	0.6587
140	MERCED, CA	0.6583
141	JACKSON, MI	0.6546
142	LAFAYETTE, LA	0.6539
143	CLEVELAND, OH	0.6512
144	IOWA CITY, IA	0.6510
145	ATLANTIC CITY, NJ	0.6476
146	CHATTANOOGA, TN	0.6448
147	SYRACUSE, NY	0.6398
148	WILLIAMSPORT, PA	0.6387
149	SPOKANE, WA	0.6280
150	NASHVILLE AND DAVIDSON COUNTY, TN	0.6277
151	ELIZABETH, NJ	0.6274
152	DES MOINES, IA	0.6264
153	NORTH CHARLESTON, SC	0.6228
154	COMPTON, CA	0.6226
155	DURHAM, NC	0.6210
156	GREAT FALLS, MT	0.6061
157	MOBILE, AL	0.6058
158	LONGVIEW, TX	0.6038
159	DULUTH, MN	0.6018
160	DANVILLE, VA	0.6014
161	CHARLOTTE, NC	0.6012
162	ANN ARBOR, MI	0.6006
163	HAMPTON, VA	0.5988
164	HONOLULU, HI	0.5982
165	GRAND RAPIDS, MI	0.5971
166	NEWARK, NJ	0.5940
167	JACKSONVILLE, FL	0.5910
168	WACO, TX	0.5904
169	OAKLAND, CA	0.5901
170	RIVERSIDE, CA	0.5900
171	OXNARD, CA	0.5895
172	SALT LAKE, UT	0.5859
173	LUBBOCK, TX	0.5855
174	WESTLAND, MI	0.5849

Rank	DMU	Score
175	SOMERVILLE, MA	0.5834
176	BUFFALO, NY	0.5826
177	HAMILTON, OH	0.5806
178	HOLLYWOOD, FL	0.5781
179	WEST PALM BEACH, FL	0.5687
180	HIGH POINT, NC	0.5650
181	KNOXVILLE, TN	0.5563
182	LINDENHURST, NY	0.5549
183	INDIANAPOLIS, IN	0.5531
184	WINSTON SALEM, NC	0.5513
185	MOUNT VERNON, NY	0.5486
186	RENO, NV	0.5455
187	DOWNEY, CA	0.5307
188	WESTMINISTER, CA	0.5291
189	CHARLESTON, WV	0.5281
190	LAKE CHARLES, LA	0.5281
191	BELLFLOWER, CA	0.5248
192	ODESSA, TX	0.5238
193	LEXINGTON-FAYETTE, KY	0.5219
194	GOLDSBORO, NC	0.5205
195	COLUMBIA, SC	0.5204
196	OMAHA, NE	0.5203
197	CHARLESTON, SC	0.5171
198	JACKSON, TN	0.5153
199	HUNTSVILLE, AL	0.5123
200	TOPEKA, KS	0.5106
201	MUNCIE, IN	0.5087
202	SEATTLE, WA	0.5084
203	PORT ARTHUR, TX	0.5074
204	LAKELAND, FL	0.5069
205	PERTH AMBOY, NJ	0.5062
206	BATON ROUGE, LA	0.5045
207	TRENTON, NJ	0.5035
208	ROCKFORD, IL	0.5031
209	ROANOKE, VA	0.5008
210	PONTIAC, MI	0.4906

Rank	DMU	Score
211	FLINT, MI	0.4896
212	PORTLAND, ME	0.4882
213	GREEN BAY, WI	0.4812
214	VIRGINIA BEACH, VA	0.4790
215	EAST ST LOUIS, IL	0.4789
216	COLUMBIA, MO	0.4710
217	LOWELL, MA	0.4698
218	SPRINGFIELD, MA	0.4672
219	EL MONTE, CA	0.4640
220	POMONA, CA	0.4634
221	UTICA, NY	0.4580
222	LANCASTER, PA	0.4577
223	BLOOMINGTON, IN	0.4535
224	DETROIT, MI	0.4531
225	READING, PA	0.4490
226	COLORADO SPRINGS, CO	0.4486
227	FONTANA, CA	0.4475
228	ONTARIO, CA	0.4449
229	WORCESTER, MA	0.4445
230	FALL RIVER, MA	0.4436
231	LOUISVILLE, KY	0.4401
232	MINNEAPOLIS, MN	0.4397
233	KANSAS CITY, MO	0.4360
234	BETHLEHEM, PA	0.4304
235	MANSFIELD, OH	0.4301
236	LA CROSSE, WI	0.4295
237	WILMINGTON, DE	0.4276
238	DENVER, CO	0.4257
239	ALLENTOWN, PA	0.4207
240	SPRINGFIELD, MO	0.4189
241	EAST ORANGE, NJ	0.4173
242	DENTON, TX	0.4167
243	SANTA ANA, CA	0.4165
244	LINCOLN, NE	0.4162
245	PATERSON, NJ	0.4102
246	MANCHESTER, NH	0.4088
247	GAINESVILLE, FL	0.4044

Rank	DMU	Score
248	PHOENIX, AZ	0.3980
249	GARDEN GROVE, CA	0.3968
250	INGLEWOOD, CA	0.3965
251	TUSCALOOSA, AL	0.3944
252	TACOMA, WA	0.3937
253	NEW HAVEN, CT	0.3918
254	STAMFORD, CT	0.3909
255	ORANGE, CA	0.3896
256	MACON, GA	0.3869
257	SAN FRANCISCO, CA	0.3832
258	CHICO, CA	0.3676
259	HIALEAH, FL	0.3586
260	ALBUQUERQUE, NM	0.3566
261	SAN DIEGO, CA	0.3565
262	DAVENPORT, IA	0.3541
263	SANTA MONICA, CA	0.3526
264	RALEIGH, NC	0.3524
265	VALLEJO, CA	0.3515
266	ALEXANDRIA, VA	0.3481
267	SALEM, OR	0.3465
268	BIRMINGHAM, AL	0.3450
269	IRVINGTON, NJ	0.3441
270	BAY CITY, MI	0.3437
271	BATTLE CREEK, MI	0.3437
272	BELLINGHAM, WA	0.3400
273	CLEARWATER, FL	0.3394
274	VISALIA, CA	0.3389
275	LAS CRUCES, NM	0.3384
276	WILMINGTON, NC	0.3376
277	OWENSBORO, KY	0.3355
278	ABILENE, TX	0.3339
279	LORAIN, OH	0.3305
280	OCEANSIDE, CA	0.3304
281	SANTA ROSA, CA	0.3302
282	LITTLE ROCK, AR	0.3301
283	HAWTHORNE, CA	0.3298
284	GARLAND, TX	0.3226
285	KENOSHA, WI	0.3200

Rank	DMU	Score
286	LAS VEGAS, NV	0.3153
287	LAWTON, OK	0.3130
288	WARREN, MI	0.3108
289	MIAMI BEACH, FL	0.3090
290	SPRINGFIELD, OH	0.3060
291	LAWRENCE, KS	0.3053
292	SPARTANBURG, SC	0.3039
293	SUNNYVALE, CA	0.3030
294	NORTH LITTLE ROCK, A	0.3017
295	GREENVILLE, SC	0.3012
296	JERSEY CITY, NJ	0.2998
297	MADISON, WI	0.2977
298	STOCKTON, CA	0.2972
299	YAKIMA, WA	0.2968
300	BALDWIN PARK, CA	0.2934
301	ERIE, PA	0.2920
302	COLLEGE STATION, TX	0.2897
303	MUSKEGON, MI	0.2887
304	SAN JOSE, CA	0.2879
305	ALBANY, GA	0.2861
306	ALHAMBRA, CA	0.2824
307	YONKERS, NY	0.2811
308	PASADENA, CA	0.2790
309	BOSTON, MA	0.2786
310	SALINAS, CA	0.2755
311	TERRE HAUTE, IN	0.2750
312	CHULA VISTA, CA	0.2721
313	MONTEBELLO, CA	0.2700
314	STATE COLLEGE, PA	0.2689
315	BOISE, ID	0.2632
316	TAMPA, FL	0.2592
317	WATERLOO, IA	0.2544
318	NIAGARA FALLS, NY	0.2506
319	GREELEY, CO	0.2472
320	HUNTINGTON PARK, CA	0.2451
321	CHESAPEAKE, VA	0.2418

Rank	DMU	Score
322	MONTGOMERY, AL	0.2405
323	EL CAJON, CA	0.2404
324	SAN MATEO, CA	0.2304
325	SANTA BARBARA, CA	0.2188
326	PROVIDENCE, RI	0.2143
327	NEW BEDFORD, MA	0.2131
328	ANDERSON, IN	0.2111
329	SANTA CLARA, CA	0.1932
330	MODESTO, CA	0.1873
331	CAMBRIDGE, MA	0.1732
332	SOUTH GATE, CA	0.1712
333	MOUNTAIN VIEW, CA	0.1703
334	SAVANNAH, GA	0.1690
335	EVANSTON, IL	0.1658
336	HUNTINGTON BEACH, CA	0.1654
337	FULLERTON, CA	0.1482
338	BURBANK, CA	0.1446
339	REDWOOD, CA	0.1414
340	PORT HURON, MI	0.1396
341	ISLIP, NY	0.1128
342	LAKEWOOD, CO	0.0986

Table E.2: DMU Resource Input Projections

			(I)tohome		(I)totpublic		(I)totproginc		(I)totlihtc		(I)totprivt	
No.	DMU	1/Score	Projection	Change	Projection	Change	Projection	Change	Projection	Change	Projection	Change
1	BIRMINGHAM, AL	2.8988	\$12,072	0.00%	\$3,144	-25.58%	\$165	-85.07%	\$6,139	0.00%	\$16,603	0.00%
2	HUNTSVILLE, AL	1.9521	\$3,539	0.00%	\$873	-6.47%	\$	0.00%	\$1,770	0.00%	\$2,876	0.00%
3	MOBILE, AL	1.6508	\$3,544	0.00%	\$157	-83.40%	\$10	0.00%	\$	0.00%	\$2,919	0.00%
4	MONTGOMERY, AL	4.1586	\$7,023	0.00%	\$1,303	-7.26%	\$	0.00%	\$2,403	0.00%	\$10,525	-2.85%
5	TUSCALOOSA, AL	2.5358	\$2,658	0.00%	\$83	0.00%	\$198	0.00%	\$	0.00%	\$7,912	0.00%
6	ANCHORAGE, AK	1.0106	\$3,821	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$	0.00%
7	PHOENIX, AZ	2.5126	\$16,193	0.00%	\$3,659	-23.15%	\$362	-57.95%	\$7,807	0.00%	\$16,592	0.00%
8	LITTLE ROCK, AR	3.0292	\$5,638	0.00%	\$303	0.00%	\$1,191	0.00%	\$	0.00%	\$4,293	0.00%
9	PINE BLUFF, AR	1.0000	\$3,158	0.00%	\$16	0.00%	\$40	0.00%	\$	0.00%	\$11,078	0.00%
10	FORT SMITH, AR	1.3727	\$1,570	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$	-100.00%
11	NORTH LITTLE ROCK, AR	3.3151	\$1,165	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$	0.00%
12	BERKELEY, CA	1.4720	\$5,556	0.00%	\$1,312	-81.87%	\$	0.00%	\$2,538	0.00%	\$5,811	-27.16%
13	FRESNO, CA	1.0000	\$18,950	0.00%	\$1,067	0.00%	\$1,619	0.00%	\$	0.00%	\$235,711	0.00%
14	MODESTO, CA	5.3385	\$3,004	0.00%	\$1,329	-73.11%	\$	0.00%	\$3,197	0.00%	\$1,181	-75.42%
15	OAKLAND, CA	1.6948	\$17,953	0.00%	\$2,205	-54.79%	\$	0.00%	\$2,906	0.00%	\$40,365	-8.17%
16	RICHMOND, CA	1.0000	\$2,218	0.00%	\$6,164	0.00%	\$	0.00%	\$	0.00%	\$237	0.00%
17	SACRAMENTO, CA	1.1111	\$13,003	0.00%	\$1,128	0.00%	\$268	0.00%	\$378	-52.78%	\$54,284	-47.76%
18	SALINAS, CA	3.6304	\$3,453	0.00%	\$360	0.00%	\$103	-67.39%	\$	0.00%	\$3,411	0.00%
19	SAN FRANCISCO, CA	2.6097	\$2,148	-60.86%	\$171	0.00%	\$	0.00%	\$	0.00%	\$188	0.00%
20	SAN JOSE, CA	3.4735	\$12,044	0.00%	\$5,993	-53.21%	\$118	-44.89%	\$11,560	-13.48%	\$12,312	0.00%
21	SANTA CLARA, CA	5.1769	\$2,089	0.00%	\$161	-93.46%	\$33	-58.93%	\$	0.00%	\$912	-83.36%

			(I)tohome		(I)totpublic		(I)totproginc		(I)totlihtc		(I)totprivt	
No.	DMU	1/Score	Projection	Change	Projection	Change	Projection	Change	Projection	Change	Projection	Change
22	SANTA ROSA, CA	3.0288	\$3,904	0.00%	\$723	-89.23%	\$41	-92.68%	\$	0.00%	\$7,618	0.00%
23	STOCKTON, CA	3.3645	\$9,346	0.00%	\$3,810	-63.33%	\$246	-39.82%	\$974	-87.55%	\$5,720	0.00%
24	SUNNYVALE, CA	3.2999	\$2,668	0.00%	\$1,503	-73.07%	\$	0.00%	\$3,672	-21.31%	\$771	-53.85%
25	VALLEJO, CA	2.8450	\$1,490	0.00%	\$36	-83.71%	\$	0.00%	\$	0.00%	\$91	0.00%
26	MERCED, CA	1.5191	\$3,128	0.00%	\$510	-53.45%	\$74	-70.36%	\$	0.00%	\$20,891	-32.58%
27	SAN MATEO, CA	4.3405	\$1,685	0.00%	\$329	0.00%	\$	0.00%	\$	0.00%	\$194	0.00%
28	VISALIA, CA	2.9507	\$2,905	0.00%	\$688	-47.68%	\$434	0.00%	\$	0.00%	\$8,295	0.00%
29	CHICO, CA	2.7206	\$1,747	0.00%	\$373	0.00%	\$39	-10.41%	\$	0.00%	\$6,972	0.00%
30	MOUNTAIN VIEW, CA	5.8715	\$1,058	0.00%	\$594	-97.90%	\$	0.00%	\$1,452	-80.70%	\$354	-74.95%
31	REDWOOD, CA	7.0705	\$698	0.00%	\$42	-97.80%	\$	0.00%	\$	0.00%	\$	0.00%
32	SANTA CRUZ, CA	1.0000	\$976	0.00%	\$2,215	0.00%	\$137	0.00%	\$	0.00%	\$356	0.00%
33	ALHAMBRA, CA	3.5409	\$3,250	0.00%	\$10	0.00%	\$91	0.00%	\$	0.00%	\$2,806	0.00%
34	ANAHEIM, CA	1.2850	\$3,818	-44.91%	\$	0.00%	\$237	-16.77%	\$	0.00%	\$3,636	-72.13%
35	BAKERSFIELD, CA	1.5055	\$5,869	0.00%	\$692	-15.85%	\$652	0.00%	\$	0.00%	\$7,583	0.00%
36	BURBANK, CA	6.9136	\$1,839	0.00%	\$20	-89.58%	\$	0.00%	\$	0.00%	\$370	0.00%
37	CHULA VISTA, CA	3.6749	\$2,132	0.00%	\$170	-67.89%	\$	0.00%	\$	0.00%	\$2,383	0.00%
38	COMPTON, CA	1.6061	\$1,340	-22.59%	\$	0.00%	\$	0.00%	\$	0.00%	\$	-100.00%
39	COSTA MESA, CA	1.3100	\$2,169	0.00%	\$216	0.00%	\$	0.00%	\$	0.00%	\$675	0.00%
40	EL CAJON, CA	4.1601	\$2,221	0.00%	\$791	-35.05%	\$49	-78.05%	\$	-100.00%	\$4,644	0.00%
41	EL MONTE, CA	2.1553	\$1,693	0.00%	\$129	0.00%	\$	0.00%	\$	0.00%	\$2,456	-12.78%
42	FULLERTON, CA	6.7459	\$3,377	0.00%	\$907	0.00%	\$	0.00%	\$2,171	-10.92%	\$7,824	0.00%
43	GARDEN GROVE, CA	2.5205	\$1,151	0.00%	\$	0.00%	\$	-100.00%	\$	0.00%	\$10	0.00%
44	GLENDALE, CA	1.2379	\$2,362	0.00%	\$393	0.00%	\$	0.00%	\$	0.00%	\$332	0.00%
45	HAWTHORNE, CA	3.0322	\$1,066	0.00%	\$147	0.00%	\$	0.00%	\$	0.00%	\$1,177	0.00%

No.	DMU	1/Score	(I)tothome Projection	Change	(I)totpublic Projection	Change	(I)totproginc Projection	Change	(I)totlihtc Projection	Change	(I)totprivt Projection	Change
46	HUNTINGTON BEACH, CA	6.0442	\$2,128	0.00%	\$14	-68.73%	\$	0.00%	\$	0.00%	\$563	0.00%
47	HUNTINGTON PARK, CA	4.0797	\$315	0.00%	\$3	0.00%	\$	0.00%	\$	0.00%	\$27	-87.19%
48	INGLEWOOD, CA	2.5219	\$3,427	0.00%	\$800	0.00%	\$	0.00%	\$	0.00%	\$5,944	-35.04%
49	LONG BEACH, CA	1.0000	\$18,335	0.00%	\$252	0.00%	\$535	0.00%	\$	0.00%	\$18	0.00%
50	LOS ANGELES, CA	1.0962	\$25,069	-73.96%	\$12,757	-87.45%	\$17	-99.83%	\$30,464	-63.51%	\$22,541	-48.40%
51	LYNWOOD, CA	1.1598	\$744	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$2	-99.92%
52	NATIONAL CITY, CA	1.0248	\$2,679	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$329	-95.81%
53	OCEANSIDE, CA	3.0267	\$3,569	0.00%	\$	-99.99%	\$103	0.00%	\$	0.00%	\$	0.00%
54	ONTARIO, CA	2.2478	\$2,991	0.00%	\$104	-64.57%	\$30	0.00%	\$	0.00%	\$187	0.00%
55	OXNARD, CA	1.6962	\$2,916	0.00%	\$235	0.00%	\$	0.00%	\$38	-98.73%	\$5,188	-53.96%
56	PASADENA, CA	3.5843	\$2,174	0.00%	\$510	-94.39%	\$70	0.00%	\$	0.00%	\$386	0.00%
57	POMONA, CA	2.1579	\$1,469	-1.80%	\$	0.00%	\$	0.00%	\$	0.00%	\$	0.00%
58	RIVERSIDE, CA	1.6949	\$3,045	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$	-100.00%
59	SAN BERNARDINO, CA	1.0000	\$7,435	0.00%	\$570	0.00%	\$219	0.00%	\$	0.00%	\$1,913	0.00%
60	SAN DIEGO, CA	2.8048	\$37,477	0.00%	\$4,243	-72.37%	\$1,507	-36.18%	\$9,159	0.00%	\$19,724	-71.49%
61	SANTA ANA, CA	2.4008	\$6,522	0.00%	\$47	0.00%	\$78	0.00%	\$	0.00%	\$4,355	0.00%
62	SANTA BARBARA, CA	4.5700	\$3,376	0.00%	\$321	-95.83%	\$33	0.00%	\$504	0.00%	\$2,147	0.00%
63	SANTA MONICA, CA	2.8359	\$4,392	0.00%	\$428	-82.96%	\$	0.00%	\$	0.00%	\$1,672	0.00%
64	SOUTH GATE, CA	5.8397	\$3,041	0.00%	\$335	0.00%	\$	0.00%	\$	0.00%	\$2,716	0.00%
65	DOWNEY, CA	1.8844	\$1,462	0.00%	\$	0.00%	\$19	-77.06%	\$	0.00%	\$2,591	0.00%
66	ESCONDIDO, CA	1.0000	\$1,545	0.00%	\$2,378	0.00%	\$	0.00%	\$1,993	0.00%	\$29,138	0.00%
67	MONTEBELLO, CA	3.7038	\$1,230	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$	-100.00%

No.	DMU	1/Score	(I)tothome Projection	Change	(I)totpublic Projection	Change	(I)totproginc Projection	Change	(I)totlihtc Projection	Change	(I)totprivt Projection	Change
68	ORANGE, CA	2.5667	\$1,421	0.00%	\$51	0.00%	\$1	0.00%	\$	-100.00%	\$898	-74.25%
69	BALDWIN PARK, CA	3.4082	\$1,842	0.00%	\$284	-20.33%	\$45	-81.36%	\$	0.00%	\$9,696	0.00%
70	BELLFLOWER, CA	1.9054	\$472	0.00%	\$	0.00%	\$13	-51.77%	\$	0.00%	\$1,854	-28.59%
71	FONTANA, CA	2.2348	\$1,887	0.00%	\$5	-99.76%	\$168	0.00%	\$	0.00%	\$	0.00%
72	MORENO VALLEY, CA	1.0000	\$428	0.00%	\$120	0.00%	\$	0.00%	\$	0.00%	\$	0.00%
73	NORWALK, CA	1.0000	\$1,285	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$	0.00%
74	WESTMINISTER, CA	1.8899	\$801	0.00%	\$2	0.00%	\$4	-93.69%	\$	0.00%	\$	-99.99%
76	PARAMOUNT, CA	1.4114	\$705	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$26	-81.60%
77	AURORA, CO	1.0000	\$6,369	0.00%	\$75	0.00%	\$2,383	0.00%	\$	0.00%	\$	0.00%
78	BOULDER, CO	1.2880	\$1,797	0.00%	\$172	-95.61%	\$	0.00%	\$123	0.00%	\$3,116	-47.14%
79	COLORADO SPRINGS, CO	2.2290	\$4,604	0.00%	\$465	-27.71%	\$57	-72.90%	\$	0.00%	\$4,050	0.00%
80	DENVER, CO	2.3488	\$13,845	0.00%	\$3,768	-90.68%	\$187	-67.59%	\$8,744	0.00%	\$3,201	-88.12%
81	FORT COLLINS, CO	1.0000	\$2,796	0.00%	\$4,311	0.00%	\$94	0.00%	\$7,715	0.00%	\$59,134	0.00%
82	LAKEWOOD, CO	10.1388	\$370	0.00%	\$104	-15.53%	\$	0.00%	\$	-100.00%	\$11	-99.68%
83	GREELEY, CO	4.0450	\$1,265	0.00%	\$567	-80.86%	\$	0.00%	\$1,048	-15.61%	\$1,693	0.00%
84	BRIDGEPORT, CT	1.0000	\$8,549	0.00%	\$1,049	0.00%	\$	0.00%	\$	0.00%	\$1,679	0.00%
85	HARTFORD, CT	1.0000	\$10,029	0.00%	\$5,192	0.00%	\$	0.00%	\$3,417	0.00%	\$1,682	0.00%
86	NEW BRITAIN, CT	1.0000	\$368	0.00%	\$23	0.00%	\$	0.00%	\$	0.00%	\$1,693	0.00%
87	NEW HAVEN, CT	2.5526	\$4,766	0.00%	\$2,293	-40.20%	\$	0.00%	\$4,820	0.00%	\$6,738	0.00%
88	STAMFORD, CT	2.5583	\$2,350	0.00%	\$1,532	-62.33%	\$11	-81.01%	\$3,188	-15.41%	\$7,056	0.00%
89	WATERBURY, CT	1.0631	\$5,545	0.00%	\$32	0.00%	\$198	-17.81%	\$	0.00%	\$425	0.00%
90	WILMINGTON, DE	2.3386	\$3,095	0.00%	\$87	0.00%	\$48	0.00%	\$	0.00%	\$10,762	0.00%
91	DAYTONA BEACH, FL	1.2351	\$3,095	0.00%	\$925	-51.48%	\$	0.00%	\$	0.00%	\$4,884	-41.52%
92	FORT	1.3290	\$2,087	0.00%	\$572	-85.52%	\$	0.00%	\$	0.00%	\$2,461	-78.63%

			(I)tothome		(I)totpublic		(I)totproginc		(I)totlihtc		(I)totprivt	
No.	DMU	1/Score	Projection	Change	Projection	Change	Projection	Change	Projection	Change	Projection	Change
	LAUDERDALE, FL											
93	GAINESVILLE, FL	2.4731	\$3,669	0.00%	\$825	-44.95%	\$	0.00%	\$	0.00%	\$5,193	0.00%
94	HIALEAH, FL	2.7887	\$7,014	-14.34%	\$907	0.00%	\$30	0.00%	\$	0.00%	\$7,009	0.00%
95	JACKSONVILLE, FL	1.6922	\$13,390	0.00%	\$3,266	-67.31%	\$517	-56.67%	\$2,468	0.00%	\$58,274	0.00%
96	MIAMI, FL	1.0000	\$13,520	0.00%	\$3,326	0.00%	\$	0.00%	\$	0.00%	\$4,983	0.00%
97	MIAMI BEACH, FL	3.2364	\$3,553	0.00%	\$639	-80.05%	\$	0.00%	\$930	0.00%	\$3,513	0.00%
98	ORLANDO, FL	1.3616	\$5,851	0.00%	\$334	-84.54%	\$100	-4.75%	\$	0.00%	\$15,519	0.00%
99	ST PETERSBURG, FL	1.3169	\$6,009	0.00%	\$564	-87.94%	\$86	-90.93%	\$728	0.00%	\$13,116	-2.90%
100	TALLAHASSEE, FL	1.0000	\$4,029	0.00%	\$695	0.00%	\$	0.00%	\$	0.00%	\$1,498	0.00%
101	TAMPA, FL	3.8576	\$13,242	0.00%	\$1,136	0.00%	\$803	0.00%	\$	0.00%	\$13,344	0.00%
102	WEST PALM BEACH, FL	1.7584	\$2,286	0.00%	\$1,134	-49.80%	\$	0.00%	\$2,600	-9.45%	\$7,467	0.00%
103	HOLLYWOOD, FL	1.7298	\$1,872	0.00%	\$146	0.00%	\$104	0.00%	\$	0.00%	\$5,468	0.00%
104	LAKELAND, FL	1.9727	\$1,915	0.00%	\$258	-74.30%	\$13	0.00%	\$	0.00%	\$5,389	0.00%
105	POMPANO BEACH, FL	1.0000	\$215	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$	0.00%
106	CLEARWATER, FL	2.9464	\$297	0.00%	\$83	-62.47%	\$	0.00%	\$-100.00%		\$25	-99.80%
107	ATLANTA, GA	1.1993	\$10,198	0.00%	\$595	-76.07%	\$202	-42.11%	\$685	0.00%	\$4,306	0.00%
108	MACON, GA	2.5844	\$3,353	0.00%	\$178	0.00%	\$205	0.00%	\$	0.00%	\$5,346	0.00%
109	ATHENS-CLARKE COUNTY, GA	1.4188	\$2,724	-4.98%	\$	0.00%	\$1	-99.85%	\$	0.00%	\$4	0.00%
110	SAVANNAH, GA	5.9173	\$6,919	0.00%	\$224	0.00%	\$318	0.00%	\$	0.00%	\$1,037	0.00%
111	ALBANY, GA	3.4951	\$693	0.00%	\$1	0.00%	\$28	-83.21%	\$	0.00%	\$253	0.00%
112	AUGUSTA-RICHMOND COUNTY, GA	1.0000	\$3,039	0.00%	\$	0.00%	\$118	0.00%	\$	0.00%	\$64	0.00%
113	COLUMBUS, GA	1.4149	\$5,509	0.00%	\$1,156	0.00%	\$21	0.00%	\$2,093	0.00%	\$8,124	0.00%

No.	DMU	1/Score	(I)tothome Projection	Change	(I)totpublic Projection	Change	(I)totproginc Projection	Change	(I)totlihtc Projection	Change	(I)totprivt Projection	Change
114	HONOLULU, HI	1.6717	\$4,966	0.00%	\$374	-85.70%	\$10	0.00%	\$	0.00%	\$1,599	0.00%
115	BOISE, ID	3.8001	\$5,035	0.00%	\$1,907	-26.00%	\$83	-70.46%	\$3,946	0.00%	\$12,769	0.00%
116	CHICAGO, IL	1.1625	\$24,137	-78.08%	\$13,437	-34.41%	\$	0.00%	\$32,815	0.00%	\$6,736	-85.23%
117	DECATUR, IL	1.3377	\$3,359	0.00%	\$8	0.00%	\$	0.00%	\$	0.00%	\$1,523	0.00%
118	PEORIA, IL	1.2626	\$5,294	0.00%	\$218	0.00%	\$105	0.00%	\$	0.00%	\$367	0.00%
119	ROCKFORD, IL	1.9877	\$7,028	0.00%	\$464	-56.28%	\$110	0.00%	\$	0.00%	\$7,591	0.00%
120	SPRINGFIELD, IL	1.0263	\$4,242	0.00%	\$69	-92.34%	\$83	0.00%	\$	0.00%	\$583	0.00%
121	EAST ST LOUIS, IL	2.0883	\$3,596	0.00%	\$638	-74.54%	\$57	-79.27%	\$	0.00%	\$4,509	-15.59%
122	JOLIET, IL	1.3529	\$998	0.00%	\$415	-56.37%	\$	0.00%	\$674	-84.46%	\$1,614	-18.25%
123	EVANSTON, IL	6.0300	\$882	0.00%	\$51	-91.23%	\$3	0.00%	\$	0.00%	\$145	0.00%
124	BLOOMINGTON, IN	2.2050	\$3,286	0.00%	\$383	0.00%	\$47	0.00%	\$	0.00%	\$6,587	0.00%
125	EVANSVILLE, IN	1.4150	\$4,182	0.00%	\$672	0.00%	\$	0.00%	\$969	-29.44%	\$12,893	-17.44%
126	FORT WAYNE, IN	1.1873	\$7,947	0.00%	\$301	0.00%	\$502	0.00%	\$	0.00%	\$4,401	0.00%
127	GARY, IN	1.0134	\$4,919	0.00%	\$326	0.00%	\$	0.00%	\$1,405	-65.59%	\$3,155	0.00%
128	HAMMOND, IN	1.1452	\$1,544	-43.59%	\$	0.00%	\$	0.00%	\$	0.00%	\$27	0.00%
129	INDIANAPOLIS, IN	1.8080	\$14,682	-7.43%	\$5,504	0.00%	\$96	0.00%	\$10,596	-24.01%	\$20,395	0.00%
130	MUNCIE, IN	1.9657	\$3,348	0.00%	\$677	0.00%	\$6	0.00%	\$1,491	-74.84%	\$3,040	-53.39%
131	ANDERSON, IN	4.7373	\$1,377	0.00%	\$	0.00%	\$	0.00%	\$	-100.00%	\$	-100.00%
132	EAST CHICAGO, IN	1.4195	\$2,104	0.00%	\$105	-77.15%	\$	0.00%	\$	0.00%	\$942	0.00%
133	TERRE HAUTE, IN	3.6370	\$3,072	0.00%	\$167	-74.86%	\$69	-51.14%	\$	0.00%	\$1,434	-45.37%
134	DAVENPORT, IA	2.8238	\$4,378	0.00%	\$751	0.00%	\$229	0.00%	\$3,209	0.00%	\$2,592	0.00%
135	DES MOINES, IA	1.5963	\$4,574	0.00%	\$197	-89.55%	\$97	-64.89%	\$	0.00%	\$1,488	-59.32%
136	CEDAR RAPIDS, IA	1.1992	\$2,173	0.00%	\$909	-87.78%	\$50	-60.52%	\$1,789	-47.37%	\$5,472	0.00%
137	IOWA CITY, IA	1.5361	\$2,127	0.00%	\$409	-80.12%	\$51	0.00%	\$941	-68.43%	\$1,849	-53.03%
138	WATERLOO, IA	3.9305	\$1,440	0.00%	\$414	-51.26%	\$	0.00%	\$961	-28.51%	\$183	0.00%
139	KANSAS CITY, KS	1.0708	\$4,991	0.00%	\$439	0.00%	\$106	-65.00%	\$	0.00%	\$14,108	0.00%

			(I)tohome		(I)totpublic		(I)totproginc		(I)totlihtc		(I)totprivt	
No.	DMU	1/Score	Projection	Change	Projection	Change	Projection	Change	Projection	Change	Projection	Change
140	TOPEKA, KS	1.9583	\$3,893	0.00%	\$236	-12.11%	\$	0.00%	\$	0.00%	\$4,658	0.00%
141	WICHITA, KS	1.4605	\$8,992	0.00%	\$1,240	-88.69%	\$137	-85.02%	\$793	0.00%	\$19,058	0.00%
142	LAWRENCE, KS	3.2758	\$2,501	0.00%	\$876	-50.93%	\$56	-81.94%	\$	0.00%	\$5,250	0.00%
143	COVINGTON, KY	1.0362	\$4,443	-1.01%	\$	0.00%	\$193	-34.78%	\$	-100.00%	\$2,399	-48.23%
144	LEXINGTON-FAYETTE, KY	1.9162	\$6,248	0.00%	\$2,159	0.00%	\$76	-42.87%	\$4,881	-37.65%	\$12,991	-24.92%
145	LOUISVILLE, KY	2.2723	\$15,284	0.00%	\$224	-94.42%	\$974	-54.83%	\$	0.00%	\$2,816	0.00%
146	OWENSBORO, KY	2.9805	\$2,296	0.00%	\$257	0.00%	\$11	0.00%	\$	0.00%	\$3,730	0.00%
147	SHREVEPORT, LA	1.2513	\$6,424	-29.36%	\$37	0.00%	\$73	0.00%	\$	-100.00%	\$3,550	0.00%
148	NEW ORLEANS, LA	1.3743	\$4,615	0.00%	\$5	-98.70%	\$	0.00%	\$	0.00%	\$1	0.00%
149	LAFAYETTE, LA	1.5294	\$4,569	0.00%	\$1,105	-14.92%	\$34	0.00%	\$1,201	0.00%	\$1,530	0.00%
150	BATON ROUGE, LA	1.9820	\$8,186	0.00%	\$471	-28.30%	\$277	-36.67%	\$	0.00%	\$18,632	0.00%
151	ALEXANDRIA, LA	1.2433	\$1,897	0.00%	\$1	-99.67%	\$	0.00%	\$	0.00%	\$141	0.00%
152	MONROE, LA	1.0000	\$3,204	0.00%	\$3	0.00%	\$8	0.00%	\$	0.00%	\$	0.00%
153	LAKE CHARLES, LA	1.8937	\$1,813	0.00%	\$39	-78.30%	\$	0.00%	\$	0.00%	\$65	0.00%
154	PORTLAND, ME	2.0485	\$3,597	0.00%	\$266	-44.63%	\$127	-75.11%	\$	0.00%	\$4,214	0.00%
155	BALTIMORE, MD	1.5071	\$42,792	-12.59%	\$20,321	-76.24%	\$	0.00%	\$38,057	-6.12%	\$7,409	-55.89%
156	BOSTON, MA	3.5896	\$31,565	0.00%	\$11,755	-85.73%	\$67	-78.93%	\$23,845	-55.26%	\$69,035	-7.40%
157	BROCKTON, MA	1.0000	\$5,804	0.00%	\$	0.00%	\$261	0.00%	\$	0.00%	\$	0.00%
158	CAMBRIDGE, MA	5.7730	\$2,835	0.00%	\$1,036	-88.69%	\$	0.00%	\$2,833	0.00%	\$7,674	0.00%
159	FALL RIVER, MA	2.2543	\$7,335	0.00%	\$4,325	-47.59%	\$131	-75.07%	\$7,254	-9.75%	\$2,589	0.00%
160	LAWRENCE, MA	1.0921	\$6,232	0.00%	\$125	0.00%	\$826	0.00%	\$	0.00%	\$31,695	0.00%
161	LOWELL, MA	2.1284	\$6,974	0.00%	\$913	-17.33%	\$165	-76.95%	\$	0.00%	\$30,894	0.00%
162	LYNN, MA	1.3045	\$2,293	0.00%	\$94	0.00%	\$155	0.00%	\$	0.00%	\$6,770	0.00%
163	NEW BEDFORD, MA	4.6922	\$5,898	0.00%	\$628	0.00%	\$195	-38.67%	\$906	-1.99%	\$6,781	0.00%
164	SOMERVILLE, MA	1.7140	\$3,981	0.00%	\$2,302	-79.62%	\$5	-98.92%	\$5,233	-51.37%	\$4,231	0.00%

No.	DMU	1/Score	(I)tothome Projection	Change	(I)totpublic Projection	Change	(I)totproginc Projection	Change	(I)totlihtc Projection	Change	(I)totprivt Projection	Change
165	SPRINGFIELD, MA	2.1404	\$8,914	0.00%	\$2,125	-54.13%	\$213	0.00%	\$2,061	-90.30%	\$38,600	-5.61%
166	WORCESTER, MA	2.2497	\$7,285	0.00%	\$1,641	-76.84%	\$178	-37.29%	\$811	0.00%	\$16,621	0.00%
167	ANN ARBOR, MI	1.6649	\$4,095	0.00%	\$858	-74.42%	\$77	0.00%	\$2,007	-27.74%	\$449	-87.99%
168	DETROIT, MI	2.2072	\$20,010	-19.59%	\$5,107	0.00%	\$225	0.00%	\$11,578	0.00%	\$13,102	0.00%
169	BATTLE CREEK, MI	2.9098	\$1,689	0.00%	\$281	-58.09%	\$1	0.00%	\$	0.00%	\$2,849	0.00%
170	FLINT, MI	2.0425	\$2,764	0.00%	\$1,409	-77.79%	\$	0.00%	\$2,127	0.00%	\$14,134	-35.70%
171	GRAND RAPIDS, MI	1.6748	\$7,780	0.00%	\$1,858	0.00%	\$71	-83.75%	\$3,633	-31.25%	\$32,690	0.00%
172	KALAMAZOO, MI	1.0000	\$2,920	0.00%	\$59	0.00%	\$1	0.00%	\$	0.00%	\$977	0.00%
173	LANSING, MI	1.3372	\$5,442	0.00%	\$444	-60.14%	\$104	0.00%	\$	0.00%	\$4,600	0.00%
174	PONTIAC, MI	2.0385	\$1,340	-37.90%	\$	0.00%	\$	0.00%	\$	0.00%	\$	-100.00%
175	SAGINAW, MI	1.0000	\$8,285	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$	0.00%
176	JACKSON, MI	1.5276	\$2,324	0.00%	\$494	0.00%	\$28	-91.00%	\$	0.00%	\$3,753	0.00%
177	MUSKEGON, MI	3.4634	\$768	0.00%	\$41	0.00%	\$	-100.00%	\$	0.00%	\$	0.00%
178	WARREN, MI	3.2174	\$1,371	0.00%	\$85	0.00%	\$98	-71.69%	\$	0.00%	\$224	0.00%
179	PORT HURON, MI	7.1642	\$747	0.00%	\$	-100.00%	\$	0.00%	\$	0.00%	\$	0.00%
180	WESTLAND, MI	1.7096	\$1,269	0.00%	\$44	0.00%	\$10	0.00%	\$	0.00%	\$3,105	-38.26%
181	BAY CITY, MI	2.9092	\$744	0.00%	\$16	0.00%	\$	-97.84%	\$	0.00%	\$42	0.00%
182	DULUTH, MN	1.6618	\$3,882	0.00%	\$1,437	-64.34%	\$26	-65.27%	\$3,187	0.00%	\$1,115	-48.59%
183	MINNEAPOLIS, MN	2.2740	\$16,053	0.00%	\$8,015	-62.43%	\$55	0.00%	\$19,520	-13.64%	\$3,739	-82.44%
184	ST PAUL, MN	1.3456	\$11,218	0.00%	\$3,711	-70.86%	\$	0.00%	\$8,320	0.00%	\$11,968	0.00%
185	JACKSON, MS	1.1622	\$5,795	0.00%	\$363	0.00%	\$	0.00%	\$	0.00%	\$8,513	0.00%
186	HATTIESBURG, MS	1.0000	\$1,469	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$	0.00%
187	KANSAS CITY, MO	2.2936	\$15,512	0.00%	\$1,668	0.00%	\$1,150	0.00%	\$	0.00%	\$15,508	0.00%
188	SPRINGFIELD, MO	2.3873	\$5,947	0.00%	\$227	-53.19%	\$174	-71.47%	\$294	0.00%	\$738	0.00%
189	INDEPENDENCE, MO	1.0000	\$1,599	0.00%	\$132	0.00%	\$41	0.00%	\$	0.00%	\$13,346	0.00%

No.	DMU	1/Score	(I)tothome Projection	Change	(I)totpublic Projection	Change	(I)totproginc Projection	Change	(I)totlihtc Projection	Change	(I)totprivt Projection	Change
190	ST JOSEPH, MO	1.0142	\$1,490	0.00%	\$431	-77.20%	\$	0.00%	\$1,191	0.00%	\$1,841	0.00%
191	ST LOUIS, MO	1.4968	\$24,478	0.00%	\$1,728	0.00%	\$423	0.00%	\$749	-90.12%	\$46,192	0.00%
192	COLUMBIA, MO	2.1231	\$2,475	0.00%	\$932	0.00%	\$14	-74.20%	\$2,138	-43.30%	\$421	0.00%
193	BILLINGS, MT	1.0000	\$1,060	0.00%	\$273	0.00%	\$	0.00%	\$	0.00%	\$10,413	0.00%
194	GREAT FALLS, MT	1.6500	\$2,140	0.00%	\$810	-94.94%	\$59	-72.61%	\$	0.00%	\$702	0.00%
195	LINCOLN, NE	2.4024	\$6,931	0.00%	\$1,878	0.00%	\$115	-79.35%	\$848	-76.95%	\$20,041	0.00%
196	OMAHA, NE	1.9219	\$9,651	0.00%	\$1,450	-80.20%	\$35	0.00%	\$2,251	0.00%	\$27,276	0.00%
197	LAS VEGAS, NV	3.1711	\$821	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$	-100.00%
198	RENO, NV	1.8333	\$3,353	0.00%	\$281	-67.33%	\$7	0.00%	\$	0.00%	\$13,835	-23.80%
199	MANCHESTER, NH	2.4460	\$3,539	0.00%	\$1,728	-71.12%	\$16	-71.86%	\$3,429	-69.50%	\$4,600	0.00%
200	ATLANTIC CITY, NJ	1.5443	\$2,810	-16.92%	\$1	-99.55%	\$18	0.00%	\$	0.00%	\$	0.00%
201	CAMDEN, NJ	1.0000	\$4,724	0.00%	\$372	0.00%	\$	0.00%	\$	0.00%	\$7,050	0.00%
202	EAST ORANGE, NJ	2.3964	\$3,348	0.00%	\$374	-77.81%	\$9	0.00%	\$	0.00%	\$6,222	0.00%
203	ELIZABETH, NJ	1.5938	\$5,316	0.00%	\$1,015	-22.38%	\$	0.00%	\$1,727	0.00%	\$6,254	-14.04%
204	IRVINGTON, NJ	2.9065	\$1,727	0.00%	\$366	0.00%	\$	0.00%	\$541	0.00%	\$5,122	-10.73%
205	JERSEY CITY, NJ	3.3351	\$15,590	0.00%	\$5,483	0.00%	\$6	0.00%	\$13,465	-6.28%	\$14,897	0.00%
206	NEWARK, NJ	1.6835	\$24,363	0.00%	\$4,354	0.00%	\$	0.00%	\$5,231	0.00%	\$24,140	0.00%
207	PASSAIC, NJ	1.2919	\$2,092	-44.62%	\$	0.00%	\$	0.00%	\$	0.00%	\$128	-67.67%
208	PATERSON, NJ	2.4376	\$6,553	0.00%	\$3,008	0.00%	\$161	-13.97%	\$3,144	-40.11%	\$18,006	0.00%
209	PERTH AMBOY, NJ	1.9754	\$1,459	0.00%	\$30	-27.52%	\$	0.00%	\$	0.00%	\$1,186	-38.53%
210	TRENTON, NJ	1.9859	\$5,427	0.00%	\$2,259	-90.50%	\$	0.00%	\$5,531	-76.67%	\$9,575	0.00%
211	ALBUQUERQUE, NM	2.8040	\$12,355	0.00%	\$310	-0.25%	\$466	-58.92%	\$	0.00%	\$7,704	0.00%
212	LAS CRUCES, NM	2.9549	\$1,601	0.00%	\$544	-67.10%	\$34	-51.07%	\$	0.00%	\$3,442	0.00%
213	LINDENHURST, NY	1.8022	\$1,575	0.00%	\$912	-39.54%	\$3	0.00%	\$	0.00%	\$2,600	0.00%
214	ISLIP, NY	8.8620	\$1,711	0.00%	\$	-99.85%	\$	0.00%	\$	0.00%	\$80	0.00%

			(I)tohome		(I)totpublic		(I)totproginc		(I)totlihtc		(I)totprivt	
No.	DMU	1/Score	Projection	Change	Projection	Change	Projection	Change	Projection	Change	Projection	Change
215	MOUNT VERNON, NY	1.8228	\$301	0.00%	\$195	-73.44%	\$	0.00%	\$	0.00%	\$561	-66.44%
216	NEW YORK, NY	1.0000	\$224,761	0.00%	\$85,939	0.00%	\$	0.00%	\$86,002	0.00%	\$18,188	0.00%
217	YONKERS, NY	3.5577	\$7,712	0.00%	\$2,580	-82.43%	\$	0.00%	\$5,624	0.00%	\$6,394	-54.39%
218	ALBANY, NY	1.4773	\$4,460	-4.35%	\$261	0.00%	\$	0.00%	\$	0.00%	\$7,841	0.00%
219	BINGHAMTON, NY	1.2497	\$2,610	0.00%	\$137	-69.40%	\$15	0.00%	\$	0.00%	\$103	0.00%
220	BUFFALO, NY	1.7163	\$23,276	0.00%	\$10,752	-74.02%	\$33	-83.51%	\$25,197	0.00%	\$13,045	0.00%
221	NIAGARA FALLS, NY	3.9900	\$1,904	0.00%	\$675	-24.03%	\$70	0.00%	\$	-100.00%	\$1,419	0.00%
222	ROCHESTER, NY	1.5107	\$16,649	-12.46%	\$3,552	0.00%	\$597	0.00%	\$3,304	-32.71%	\$8,754	0.00%
223	SYRACUSE, NY	1.5629	\$9,344	0.00%	\$2,828	-44.55%	\$27	0.00%	\$3,928	0.00%	\$5,800	0.00%
224	UTICA, NY	2.1834	\$3,147	-31.64%	\$202	-99.17%	\$	0.00%	\$	0.00%	\$323	0.00%
225	ELMIRA, NY	1.1510	\$2,246	0.00%	\$55	0.00%	\$30	0.00%	\$	0.00%	\$5,733	0.00%
226	JAMESTOWN, NY	1.4617	\$743	0.00%	\$	0.00%	\$	-100.00%	\$	0.00%	\$	-100.00%
227	CHARLOTTE, NC	1.6633	\$6,900	0.00%	\$148	-90.22%	\$1,175	-7.15%	\$	0.00%	\$1,374	0.00%
228	DURHAM, NC	1.6104	\$415	0.00%	\$2	0.00%	\$	0.00%	\$	0.00%	\$31	0.00%
229	FAYETTEVILLE, NC	1.1830	\$3,212	0.00%	\$3	0.00%	\$120	-69.77%	\$	0.00%	\$55	0.00%
230	GREENSBORO, NC	1.1889	\$4,729	0.00%	\$1,340	0.00%	\$	0.00%	\$1,758	-24.45%	\$19,399	0.00%
231	HIGH POINT, NC	1.7700	\$766	0.00%	\$62	-63.38%	\$	0.00%	\$	0.00%	\$309	-52.91%
232	RALEIGH, NC	2.8375	\$6,004	0.00%	\$1,233	-33.26%	\$91	-74.34%	\$2,672	0.00%	\$2,296	0.00%
233	WILMINGTON, NC	2.9617	\$3,126	0.00%	\$481	0.00%	\$57	0.00%	\$1,091	-1.12%	\$285	0.00%
234	WINSTON SALEM, NC	1.8139	\$3,530	0.00%	\$1,086	-30.14%	\$37	-18.55%	\$2,329	0.00%	\$785	-82.87%
235	GOLDSBORO, NC	1.9211	\$684	0.00%	\$87	0.00%	\$5	0.00%	\$	0.00%	\$1,548	0.00%
237	EAST CLEVELAND, OH	1.1246	\$2,027	0.00%	\$28	-50.43%	\$	0.00%	\$	0.00%	\$62	0.00%
238	CANTON, OH	1.0000	\$3,380	0.00%	\$189	0.00%	\$181	0.00%	\$4,224	0.00%	\$1,987	0.00%

No.	DMU	1/Score	(I)tothome Projection	Change	(I)totpublic Projection	Change	(I)totproginc Projection	Change	(I)totlihtc Projection	Change	(I)totprivt Projection	Change
239	DAYTON, OH	1.0000	\$2,911	0.00%	\$2,191	0.00%	\$	0.00%	\$2,117	0.00%	\$32,438	0.00%
240	AKRON, OH	1.0638	\$18,474	0.00%	\$1,205	0.00%	\$956	-35.44%	\$80	-97.28%	\$19,853	0.00%
241	CLEVELAND, OH	1.5355	\$38,807	-12.27%	\$5,688	0.00%	\$1,208	-25.32%	\$11,856	-64.63%	\$29,855	-32.47%
242	YOUNGSTOWN, OH	1.0000	\$7,022	0.00%	\$1,339	0.00%	\$258	0.00%	\$7,575	0.00%	\$3,376	0.00%
243	COLUMBUS, OH	1.2605	\$17,012	0.00%	\$3,818	-78.28%	\$129	-23.54%	\$7,197	0.00%	\$54,153	-1.27%
244	TOLEDO, OH	1.0000	\$17,883	0.00%	\$1,451	0.00%	\$	0.00%	\$	0.00%	\$7,962	0.00%
245	CINCINNATI, OH	1.0000	\$21,944	0.00%	\$6,405	0.00%	\$6	0.00%	\$12,408	0.00%	\$27,323	0.00%
246	HAMILTON, OH	1.7224	\$1,973	0.00%	\$76	-54.26%	\$	0.00%	\$	0.00%	\$1,646	0.00%
247	SPRINGFIELD, OH	3.2680	\$3,873	0.00%	\$1,288	-19.21%	\$	-100.00%	\$2,641	0.00%	\$3,511	0.00%
248	LIMA, OH	1.0000	\$2,349	0.00%	\$	0.00%	\$757	0.00%	\$	0.00%	\$4,039	0.00%
249	LORAIN, OH	3.0258	\$2,483	0.00%	\$343	0.00%	\$53	-81.30%	\$1,515	-35.36%	\$1,126	0.00%
250	MANSFIELD, OH	2.3250	\$1,403	0.00%	\$1	0.00%	\$	0.00%	\$	0.00%	\$18	-68.92%
251	LAWTON, OK	3.1945	\$2,058	0.00%	\$24	-72.72%	\$7	0.00%	\$	0.00%	\$534	0.00%
252	TULSA, OK	1.4637	\$8,028	0.00%	\$121	0.00%	\$292	-85.94%	\$	0.00%	\$22,208	0.00%
253	OKLAHOMA, OK	1.1796	\$12,204	-11.20%	\$336	0.00%	\$556	0.00%	\$	0.00%	\$4,055	0.00%
254	NORMAN, OK	1.4766	\$2,339	0.00%	\$	0.00%	\$24	0.00%	\$	0.00%	\$714	-57.50%
255	SALEM, OR	2.8864	\$3,904	0.00%	\$641	0.00%	\$301	-43.71%	\$	0.00%	\$2,845	0.00%
256	ALLENTOWN, PA	2.3769	\$3,852	0.00%	\$436	0.00%	\$76	0.00%	\$1,192	-2.86%	\$645	0.00%
257	HARRISBURG, PA	1.4210	\$2,155	0.00%	\$22	-97.79%	\$18	0.00%	\$	0.00%	\$299	0.00%
258	LANCASTER, PA	2.1847	\$4,162	0.00%	\$2,576	-1.88%	\$23	-83.93%	\$3,658	-16.46%	\$10,426	0.00%
259	PHILADELPHIA, PA	1.0000	\$24,018	0.00%	\$13,551	0.00%	\$	0.00%	\$33,111	0.00%	\$6,297	0.00%
260	READING, PA	2.2272	\$3,847	0.00%	\$2,058	-37.42%	\$98	0.00%	\$4,203	-6.79%	\$1,719	0.00%
261	SCRANTON, PA	1.1778	\$6,022	0.00%	\$366	0.00%	\$628	0.00%	\$	0.00%	\$22,374	0.00%
262	YORK, PA	1.0000	\$429	0.00%	\$74	0.00%	\$3	0.00%	\$	0.00%	\$3,341	0.00%
263	BETHLEHEM, PA	2.3234	\$1,402	0.00%	\$	0.00%	\$	-100.00%	\$	0.00%	\$	-99.88%
264	WILLIAMSPORT, PA	1.5658	\$695	0.00%	\$3	0.00%	\$	0.00%	\$	0.00%	\$116	-63.66%

No.	DMU	1/Score	(I)tothome Projection	Change	(I)totpublic Projection	Change	(I)totproginc Projection	Change	(I)totlihtc Projection	Change	(I)totprivt Projection	Change
265	STATE COLLEGE, PA	3.7187	\$747	0.00%	\$116	0.00%	\$	0.00%	\$248	-91.69%	\$567	-38.71%
266	ERIE, PA	3.4244	\$5,619	0.00%	\$2,823	-29.46%	\$16	-57.37%	\$5,966	-60.84%	\$10,021	0.00%
267	PITTSBURGH, PA	1.0000	\$12,012	0.00%	\$10,930	0.00%	\$	0.00%	\$	0.00%	\$2,217	0.00%
268	ALTOONA, PA	1.0000	\$1,567	0.00%	\$33	0.00%	\$	0.00%	\$	0.00%	\$1,284	0.00%
269	JOHNSTOWN, PA	1.2264	\$959	0.00%	\$16	0.00%	\$8	0.00%	\$	0.00%	\$55	0.00%
270	PAWTUCKET, RI	1.0000	\$1,741	0.00%	\$235	0.00%	\$6	0.00%	\$	0.00%	\$23,484	0.00%
271	PROVIDENCE, RI	4.6662	\$9,565	0.00%	\$3,854	-47.14%	\$244	-61.58%	\$1,250	-83.35%	\$6,893	0.00%
272	WOONSOCKET, RI	1.0000	\$2,308	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$4	0.00%
273	CHARLESTON, SC	1.9340	\$1,781	-30.83%	\$280	-9.99%	\$	0.00%	\$	0.00%	\$96	0.00%
274	COLUMBIA, SC	1.9218	\$2,232	0.00%	\$126	-79.13%	\$	0.00%	\$	0.00%	\$916	0.00%
275	GREENVILLE, SC	3.3201	\$1,436	0.00%	\$7	0.00%	\$23	-22.27%	\$	0.00%	\$53	0.00%
276	NORTH CHARLESTON, SC	1.6056	\$903	0.00%	\$65	0.00%	\$	0.00%	\$	0.00%	\$181	0.00%
277	SPARTANBURG, SC	3.2905	\$1,755	0.00%	\$72	-99.49%	\$64	0.00%	\$	0.00%	\$175	0.00%
278	SIOUX FALLS, SD	1.0000	\$2,283	0.00%	\$916	0.00%	\$72	0.00%	\$2,162	0.00%	\$9,511	0.00%
279	CHATTANOOGA, TN	1.5509	\$5,769	0.00%	\$108	-89.83%	\$82	0.00%	\$	0.00%	\$398	0.00%
280	KNOXVILLE, TN	1.7975	\$8,149	0.00%	\$242	-93.99%	\$626	0.00%	\$	0.00%	\$1,680	0.00%
281	MEMPHIS, TN	1.0000	\$21,018	0.00%	\$2,779	0.00%	\$90	0.00%	\$	0.00%	\$10,847	0.00%
282	NASHVILLE AND DAVIDSON COUNTY, TN	1.5930	\$23,587	0.00%	\$255	-95.23%	\$1,192	-71.50%	\$	0.00%	\$19,314	0.00%
283	CLARKSVILLE, TN	1.3475	\$1,256	0.00%	\$	0.00%	\$	-100.00%	\$	0.00%	\$	0.00%
284	JACKSON, TN	1.9407	\$921	0.00%	\$20	-83.90%	\$8	0.00%	\$	0.00%	\$61	0.00%
285	BEAUMONT, TX	1.0000	\$4,752	0.00%	\$4	0.00%	\$	0.00%	\$	0.00%	\$8	0.00%
286	WACO, TX	1.6938	\$5,190	0.00%	\$268	0.00%	\$235	0.00%	\$	0.00%	\$7,094	0.00%
287	DALLAS, TX	1.0000	\$35,673	0.00%	\$4,743	0.00%	\$194	0.00%	\$3,767	0.00%	\$186,393	0.00%

			(I)tohome		(I)totpublic		(I)totproginc		(I)totlihtc		(I)totprivt	
No.	DMU	1/Score	Projection	Change	Projection	Change	Projection	Change	Projection	Change	Projection	Change
288	FORT WORTH, TX	1.0000	\$15,266	0.00%	\$77	0.00%	\$	0.00%	\$	0.00%	\$48,476	0.00%
289	LUBBOCK, TX	1.7081	\$1,657	0.00%	\$1	-99.70%	\$	0.00%	\$	0.00%	\$12	0.00%
290	HOUSTON, TX	1.0000	\$43,072	0.00%	\$72	0.00%	\$2,808	0.00%	\$	0.00%	\$23,272	0.00%
291	ODESSA, TX	1.9090	\$1,739	-2.89%	\$	0.00%	\$	-100.00%	\$	0.00%	\$	0.00%
292	GALVESTON, TX	1.0314	\$2,289	-45.46%	\$12	-93.50%	\$25	0.00%	\$	0.00%	\$1	0.00%
293	ABILENE, TX	2.9948	\$2,475	0.00%	\$1,294	-40.03%	\$	-98.49%	\$2,887	-31.87%	\$730	0.00%
294	AMARILLO, TX	1.0000	\$6,424	0.00%	\$135	0.00%	\$168	0.00%	\$	0.00%	\$52,484	0.00%
295	ARLINGTON, TX	1.3025	\$3,156	0.00%	\$290	-23.52%	\$69	0.00%	\$	0.00%	\$27,600	0.00%
296	EL PASO, TX	1.0000	\$28,119	0.00%	\$4,327	0.00%	\$	0.00%	\$	0.00%	\$13,534	0.00%
297	WICHITA FALLS, TX	1.0000	\$3,466	0.00%	\$2,278	0.00%	\$	0.00%	\$	0.00%	\$5,698	0.00%
298	PORT ARTHUR, TX	1.9710	\$1,619	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$	0.00%
299	TYLER, TX	1.0000	\$1,340	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$	0.00%
300	COLLEGE STATION, TX	3.4517	\$1,954	0.00%	\$21	-88.03%	\$228	0.00%	\$	0.00%	\$	0.00%
301	PASADENA, TX	1.5182	\$364	0.00%	\$220	-82.58%	\$	0.00%	\$	-100.00%	\$614	0.00%
302	DENTON, TX	2.3997	\$2,609	0.00%	\$900	0.00%	\$236	-11.59%	\$	0.00%	\$8,869	0.00%
303	SAN ANGELO, TX	1.0000	\$242	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$167	0.00%
304	GARLAND, TX	3.0998	\$1,764	0.00%	\$334	-72.29%	\$22	-78.81%	\$	0.00%	\$728	0.00%
305	GRAND PRAIRIE, TX	1.1735	\$1,141	0.00%	\$27	-83.90%	\$	0.00%	\$	0.00%	\$27	0.00%
306	LONGVIEW, TX	1.6563	\$1,340	-15.53%	\$	0.00%	\$	0.00%	\$	0.00%	\$	0.00%
307	KILLEEN, TX	1.3251	\$1,217	0.00%	\$136	0.00%	\$	0.00%	\$123	-98.83%	\$2,588	-55.05%
308	BRYAN, TX	1.0000	\$1,376	0.00%	\$	0.00%	\$39	0.00%	\$	0.00%	\$5,281	0.00%
309	IRVING, TX	1.0000	\$5	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$81	0.00%
310	AUSTIN, TX	1.0000	\$12,506	0.00%	\$341	0.00%	\$66	0.00%	\$	0.00%	\$16,821	0.00%
311	BROWNSVILLE, TX	1.0000	\$3,945	0.00%	\$	0.00%	\$	0.00%	\$	0.00%	\$880	0.00%
312	CORPUS CHRISTI,	1.0000	\$11,310	0.00%	\$4,533	0.00%	\$328	0.00%	\$	0.00%	\$3,438	0.00%

No.	DMU	1/Score	(I)tothome Projection	Change	(I)totpublic Projection	Change	(I)totproginc Projection	Change	(I)totlihtc Projection	Change	(I)totprivt Projection	Change
	TX											
313	HARLINGEN, TX	1.2914	\$2,022	0.00%	\$34	0.00%	\$	0.00%	\$	0.00%	\$312	-15.74%
314	LAREDO, TX	1.0000	\$6,157	0.00%	\$251	0.00%	\$	0.00%	\$1,820	0.00%	\$12,418	0.00%
315	MCALLEN, TX	1.0000	\$5,754	0.00%	\$284	0.00%	\$	0.00%	\$	0.00%	\$4,910	0.00%
316	SAN ANTONIO, TX	1.0000	\$36,868	0.00%	\$1,248	0.00%	\$	0.00%	\$1,331	0.00%	\$53,533	0.00%
317	SALT LAKE, UT	1.7067	\$8,387	0.00%	\$2,805	-53.21%	\$	0.00%	\$4,168	0.00%	\$13,068	0.00%
318	OGDEN, UT	1.1187	\$2,109	0.00%	\$288	-2.97%	\$37	-91.60%	\$	0.00%	\$18,001	-17.61%
319	CHESAPEAKE, VA	4.1360	\$4,072	0.00%	\$318	-61.46%	\$737	-11.05%	\$631	0.00%	\$470	0.00%
320	HAMPTON, VA	1.6701	\$4,240	0.00%	\$73	0.00%	\$107	-58.19%	\$	0.00%	\$1,219	0.00%
321	NEWPORT NEWS, VA	1.5025	\$5,347	0.00%	\$2,077	-66.44%	\$	0.00%	\$2,884	0.00%	\$2,198	0.00%
322	NORFOLK, VA	1.2133	\$5,294	-56.34%	\$1,727	0.00%	\$	0.00%	\$	0.00%	\$11,854	0.00%
323	PORTSMOUTH, VA	1.0000	\$4,419	0.00%	\$6	0.00%	\$	0.00%	\$	0.00%	\$1,450	0.00%
324	RICHMOND, VA	1.4844	\$9,598	0.00%	\$1,395	-57.65%	\$311	-12.34%	\$	0.00%	\$32,489	0.00%
325	ROANOKE, VA	1.9969	\$4,939	0.00%	\$647	0.00%	\$197	0.00%	\$	0.00%	\$1,605	0.00%
326	VIRGINIA BEACH, VA	2.0875	\$7,268	0.00%	\$720	0.00%	\$181	0.00%	\$	0.00%	\$21,483	0.00%
327	DANVILLE, VA	1.6629	\$2,295	0.00%	\$32	-73.02%	\$243	0.00%	\$	0.00%	\$8	0.00%
328	LYNCHBURG, VA	1.0000	\$1,737	0.00%	\$24	0.00%	\$80	0.00%	\$	0.00%	\$54	0.00%
329	ALEXANDRIA, VA	2.8724	\$1,326	0.00%	\$81	-96.50%	\$25	0.00%	\$	0.00%	\$108	0.00%
330	SEATTLE, WA	1.9671	\$16,803	0.00%	\$4,075	-78.05%	\$253	0.00%	\$9,454	0.00%	\$3,984	-59.15%
331	SPOKANE, WA	1.5923	\$6,189	0.00%	\$1,606	-80.33%	\$141	-54.22%	\$3,767	-52.51%	\$7,807	-44.01%
332	TACOMA, WA	2.5402	\$5,194	0.00%	\$774	-87.37%	\$1	0.00%	\$1,057	0.00%	\$6,700	-23.08%
333	YAKIMA, WA	3.3694	\$1,949	0.00%	\$586	0.00%	\$60	-75.48%	\$	0.00%	\$3,243	0.00%
334	BELLINGHAM, WA	2.9411	\$374	0.00%	\$208	-91.65%	\$	0.00%	\$509	-26.15%	\$177	-52.27%
335	BREMERTON, WA	1.0000	\$409	0.00%	\$92	0.00%	\$5	0.00%	\$	0.00%	\$5,479	0.00%

No.	DMU	1/Score	(I)tothome		(I)totpublic		(I)totproginc		(I)totlihtc		(I)totprivt	
			Projection	Change	Projection	Change	Projection	Change	Projection	Change	Projection	Change
336	CHARLESTON, WV	1.8934	\$2,656	0.00%	\$22	0.00%	\$5	0.00%	\$	0.00%	\$206	0.00%
337	HUNTINGTON, WV	1.0000	\$4,206	0.00%	\$	0.00%	\$270	0.00%	\$	0.00%	\$5,932	0.00%
338	GREEN BAY, WI	2.0781	\$4,249	0.00%	\$249	0.00%	\$256	0.00%	\$	0.00%	\$2,005	0.00%
339	MADISON, WI	3.3593	\$11,290	0.00%	\$3,008	-75.09%	\$110	-75.20%	\$2,982	0.00%	\$18,095	0.00%
340	RACINE, WI	1.0000	\$3,634	0.00%	\$834	0.00%	\$	0.00%	\$5,106	0.00%	\$3,177	0.00%
341	MILWAUKEE, WI	1.0000	\$54,074	0.00%	\$4,055	0.00%	\$526	0.00%	\$3,328	0.00%	\$30,875	0.00%
342	KENOSHA, WI	3.1255	\$1,525	0.00%	\$459	-27.84%	\$	0.00%	\$936	-52.22%	\$5,119	0.00%
343	EAU CLAIRE, WI	1.0000	\$1,110	0.00%	\$1,350	0.00%	\$8	0.00%	\$	0.00%	\$5,397	0.00%
344	LA CROSSE, WI	2.3283	\$1,794	0.00%	\$1,168	-70.42%	\$18	0.00%	\$	0.00%	\$6,770	0.00%

Table E.3: DMU Output Projections

No.	DMU	1/Score	(O)totinc1		(O)totinc2		(O)totinc3		(O)totinc4	
			Projection	Change	Projection	Change	Projection	Change	Projection	Change
1	BIRMINGHAM, AL	2.8988	311.88	124.37%	453.23	124.37%	213.15	124.37%	344.93	320.65%
2	HUNTSVILLE, AL	1.9521	115.68	46.43%	146.43	46.43%	63.62	176.59%	83.50	943.81%
3	MOBILE, AL	1.6508	101.78	25.66%	114.79	218.86%	47.23	329.33%	52.52	950.39%
4	MONTGOMERY, AL	4.1586	203.94	239.90%	318.72	368.71%	134.77	349.23%	175.15	661.51%
5	TUSCALOOSA, AL	2.5358	31.69	428.21%	83.00	93.01%	67.55	93.01%	148.62	93.01%
6	ANCHORAGE, AK	1.0106	25.79	7.46%	75.01	0.01%	31.00	0.01%	48.75	68.12%
7	PHOENIX, AZ	2.5126	422.45	280.58%	565.53	91.06%	233.09	91.06%	375.80	166.52%
8	LITTLE ROCK, AR	3.0292	68.58	144.95%	165.15	135.93%	127.40	135.93%	416.63	434.14%
9	PINE BLUFF, AR	1.0000	81.00	0.00%	179.00	0.00%	84.00	0.00%	71.00	0.00%
10	FORT SMITH, AR	1.3727	14.32	10.12%	52.86	10.12%	9.91	10.12%	36.48	10.56%
11	NORTH LITTLE ROCK, AR	3.3151	23.55	161.67%	44.21	268.40%	23.55	161.67%	34.31	999.90%

No.	DMU	1/Score	(O)totinc1 Projection	Change	(O)totinc2 Projection	Change	(O)totinc3 Projection	Change	(O)totinc4 Projection	Change
12	BERKELEY, CA	1.4720	177.31	15.13%	293.22	337.64%	122.50	716.70%	142.30	469.22%
13	FRESNO, CA	1.0000	24.00	0.00%	661.00	0.00%	726.00	0.00%	2049.00	0.00%
14	MODESTO, CA	5.3385	140.30	352.58%	132.24	450.98%	45.26	352.58%	55.30	591.24%
15	OAKLAND, CA	1.6948	218.92	271.05%	271.15	73.81%	176.33	52.01%	303.22	28.48%
16	RICHMOND, CA	1.0000	69.00	0.00%	35.00	0.00%	20.00	0.00%	16.00	0.00%
17	SACRAMENTO, CA	1.1111	295.24	1.11%	401.20	15.62%	290.19	1.11%	670.37	1.11%
18	SALINAS, CA	3.6304	71.27	691.88%	133.67	190.58%	78.46	190.58%	139.27	216.53%
19	SAN FRANCISCO, CA	2.6097	49.82	99.29%	54.70	993.91%	25.82	999.90%	24.27	203.34%
20	SAN JOSE, CA	3.4735	418.28	276.83%	447.35	176.14%	259.57	176.14%	594.63	999.90%
21	SANTA CLARA, CA	5.1769	96.14	337.01%	83.03	337.01%	22.05	999.90%	24.40	999.90%
22	SANTA ROSA, CA	3.0288	99.08	135.90%	146.26	135.90%	87.28	135.90%	125.03	135.90%
23	STOCKTON, CA	3.3645	103.67	331.98%	165.03	166.17%	274.16	166.17%	884.58	386.03%
24	SUNNYVALE, CA	3.2999	117.13	160.30%	127.73	340.45%	55.45	999.90%	68.09	999.90%
25	VALLEJO, CA	2.8450	13.81	245.31%	53.90	236.87%	30.75	119.65%	43.93	119.65%
26	MERCED, CA	1.5191	46.29	999.90%	80.06	17.74%	80.06	17.74%	293.17	17.74%
27	SAN MATEO, CA	4.3405	49.99	257.09%	50.11	456.81%	25.51	999.90%	27.43	999.90%
28	VISALIA, CA	2.9507	36.01	999.90%	68.69	128.96%	64.79	169.95%	267.89	128.96%
29	CHICO, CA	2.7206	20.88	108.82%	56.50	232.36%	58.47	108.82%	125.29	108.82%
30	MOUNTAIN VIEW, CA	5.8715	50.42	404.18%	52.69	652.68%	22.53	999.90%	26.92	999.90%
31	REDWOOD, CA	7.0705	12.42	521.19%	37.27	521.19%	16.54	999.90%	18.64	521.19%
32	SANTA CRUZ, CA	1.0000	85.00	0.00%	16.00	0.00%	0.00	0.00%	4.00	0.00%
33	ALHAMBRA, CA	3.5409	53.64	182.33%	93.17	182.33%	50.82	182.33%	93.17	182.33%
34	ANAHEIM, CA	1.2850	20.20	6.32%	49.11	16.93%	37.21	6.32%	62.73	6.32%
35	BAKERSFIELD, CA	1.5055	106.67	363.78%	187.16	16.98%	150.33	105.94%	346.25	16.98%
36	BURBANK, CA	6.9136	42.41	505.83%	60.58	505.83%	36.35	505.83%	36.92	999.90%
37	CHULA VISTA, CA	3.6749	47.93	219.50%	106.09	194.71%	40.17	999.90%	62.95	999.90%
38	COMPTON, CA	1.6061	40.55	22.87%	58.11	999.90%	27.25	999.90%	31.00	999.90%

			(O)totinc1		(O)totinc2		(O)totinc3		(O)totinc4	
No.	DMU	1/Score	Projection	Change	Projection	Change	Projection	Change	Projection	Change
39	COSTA MESA, CA	1.3100	62.25	7.34%	43.86	12.47%	19.61	880.74%	19.23	999.90%
40	EL CAJON, CA	4.1601	17.72	490.69%	61.23	410.27%	85.01	240.05%	194.82	747.04%
41	EL MONTE, CA	2.1553	30.77	61.93%	80.44	793.77%	38.45	380.64%	43.72	61.93%
42	FULLERTON, CA	6.7459	88.41	489.41%	151.01	655.03%	90.78	999.90%	123.78	489.41%
43	GARDEN GROVE, CA	2.5205	34.51	91.72%	40.75	126.42%	21.93	448.19%	26.11	999.90%
44	GLENDALE, CA	1.2379	59.61	4.57%	49.71	60.36%	22.84	280.74%	24.97	212.09%
45	HAWTHORNE, CA	3.0322	18.90	136.20%	52.42	555.27%	29.23	630.65%	30.71	136.20%
46	HUNTINGTON BEACH, CA	6.0442	41.68	420.97%	72.94	420.97%	29.07	999.90%	45.85	999.90%
47	HUNTINGTON PARK, CA	4.0797	3.68	999.90%	16.62	232.48%	9.97	232.48%	12.61	999.90%
48	INGLEWOOD, CA	2.5219	76.34	999.90%	166.35	999.90%	67.15	91.85%	95.92	91.85%
49	LONG BEACH, CA	1.0000	1231.00	0.00%	387.00	0.00%	130.00	0.00%	98.00	0.00%
50	LOS ANGELES, CA	1.0962	1153.66	0.84%	1262.57	0.84%	491.87	15.19%	589.24	18.32%
51	LYNWOOD, CA	1.1598	23.51	2.20%	33.65	97.91%	18.71	133.89%	17.37	2.20%
52	NATIONAL CITY, CA	1.0248	15.11	277.82%	43.09	187.27%	40.02	0.06%	68.04	0.06%
53	OCEANSIDE, CA	3.0267	37.71	135.71%	73.78	467.52%	46.14	171.43%	120.21	135.71%
54	ONTARIO, CA	2.2478	81.74	581.20%	67.71	69.27%	40.63	69.27%	40.54	93.07%
55	OXNARD, CA	1.6962	75.86	28.58%	138.75	156.94%	56.57	28.58%	54.00	28.58%
56	PASADENA, CA	3.5843	20.04	186.33%	40.87	308.72%	63.44	693.06%	157.48	186.33%
57	POMONA, CA	2.1579	13.24	89.20%	60.24	760.63%	30.80	62.13%	50.17	457.45%
58	RIVERSIDE, CA	1.6949	28.27	28.49%	53.97	28.49%	13.56	35.59%	36.18	804.53%
59	SAN BERNARDINO, CA	1.0000	51.00	0.00%	56.00	0.00%	213.00	0.00%	127.00	0.00%
60	SAN DIEGO, CA	2.8048	691.62	116.13%	872.11	153.52%	460.36	116.13%	868.85	116.13%
61	SANTA ANA, CA	2.4008	135.45	83.05%	139.93	81.73%	71.94	499.52%	100.36	999.90%
62	SANTA BARBARA, CA	4.5700	132.61	278.88%	131.23	720.21%	53.04	278.88%	61.79	782.70%
63	SANTA MONICA, CA	2.8359	83.17	118.86%	63.47	118.86%	29.01	480.30%	37.48	999.90%
64	SOUTH GATE, CA	5.8397	55.12	401.09%	104.99	556.16%	54.77	999.90%	85.19	401.09%
65	DOWNEY, CA	1.8844	14.15	41.51%	37.25	313.91%	22.12	268.73%	53.77	41.51%

No.	DMU	1/Score	(O)totinc1 Projection	Change	(O)totinc2 Projection	Change	(O)totinc3 Projection	Change	(O)totinc4 Projection	Change
66	ESCONDIDO, CA	1.0000	9.00	0.00%	26.00	0.00%	41.00	0.00%	166.00	0.00%
67	MONTEBELLO, CA	3.7038	3.65	265.47%	60.71	999.90%	8.92	197.38%	38.66	197.38%
68	ORANGE, CA	2.5667	18.13	999.90%	62.60	95.63%	9.74	224.75%	46.51	999.90%
69	BALDWIN PARK, CA	3.4082	27.47	815.52%	54.03	170.16%	59.44	170.16%	159.39	170.16%
70	BELLFLOWER, CA	1.9054	2.39	999.90%	7.16	999.90%	4.96	395.74%	24.31	43.02%
71	FONTANA, CA	2.2348	23.55	68.22%	53.83	68.22%	24.72	105.96%	98.37	999.90%
72	MORENO VALLEY, CA	1.0000	23.00	0.00%	47.00	0.00%	0.00	0.00%	0.00	0.00%
73	NORWALK, CA	1.0000	0.00	0.00%	67.00	0.00%	0.00	0.00%	51.00	0.00%
74	WESTMINISTER, CA	1.8899	24.12	41.90%	26.96	41.90%	16.57	136.69%	14.84	64.88%
76	PARAMOUNT, CA	1.4114	21.28	11.99%	25.76	11.99%	14.81	146.85%	15.72	214.45%
77	AURORA, CO	1.0000	35.00	0.00%	154.00	0.00%	191.00	0.00%	740.00	0.00%
78	BOULDER, CO	1.2880	64.93	6.44%	60.67	14.48%	27.59	112.20%	30.87	6.44%
79	COLORADO SPRINGS, CO	2.2290	134.21	67.76%	149.31	67.76%	77.17	67.76%	126.66	111.11%
80	DENVER, CO	2.3488	619.33	77.46%	420.58	77.46%	189.56	802.68%	211.72	684.17%
81	FORT COLLINS, CO	1.0000	101.00	0.00%	191.00	0.00%	114.00	0.00%	366.00	0.00%
82	LAKWOOD, CO	10.1388	19.85	999.90%	36.95	823.75%	0.14	999.90%	0.00	0.00%
83	GREELEY, CO	4.0450	56.19	602.33%	75.72	229.23%	27.44	999.90%	21.87	999.90%
84	BRIDGEPORT, CT	1.0000	162.00	0.00%	42.00	0.00%	9.00	0.00%	16.00	0.00%
85	HARTFORD, CT	1.0000	279.00	0.00%	295.00	0.00%	123.00	0.00%	221.00	0.00%
86	NEW BRITAIN, CT	1.0000	6.00	0.00%	7.00	0.00%	7.00	0.00%	17.00	0.00%
87	NEW HAVEN, CT	2.5526	174.99	94.44%	219.24	398.28%	91.28	265.11%	118.61	94.44%
88	STAMFORD, CT	2.5583	105.88	252.93%	116.95	94.92%	42.43	430.41%	83.45	999.90%
89	WATERBURY, CT	1.0631	174.66	146.01%	131.49	0.37%	59.04	31.20%	175.45	697.48%
90	WILMINGTON, DE	2.3386	63.91	255.07%	130.70	76.62%	68.88	76.62%	63.58	76.62%
91	DAYTONA BEACH, FL	1.2351	55.37	4.47%	129.80	70.79%	61.64	4.47%	104.47	4.47%
92	FORT LAUDERDALE, FL	1.3290	24.86	18.40%	76.78	8.15%	30.28	8.15%	71.38	8.15%
93	GAINESVILLE, FL	2.4731	65.71	87.74%	137.05	87.74%	69.26	138.83%	103.26	87.74%

No.	DMU	1/Score	(O)totinc1 Projection	Change	(O)totinc2 Projection	Change	(O)totinc3 Projection	Change	(O)totinc4 Projection	Change
94	HIALEAH, FL	2.7887	130.99	114.73%	243.37	263.24%	132.43	678.99%	165.34	114.73%
95	JACKSONVILLE, FL	1.6922	213.00	28.31%	318.22	28.31%	322.07	28.31%	928.54	54.24%
96	MIAMI, FL	1.0000	125.00	0.00%	166.00	0.00%	113.00	0.00%	63.00	0.00%
97	MIAMI BEACH, FL	3.2364	112.00	154.54%	148.13	236.66%	56.00	154.54%	71.69	377.94%
98	ORLANDO, FL	1.3616	193.99	9.60%	198.38	9.60%	112.89	9.60%	203.60	114.31%
99	ST PETERSBURG, FL	1.3169	214.17	7.63%	222.78	7.63%	106.55	7.63%	170.05	7.63%
100	TALLAHASSEE, FL	1.0000	42.00	0.00%	123.00	0.00%	78.00	0.00%	16.00	0.00%
101	TAMPA, FL	3.8576	169.04	604.32%	330.39	211.68%	279.74	330.37%	657.65	211.68%
102	WEST PALM BEACH, FL	1.7584	58.39	32.71%	92.55	101.19%	59.68	148.68%	86.26	32.71%
103	HOLLYWOOD, FL	1.7298	18.31	30.79%	72.24	118.91%	56.24	30.79%	79.78	30.79%
104	LAKELAND, FL	1.9727	22.19	47.96%	60.37	72.48%	48.83	47.96%	94.69	47.96%
105	POMPANO BEACH, FL	1.0000	3.00	0.00%	15.00	0.00%	13.00	0.00%	10.00	0.00%
106	CLEARWATER, FL	2.9464	15.86	999.90%	25.14	128.58%	0.31	999.90%	0.00	0.00%
107	ATLANTA, GA	1.1993	515.61	36.04%	293.41	3.31%	116.11	29.01%	124.12	114.01%
108	MACON, GA	2.5844	38.95	999.90%	67.46	255.07%	61.20	511.99%	206.99	97.13%
109	ATHENS-CLARKE COUNTY, GA	1.4188	37.08	12.36%	49.44	12.36%	24.72	12.36%	27.33	241.56%
110	SAVANNAH, GA	5.9173	63.38	604.27%	116.98	408.63%	116.98	408.63%	335.69	408.63%
111	ALBANY, GA	3.4951	8.34	178.12%	22.25	178.12%	16.37	718.60%	27.81	178.12%
112	AUGUSTA-RICHMOND COUNTY, GA	1.0000	71.00	0.00%	55.00	0.00%	7.00	0.00%	3.00	0.00%
113	COLUMBUS, GA	1.4149	160.40	12.17%	222.64	23.69%	117.77	12.17%	127.83	19.47%
114	HONOLULU, HI	1.6717	109.21	26.99%	64.91	332.70%	23.95	999.90%	20.02	53.99%
115	BOISE, ID	3.8001	199.11	206.32%	191.84	248.79%	104.15	206.32%	171.54	206.32%
116	CHICAGO, IL	1.1625	1169.99	2.27%	1242.77	107.82%	462.84	132.58%	605.44	943.86%
117	DECATUR, IL	1.3377	16.28	8.53%	50.68	23.60%	33.64	8.53%	79.22	8.53%
118	PEORIA, IL	1.2626	75.54	51.08%	87.53	5.46%	81.20	5.46%	147.80	52.37%
119	ROCKFORD, IL	1.9877	168.48	230.35%	242.99	49.08%	118.19	103.77%	174.64	235.85%

No.	DMU	1/Score	(O)totinc1 Projection	Change	(O)totinc2 Projection	Change	(O)totinc3 Projection	Change	(O)totinc4 Projection	Change
120	SPRINGFIELD, IL	1.0263	201.03	128.45%	131.09	0.07%	30.12	150.96%	65.31	493.74%
121	EAST ST LOUIS, IL	2.0883	134.78	56.72%	114.40	56.72%	45.45	56.72%	57.99	56.72%
122	JOLIET, IL	1.3529	38.22	9.21%	63.34	9.21%	21.27	325.33%	14.92	999.90%
123	EVANSTON, IL	6.0300	9.34	834.36%	35.48	787.12%	25.98	419.58%	42.61	999.90%
124	BLOOMINGTON, IN	2.2050	97.85	65.85%	106.14	65.85%	61.36	65.85%	91.22	65.85%
125	EVANSVILLE, IN	1.4150	58.33	12.17%	128.14	64.29%	117.48	52.57%	143.58	12.17%
126	FORT WAYNE, IN	1.1873	249.19	227.88%	236.80	2.96%	131.78	2.96%	258.64	62.67%
127	GARY, IN	1.0134	47.01	0.02%	91.26	82.51%	121.02	0.02%	100.07	72.54%
128	HAMMOND, IN	1.1452	16.38	999.90%	59.98	149.92%	37.66	63.73%	50.92	1.84%
129	INDIANAPOLIS, IN	1.8080	346.59	51.35%	453.07	54.63%	306.25	36.11%	626.74	620.39%
130	MUNCIE, IN	1.9657	122.38	47.44%	104.68	47.44%	42.34	149.06%	42.83	86.24%
131	ANDERSON, IN	4.7373	12.84	999.90%	62.01	999.90%	27.64	294.84%	43.43	294.84%
132	EAST CHICAGO, IN	1.4195	60.70	12.40%	54.66	56.18%	20.23	12.40%	21.54	43.59%
133	TERRE HAUTE, IN	3.6370	148.51	191.19%	87.36	191.19%	26.21	191.19%	23.12	999.90%
134	DAVENPORT, IA	2.8238	91.47	117.79%	121.96	117.79%	93.65	117.79%	133.54	999.90%
135	DES MOINES, IA	1.5963	205.43	22.28%	121.05	22.28%	42.29	134.95%	43.91	339.12%
136	CEDAR RAPIDS, IA	1.1992	98.14	3.31%	83.49	11.32%	47.52	3.31%	80.58	3.31%
137	IOWA CITY, IA	1.5361	106.84	18.71%	54.70	33.42%	22.83	107.58%	21.37	18.71%
138	WATERLOO, IA	3.9305	54.14	218.49%	63.70	218.49%	25.48	218.49%	30.88	414.59%
139	KANSAS CITY, KS	1.0708	130.59	284.09%	248.16	0.47%	139.65	0.47%	267.40	67.13%
140	TOPEKA, KS	1.9583	80.10	60.20%	158.65	46.90%	63.70	59.25%	96.92	272.76%
141	WICHITA, KS	1.4605	240.49	14.52%	286.30	14.52%	161.47	14.52%	312.64	14.52%
142	LAWRENCE, KS	3.2758	20.65	158.11%	65.01	242.16%	90.34	158.11%	188.15	189.46%
143	COVINGTON, KY	1.0362	29.04	0.13%	55.07	0.13%	32.04	0.13%	77.10	0.13%
144	LEXINGTON-FAYETTE, KY	1.9162	244.47	43.81%	223.32	44.08%	112.17	43.81%	136.62	43.81%
145	LOUISVILLE, KY	2.2723	658.61	294.38%	282.54	71.23%	142.12	71.23%	304.28	227.18%

No.	DMU	1/Score	(O)totinc1 Projection	Change	(O)totinc2 Projection	Change	(O)totinc3 Projection	Change	(O)totinc4 Projection	Change
146	OWENSBORO, KY	2.9805	35.10	289.96%	83.38	131.60%	57.90	131.60%	88.01	131.60%
147	SHREVEPORT, LA	1.2513	116.60	5.05%	123.95	5.05%	73.53	5.05%	105.05	5.05%
148	NEW ORLEANS, LA	1.3743	34.16	10.19%	72.20	213.90%	20.39	45.65%	30.85	10.19%
149	LAFAYETTE, LA	1.5294	160.92	18.32%	123.06	18.32%	55.43	207.94%	73.04	563.98%
150	BATON ROUGE, LA	1.9820	127.32	65.35%	269.07	48.66%	153.12	48.66%	308.78	133.93%
151	ALEXANDRIA, LA	1.2433	29.33	4.76%	59.71	4.76%	16.63	38.55%	38.80	177.13%
152	MONROE, LA	1.0000	16.00	0.00%	61.00	0.00%	46.00	0.00%	86.00	0.00%
153	LAKE CHARLES, LA	1.8937	42.65	42.18%	45.50	42.18%	26.98	999.90%	30.25	999.90%
154	PORTLAND, ME	2.0485	87.59	53.67%	149.06	53.67%	66.43	95.38%	93.74	53.67%
155	BALTIMORE, MD	1.5071	1086.33	17.06%	999.71	17.06%	404.14	58.49%	531.41	311.94%
156	BOSTON, MA	3.5896	817.43	186.82%	1224.99	256.10%	507.67	186.82%	615.40	591.46%
157	BROCKTON, MA	1.0000	60.00	0.00%	109.00	0.00%	99.00	0.00%	332.00	0.00%
158	CAMBRIDGE, MA	5.7730	64.30	394.62%	118.71	394.62%	89.03	394.62%	93.98	394.62%
159	FALL RIVER, MA	2.2543	336.18	69.79%	251.29	69.79%	90.45	73.94%	114.12	96.76%
160	LAWRENCE, MA	1.0921	88.59	12.14%	209.44	1.67%	199.54	0.78%	645.48	140.85%
161	LOWELL, MA	2.1284	132.65	59.82%	198.18	59.82%	169.41	59.82%	473.08	59.82%
162	LYNN, MA	1.3045	22.74	13.72%	68.40	14.00%	68.55	7.11%	102.13	38.02%
163	NEW BEDFORD, MA	4.6922	164.02	290.54%	230.42	290.54%	121.07	290.54%	170.38	336.87%
164	SOMERVILLE, MA	1.7140	183.60	121.20%	182.94	29.74%	58.98	31.07%	92.06	119.19%
165	SPRINGFIELD, MA	2.1404	154.28	75.32%	252.40	60.76%	244.97	100.80%	670.39	60.76%
166	WORCESTER, MA	2.2497	171.11	69.42%	169.48	76.55%	166.03	69.42%	439.66	173.08%
167	ANN ARBOR, MI	1.6649	196.16	26.55%	113.71	99.49%	48.50	999.90%	50.90	999.90%
168	DETROIT, MI	2.2072	617.63	66.03%	536.28	66.03%	254.03	66.03%	466.27	380.69%
169	BATTLE CREEK, MI	2.9098	34.22	144.43%	81.12	125.35%	24.50	145.04%	47.32	125.35%
170	FLINT, MI	2.0425	85.80	53.21%	106.58	117.52%	58.22	53.21%	93.46	53.21%
171	GRAND RAPIDS, MI	1.6748	196.41	88.85%	309.06	27.19%	176.79	27.19%	307.79	27.19%
172	KALAMAZOO, MI	1.0000	103.00	0.00%	51.00	0.00%	18.00	0.00%	14.00	0.00%

No.	DMU	1/Score	(O)totinc1 Projection	Change	(O)totinc2 Projection	Change	(O)totinc3 Projection	Change	(O)totinc4 Projection	Change
173	LANSING, MI	1.3372	186.14	93.90%	193.14	8.50%	94.40	8.50%	147.28	99.02%
174	PONTIAC, MI	2.0385	39.75	52.90%	53.89	349.06%	21.38	64.44%	27.94	365.72%
175	SAGINAW, MI	1.0000	44.00	0.00%	98.00	0.00%	15.00	0.00%	38.00	0.00%
176	JACKSON, MI	1.5276	53.20	18.22%	89.85	18.22%	54.38	18.22%	79.21	18.22%
177	MUSKEGON, MI	3.4634	24.77	175.22%	39.45	393.07%	14.96	999.90%	15.55	999.90%
178	WARREN, MI	3.2174	20.23	152.82%	50.56	152.82%	27.81	152.82%	55.62	152.82%
179	PORT HURON, MI	7.1642	18.91	530.37%	31.84	536.90%	18.91	530.37%	20.89	944.31%
180	WESTLAND, MI	1.7096	33.66	29.45%	52.90	230.61%	29.77	29.45%	37.28	86.38%
181	BAY CITY, MI	2.9092	15.77	125.29%	31.54	125.29%	14.15	999.90%	19.14	538.16%
182	DULUTH, MN	1.6618	165.52	26.35%	155.41	26.35%	50.47	68.24%	63.36	134.66%
183	MINNEAPOLIS, MN	2.2740	690.65	71.38%	727.23	310.86%	232.07	81.30%	343.52	573.58%
184	ST PAUL, MN	1.3456	436.21	240.79%	458.36	8.87%	210.05	180.06%	260.82	186.62%
185	JACKSON, MS	1.1622	105.40	192.79%	192.89	119.19%	119.65	2.26%	107.38	2.26%
186	HATTIESBURG, MS	1.0000	17.00	0.00%	64.00	0.00%	41.00	0.00%	55.00	0.00%
187	KANSAS CITY, MO	2.2936	122.99	223.66%	278.25	131.88%	307.87	72.96%	780.32	93.63%
188	SPRINGFIELD, MO	2.3873	298.91	474.82%	133.66	80.62%	58.58	125.29%	48.02	200.15%
189	INDEPENDENCE, MO	1.0000	32.00	0.00%	64.00	0.00%	26.00	0.00%	214.00	0.00%
190	ST JOSEPH, MO	1.0142	41.01	310.14%	77.02	0.02%	50.01	0.02%	51.83	999.90%
191	ST LOUIS, MO	1.4968	321.50	16.49%	433.33	16.49%	316.89	26.25%	626.70	16.49%
192	COLUMBIA, MO	2.1231	103.79	999.90%	105.21	59.41%	38.26	59.41%	46.24	77.85%
193	BILLINGS, MT	1.0000	6.00	0.00%	84.00	0.00%	88.00	0.00%	17.00	0.00%
194	GREAT FALLS, MT	1.6500	16.60	50.88%	34.10	36.42%	62.80	25.60%	185.89	25.60%
195	LINCOLN, NE	2.4024	87.30	81.87%	201.87	81.87%	183.69	81.87%	437.77	214.94%
196	OMAHA, NE	1.9219	183.16	44.22%	368.73	85.29%	181.72	44.22%	223.44	260.39%
197	LAS VEGAS, NV	3.1711	14.92	148.64%	32.32	148.64%	12.46	211.48%	25.16	999.90%
198	RENO, NV	1.8333	67.56	37.88%	140.97	120.27%	94.86	999.90%	126.85	37.88%
199	MANCHESTER, NH	2.4460	121.68	176.54%	140.97	85.48%	83.47	85.48%	136.31	999.90%

No.	DMU	1/Score	(O)totinc1 Projection	Change	(O)totinc2 Projection	Change	(O)totinc3 Projection	Change	(O)totinc4 Projection	Change
200	ATLANTIC CITY, NJ	1.5443	19.07	19.18%	60.77	125.08%	32.18	19.18%	57.21	19.18%
201	CAMDEN, NJ	1.0000	149.00	0.00%	282.00	0.00%	121.00	0.00%	142.00	0.00%
202	EAST ORANGE, NJ	2.3964	72.55	81.37%	145.10	81.37%	76.18	81.37%	107.30	410.95%
203	ELIZABETH, NJ	1.5938	155.10	22.13%	281.21	319.72%	116.50	348.06%	136.48	313.59%
204	IRVINGTON, NJ	2.9065	47.26	125.06%	77.31	186.33%	47.26	125.06%	29.26	125.06%
205	JERSEY CITY, NJ	3.3351	502.63	661.56%	481.40	190.00%	297.60	404.41%	345.18	163.50%
206	NEWARK, NJ	1.6835	400.96	656.53%	450.95	27.75%	211.07	48.64%	278.70	281.79%
207	PASSAIC, NJ	1.2919	29.85	6.59%	41.24	42.22%	31.98	6.59%	33.04	6.59%
208	PATERSON, NJ	2.4376	142.28	84.78%	155.22	84.78%	144.91	101.26%	443.48	84.78%
209	PERTH AMBOY, NJ	1.9754	57.78	48.16%	44.45	999.90%	9.92	98.47%	4.44	48.16%
210	TRENTON, NJ	1.9859	198.68	999.90%	201.08	48.95%	131.07	48.95%	149.33	999.90%
211	ALBUQUERQUE, NM	2.8040	324.20	145.61%	319.77	116.06%	200.37	954.60%	336.82	999.90%
212	LAS CRUCES, NM	2.9549	11.47	129.33%	42.61	136.74%	59.63	129.33%	115.59	140.82%
213	LINDENHURST, NY	1.8022	17.64	35.70%	51.86	548.25%	32.65	716.36%	65.14	35.70%
214	ISLIP, NY	8.8620	7.97	697.48%	63.80	697.48%	7.97	697.48%	49.27	999.90%
215	MOUNT VERNON, NY	1.8228	1.62	999.90%	7.26	999.90%	6.13	999.90%	12.34	37.14%
216	NEW YORK, NY	1.0000	1976.00	0.00%	832.00	0.00%	470.00	0.00%	195.00	0.00%
217	YONKERS, NY	3.5577	275.37	183.88%	411.24	954.45%	166.94	999.90%	206.85	999.90%
218	ALBANY, NY	1.4773	109.65	15.42%	212.33	417.89%	84.14	100.34%	93.89	40.13%
219	BINGHAMTON, NY	1.2497	27.30	4.99%	57.81	41.00%	45.18	55.80%	85.04	4.99%
220	BUFFALO, NY	1.7163	1072.83	731.65%	952.14	29.90%	348.16	444.00%	417.96	849.91%
221	NIAGARA FALLS, NY	3.9900	35.16	603.11%	64.81	224.06%	45.37	224.06%	129.62	224.06%
222	ROCHESTER, NY	1.5107	239.08	88.25%	361.17	17.26%	329.51	17.26%	813.80	17.26%
223	SYRACUSE, NY	1.5629	279.29	46.22%	312.71	20.27%	138.21	115.96%	178.51	128.85%
224	UTICA, NY	2.1834	54.17	64.14%	44.32	70.45%	22.98	64.14%	25.29	405.74%
225	ELMIRA, NY	1.1510	22.33	48.88%	62.52	83.90%	37.73	1.98%	132.57	1.98%
226	JAMESTOWN, NY	1.4617	12.60	14.58%	29.79	14.58%	13.18	229.38%	20.07	54.35%

			(O)totinc1		(O)totinc2		(O)totinc3		(O)totinc4	
No.	DMU	1/Score	Projection	Change	Projection	Change	Projection	Change	Projection	Change
227	CHARLOTTE, NC	1.6633	227.00	773.09%	150.47	26.45%	104.95	26.45%	354.00	405.72%
228	DURHAM, NC	1.6104	11.08	23.14%	18.25	160.72%	11.89	999.90%	11.18	999.90%
229	FAYETTEVILLE, NC	1.1830	70.95	2.83%	56.44	37.66%	14.40	2.83%	26.59	141.71%
230	GREENSBORO, NC	1.1889	130.99	211.88%	200.85	3.00%	115.09	42.09%	182.31	3.00%
231	HIGH POINT, NC	1.7700	26.70	33.50%	33.38	33.50%	8.01	33.50%	6.68	33.50%
232	RALEIGH, NC	2.8375	267.17	118.99%	181.76	118.99%	70.08	118.99%	85.85	758.53%
233	WILMINGTON, NC	2.9617	147.16	129.94%	83.10	196.80%	33.56	319.46%	32.19	129.94%
234	WINSTON SALEM, NC	1.8139	154.27	36.52%	129.69	36.52%	42.68	184.56%	45.58	82.34%
235	GOLDSBORO, NC	1.9211	5.77	44.16%	21.12	62.46%	25.46	409.26%	37.48	44.16%
237	EAST CLEVELAND, OH	1.1246	22.50	25.00%	47.65	1.38%	45.62	1.38%	32.34	223.42%
238	CANTON, OH	1.0000	54.00	0.00%	93.00	0.00%	105.00	0.00%	13.00	0.00%
239	DAYTON, OH	1.0000	79.00	0.00%	131.00	0.00%	110.00	0.00%	258.00	0.00%
240	AKRON, OH	1.0638	224.86	0.38%	511.95	0.38%	406.55	0.38%	982.75	40.80%
241	CLEVELAND, OH	1.5355	733.43	18.68%	912.63	18.68%	464.03	18.68%	868.79	93.93%
242	YOUNGSTOWN, OH	1.0000	166.00	0.00%	365.00	0.00%	163.00	0.00%	262.00	0.00%
243	COLUMBUS, OH	1.2605	453.16	5.39%	689.22	5.39%	325.64	5.39%	470.89	572.69%
244	TOLEDO, OH	1.0000	206.00	0.00%	291.00	0.00%	46.00	0.00%	64.00	0.00%
245	CINCINNATI, OH	1.0000	711.00	0.00%	1191.00	0.00%	160.00	0.00%	95.00	0.00%
246	HAMILTON, OH	1.7224	62.54	30.30%	72.29	167.73%	26.25	74.97%	24.76	30.30%
247	SPRINGFIELD, OH	3.2680	141.61	221.84%	185.33	157.40%	76.88	449.15%	79.65	165.49%
248	LIMA, OH	1.0000	104.00	0.00%	43.00	0.00%	21.00	0.00%	49.00	0.00%
249	LORAIN, OH	3.0258	58.91	135.63%	103.68	135.63%	42.41	135.63%	67.34	461.14%
250	MANSFIELD, OH	2.3250	8.78	75.51%	57.58	379.79%	25.70	542.39%	40.37	75.51%
251	LAWTON, OK	3.1945	27.58	150.75%	70.21	150.75%	11.94	198.41%	54.54	999.90%
252	TULSA, OK	1.4637	164.00	14.69%	239.70	14.69%	153.88	43.82%	331.88	83.36%
253	OKLAHOMA, OK	1.1796	168.48	2.73%	226.01	2.73%	204.44	2.73%	396.55	2.73%
254	NORMAN, OK	1.4766	9.23	15.38%	47.31	15.38%	29.84	129.57%	53.08	15.38%

No.	DMU	1/Score	(O)totinc1 Projection	Change	(O)totinc2 Projection	Change	(O)totinc3 Projection	Change	(O)totinc4 Projection	Change
255	SALEM, OR	2.8864	89.31	123.28%	87.08	123.28%	78.15	123.28%	216.59	123.28%
256	ALLENTOWN, PA	2.3769	70.11	79.76%	104.26	79.76%	52.13	79.76%	107.86	79.76%
257	HARRISBURG, PA	1.4210	48.96	63.20%	67.48	12.47%	26.99	12.47%	55.25	402.30%
258	LANCASTER, PA	2.1847	152.36	130.84%	177.38	64.24%	77.28	71.74%	159.31	64.24%
259	PHILADELPHIA, PA	1.0000	1339.00	0.00%	1334.00	0.00%	492.00	0.00%	614.00	0.00%
260	READING, PA	2.2272	174.36	412.82%	165.94	67.62%	61.79	113.08%	98.90	67.62%
261	SCRANTON, PA	1.1778	67.64	38.04%	160.93	62.56%	181.75	2.68%	466.67	69.70%
262	YORK, PA	1.0000	4.00	0.00%	27.00	0.00%	13.00	0.00%	33.00	0.00%
263	BETHLEHEM, PA	2.3234	31.57	75.38%	46.97	95.71%	24.55	75.38%	35.44	785.93%
264	WILLIAMSPORT, PA	1.5658	13.25	20.44%	30.42	176.53%	16.86	20.44%	18.35	66.83%
265	STATE COLLEGE, PA	3.7187	29.88	198.76%	23.90	198.76%	11.50	999.90%	8.96	198.76%
266	ERIE, PA	3.4244	228.00	635.48%	249.91	171.64%	138.54	171.64%	156.97	423.25%
267	PITTSBURGH, PA	1.0000	59.00	0.00%	60.00	0.00%	140.00	0.00%	214.00	0.00%
268	ALTOONA, PA	1.0000	83.00	0.00%	48.00	0.00%	13.00	0.00%	6.00	0.00%
269	JOHNSTOWN, PA	1.2264	9.70	93.97%	33.34	4.18%	26.05	4.18%	34.39	329.86%
270	PAWTUCKET, RI	1.0000	8.00	0.00%	42.00	0.00%	80.00	0.00%	206.00	0.00%
271	PROVIDENCE, RI	4.6662	112.54	288.05%	188.08	308.87%	291.04	288.05%	955.13	999.90%
272	WOONSOCKET, RI	1.0000	29.00	0.00%	39.00	0.00%	56.00	0.00%	18.00	0.00%
273	CHARLESTON, SC	1.9340	42.08	45.10%	50.34	164.94%	24.76	125.05%	26.12	45.10%
274	COLUMBIA, SC	1.9218	59.13	44.21%	57.39	719.79%	22.20	999.90%	17.31	44.21%
275	GREENVILLE, SC	3.3201	13.11	162.13%	55.05	162.13%	13.11	162.13%	41.32	999.90%
276	NORTH CHARLESTON, SC	1.6056	31.94	22.84%	46.82	290.19%	9.64	92.88%	11.21	999.90%
277	SPARTANBURG, SC	3.2905	28.54	159.44%	59.67	159.44%	36.32	159.44%	35.37	172.07%
278	SIOUX FALLS, SD	1.0000	155.00	0.00%	106.00	0.00%	47.00	0.00%	58.00	0.00%
279	CHATTANOOGA, TN	1.5509	185.82	257.34%	104.03	19.57%	32.54	71.26%	59.79	19.57%
280	KNOXVILLE, TN	1.7975	346.12	166.25%	171.93	35.38%	89.35	35.38%	184.97	105.52%
281	MEMPHIS, TN	1.0000	345.00	0.00%	520.00	0.00%	176.00	0.00%	201.00	0.00%

No.	DMU	1/Score	(O)totinc1 Projection	Change	(O)totinc2 Projection	Change	(O)totinc3 Projection	Change	(O)totinc4 Projection	Change
282	NASHVILLE AND DAVIDSON COUNTY, TN	1.5930	574.98	22.08%	474.88	22.08%	315.35	111.65%	641.26	143.83%
283	CLARKSVILLE, TN	1.3475	6.54	8.96%	57.32	421.06%	17.53	75.27%	39.23	8.96%
284	JACKSON, TN	1.9407	14.56	45.60%	34.94	45.60%	18.93	45.60%	21.06	75.50%
285	BEAUMONT, TX	1.0000	38.00	0.00%	75.00	0.00%	78.00	0.00%	30.00	0.00%
286	WACO, TX	1.6938	147.68	28.42%	145.12	28.42%	90.30	88.12%	174.65	28.42%
287	DALLAS, TX	1.0000	397.00	0.00%	1760.00	0.00%	906.00	0.00%	824.00	0.00%
288	FORT WORTH, TX	1.0000	315.00	0.00%	423.00	0.00%	234.00	0.00%	334.00	0.00%
289	LUBBOCK, TX	1.7081	32.34	29.35%	46.57	29.35%	27.16	29.35%	28.71	59.53%
290	HOUSTON, TX	1.0000	481.00	0.00%	1159.00	0.00%	825.00	0.00%	1855.00	0.00%
291	ODESSA, TX	1.9090	17.19	43.28%	48.72	43.28%	28.66	43.28%	43.96	193.07%
292	GALVESTON, TX	1.0314	91.09	0.10%	75.18	15.66%	38.04	0.10%	41.93	23.34%
293	ABILENE, TX	2.9948	119.04	340.88%	123.42	132.87%	35.57	223.35%	50.24	737.31%
294	AMARILLO, TX	1.0000	134.00	0.00%	291.00	0.00%	244.00	0.00%	729.00	0.00%
295	ARLINGTON, TX	1.3025	53.08	104.17%	111.31	7.03%	97.39	7.03%	294.32	7.03%
296	EL PASO, TX	1.0000	212.00	0.00%	477.00	0.00%	211.00	0.00%	167.00	0.00%
297	WICHITA FALLS, TX	1.0000	19.00	0.00%	85.00	0.00%	61.00	0.00%	192.00	0.00%
298	PORT ARTHUR, TX	1.9710	14.78	47.83%	50.76	81.30%	33.24	155.69%	39.92	47.83%
299	TYLER, TX	1.0000	53.00	0.00%	60.00	0.00%	28.00	0.00%	31.00	0.00%
300	COLLEGE STATION, TX	3.4517	21.93	174.14%	43.86	174.14%	37.14	312.63%	101.43	174.14%
301	PASADENA, TX	1.5182	1.85	84.94%	7.94	32.32%	7.19	139.75%	15.30	17.69%
302	DENTON, TX	2.3997	56.67	529.61%	101.72	81.64%	64.15	220.77%	156.21	81.64%
303	SAN ANGELO, TX	1.0000	11.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%
304	GARLAND, TX	3.0998	24.37	999.90%	50.87	142.24%	46.02	142.24%	100.61	164.76%
305	GRAND PRAIRIE, TX	1.1735	41.03	2.56%	55.52	516.85%	20.55	242.50%	22.97	474.15%
306	LONGVIEW, TX	1.6563	40.32	26.00%	48.51	67.27%	22.45	60.38%	27.43	204.82%
307	KILLEEN, TX	1.3251	19.44	7.98%	42.56	28.97%	29.38	83.60%	43.19	7.98%

No.	DMU	1/Score	(O)totinc1 Projection	Change	(O)totinc2 Projection	Change	(O)totinc3 Projection	Change	(O)totinc4 Projection	Change
308	BRYAN, TX	1.0000	7.00	0.00%	21.00	0.00%	14.00	0.00%	95.00	0.00%
309	IRVING, TX	1.0000	0.00	0.00%	0.00	0.00%	1.00	0.00%	0.00	0.00%
310	AUSTIN, TX	1.0000	61.00	0.00%	250.00	0.00%	256.00	0.00%	564.00	0.00%
311	BROWNSVILLE, TX	1.0000	1.00	0.00%	32.00	0.00%	27.00	0.00%	129.00	0.00%
312	CORPUS CHRISTI, TX	1.0000	108.00	0.00%	201.00	0.00%	420.00	0.00%	1335.00	0.00%
313	HARLINGEN, TX	1.2914	2.13	6.58%	57.26	999.90%	11.86	196.56%	60.75	6.58%
314	LAREDO, TX	1.0000	13.00	0.00%	62.00	0.00%	246.00	0.00%	244.00	0.00%
315	MCALLEN, TX	1.0000	3.00	0.00%	19.00	0.00%	147.00	0.00%	50.00	0.00%
316	SAN ANTONIO, TX	1.0000	361.00	0.00%	513.00	0.00%	348.00	0.00%	565.00	0.00%
317	SALT LAKE, UT	1.7067	204.24	29.26%	284.62	76.78%	122.80	29.26%	192.60	29.26%
318	OGDEN, UT	1.1187	32.68	30.71%	107.33	1.26%	97.21	1.26%	158.98	1.26%
319	CHESAPEAKE, VA	4.1360	91.43	603.28%	114.84	237.78%	81.07	237.78%	219.47	545.50%
320	HAMPTON, VA	1.6701	131.65	88.07%	110.39	26.89%	32.99	26.89%	79.01	88.13%
321	NEWPORT NEWS, VA	1.5025	145.49	53.15%	188.06	16.80%	69.92	79.29%	120.94	86.06%
322	NORFOLK, VA	1.2133	62.25	3.75%	135.09	60.82%	81.04	52.91%	176.37	3.75%
323	PORTSMOUTH, VA	1.0000	75.00	0.00%	129.00	0.00%	49.00	0.00%	59.00	0.00%
324	RICHMOND, VA	1.4844	158.65	15.81%	232.77	15.81%	233.93	15.81%	810.23	328.69%
325	ROANOKE, VA	1.9969	96.53	63.62%	112.32	49.77%	89.86	49.77%	216.51	228.04%
326	VIRGINIA BEACH, VA	2.0875	126.40	174.78%	228.72	56.66%	161.35	56.66%	414.52	129.02%
327	DANVILLE, VA	1.6629	41.72	26.43%	63.21	26.43%	29.08	26.43%	98.07	367.00%
328	LYNCHBURG, VA	1.0000	39.00	0.00%	77.00	0.00%	43.00	0.00%	25.00	0.00%
329	ALEXANDRIA, VA	2.8724	19.82	890.78%	48.85	122.06%	26.65	122.06%	44.41	122.06%
330	SEATTLE, WA	1.9671	752.50	47.55%	521.66	128.80%	204.48	258.74%	217.35	161.87%
331	SPOKANE, WA	1.5923	306.29	22.03%	174.50	22.03%	82.17	413.56%	95.21	765.56%
332	TACOMA, WA	2.5402	141.17	93.39%	284.90	849.65%	112.45	368.54%	122.93	179.38%
333	YAKIMA, WA	3.3694	69.32	166.62%	47.99	166.62%	34.66	166.62%	71.99	166.62%
334	BELLINGHAM, WA	2.9411	15.97	128.11%	17.21	244.22%	8.55	999.90%	9.44	999.90%

No.	DMU	1/Score	(O)totinc1 Projection	Change	(O)totinc2 Projection	Change	(O)totinc3 Projection	Change	(O)totinc4 Projection	Change
335	BREMERTON, WA	1.0000	4.00	0.00%	4.00	0.00%	25.00	0.00%	47.00	0.00%
336	CHARLESTON, WV	1.8934	11.37	42.16%	46.81	122.92%	31.73	58.66%	65.39	42.16%
337	HUNTINGTON, WV	1.0000	18.00	0.00%	87.00	0.00%	69.00	0.00%	38.00	0.00%
338	GREEN BAY, WI	2.0781	101.35	55.93%	106.03	55.93%	71.73	55.93%	142.81	549.14%
339	MADISON, WI	3.3593	217.87	165.69%	393.23	165.69%	199.27	165.69%	414.48	165.69%
340	RACINE, WI	1.0000	33.00	0.00%	140.00	0.00%	122.00	0.00%	187.00	0.00%
341	MILWAUKEE, WI	1.0000	1337.00	0.00%	828.00	0.00%	287.00	0.00%	263.00	0.00%
342	KENOSHA, WI	3.1255	20.75	591.60%	61.14	144.54%	24.45	144.54%	63.58	144.54%
343	EAU CLAIRE, WI	1.0000	35.00	0.00%	76.00	0.00%	29.00	0.00%	89.00	0.00%
344	LA CROSSE, WI	2.3283	40.27	475.29%	77.34	75.78%	45.70	75.78%	94.92	75.78%

APPENDIX F: DOCUMENTS TO BE REVIEWED

Documents to be Reviewed For the period 1992-2001

The following are documents that I would like to review if they are readily available. I understand that many of the older items may not be available. If any of the items are available electronically and can be sent by e-mail (mkkoerner@mail.utexas.edu) prior to my visit that would be greatly appreciated. For those items that are not available electronically, if you could locate and compile these documents prior to my visit, that would also be appreciated.

- Organizational Chart
- city budgets & budget reports
- Consolidated annual financial reports (CAFRs)
- Consolidated annual performance reports (req. by HUD)
- 5yr consolidated plan and annual action plans
- Home program guidelines
- request for proposals for HOME funding
- contracts or contract templates for HOME funding
- policies on CHDO certification
- any other HOME specific materials and/or policies
- any other housing programs or guidelines which affect HOME development
- Memorandum of understanding
- joint resolutions
- grant contracts/proposals
- strategic plans

APPENDIX G: CITY STUDY PROTOCOL

<p>Background on City <i>Sources: US Census, Maps, City/County Databook, American Metropolitan Statistical Abstract, Local Newspaper, Chamber of Commerce, interviews</i></p> <p>Demographics History Major industry Region and significance in region</p>
<p>Political Environment <i>Sources: ICMA surveys, city web page, organizational chart, by-laws, city council minutes, strategic planning documents, Master plans, interviews</i></p> <p>What is the form of government with details (council-manager, mayor-council strong/weak) partisan elections? districts or at large? do at-large members vote differently than district elected members? What are/were the most important issues in last 10 years (biggest challenges facing city)? What major community development events occurred? accomplishments, debacles, lawsuits, failures, federal paybacks? What is the relationship between decision-makers and managers? What are the lines of communication to and from departments? and city council? How frequently does city council meet? How frequently do council members speak with agency heads?</p>
<p>Administrative Structure <i>Sources: organizational charts, Consolidated Plan, Annual Performance Reports, studies or reports, interviews, budgets and budget reports, audits</i></p> <p>What is the organization of departments? particularly, how are the following functions organized? planning, zoning, economic development, community development, neighborhoods and family services, finance What is the role of each of these departments in housing? How is each related to each other and to the lead agency for housing? What is the organization of the department/agency responsible for housing programs? department, agency or independent authority? only housing? housing and community development? economic development? What is the level of independence?/autonomy? relationship to other departments, to city-council and mayor? How does city council and or mayor influence/control agency?</p>

If independent authority, where does legitimacy/authority come from? How created? and when?
 Are there specific reasons for the structure? historical, political or functional?
 What is the impact of the structure on activities?
 road blocks hurdles (i.e. advantages/disadvantages of being separate entity/under city authority)
 What department is responsible for consolidated plan?
 other organizations involved? who has input?
 who is lead on CDBG, HOME, ESG, bonds etc.
 How do other agencies/departments have input to plan?
 how is citizen participation incorporated?
 What are the characteristics of the departments involved in community development?
 Agency head: background, years with agency, previous position, from community or from somewhere else? appointed or hired? by whom? how dismissed? salary? other perks?
 number of staff: full time vs. part-time, average tenure, education levels/background - previous experience (number with private sector experience)
 number of career bureaucrats, years of experience, salary levels
 What is the size and character of city's budget for housing?
 What is the size and character of the department's budget?
 sources of revenue, expenditures, administrative costs
 if independent authority, how much of budget comes from city? what are other sources?

Housing Network

Sources: CHDO guidelines, CHDO certifications, Consolidated Plan, Annual Performance Reports, marketing materials, HOME data

How many nonprofits are involved in housing in the city?
 How many are certified as CHDOs?
 How many units produced (type activity, tenure)?
 What is role or nonprofit organizations? (as perceived by elected officials, by city staff, by nonprofits themselves, by for-profits)
 What are the characteristics of nonprofits?
 size, budget, number of staff, history - development, relation to other community organizations
 relationship to city, state, other housing organizations, banks, lenders etc., national intermediaries
 How many for profits are involved in housing? In what capacity? type of organization?
 How many receive money from city?
 How many units produced? (type, activity, tenure)?
 What are the characteristics of the for profit organizations?
 size, budget, number of staff, history, proportion devoted to affordable?
 development relation to community?
 relationship to other housing organizations, banks, lenders, national firms?

What is role of for profit organizations? (as perceived by elected officials, by city staff, by nonprofits themselves, by for-profits)
What is the relationship between nonprofit and for profit organizations? What is their relationship to the city?
How does the state fit in?
does the state spend Home \$ in city?
does state consult with city on lihtc projects in city or on LIHTC QAP?
What other organizations are involved?

Housing Strategies, Policies and Priorities

Sources: Consolidated Plan, Master Plan, City council resolutions, minutes, newspapers, interviews

What are the priorities as indicated in Consolidated Plan? budget?
Do elected official priorities agree? (with each other, with Con Plan, with staff?, with community, with HUD)?
How have priorities changed over time? in response to what?
are stated priorities reflected in funding allocations? how are priorities translated into funding allocations?
is income targeting important? why? to whom?
is geographical targeting important? why? to whom?
Have strategies been identified to meet priorities/goals?
What are the strategies? rationale?
Housing activities/programs: inventory of programs and guidelines/rules
homeownership - downpayment, owner-occupied rehab, MRB, MCC others?
rental - lihtc, loans, grants, rehab/new construction (preferences?)
number of people employed/hours per program?
administrative dollars/program? How distributed among activities? consistent with goals?
What have been the major accomplishments since 1991?
What have been greatest challenges? barriers? (get historical income limits 92-2001)

Mechanisms Of Governance

Sources: contracts, interviews

What is relationship between city and CHDOs?
What is certification policy?
What requirements for becoming a CHDO? How often re-certify?
What is relationship between city and for-profits?
are contracts used? competitive bidding, long-term commitments, relational?
number and frequency of face-to-face interactions between city and nonprofits/for profits?
Do participants 'trust' each other?

<p>How does city cooperate with lenders, builders, realtors? Do other entities cooperate with each other despite the city? How? and why? What are benefits of cooperation?</p>
<p>Performance <i>Sources: HOME database, Annual performance reports, city reports and city database</i></p>

APPENDIX H: CHARACTERIZATION OF SAMPLE CITIES

A detailed characterization of the six sample cities was undertaken as part of the comparative analysis of governance. This analysis compared the six cities on several elements of governance that potentially affect performance. These comparisons, described here, are organized according to Lynn's logic of governance as discussed in Chapter Two. The characterization begins with an examination of contextual factors including intergovernmental influences, inter-jurisdictional competition, demographics and culture; next, is a comparison of institutional level factors which include the structure and form of government, housing policy adoption, and the organization of departments; this is followed by an investigation of the managerial level of government which primarily focuses on the character and nature of the housing agency; and finally the analysis concludes with a comparison of the technical level of governance comprised of a city's network of housing partners.

Contextual Factors

When viewed as a system, the policy-making process exists within an environment that creates the context for the articulation of issues and the development of government choices. This context may differ over time or across localities but represents external influences to the system which are largely beyond the control of individuals. Similarities or differences in the contextual

factors that cities face in developing and implementing an affordable housing policy can help to explain similarities or differences in performance regardless of the strategies adopted in those cities. Therefore it is important to understand what those context factors are and how they potentially affect local housing policies. The key contextual factors which have an impact on housing policy in the six sample cities include intergovernmental influences, interjurisdictional competition, and culture and environment.

Intergovernmental Influences

According to R. Allen Hays intergovernmental power relationships have been a focal concern of community development policy. He states, "The resolution of these intergovernmental issues has profoundly shaped community development programs, and this, in turn, has greatly affected their impact on housing" (Hays 1995). The U.S. Department of Housing and Urban Development (HUD) as the major federal bureaucracy for housing and community development since the mid-1960s has been at the center of the federal-local struggle for more than forty years. The first efforts at decentralizing housing policy to the state and local level and the creation the CDBG program under Nixon's New Federalism initiatives which favored general-revenue sharing or special revenue sharing were instrumental in establishing HUD's role in federal oversight of local programs. "The original Nixon proposal called for no review of locally devised programs - the funds would simply be passed along with no strings, as in general revenue sharing" (Hays 1995). However, this plan met with strong resistance in Congress

and ultimately led to the passage of legislation which required localities to submit annual applications to HUD for CDBG funds.

HUD's oversight role was continued with the creation of the HOME program. Each HOME participating jurisdiction is required to submit a Consolidated Plan at least every five years which assesses the housing and community development needs of the jurisdiction. The Consolidated Plan serves as the application for federal funding under the CDBG and HOME programs as well as some homeless programs and the Housing Opportunities for People with AIDs (HOPWA) program. In addition, each jurisdiction is also required to submit annual Action Plans specifying how the money will be spent to meet the community's needs and Consolidated Annual Performance and Evaluation Reports (CAPER) which assess the jurisdictions efforts. Beyond these reporting requirements which are extensive, expensive and time-consuming, (although many state they are useful), jurisdictions are also subject to annual monitoring visits by HUD.

HUD has promulgated program regulations for the HOME program which incorporate a number of additional federal regulations referred to as "cross-cutting federal regulations". HUD has taken on the role of ensuring that participating jurisdictions not only spend the HOME money appropriately but that in doing so they also comply with these other federal regulations. The complicated nature of the HUD regulations creates an asset specificity barrier in terms of trained staff. It takes considerable time, effort and expense for city staff to gain sufficient

knowledge of the regulations in order to appropriately comply. If nonprofit and other private sector partners are involved they too must invest in such training.

Cities have adopted different approaches to dealing with the asset specificity requirements of the HOME program. Austin has determined that it is too costly and inefficient to expect their partners to invest in understanding the program regulations and has therefore designed programs at the city which minimize the need for their private sector partners to acquire the necessary skills in the HOME program. The city engages in all HOME eligible activities and finds that they can not administer all the activities with the allotted 10% for administrative fees under the program and must cover the additional administrative costs with local resources. Aurora on the other hand has chosen to minimize their asset investment requirements by only engaging in a limited number of eligible activities and avoiding those that trigger the most rigorous training of staff. Albuquerque, and to a certain extent Nashville, have required that their nonprofit sector partners understand the HOME regulations in addition to city staff. The investment in such knowledge may explain why many of the nonprofits in Albuquerque have experienced financial difficulty and failure, although the Nashville nonprofits have fared better.

In addition to creating asset specificity barriers the HOME regulations have other adverse affects, discussed more thoroughly later, and are perceived by many at the local level as unrealistic. For example, the lead-based paint requirements which require the use of a certified lead-based paint expert are difficult to comply with in Albuquerque where there is a lack of such experts.

Further, the Tennessee Department of Health found no cases of lead-based paint poisonings in the Nashville area for which the regulation is aimed to prevent. Many of the staff at the local level, especially in those cities without a locally adopted housing policy, act like or describe their role as enforcers of the HUD regulations. They are similarly perceived as agents of HUD by nonprofit community housing development organizations in the community.

In the early 1990s amid stories of corruption and scandal, HUD was slated for elimination by some members of Congress. The "Reinventing Government" report prepared by Vice President Al Gore's task force portrayed HUD as "the epitome of the smothering of local flexibility and innovation by excessive 'top-down' regulation"(Hays 1995). In an effort to save the organization, Secretary Cisneros adopted a "Blueprint for a Reinvented HUD" and sought to 'reinvent' HUD by down-sizing the bureaucracy and focusing on performance evaluation. The effect of this threat to the organization and the need to reinvent HUD was to create a need to be relevant. Thus, while Congress has attempted to devolve responsibility for affordable housing production to the local level, HUD has been struggling to remain relevant.

Since the middle of the 1990s HUD has sought to develop a greater local presence in many communities with the creation of over 100 storefront offices as well as placing more than 300 kiosks in local communities. As perceived by local participants in the HOME program, HUD is eager to take credit for affordable housing successes and quick to blame the local level for program failures. In one case, HUD staff from the local office planned a ground breaking for an affordable

housing project. Neither the city nor the state was invited (or even knew about it until it was over) despite the fact that both had played a role in the project. This oversight role in the HOME program is in stark contrast to the oversight of the other major affordable housing production program the Low Income Housing Tax Credit Program which is overseen by the Internal Revenue Service (IRS).

Beyond direct federal oversight, HUD also affects local implementation in more inadvertent ways. One example is that HUD, and the rest of the federal government, with their fairly recent focus on performance measurement has moved toward greater reporting of program outputs and outcomes. Therefore in addition to the required Consolidated Annual Performance and Evaluation Report which all participating jurisdictions must submit, HUD also collects data on the HOME program through its Integrated Disbursement and Information System (IDIS). The system is designed to collect comparable information nationwide but makes no allowance for differences that may exist among jurisdictions.

The system, although it collects a relatively rich set of data at the national level, is fairly useless to local jurisdictions in managing their HOME programs. In five out of the six cities studied the administering department had to create its own separate database to track their housing activities, and all six cities had separate accounting systems which were incompatible with the IDIS system. This resulted, in some cases, three different systems in which housing activity data had to be entered and reconciled: IDIS, the department database, and the city accounting system.

Historical patterns of federal interaction have also impacted local housing efforts. Perhaps the most obvious impact results from federal efforts under the public housing program. Nashville, Austin and Lexington, some of the first cities in which public housing was built have a large number of public housing units that suffer from the major shortcomings of that program - primarily poor project design and concentration of the very poor in one area. These cities now must deal with the impact these projects have had on their built and social environments. Both Lexington and Nashville have turned to another federal program the HOPE VI program for federal resources to destroy the existing public housing units and construct fewer new units of affordable housing. Austin, on the other hand through the vision of the current executive director of the public housing authority is seeking out other financing activities and ways to preserve the public housing units as a community asset.

Albuquerque, Aurora and Colorado Springs have little similar remnants of a failed public housing program since many of the units in these cities were built later and were less concentrated. In fact, Albuquerque has no multifamily public housing units but a series of scattered site units all over the city. Projects in these cities have greater difficulty in maintaining public housing units because they are smaller and more dispersed which increases the maintenance costs of these units.

Finally, federal action in the area of community development seems to have influenced the relationship of states to their major cities, at least in this area. In the 1960s, when the federal government began to give grants directly to large cities by-passing the states they began to develop a closer relationship with such

cities. Most of these larger cities have a closer relationship with the federal government in the area of community development than they do with their states. Many local participants perceive the federal government as a partner that can assist them in this area but not the state. Some even perceive the state as an obstacle to a number of initiatives. This disjuncture between states and their large cities becomes an important stumbling block in a devolved environment.

Whereas since the mid-1980s states have begun to develop new housing initiatives and create new sources of revenue for affordable housing projects, large 'entitlement' cities may not receive the benefits of such efforts. The states which have under previous federal programs assisted smaller suburban or rural municipalities have developed working relationships with such cities in the area of community development. Larger cities may be missing out on state resources for affordable housing and may be misunderstood by state-level policy-makers in the area of community development and housing.

Influences of the State

Despite a possible disconnect between the state and local levels in the area of housing policy, states are important influences in the governance of local housing policy. States affect local housing policy through state law and regulations that either directly or indirectly impact local housing efforts and through the ways in which they arrange or distribute other housing services and resources. Some specific examples will help to illustrate this point. In Colorado, the Taxpayer Bill of Rights a constitutional amendment known as TABOR adopted in 1992 as a tax relief mechanism, indirectly impacts local governments'

ability to pursue affordable housing production. TABOR which has been highly praised by some and highly criticized by others, limits the spending increases of all governments in Colorado to the rate of inflation plus population growth. The amendment creates barriers for local governments pursuing affordable housing projects by limiting their ability to issue long-term debt.

In a similar fashion the "anti-donation clause" of the New Mexico constitution has represented a barrier to pursuing affordable housing initiatives in that state. The clause prohibits any government: state, county, city, school district or special authority from providing a subsidy to the private sector. The effect has been to limit government's ability to partner with the private sector for affordable housing including prohibiting the use of idle assets such as land or publicly owned buildings from being converted to use as affordable housing. In 2002, an amendment to the constitution was passed that provides an exception to the anti-donation clause specifically for affordable housing.

In Texas and Tennessee state influences on local affordable housing are prominent in state tax policies. The state of Tennessee imposes a franchise tax on the assets of entities conducting business in the state which operates similar to a property tax. Nonprofit organizations which own real property including affordable rental housing projects are not exempt creating a disincentive for developers to produce affordable housing. Texas on the other hand provides a property-tax exemption for land owned by community housing development organizations (CHDOs). The exemption has created such a strong incentive for private sector for-profit developers to partner with nonprofit organizations that it

has become problematic in the sense that for-profit entities are taking advantage of nonprofit organizations. Also, the amount of real estate that has been taken out of local governments' tax bases has lead many to question the benefit of the exemption. Legislation in 2003 was introduced to alleviate these problems by requiring CHDOs to spend 40% the value of the exemption on services and for properties that are developed with tax-exempt bonds or tax credits to receive an exemption only if the partnership is 100% controlled by the nonprofit and 90% of the project's cash flow is spent on services.

The other major way in which the state impacts local affordable housing policy is through its control and distribution of certain resources for affordable housing development. These include the federal resources such as the Low Income Housing Tax Credit (LIHTC), private-activity bond volume cap, state allocations of HOME funds, as well as states' own sources for affordable housing. The majority of states will require that an affordable housing project seeking tax credits be supported by the city within which it will be located but beyond that cities appear to have little input on the priorities that are addressed with the tax credit program. Any input a city has is through the public involvement process and the city's voice has no special privilege over others.

A state may impact a city's affordable housing if it is willing to spend HOME funds that are allocated for those areas outside entitlement cities within those cities as some states have. For example, the state of New Mexico spends a portion of its HOME allocation within the city of Albuquerque specifically to serve persons with disabilities. Texas has also distributed their state HOME funds

to CHDOs in the city of Austin after failing to spend the money in rural areas and facing potential loss of the funds. In other states, entities that work in geographic areas that are greater than the entitlement city may receive both city and state HOME funds and have to deal with differences in city and state requirements for the expenditure of such. This is true of REACH, a nonprofit organization in Lexington providing down payment assistance in the area and for El Paso County Housing Authority which receives HOME funds from both Colorado Springs and the state of Colorado for down payment assistance.

Private activity bond cap represents an important resource for affordable housing that is distributed very differently in each state. In Colorado, each city is allocated its relative share of the cap which allows them to issue a certain amount of private activity bonds for use in producing affordable housing (or any other eligible uses). The city of Aurora, if it has not identified a specific project to be developed, usually gives up its allocation of private activity bond cap to a regional authority which issues mortgage revenue bonds for the entire Denver metro area. The authority does not guarantee that the amount of low-income mortgages made in the city of Aurora will approximate the amount of bond cap that Aurora provides. Therefore by cooperating in this way Aurora gives up control of a valuable resource for affordable housing. On the other hand, Colorado Springs shares their bond volume cap with El Paso County which also receives an allocation and the county issues single family mortgage revenue bonds. Because the population of the city represents a large share of the county population the city

of Colorado Springs is more likely, than Aurora, to reap the benefits of their own bond cap allocation.

The state of New Mexico allocates the majority of the bond cap for single family bonds which is given entirely to the New Mexico Mortgage Finance Authority (MFA), a state created quasi-public authority. The MFA then issues single-family mortgage revenue bonds for the entire state. The centralized nature of their operation means that they are best able to economize on the bond cap and recycle it to maximize the resource. Further, the economies of scale produce a revenue stream that allows the MFA to earn more than it costs to administer the program. Excess revenues are then turned into flexible resources that are invested in affordable housing statewide through various MFA programs. The remaining portion of bond cap is competitively awarded by the state to multifamily housing projects through an application process. Often the MFA will sponsor these projects as well and issue the bonds on behalf of a developer although cities and counties are also authorized to issue the bonds.

Texas allocates a single-family portion of its bond cap to cities around the state but places additional income targeting requirements on the cities beyond that required by the federal government. Often the amount of bond cap that a city receives is too small to be efficient and the added requirements make it difficult for some cities to utilize the cap. If they do not utilize the cap within a certain time frame it reverts to the Texas Department of Housing and Community Affairs (TDHCA) and the additional restrictions are relaxed. The city of Austin has generally traded a portion of its allocation of bond cap for mortgage credit

certificates (MCC). For multifamily projects, developers must compete in a lottery process for private activity bond cap.

The state of Tennessee allocates a portion of its bond cap to the Tennessee Housing Development Agency which issues single-family bonds for the state and takes applications for multifamily projects and issues the bonds on behalf of developers. Kentucky allocates its bond cap by committee through a competitive application process. Both Kentucky and Tennessee reserve the right to utilize a portion of the bond cap for state projects.

Influences of Counties

Not only is local governance affected by federal and state level institutions but in some cities governance is also affected by the arrangement and activities of county governments. In Colorado, all social services are delivered by the counties not by cities therefore cities play a limited role in social service programs. Aurora spans three different counties and has less of a relationship with each than Colorado Springs which is contained entirely within El Paso County. Colorado Springs and the county cooperate to administer affordable housing programs in the city. In New Mexico and Texas the counties play a more competitive role. For example, Bernalillo County in which Albuquerque is located competes with the New Mexico Mortgage Finance Authority to issue multifamily revenue bonds and for the right to administer the city of Albuquerque's down payment assistance program. The city of Austin places a number of requirements on housing projects within the city and will not issue bonds for a project that does not meet the city's

requirements but Travis County will issue bonds for housing projects within the city which do not meet the city's rigorous standards.

Lexington and Nashville are both consolidated city-county governments and therefore do not experience such county influences. The city of Albuquerque and Bernalillo County have attempted to consolidate on several occasions but the proposal has consistently been turned down by the voters. This is largely due to the fact that residents in both the city and county must separately approve of the consolidation. While city residents have approved the consolidation, residents of the county oppose such a move. A recent change in state law now provides that voter approval for consolidation will be determined by a majority of all residents in the city and county combined -- a move that severely disadvantages the residents of the less populated county.

Inter-jurisdictional competition

Of the six cities Austin, Aurora and Nashville are situated in metropolitan areas with a large number of other local jurisdictions. In both Austin and Aurora regional influences and what other jurisdictions are doing plays a larger role in policy making than for the remaining cities. In Aurora, which is the only city that is not a central city, there was a clear consensus among policy-makers and staff that the city be seen as "independent." This vision permeates much of the city's policy-making especially in the area of community development. In the last five years the city has embarked on an effort to build a new city center which has included: adding a new interchange to the freeway; establishing a tax increment financing district (TIF) for the development of a new commercial retail shopping

center; the development of a new detention center, library, municipal building, county building; and a proposed \$1 million renovation to the existing shopping mall. Both the geographic location and the architectural stature of the new municipal building which opened in April of 2003 symbolize the vision of Aurora as an independent city. Also, when the city of Aurora found that its down payment program was no longer meeting the community need, they surveyed the surrounding jurisdictions to identify potential programmatic changes.

Table H.1: City Relationship in Region

Sample City	MSA Name	MSA Population	City Population	% of MSA pop	# of Counties in MSA	# of cities in MSA	Central City	#HOME PJs in MSA
Albuquerque	Albuquerque, NM	712,738	448,607	62.9	3	12	Y	1
Aurora	Denver, CO	2,109,282	276,393	13.1	5	31	N	7
Austin	Austin-San Marcos, TX	1,249,763	656,562	52.5	5	40	Y	3
Colorado Springs	Colorado Springs, CO	516,929	360,890	69.8	1	8	Y	1
Lexington,	Lexington, KY	479,198	260,512	54.4	7	14	Y	1
Nashville	Nashville, TN	1,231,311	545,524	44.3	8	43	Y	1

The city of Austin although unlike Aurora in that it maintains a distinct identity not only by virtue of its central city status but also as the state capital, liberal center of Texas, Live Music Capital of the World and center of the Texas hill country, is also largely influenced by the presence of surrounding jurisdictions. In 1999 with the publication of "Through the Roof: A Report on Affordable Homes" by the Austin Community Action Network, the city declared

an affordable housing crisis. One of the major focuses of the report and city efforts since has been the need to retain affordable housing in the city for moderate income workers including city personnel, police, fire, and teachers that had begun to move to surrounding areas where housing is more affordable. The need to compete with surrounding areas for these residents has led the city of Austin to adopt a new housing strategy to increase the number of affordable units in the city and to make the development of new affordable housing easier. In the remaining cities there was little evidence that surrounding jurisdictions had any influence on policy-decisions.

Cultural and Environmental Aspects

Other dimensions of context which may serve to affect local governance of affordable housing include cultural and environmental aspects which influence citizen preferences. General demographics and demographic trends are important for understanding differences among the cities. The age of the population is important for understanding citizen preferences for housing. Figure 3.1 shows the age distribution of the six sample cities. Austin and Lexington have the largest proportion of college age residents due to the prominence of major universities in those cities. Both the Colorado cities have a relatively higher proportion of children. The cities have similar levels of the working age population while Albuquerque has the greatest proportion of residents at retirement age.

The age of the population is closely related to household type, in that those cities with more children have a greater proportion of family households, while the college towns have fewer family households and more non-family households.

Figure H.1: Age Distribution of Population

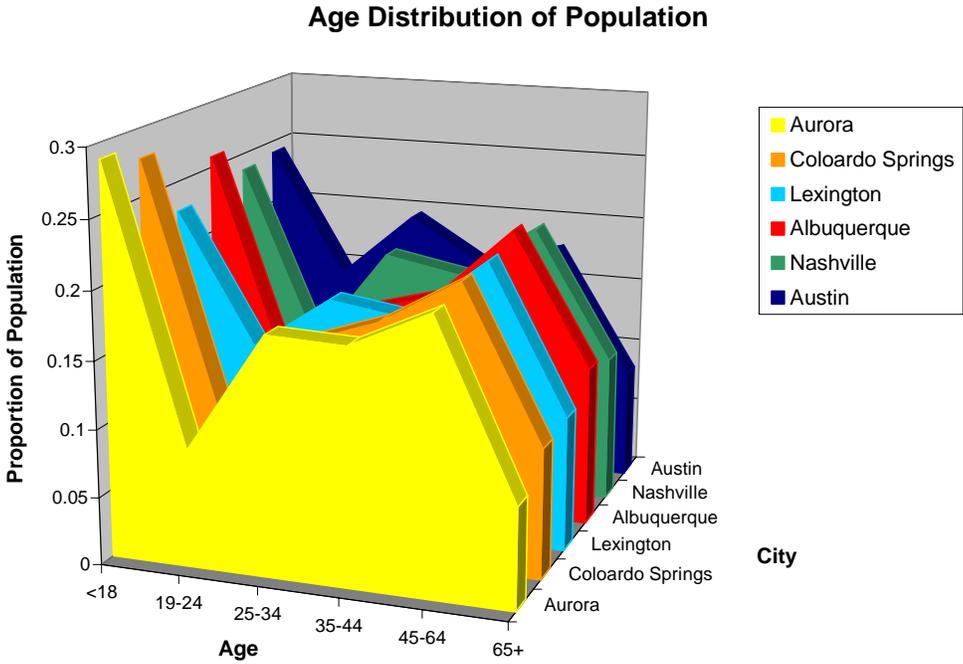
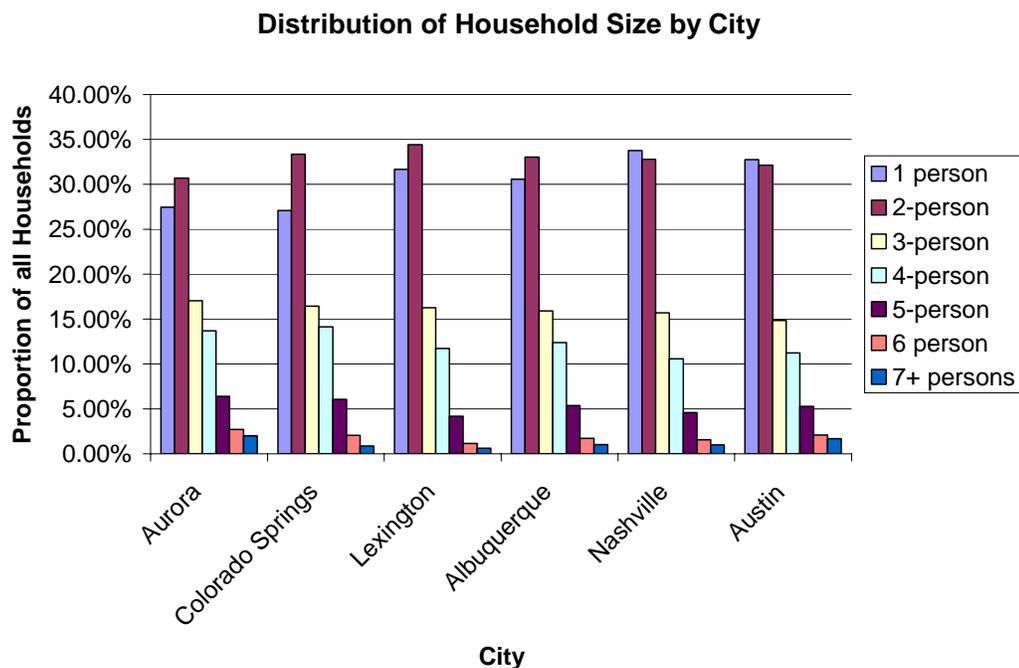


Table H.2: Household Type

City	% Family HH
Aurora	65.62%
Colorado Springs	66.23%
Lexington	58.71%
Albuquerque	61.70%
Nashville	58.12%
Austin	53.95%

Despite the differences in household type the distribution of household size across cities is very similar. In each of the cities one and two-person households make up 50-60% of all households as shown in Figure H.2

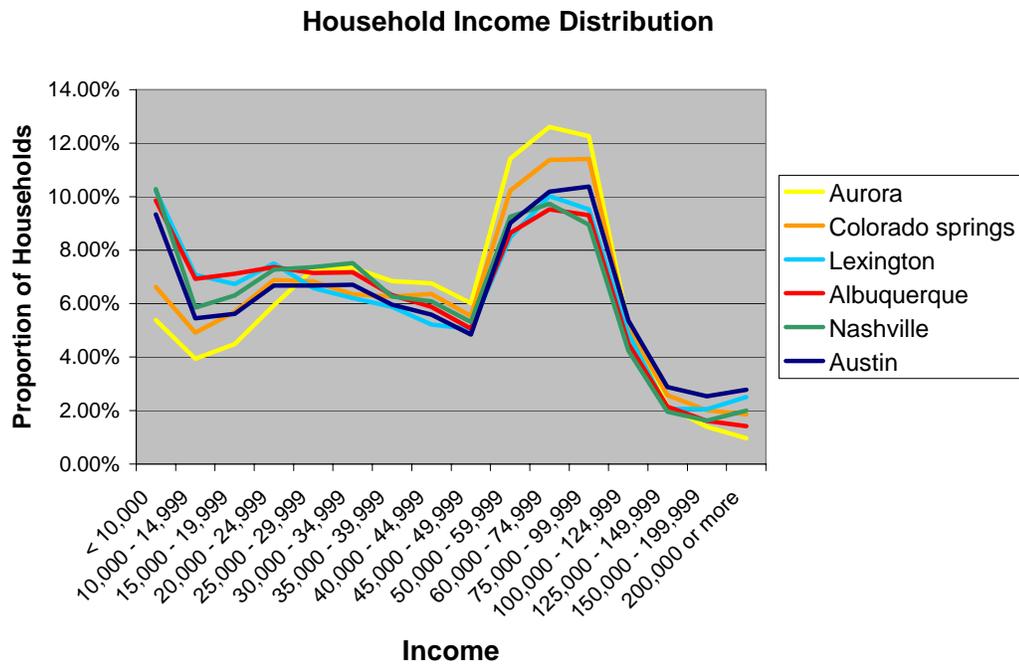
Figure H.2: Distribution of Household Size by City



Household type is also related to income in that family households typically have higher incomes than non-family households. And while the median household incomes across the cities are fairly similar, Albuquerque and Nashville have much lower family median incomes than the other four cities. The distribution of household incomes across the cities is also very similar as Figure H.3 illustrates. Aurora consistent with its suburban status has the greatest proportion of middle income households, while Austin has the most inequitable

income distribution and Albuquerque has the highest proportion of poorer households.

Figure H.3: Household Income Distribution



Growth and population density are important factors that affect housing affordability. The increased housing demand caused by population growth can result in demand exceeding supply which will drive up the price of housing. Greater density can indicate less available developable land and increased construction costs due to the need to build additional stories. Table H.3 compares the cities in terms of size, growth, and density.

Table H.3: Size, Growth and Density

	Aurora	Colorado Springs	Lexington	Albuquerque	Nashville	Austin
Population	276,393	360,890	260,512	448,607	545,524	656,562
State Ranking	3	2	1	1	2	4
National Ranking	61	48	64	35	25	16
Growth 1990-2000	24.58%	27.47%	15.60%	15.92%	11.74%	32.83%
Growth Ranking	592	523	879	859	1,064	426
Housing Units	109,260	148,690	116,167	198,465	242,451	276,842
Land area	142.5	185.74	284.52	180.64	473.32	251.52
People/sq mi	1939.6	1942.9	915.6	2483.4	1152.6	2610.4
Housing units/sq mi	766.7	800.5	408.3	1098.7	512.2	1100.7

Aurora, Colorado Springs and Austin have experienced the greatest growth suggesting that these cities may have greater difficulty in keeping up with housing demands. Albuquerque and Austin are the most densely populated reflecting constraints on growth. In Austin these include the multiple surrounding incorporated areas which prevent Austin from growing north or south. Albuquerque faces both political and physical constraints. They are constrained by certain physical barriers such as the Sandia Mountains to the east and by a lack of available water rights as well as by the presence of federal landholdings to the south (Sandia National Laboratories and Kirkland Air Force Base) and sovereign Native American Trust Lands to the north (Sandia Indian Reservation). The remaining cities have a greater amount of developable land available.

The cities differ in terms of culture and physical environment. Region of the country can be an important explanatory factor of both culture and environment. Austin, Nashville, and Lexington are regionally located in the South giving them a similar history and culture. They also are more similar to each other than to the other three cities in terms of their physical environment which can create or eliminate certain challenges with regard to housing development. This common history and culture may be expressed in a number of ways from holidays and celebrations to food and music to religion and political beliefs.

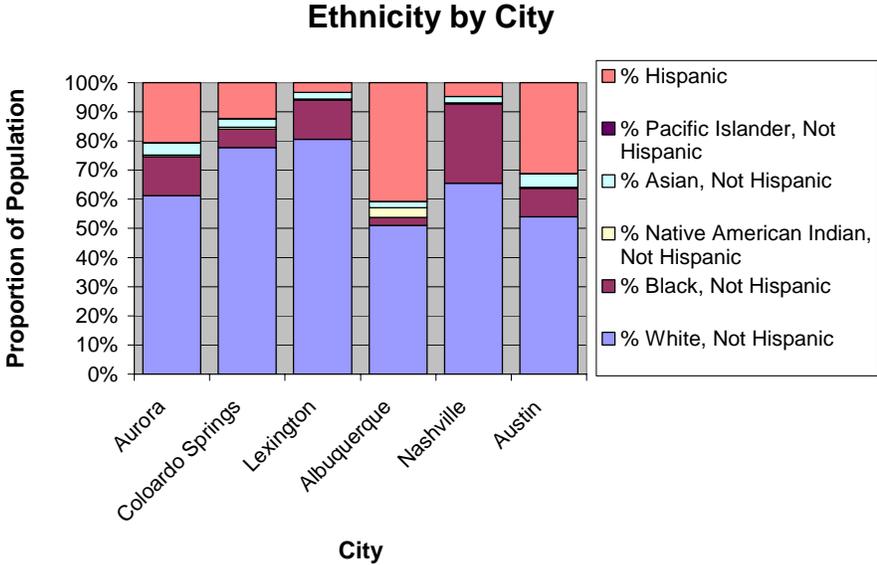
The South has long been regarded as the "Bible Belt" of America highlighting the importance of faith and faith-based associations in this part of the country. These cities are expected to have greater church attendance but also a greater presence in the community by faith-based entities which may play a larger role in affordable housing development than is the case in the remaining cities. Further, these cities are expected to have a greater network of social and community associations and may display more community pride. Further, the southern cities also experience a wetter climate which can affect the maintenance of structures. They may be subject to greater flooding as well as threats from tornados and hurricanes. These differences can lead to differences in housing design and use of different materials.

The western cities, of Aurora, Colorado Springs and Albuquerque are more likely to display a preeminence of the individual and an independence that is consistent with the western frontier mentality. The West is also a drier climate

with greater amounts of snowfall and more days of sunshine creating different challenges for building design and maintenance. Another important difference is that the western cities are more likely to have a federal presence as both an economic driver and a landowner. The presence of military establishments in these cities affects their economic development but also historical patterns of housing development. Significant land holdings by the federal government can reduce the local tax base in these cities as well.

In addition to regional differences in culture and environment, each of these cities also has its own unique culture and environment. One important element of a city's culture is the ethnic make-up of the population. Figure H.4 illustrates the different ethnic groups within each city.

Figure H.4: Ethnicity



Albuquerque is the most diverse with no majority group. They have the greatest proportion of Hispanics and Native Americans of any of the cities. Nashville has the greatest proportion of blacks. Perhaps even more significant than the overall make up are the changes that have taken place in the last ten years. All of the cities have experienced a large growth in their Hispanic populations with the greatest changes occurring in Aurora and Austin. In Nashville and Kentucky more than half the Hispanic population is foreign born while the remaining cities have more native born Hispanics.

The historical development of the cities is also important for understanding community development policy generally and affordable housing specifically. One of the major influences impacting the development of the cities was the building of the interstate highway system which affected each city slightly differently but left an impact which is still important today. In both Aurora and Albuquerque the interstate highway diverted traffic away from a major corridor. In Aurora, U.S. Highway 70 (or Colfax Avenue) was the traditional route carrying traffic west into the Denver metropolitan area. With the development of the freeway, traffic was diverted away from this corridor which thus declined. This corridor runs through the heart of Aurora (called Original Aurora) and is made up of a number of uses such as gas stations, restaurants and motor lodges. Revitalization of this corridor is an important goal of the community.

Similarly, in Albuquerque historic route 66 (Central Avenue) carried traffic east and west through the center of town until the interstate diverted traffic

away from this area. The city of Albuquerque is ahead of Aurora in that sections of this corridor have been revitalized but it remains an important area for community development. One of the nonprofits in Albuquerque has converted an old motor hotel into single room occupancy housing for people with mental illness and plans to do another.

In Austin the interstate did not change the flow of traffic but reinforced the segregation of ethnic groups by creating a physical barrier between the historic black and Hispanic neighborhoods and the rest of the city. This corridor is both a physical and symbolic barrier that prevents greater integration of the community. Community development efforts now target the area east of I-35 which threatens to gentrify the area. In Nashville the interstate cut through the traditionally black neighborhood cutting off residents from the major commercial corridor -- Jefferson Street. Many community development resources have been utilized to redevelop the corridor including new sidewalks, street lighting and rehabilitation of commercial facades. Each of these cultural and environmental factors creates unique and in some cases not so unique challenges for cities in producing affordable housing.

Institutional Level Factors

While contextual aspects are important determinants of system inputs, structural factors more clearly define and filter those inputs. Structural factors or organizations are a source of institutional change. Therefore while the contextual aspects remain largely external influences over which leaders have little control, structural factors are internal influences which not only can but must be adjusted

and adapted to meet new needs, challenges and new developments. The following differences in structural factors among the cities represent potential areas for change in order to improve government performance, but while these factors may affect the implementation of housing policy favorably or adversely the same factors may affect other policy arenas differently resulting in the need to compromise in the design of institutions to best meet a variety of different types of societal needs. Further, these institutional arrangements may dictate or prevent the adoption of different types of governance in the implementation of local housing policy.

Structure and Form of Government

The way in which cities elect their decision-makers, the form of government and the organization of departments combine to make each municipal entity unique. In the early part of the 20th century municipal reformers seeking to improve government efficiency and effectiveness sought to depoliticize and professionalize municipal governments. Although the goals of the reformers were implemented to differing and varying degrees in cities across the country, these goals represent useful dimensions for understanding current structures of municipal government in general. These dimensions include: form of government, partisanship of elections, election system, size of council, terms and term limits.

Form of Government

One of the primary goals of the reform movement was to separate politics from the administration of government. This was primarily accomplished by

changing the form of government from the mayor-council form to the council-manager form.

Three of the cities, Albuquerque, Nashville, and Lexington operate under the Strong-Mayor-Council form and the other three, Austin, Aurora, and Colorado Springs operate under the Council-Manager form. It is also interesting to note that Nashville (Nashville-Davidson County) and Lexington (Lexington-Fayette County) which have a strong-mayor form are both consolidated city-county governments and Albuquerque the other strong-mayor city has been trying to move to a consolidated city-county government.

The six cities represent several different dimensions of the form of government. The most similar are the council-manager cities -- Austin, Aurora, and Colorado Springs. In each case the mayor presides over the council and a mayor pro temp elected by the council (called a Vice Mayor in Colorado Springs) serves in the mayor's absence. Aurora has now has recently moved from a part-time mayor to its first full-time independently elected mayor.

In Lexington and Nashville the mayor has veto power. Lexington is unusual in that the mayor presides over the council with no vote but then has veto power over council decisions. Lexington also has an appointed chief administrative officer to over see day-to-day operations. In Nashville, a separately elected vice mayor presides over the council. In Albuquerque the mayor holds all executive power but does not have any veto power. The mayor appoints a CAO. The council elects a president from its membership to preside over meetings.

Partisanship

Another goal of the early reform movement was to eliminate partisanship from local governments. This has largely been adopted by cities nationwide which now hold nonpartisan elections. Some argue that political parties were historically key institutions for mobilizing potential voters to participate in elections. With the elimination of party influence at the local level municipal elections have experienced decreased voter participation. Although all of the cities in the study utilize nonpartisan elections, the City of Albuquerque is unique in the competitiveness of its elections due to campaign spending limits. According to National Voting Rights Institute, Albuquerque has experienced higher voter participation than other cities across the country and more competitive elections with greater turnover of incumbents (Spending limits work: Just ask albuquerque 2002).

Although this has been promoted as a positive aspect of Albuquerque's political life, when coupled with the strong-mayor-form of government it has some serious drawbacks for effective administration. Since the city has been operating under the campaign spending limits adopted in 1974, no incumbent mayor has been re-elected. Under the strong-mayor system where the mayor as chief executive officer appoints major department heads, this creates a situation where department heads turn over *at least* every four years. Albuquerque has also experienced frequent changes in departmental structure which eliminate some jobs add new positions and move employees back and forth. Such a lack of continuity creates serious difficulties for effective organizational management.

This represents an example of one of the major differences between a government bureaucracy and a private firm highlighted by James Q. Wilson (Wilson 1989). In a government agency, because of the relatively short tenure of the executives as well as their preoccupation with turf battles and gaining political support, the tasks of an organization are shaped by the incentives valued by operators and not by the preferences of the executive. In the case of the city of Albuquerque, middle level managers which represent the highest career civil service positions and had tenures exceeding 12 years over the course of three or four administrations, although showing deference to the mayor and their politically appointed department head, expended minimum amounts of their time and efforts on pursuing any of the preferences of the executive in order to minimize the disruption to their daily activities. They described their relationship with their superiors as one in which they spent the first part of any administration educating them on what the department does and the second half of the administration being ignored while the executives turned their attention to ways of gaining re-election.

Managers were ambiguous toward such lack of leadership in that it left them with considerable autonomy and freedom which they welcomed but also left them without the support and guidance that a corporate or public board might provide and which they coveted. Without such support, the managers faced few incentives and were less likely to take the risk necessary to engage in new programs or to make significant changes in their housing strategies than the managers in the council-manager cities. Front-line operators were influenced

even less by the preferences of the executive in execution of their daily tasks and had little respect for the department head who they perceived as being the recipient of political spoils.

The department head had little experience in managing a large organization and little experience in the substantive area as well but had worked hard on the mayor's campaign. As one operator described the situation, "There are fewer requirements for the position of department head than there are for the receptionist position." Although this phenomenon was the most pronounced in Albuquerque, there was also evidence that managers and operators in Lexington were influenced little by the preferences of the executives. In contrast the staff in the council-manager cities of Austin, Aurora and Colorado Springs had greater respect for their superiors and elected decision-makers, worked more closely with them, and communicated with them more frequently.

Election System

Early reformers also sought to change municipal election systems from electing members from single-member districts (or wards) to electing members at-large. Single-member district systems provide greater opportunity for minorities to be elected. Election system appears to be a particularly important aspect of government structure when discussing issues of housing and community development because of the place-based nature of such policies. The six cities represent very different election systems which can be described as four distinct types: mixed-unbalanced, mixed-balanced, single-member district, or at-large. Nashville and Lexington elect the majority of their council members through

districts with a small proportion of members elected at-large (mixed-unbalanced). Aurora and Colorado Springs also used a mixed system but with more balance between the number of members elected by district and at-large (mixed-balanced). Such a system allows for balance in policy decisions concerning community development. While each area of a city has a voice through its district representative, the at-large members bring to the discussion a "whole city" perspective which appears to minimize conflict among districts and allows those cities to develop more balanced strategies with the good of the whole in mind. Further, when a particular project under consideration is in one district the other district members are more likely to take a "what's good for the city stance" adding to the perspective of the at-large members rather than calculating and negotiating future benefits for their own district in the absence of such at-large members. The greater the balance between at-large members and district members the more this was the case.

In contrast, the single-member district election leads to calculating and negotiating for future benefits. Such as is the case in Albuquerque where all council members are elected through districts and policy discussions are more confrontational and combative. Further, neighborhood associations have greater power under such a system than in a mixed system where business and other special interests have a voice through the at-large members. The city of Austin represents the opposite extreme whereby particular special interests garner greater power in a system whereby all members are elected at-large. In Austin, a strong environmental group was able to back a number of candidates for office and elect

an entire city council that is sympathetic to environmental issues. As a result, environmental issues trump all other concerns in Austin policy decisions. For example, the director of the Neighborhood Housing and Community Development department indicated that the council has made it clear to him that they will support an affordable housing policy as long as it is not in conflict with the environment. This has meant that affordable housing policy in Austin includes a green build component that also promotes environmental concerns.

Council Size, Terms and Term Limits

The size of the city council, the length of members' terms and whether or not term limits are imposed can all affect the level of influence exerted in a city by certain groups as well as the level of citizen participation. The size of the council is important for the ways in which council members interact and are able to make decisions. Smaller council size may make decision-making easier but larger councils give greater voice to those being represented by virtue of the fact that each representative represents a smaller number of constituents. According to International City/County Management Association (ICMA), the size of the council in council-manager cities (five to nine members including the mayor) is generally smaller than that of mayor-council cities. For the most part this is true in the sample cities with the exception of Aurora which has an 11 member council and a full-time mayor. Still the size of the councils in the sample cities is fairly similar, ranging between seven and 15, with the exception of Nashville which has a 40 member council. This greater size coupled with the fact that the majority of the members are elected through districts makes place and neighborhood much

more important in decision-making in Nashville. As one person described it, "Each district acts like its own little fiefdom." Table H.4 illustrates the council size, whether members are elected by districts or at-large and the length of terms and term limits.

Table H.4 also illustrates that in council-manager cities the mayor is part of the city council while in mayor-council cities the mayor is a separate entity. Most of the cities have 4 year terms for the city council. The exceptions are Austin with 3 year terms and Lexington which has 2 year terms for district members with a 6-term limit and 4 year terms for at-large members with a 2-term limit. The council-manager cities impose a two-term limit while Albuquerque and Nashville impose term-limits only on the mayor.

Table H.4: Form of Government, Council Size, Terms and Term Limits

Sample City	Form of Gov't	Size of Council	Partisan Elections?	District Members	At-Large Members	Terms	Term Limits?
Albuquerque	Mayor-Council	9	No	9	0	4 years	2 terms [^]
Aurora	Council-Manager	11*	No	6	5*	4 years	2 terms
Austin	Council-Manager	7*	No	0	7*	3 years	2 terms
Nashville	Mayor-Council	40	No	35	5	4 years	3 terms [^]
Lexington	Mayor-Council	15	No	12	3	4 years	3 terms
Colorado Springs	Council-Manager	9*	No	4	5*	4 years	2 terms

* includes mayor

[^] applies only to mayor

Housing Policy Adoption

The presence or absence of a local housing policy is an important factor that may affect both the institutional structure for housing implementation and the performance of housing programs. Austin, Nashville and Aurora can be said to have a housing policy as determined by either one or more of the following: a dedication of local resources to housing beyond the federal matching requirement, the presence of housing on either the mayor or the council's agenda (other than approval of Consolidated Plan), or evidence of a consensus on council toward housing as expressed by managers. Albuquerque, Colorado Springs, Lexington have no such evidence of an adopted policy although they do allocate local resources to meet the federal matching requirement to receive HOME funds.

Both Austin and Nashville have allocated local resources for affordable housing beyond that required as federal match to the HOME program. Further affordable housing is an issue that has been raised and discussed among decision-makers. Although neither of these is true for Aurora, it was determined that they do have an affordable housing policy by the clear consensus on the housing issue that was expressed among decision-makers and city staff. Each person in the city and even external actors were able to relay the position of the council that the city had enough affordable housing but needed to improve the quality of that housing. The consistency with which this position was articulated by various individuals was remarkable and thus was considered evidence of a local housing policy.

The means by which the housing issue was placed on the agenda differed in each city. In Austin, public managers with the support of an

advocacy/stakeholder group, the Community Action Network, developed an affordable housing initiative in response to the city's adopted SMART growth strategy which was perceived as a threat to affordable housing. In Nashville the mayor campaigned on a platform that included affordable housing. Once elected the mayor has provided the leadership for an affordable housing policy in Nashville by creating the Mayor's Office of Affordable Housing. Both of these policy adoptions are recent. Austin's SMART Housing initiative was adopted in 2000 and Nashville's Mayor Purcell was elected in 1999.

Organization of Departments

The organization of executive departments varies considerably among the six cities and in some cases has important implications for how housing policy is implemented. Appendix D includes the organizational charts of all six cities. In four of the cities, Albuquerque, Aurora, Colorado Springs and Lexington, responsibility for the administration of the HOME program is combined with other HUD programs and responsibility for the Consolidated Planning process in a community development division. The division level is approximately three to four levels removed from the mayor in mayor-council cities or the manager in council-manager cities. These divisions are within departments where the department head is usually appointed and not covered by civil service protections but the division heads are hired civil servants.

The department within which the HOME and CDBG programs are administered varies by city and gives some indication of the relative importance and/or perspective of those programs within the city. In Albuquerque and Aurora

the community development division is in the department responsible for "community services" indicating that the HOME program is seen as a community service. Albuquerque's Family and Community Services Department is a social service department which also handles child and family services, community recreation and educational initiatives, substance abuse and public housing. Placement of the HUD programs within this department suggests that the city perceives these programs as more redistributive rather than developmental.

In Colorado all social service programs are administered by the counties such that the cities have no administrative role. Therefore, Aurora's Neighborhood Services Department handles animal control, community relations, neighborhood support and what is essentially urban renewal. Although seemingly less redistributive than Albuquerque due to the lack of social services, community development in Aurora does not rank as high in the organizational chart as development activities which have a more superior position in Aurora than in any of the other five cities.

Lexington, perhaps because of its smaller relative size, places its community development division within the Administrative Services Department. This is kind of a catch all department which includes such things as budgeting, public information, risk management, historic preservation and planning. What is interesting about Lexington's community development division is that it acts as a grant administrator for all intergovernmental grants that the city receives regardless of purpose. In addition to the HUD grants these include grants for such things as police and fire or social services which are activities undertaken in separate

departments. This suggests that administering these programs is seen more as administrative work than activities requiring special expertise.

Finally, Colorado Springs is the only city that places its community development division within the Planning Department which handles neighborhood services, transportation planning, comprehensive planning and land use, development review, and planning and data systems. This suggests that HUD programs are seen as related to city development, land use and urban planning.

In Austin and Nashville local housing policy occupies a more prominent position in the organizational chart while the administration of the HOME program is more removed than any of the other cities. This is consistent with the fact that these are the only two cities with a positively adopted local housing policy. In Austin the Neighborhood Housing & Community Development Office is a department level office which reports directly to the chief of staff. This office is responsible for the Consolidated Plan and HUD reporting, the administration of the CDBG program and the SMART Housing program but contracts out the administration of the HOME program to a city created and controlled nonprofit -- the Austin Housing Finance Corporation.

Nashville is perhaps the most unique in its local housing policy and administration of the HOME program. The most recent mayor has created the Mayor's Office of Affordable Housing which acts like a cabinet department to the mayor and operates with a single director and his secretary. The Office is an important advocate for affordable housing and works with the city council to

address affordable housing issues. The Office also distributes local resources that have been allocated for affordable housing by partnering with several nonprofits. The HOME program though is administered by a separate independent authority, the Metropolitan Development and Housing Authority (MDHA). MDHA is governed by an independent board appointed by the mayor and affirmed by the city council. Responsibility for the administration of the HOME and CDBG programs including the development of the Consolidated Plan is transferred to MDHA via executive order.

Institutions matter because they shape human interaction. The context within which local housing policy takes place as well as the organizational arrangements within which policy decisions are made create important constraints for public managers as they attempt to implement housing policies. HUD oversight of the HOME program creates a number of constraints that affect how local managers operate. While the influences of HUD are similar in each city, the influence of state institutions can create different constraints for public managers in different states. Differences in culture and environment can lead to the adoption of different priorities and strategies in the cities, some of which may be more or less efficient than others, but may never the less continue to be chosen by virtue of the institutional constraints those localities face. And finally, the organizational arrangements for decision-making and program implementation are important frameworks for understanding public manager behavior as well as governmental outputs.

The Managerial Level of Government

In order to understand the managerial level of governance it is important to look more closely at the agencies that are responsible for the administration of affordable housing programs. These agencies help to define the legal and normative constraints within which public managers operate and formulate strategies. Each city is different and therefore will be examined separately with regard to the characteristics of the housing agency. Important dimensions that are examined include the size and independence of the agency the role of the agency as perceived by city staff and also by their private sector partners, interaction with decision-makers and or level of influence, physical location, and history.

The affordable housing activities undertaken by these agencies rely on a combination of different federal and local resources the most significant of which is the HOME Investment Partnerships Program. In order to better understand the different strategies adopted by local managers it is important to look at expenditures and trends in the HOME program since its inception in 1992. Descriptive statistics from the HOME program will be utilized to examine local affordable housing strategies. Local policies and priorities of the sample cities along with details of their program operations will further illuminate the strategies pursued at the local level. The chapter concludes with a description of the network of housing partners that exist in each city to implement city priorities and an examination of how the network either hinders or promotes city efforts and further how city efforts affect the network and how the network affects city strategies.

Characteristics of the Housing agency

Aurora's Community Development Division

Aurora's Community Development Division of the Neighborhood Services Department is a 19 person division that is completely funded by the federal HOME and CDBG programs. Their major role is to manage and operate community development initiatives. HOME program staff are divided between down payment assistance program called HOPE (what's it stand for?) and a owner-occupied rehabilitation program. Less than .25 FTE is allocated to managing private sector partners. Staff plays an active role in each of these programs operating as either counselors or rehabilitation specialists that inspect homes and complete detailed work write ups. The average tenure of the division staff is 6.5 years with a range of 2 weeks to 14 years. The average salary of the staff is \$45,000.

The agency is also responsible for coordinating the citizen participation process and developing the consolidated plan. The division is physically separate from the new municipal building which houses all other city offices. The division is located in the heart of 'Original Aurora' the area towards which most community development efforts are focused. The division is located in a storefront with easy access for the public and potential beneficiaries. Despite its separate location the division staff communicate frequently with their superiors on a daily basis. They also communicate relatively frequently with city council. When they wish to make a programmatic change they propose the change to a citizen advisory committee of the city council. The committee then proposes the

change to the council. Staff are generally confident that if the committee approves of a change then council will adopt the change.

Because the division is completely funded by federal resources, they operate their own accounting system which mirrors the city's accounting system but allows them much faster turn around time on approving payments and disbursing checks. They also are not subject to the city's procurement policies. This separate status as well as the smaller size of the division means that a single person is responsible for entering data and reconciling the IDIS system and the city accounting system which avoids many problems between the two systems. The division works very well with other divisions and departments and relies to a great extent on the code enforcement division to provide referrals.

Colorado Springs' Community Development Division

The city of Colorado Springs' has recently reorganized its community development operations in order to eliminate a vacant manager position in a time of tight budgets. The Community Development Division is a 22 person division of the Planning Department. It too is responsible for HOME and CDBG programs and the Consolidated Planning Process. A greater proportion of the division staff is devoted to redevelopment with the federal funds. The average tenure of division staff is 14 years with a range from 2 to 27 years. The average salary is \$53,000. Colorado Springs is the only city that incorporates the process of allocating federal resources into its own budget process. Thus their consolidated planning process is not separate but integrated with the city budget. Progress on the expenditure of federal resources is monitored along with the

remainder of the city budget. While most of the division staff are located downtown in the city offices, part of the division which administers the owner-occupied rehabilitation activities under HOME are located in a separate neighborhood site in a rehabilitated single-family house, a site shared with two nonprofits engaged in affordable housing. This separate site provides greater public access and also consolidates housing activities and encourages communication with the nonprofit organizations.

The city has just experienced a turnover in the city manager position. The previous city manager was knowledgeable and involved in community development issues and often facilitated discussion on such issues between the division staff and city council. While this promoted much communication between staff and decision-makers it required a great deal of staff time in preparing reports and memos. The newly hired city manager was previously the police chief and it would appear will adopt a much more hands off approach to community development issues freeing city staff from reporting requirements to pursue activities such as new program development. The division works well with other departments and when a programmatic issue affects multiple departments, they try to gain a consensus among the departments before they present an issue to the city council.

Lexington's Community Development Division

Lexington's Community Development Division of the Administrative Services department has a staff of 10 which are largely administrative and also includes three code enforcement officers. The average salary of division staff is \$37,000 a year. The division is located in the city/county building. The division staff are not actively involved in affordable housing provision although they do operate an owner-occupied rehab program. They primarily perceive their role as obtaining various resources including those for housing from the federal government and making them available to the community. The division reports directly to the chief administrative officer but did not appear to interact with him or elected decision-makers very frequently. Although the division does what is required to comply with the HOME program regulations, they do not feel that they have the time to go beyond the regulations. That is, any recommendations or suggestions of best practices that HUD promotes will not be implemented by the division unless they are codified in the regulations.

Albuquerque's Community Development Division

The city of Albuquerque's Community Development Division of the Family and Community Services Department has a 12 member staff. The Community Development Division is physically located downtown in the city/county building but both Albuquerque Housing Services and the Mortgage Finance Authority have separate locations with available parking that are more accessible to the public. The division staff rarely communicate with decision-makers and then only through formal channels such as city council meetings.

Most often staff rely on nonprofit organizations or citizens to bring issues to the council. There is somewhat of a confrontational attitude toward decision-makers on the part of staff. Often decision-makers are seen as the enemy of affordable housing. This attitude largely stems from a history of the city council siding with particular neighborhood groups or special interests (private landlords or contractors) to strike down and eliminate affordable housing activities undertaken by city staff.

The lack of support for staff efforts on the part of decision-makers as well as the "policing" attitude adopted by staff toward their partners has created an environment for affordable housing with little trust among the players involved. Private sector partners do not trust the city staff because there is always the threat that elected decision-makers may overturn a commitment unless it is in writing and even then it is questionable. The city has been sued on several occasions for approving a development project and then changing the rules after the private developer has invested sunk costs. These are long drawn-out lawsuits (10 years) that the city is losing.

The city also does not trust its private sector partners. The assistant director of the Family and Community Services Department stated that they don't trust nonprofits to manage city owned properties, and they don't trust for profit entities to spend federal money.

Nashville's Metropolitan Development and Housing Agency and Mayor's Office of Affordable Housing

Nashville's Metropolitan Development and Housing Agency was one of the first public housing authorities in the nation created in the 1938s. It is an independent public authority governed by a volunteer public board. The authority has since taken on additional roles including that of development authority for Nashville and Davidson County. The authority owns and operates 5800 units of public housing plus 500 scattered site units and administers the Section 8 program. The authority has a large number of construction and engineering personnel on staff because of the public housing program which gives them expertise that can be utilized under HOME program initiatives. The agency also administers a number of social service programs for its housing residents. Administration of the city's CDBG program (and subsequently HOME and consolidated planning responsibilities) were granted to the agency in 1979 through an executive order, a move which sought to depoliticize the use of federal funds.

The agency is made up of 10 different departments. HOME and CDBG are administered through the Development Department which is divided into the Community Development Office and the Urban Renewal Office. The Community Development Office has a staff of 29 many of which are experts in rehabilitation and development. The average tenure of staff is 16 years and ranges from one to 36 years with the agency. The average salary of the Community Development Office is approximately \$48,000 per year. The agency and all its departments are located on the site of one of the public housing

developments. As the agency has grown it has taken over some of the public housing units and converted them to office space. The independent nature as well as the consolidation of various roles vested in the agency gives it several advantages over other administrative arrangements. The first advantage is that it provides for long-term leadership. Over the agency's 65 year history it has had only four executive directors. The latest director, Jerry Knisely, was with the agency for 22 years. Nonprofit organizations in the community said that they feel very collaborative and they attribute the collaborative environment to the strong leadership of MDHA and Jerry Knisely. He was highly spoken of as the guy in the public sector that was most like private sector and could bring a project in on-time and under budget. When one of the nonprofit organizations won an award for rebuilding a project, the director began his acceptance speech with, "I want to thank God and Jerry Knisely."

The second advantage is that the agency has such a strong presence in the community that it is seen as very powerful and it thus garners a lot of trust from its partners. Beyond its housing activities the agency wields the power of condemnation and has been instrumental in a number of key urban renewal projects including the development of the convention center in 1987, the designation of south Nashville as a federal enterprise zone in 1994, the building of an arena in 1995, and most recently the development of the football stadium that is home to the Tennessee Titans. As a result one of the nonprofit directors described the agency as the most power government agency in Nashville. This perception of power creates a great deal of faith in the agency's ability to get

things done among the nonprofit housing developers and other important community entities such as banks.

The agency plays a significant role in shaping the built environment in Nashville and is very supportive of nonprofit community development corporations. In 1996, MDHA established a separate component with a separate independent board of directors to begin to establish a pool of local resources for housing. The MDHA committed \$200,000 of operating expenditures and because of faith in the agency and the director several banks also each committed \$250,000. In 1999, the component split off from MDHA as a nonprofit Community Development Financial Institution (CDFI) called Nashville Housing Fund which then received \$3.2 million from the U.S. Treasury. The Nashville Housing Fund is a resource agency that finances affordable housing and affordable housing development. It is an important asset for nonprofit community development organizations to acquire financing.

In addition to the Metropolitan Development and Housing Agency, Nashville's mayor has recently created the Mayor's Office of Affordable Housing which is the means for communicating policy issues (or instigating policy change) to elected decision-makers. The director of the office speaks frequently with nonprofit organizations and MDHA as well as the mayor and city council. This added political arena for housing has elevated affordable housing as a policy issue and should facilitate future initiatives.

Austin's Neighborhood Housing and Community Development Office and Austin Housing Finance Corporation

Austin's Neighborhood Housing and Community Development Office is the city department responsible for housing, community development and economic development including urban renewal. The department administers the HOME and CDBG programs and is responsible for developing the city's Consolidated Plan. In addition, the department also administers several local initiatives that are funded with local resources. Federal resources including HOME and CDBG and local resources allocated to affordable housing activities are contracted out to the Austin Housing Finance Corporation (AHFC).

The Austin Housing Finance Corporation was created in 1978 under state enabling legislation for the purpose of issuing tax-exempt bonds to provide below market rate mortgages to low-income families. The AHFC operated as a conduit organization issuing bonds until 1997 when the city's department of Neighborhood Housing and Community Development (NHCD) began to contract all responsibility for affordable housing production to the AHFC thus turning it into a service authority. The reasons for this transfer of responsibility were more instrumental than theoretical. That is, administration through the AHFC overcomes certain difficulties but was not, as might be expected during this time, an effort to separate provision and production or decision-making and implementation. The AHFC hierarchy has certain advantages over the city hierarchy in the administration of housing programs, but the change does not necessarily represent an effort at marketization. The legal structure of the AHFC, as a nonprofit corporation, allows public managers to avoid procurement and

surplus asset disposal regulations and grants them higher levels of discretion in spending. The separate nature of the AHFC also allows it to invest to a greater extent in low-income housing projects without risking the assets of the city.

The AHFC, though, is only a separate entity on paper. Although the state enabling legislation would allow the AHFC to be an autonomous entity through the appointment of an independent board of directors, the city council has chosen to maintain control over the organization by appointing themselves to the AHFC board. The board is made up entirely of city council members with the mayor serving as chairman and the director of the Neighborhood Housing and Community Development department serving as treasurer. The city manager is the AHFC director; all employees are city employees on contract to the organization; and they are physically located in the city building. The idea of "buffering" managers from politics and any benefits that might accrue thereof are completely absent in this scenario. Further, in examining the production of affordable housing for the five years prior and five years following this administrative restructuring there is no evidence that the change impacted the city's performance.

The AHFC is divided into two functional areas, one dealing with homebuyer and homeowner financing the other concerned with development (both single family and multifamily) of affordable housing. The AHFC through its contract with the city's Neighborhood Housing and Community Development (NHCD) department receives three sources of funding for affordable housing activities: the HOME funds, Community Development Block Grant funds, and

Housing Trust Fund resources which are appropriated from the city's general fund. In addition to these revenue sources the AHFC is also authorized to issue tax-exempt revenue bonds for the purpose of financing affordable housing.

The AHFC annually receives an allocation for the issuance of single-family revenue bonds from the Texas Bond Review Board a portion of which they currently exchange for authority to issue Mortgage Credit Certificates. The Mortgage Credit Certificate allows a first-time homebuyer to take a 20% credit (rather than deduction) of their annual mortgage interest for the life of the loan. The additional tax benefit helps low-income buyers to qualify for mortgage financing when they might not otherwise. Unlike the single-family revenue bond allocation, the capacity to issue multifamily bonds is allocated through a lottery system with projects that propose to meet certain state standards (such as serving the lowest income renters) receiving priority. The AHFC submits potential projects on behalf of local developers and if the allocation is granted will serve as a conduit agency for issuing the bonds. The issuance of mortgage revenue bonds and origination of mortgages or MCC creates an opportunity to generate revenue through fees or arbitrage. This revenue can then be used by AHFC in any manner, a resource advantage that none of the other cities experience.

The Technical Level of Local Housing Policy: Character and Nature of the Housing Partners

Community Housing Development Organizations

In the six cities studied each had either one or two relatively established CHDOs with the capacity to develop affordable housing projects coupled with a

number of smaller organizations in the capacity building stage. The established CHDO was usually an older organization that had been in existence prior to the development of HOME and thus has over ten years of experience in housing. These organizations were also more likely to have links to numerous other funding agencies such as banks and foundations and were members of large national intermediary organizations such as Neighborhood Reinvestment Corporation. These organizations have operating budgets that exceed \$1 million; the largest of which is \$7.5 million and support from the city represented less than half of their operating budgets. Table 4.21 provides a comparison of these organizations. The established CHDOs were also more likely to serve a larger, usually citywide geographic area. The work of these organizations was supplemented by smaller developing CHDOs.

Table H.5: Characteristics of Established CHDOs

City	CHDO name	FTE	#units	Financial Position	Year est.	Affiliation
Albuquerque ¹²	YES Housing, Inc.	42	1300	\$7-8 mil assets	1998	YDI social service and National Council of La Raza
Aurora ¹³	Aurora Housing Corporation	0/47	90/500	\$5 mil operating budget	1985	Wholly controlled by public housing authority
Austin	Foundation Communities	60 +30 part-time	1815	\$35mil assets/ \$7.5mil operating	1984	Neighborhood Reinvestment Corporation
Colorado ¹⁴ Springs	Greccio Housing, Inc.	12	144	\$5.4 mil assets/\$1.3 mil operating	1990	None, grassroots org.
Nashville	Urban Housing Solutions	23	500	\$1.3mil operating	1991 est. as council/ 1997	None
	Affordable Housing Resources	15	90	\$13 mil budget	1989/ merged 2 orgs 1997	Neighborhood Reinvestment Corporation
	Bank of America Community Development Corporation	2	2000-4000/yr	Not comparable	1983	Bank of America
Lexington	Fayette County Local Development Corporation	2 shared	150	\$1.2 mil assets/ \$1.14mil operating	1981	Urban League

¹² Albuquerque has recently experienced the failure of its most established nonprofits including Neighborhood Housing Services of Albuquerque, Rural Housing, Inc. and a third Greater Albuquerque Housing Partnership is recovering from financial hardship following embezzlement and loss of city funding.

¹³ Aurora Housing Corporation is staffed by the Aurora Housing Authority.

¹⁴ Greccio Housing is also experiencing financial difficulties although Colorado Springs has two other rapidly developing nonprofit developers: Partners in Housing and Rocky Mountain Community Land Trust.

The developing CHDOs are engaged in activities such as housing counseling and partnering with others for the purposes of experiential learning. They are more often linked to a geographic area developed out of a neighborhood or religious organization or they are associated with a special needs population such as the elderly or homeless. Neighborhood organizations have focused primarily on housing counseling and homebuyer assistance programs or revitalization of existing housing stock through acquisition and rehab of single family units or infill development building one or two single-family units at a time. These organizations are largely voluntary with little to no paid staff and are heavily dependent on the city not only for housing resources but also for operating support. Often these organizations are financially threatened and find it difficult to meet the reporting requirements of the HOME program.

On the other hand, organizations that serve special needs populations often develop out of a larger social service organization and although they have greater organizational capacity they have little experience in real estate development. These organizations are relatively better off financially than neighborhood organizations because they have a more diverse resource base from which to draw (such as service grants targeted at their specific clientele) and are therefore less dependent on the city for operating resources but still require technical assistance and training from the city in order to pursue their housing goals. These organizations are also attractive partners for for-profit developers seeking to develop housing for low income residents under the Low Income Housing Tax Credit program. Such developers often wish to develop the property for a fee and

then get out of the investment. Social service organizations seeking to serve and house a special clientele can continue to own and manage the property after the developer is gone. These organizations help the developer compete for tax credits from the state which give preferences to nonprofit organizations. Unfortunately the relationship is sometimes less advantageous to the nonprofit that may learn little about housing development and may absorb much of the costs of the development without the benefit of profit or fees.

Relational Contracting

In such an environment local governments face little competition for the HOME resources and little choice among providers of housing services. Traditionally competitively-bid contracting is thus expected to be less effective at controlling agents than in situations with greater competition. Consistent with this theory, the cities rely less on traditional contracting and more on what economists call "relational-contracting" (Sclar 2000). Relational-contracting relies more on trust and reputation than on competition for ensuring compliance among agents. As Sclar argues the formal contract is less important than the trust between the organizations involved. Such is the case with housing development under the HOME program.

Each of the six cities 'certify' their CHDOs prior to committing HOME funds. The certification process involves evaluating their eligibility to receive funding under the rules of the program as well as verifying their capacity and often providing technical assistance as to the rules, regulations and procedures that must be followed. Each city maintains a list of certified CHDOs some of

which may not have received any HOME funds. Some cities also require re-certification of CHDOs periodically. The certification process requires a certain amount of information sharing among the city and the nonprofit and generally contributes to trust-building among the organizations. All of the cities engage in relational contracting to some extent.

Most cities determine how the HOME funding will be allocated among different activities and made available to their nonprofit partners through a negotiated process often involving citizen participation. Usually the process is intended to minimize competition and therefore conflict among the organizations. An important component for a successful process is the presence of an affordable housing committee, roundtable, or forum which meets regularly throughout the year and involves each of the different types of stakeholders: representatives from each of the nonprofits, city personnel, local banks, private developers, social service organizations and citizens.

Two different approaches are prevalent in the cities in allocating funds to nonprofit organizations. One is to establish a somewhat longer term commitment to nonprofit organizations for housing and or operating support (Albuquerque, Aurora, Lexington, Nashville). The organizations do not have to compete or complete an application for such funds and can usually expect to receive a relatively similar amount in future years if performance is maintained. In some cases the informal agreement between the city and the nonprofit may call for declining amounts as the organization becomes more financially independent.

Perhaps the most significant aspect of this type of arrangement is the lack of or insignificance of a formal legal agreement between the parties. Contrary to conventional wisdom and current notions of performance contracting that call for clear and specific formal agreements, agreements for HOME funding between the local jurisdiction and the nonprofit, are often informal or simple and vague 2-page or fewer documents that outline the understanding of each party. This approach may also be supplemented with competition for additional funding. The second approach to allocating HOME funds adopted by the cities is to maintain an open project review process (Austin, Colorado Springs). Instead of an annual determination of funding allocation, cities announce the availability of HOME funds and specify the characteristics and requirements of the type of projects they would like to see undertaken and then review proposals on a first-come, first-serve, case-by-case, as needed basis.

Although partnering with nonprofit community development organizations represents an important component in local affordable housing policy it represents only part of the picture. Few cities rely solely on nonprofit organizations for the delivery of housing services. In fact, on average only 18% of city HOME funds are expended by nonprofits. The remaining funds are expended either by the city itself or in conjunction with a variety of other important partners. In addition to the development activities of CHDOs all of the cities in this study also utilized their HOME program to fund down payment assistance for first-time homebuyers and owner-occupied rehabilitation of existing housing stock. Although these programs are largely undertaken by the cities themselves they too rely heavily on

other private sector partners for their success and represent further examples of relational-contracting.

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Vita

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Prior to entering the graduate program at the LBJ School of Public Affairs, University of Texas at Austin in the fall of 1999, Mona worked in many capacities and different industries all of which involved public-private sector contracting. These included transportation planning for a civil engineering firm, socio-economic analysis for an environmental research company, administration of a small high-tech research and development company, and planning and research for New Mexico's state housing finance authority.

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