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by

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Mobility Bond 2020:

Setting the Precedent for the Future of Public Transit in Austin

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Report

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Abstract

Mobility Bond 2020:

Setting the Precedent for the Future of Public Transit in Austin

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Public transportation bonds are essential for cities that hope to effectively invest in providing residents with competitive mobility options. Yet, Austin has seen little success in its attempts to directly fund the city's public transportation projects through bonds. This report analyzes news articles and research papers to understand why two public transportation bonds from 2000 and 2014 were not successfully passed in Austin, and the key opportunities the city can capitalize on to pass a public transportation mobility bond in 2020.

Soon, several factors that may provide a compelling case for a successful public transit mobility bond can align. First, there will be an important presidential election in November 2020 that will draw many voters to the polls. Second, Capital Metro (Cap Metro), Austin's public transportation provider, alongside partner consultants are actively pursuing an updated comprehensive public transportation plan called Project Connect.

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And third, Austin voters passed a significant \$250 million bond commitment to affordable housing development in the November 2018 midterm elections. This report finds that the timing of the election, plans for Project Connect, and residents' desire to address major problems in Austin all provide a unique opportunity for the city to propose a public transportation mobility bond in November 2020.

This paper will discuss how Austin can learn from past mobility bonds and case studies in other cities that have voted on public transportation bond funding. The report will also analyze the basis for the 2020 mobility bond (Project Connect) and summarize the forthcoming decisions that will guide the next iteration of public transportation in Austin. Finally, this paper will address the misleading tendency to promote public transportation investment as a solution to congestion. The report will consider how the city has communicated development of Austin's public transportation network and identify opportunities to target affordability as a priority.

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Chapter 1: Introduction

A BRIEF INTRODUCTION TO PUBLIC TRANSPORTATION BONDS IN AUSTIN

Historically, funding for public transportation in Austin, Texas has lagged, but an opportunity exists in 2020 to finally fund a system wide network. One of the ways cities attempt to fund public transportation projects is through mobility bond elections, in which residents can vote whether to tax themselves as a method of raising funds. In 2014, the City of Austin attempted to pass a bond that would have gathered \$600 million in city funds and leveraged an additional \$600 million in matching federal funds to improve both the city's public transportation network and road infrastructure. This proposition failed when 57% of voters chose to cast their ballot against it (Wear, 2014a). Since then, 59% of voters supported the passage of a \$720 million mobility bond focused on funding non-transit related "local, corridor, and regional mobility improvements" within Austin's street network (City of Austin, n.d.-b). But is there room for a future mobility bond solely dedicated to public transportation; and if so, how can the city justify the need for public transportation infrastructure to its wary residents? With a major election year that includes a presidential cycle coming up in 2020 and a carefully considered Project Connect plan already in the works, the city could see different results if it tries again. ¹

This professional report will review factors that will formulate the basis for Austin's next mobility bond from three broad perspectives: successes and failures of bond elections, the

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¹ Project Connect is Austin's public transportation plan that was outlined just before the 2014 election, in which the bond failed and Project Connect was not funded. Since 2014, Project Connect has been updated, and the city intends to use the plan as a basis for a mobility bond vote in November 2020. Project connect is further outlined in Chapter 3.

considerations of Project Connect, and alignment of affordable housing and public transportation investments. The research will not just tell the story of Austin's rocky history with public transportation mobility bonds. This paper will identify how to learn from past mobility bonds in Austin, analyze the basis for the 2020 mobility bond (Project Connect), and summarize the forthcoming decisions that will guide the next iteration of public transportation in Austin. This paper will also encourage taking lessons learned from other cities that put public transportation plans and funding up to a city-wide vote. Finally, the research will consider how the city has communicated development of Austin's public transportation network and identify opportunities to target affordability as a priority. Ultimately, the process of planning for a 2020 mobility bond is an immense task. It is my hope that this paper can provide a summary and analysis of the process and note some opportunities to actively engage with a unique election cycle, learn from other cities, and contribute to an affordable Austin.

IS AUSTIN READY? JUSTIFYING THE NEED FOR TRANSIT

The U.S. Census Bureau ranked Austin 12th out of 15 cities in terms of recent population growth between 2016 and 2017 (Census Bureau, n.d.). This expansion has yielded significant challenges in housing affordability and traffic congestion in Austin, and it comes across in the feedback the city receives from its residents. Over 800 people participated in the most recent Zandan Poll, published on April 20, 2017.² Figure 1 shows that 74% of participants chose to

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² The Zandan Poll is an annual survey directed and funded by Peter Zandan, a longtime Austin Resident and global vice chair at Hill+Knowlton Strategies. The firm conducts the poll, which "is an objective and scientifically-based survey" that aims "to increase understanding and dialogue on key community issues" (Cambia Information Group & Hill + Knowlton Strategies, 2017).

identify traffic, roads, and transportation as one the most important problems facing Austin today (Cambia Information Group and Hill & Knowlton Strategies, 2017). Despite the failed passage of Austin's last public transportation bond in 2014, congestion and local travel was on the minds of residents. In the 2014 Zandan Poll, 80% of voters chose traffic, roads, and transportation as Austin's top problem (Cambia Information Group & Hill + Knowlton Strategies, 2017).

What do you think are the three most important problems facing Austin today?

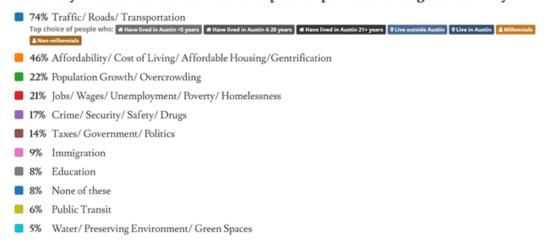


Figure 1: Zandan Poll: Three most important problems facing Austin today (Cambia Information Group and Hill & Knowlton Strategies, 2017)

WHERE DO WE GO FROM HERE? SETTING THE PRECEDENT AND WHERE THIS RESEARCH FITS IN

If Austinites are concerned about transportation, why did the 2014 bond fail, and is the city ready to try to invest in public transportation to effectively expand mobility options? The failure of the 2014 bond does not mean that future public transportation improvements in Austin are doomed, but that changes must be made to build a better precedent for public transportation. Austin must decide how public transportation fits into an overall commitment to infrastructure improvements. Three guiding forces will shape the mobility landscape in Austin over the next several years: Project Connect, the Austin Strategic Mobility Plan (ASMP), and the Corridor

Mobility Program.³ Further, from December 2018 when the plan was improved, through the end of 2019, important decisions will be made regarding how public transportation will function in Austin. All policy discussions and decision making, planning and visioning, and advocacy in the upcoming months and year will be integral to forming a comprehensive transportation plan and funding package by 2020.

QUESTIONS AND METHODOLOGY

The overarching question I am asking in this research paper is, how will Austin build and pass a better and more successful public transportation mobility bond package in 2020? My research will explore this theme by centering on several questions that pertain to the successes and failures of bond elections, the considerations of Project Connect, and the narrative surrounding public transportation investments. The topics considered in this report are described in further detail below. Throughout the report, these points have been addressed using relevant news articles and professional research sources.

³ More information on Project Connect, the ASMP, and the Corridor Mobility Program is below.

- Project Connect is Austin's plan for expanding public transportation as referenced in Footnote 1. It will be discussed in further detail throughout Chapter 3.
- The ASMP is a comprehensive document that outlines Austin's mobility goals, policy recommendations,
 and measures of success in the next 20+ years (City of Austin, n.d.-a). Additional information regarding the
 ASMP will be covered in Chapter 3.
- The Corridor Mobility Program was born out of the 2016 mobility bond that successfully aligned \$720 million in bonds to fund infrastructural improvements in the street network of several major corridors.
 More detail on this program is in Chapter 2.

Successes and failures of bond elections

Given Austin's history with unsuccessful public transportation mobility bonds, the city may consider reasons why the bond elections in 2000 and 2014 failed. A contextual background and analysis of the bond failures could help keep Austin from making the same mistake again in 2020. Chapter 2 begins by providing an overview of Austin's public transportation network and hypothesizing on what federal funding options might exist to support the implementation of Project Connect. The chapter primarily considers the history of the 2000, 2014, and 2016 bond elections in Austin. It describes how transportation usage and voting patterns have changed since 2000 and what that means for future public transportation bonds. Chapter 4 provides detail on two case studies as an example of how Austin may benefit from looking to peer cities' experiences investing in public transportation through mobility bonds. These case studies discuss how cities build support for bond funding during prime election years and contemplate what mistakes Austin could avoid for upcoming mobility bonds.

Considerations for Project Connect

Project Connect's system wide blueprint for public transportation in Austin will serve as the basis for a future mobility bond. Chapter 3 will provide context for the form and structure of the plan and detail the key decisions that will further shape the plan in 2019 before City Council votes on whether to approve it for the 2020 ballot. The chapter will also discuss Project Connect's alignment with the ASMP, the city's comprehensive vision for mobility goals and transportation policy. The ASMP highlights Austin's desire to diversify transportation options so that fewer commuters are driving alone. Project Connect is integral to giving residents more public transit options and will be key in the goal to reduce solo commuters by the ASMP's 2039 timeline.

Narrative surrounding public transportation investments

Austin has previously focused on congestion as the primary impetus for public transportation. Chapter 5 notes how studies have shown that public transportation's impact on reducing citywide congestion is limited, as there is no single solution to traffic. Further, this chapter explores the debate surrounding location efficiency, the theory that living in transit-accessible and compact neighborhoods will lower a household's transportation expenses, as they are more likely to use of public transportation. Further, understanding how affordable housing may contribute differently to the theory of location efficiency reveals that there is a unique intersection of transportation and affordable housing. The work suggests the city consider affordability as the driving narrative for a 2020 mobility bond.

To first understand how a transformative bond proposal in 2020 may develop, we must look to Austin's experience proposing public transportation bonds in elections. The following section will expand on public transportation bonds in 2000, 2014, and 2016; summarize transportation ridership and recent improvements; and elaborate on why a new mobility bond is possible now.

Chapter 2: Austin's Mobility Bond History & Future

AUSTIN'S CURRENT PUBLIC TRANSPORTATION LANDSCAPE

Cap Metro administers public transportation via MetroRail and MetroBus in a system network depicted in Figure 2. A defining feature of Austin's landscape is the Colorado River (locally known as Lady Bird Lake), which bisects the city. Public transportation connects the two sides of the river on corridors like North and South Lamar Boulevard, East 1st street, and Congress Avenue. These routes sit between two major expressways, Mopac and Interstate 35 (I-35). Several corridors run east and west through central Austin such as East and West Cesar Chavez Street and East and West Martin Luther King Jr. Boulevard. Other corridors extend to outer Austin, like Airport Boulevard, which connects the Austin-Bergstrom International Airport to North Austin.

Another route that connects Austin to its suburbs is MetroRail, a 32-mile heavy rail system that operates on pre-existing freight tracks and carries commuters from the Austin Convention Center downtown to the northwest suburb of Leander. Cap Metro established MetroRail and its only route, the red line, a decade after the rail proposal failed in 2000 (Beyer, 2016). The system, which was estimated to cost \$90 million, ended up costing \$148 million and served about 1,500 riders a day according to a 2016 Forbes article (Beyer, 2016). As of December 2018, daily ridership average for weekday boardings had increased to 2,434 people per day (Capital Metro, 2018a). Cap Metro is investing in the system, and in April 2019, the agency broke ground on an improved three track, two platform MetroRail station with a plaza at the convention center, the smallest but busiest station (Rodriguez, 2019).

Cap Metro's other transit network, MetroBus, consists of two components. The first is the High-Frequency Network, which consists of 14 bus routes that provide Austinites with service

every 15 minutes seven days a week from 6 a.m. to 8 p.m. (Capital Metro, n.d.-a). Two of those lines (the 801 and 803) provide more frequent service on bus rapid transit (BRT) Lite routes and saw 13,858 average daily weekday boardings December 2018 (Capital Metro, 2018a). Cap Metro also manages many other bus routes in Austin with less frequent service that saw a combined weekday ridership of 63,691 boardings per day in December 2018 (Capital Metro, 2018a). This estimate also includes the University of Texas at Austin (UT) shuttle bus network with routes from outlying areas to campus. Cap Metro also provides MetroExpress busses that bring suburban commuters to central Austin. MetroExpress saw an average daily ridership of 2,137 boardings in December 2018 (Capital Metro, 2018a). The bus network provides the region with reliable service, thanks to the new "Cap Remap" effort that expanded frequency of certain MetroBus routes. Still, to encourage mode shift to meet Austin's goals, Cap Metro will need more investment.

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⁴ BRT Lite is like a rapid bus transit system, but without dedicated lanes. Typically, BRT Lite will include "signal prioritization so that buses don't have to wait at stop lights" (Craver, 2018d).

⁵ Cap Metro implemented Cap Remap to improve bus frequency in June 2018. The program is detailed further within Chapter 2.

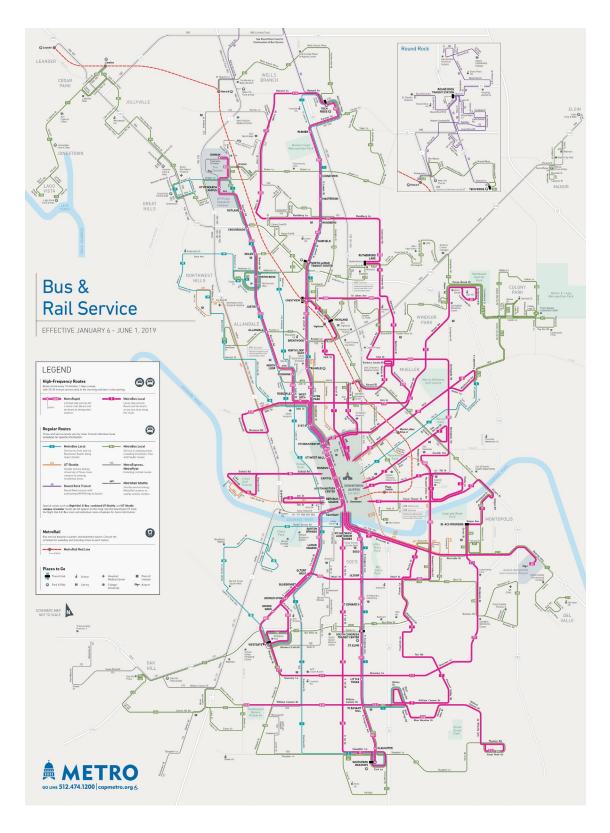


Figure 2: Cap Metro System: Bus & Rail Service (Capital Metro, 2019)

FINANCIAL AND POLITICAL CONSIDERATIONS

Austin aims to expand upon this network with the updated Project Connect plan. The city is hopeful that, should a mobility bond pass in 2020, federal funds could also support the project. However, the city has yet to determine as of Spring 2019 how the proposed bond would be matched through additional financial resources. Therefore, "Capital Metro is hoping that the feds can pick up half or more of the capital costs" (Craver, 2018b). "The real element that we've got to remember is no matter what we do, local money is not going to be enough," said Randy Clarke, President and CEO of Capital Metro, "and we need federal resources to come to the table" (Hasan, 2018). Austin's goals with Project Connect are ambitious, and the large-scale and long-term infrastructure project requires more support.

Todd Hemingson, Cap Metro's vice president of planning and strategic development, notes that, "we are trying to create a true regional vision for Central Texas" which requires a "multigenerational investment" over time (Denney, 2018b). At this point, Cap Metro is primarily considering federal grants from the Fixing America's Surface Transit Act (FAST Act) which was first passed in 2015 to commit \$2.3 billion a year for local transportation projects "through the 2020 fiscal year" (Craver, 2018b). There are several federal grants that are made available through the FAST Act, two of which (Small Starts and New Starts) would offer funding for implementing projects that are either new fixed guideways, fixed BRT, or extensions to an existing system (FTA, 2015). Small Starts also offers funding for corridor-based BRT (FTA, 2015). Their distinction is in the amount of funding they can provide. New Starts fund projects with a cost "equal to or greater than \$300 million", while Small Starts funds projects that cost "less than \$300 million" (FTA, 2015). Although their evaluation requirements differ, they both call for an environmental study as mandated by NEPA that considers "both the built and social

environments," and includes a review on "how a particular service could drive better land use patterns or accelerate gentrification in vulnerable neighborhoods" (The Austin Metropolitan, 2018).

Another key piece required for federal funding consideration is robust support for the program. Carolyn Flowers, a former FTA and AECOM official, noted the importance of maintaining this support to the Austin Monitor. "During the process, if they see any sign of lack of support for the project, the project slows down" (Craver, 2018b). Aside from making the case to federal entities for the project, the City must advocate the benefits of Project Connect to Austin residents, first and foremost.

AUSTIN'S RELATIONSHIP WITH PRIOR BONDS

The 2014 mobility bond was not the first effort Austin made to propose funding for public transportation development. Twenty-first century Austin is marked by three major mobility proposals in 2000, 2014, and 2016 that are detailed in the following subsections.

2000

In 2000, a rail proposal for a nearly 14.6-mile light rail corridor shown in Figure 2 that would have supported an estimated 37,000 trips a day was rejected by residents of the Capital Metro (Cap Metro) service area (Henry, 2014c).⁶ This ballot item was unique, as the initiative was not considered a bond and it would not have required property tax increases to fund its

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Metro, n.d.-c).

⁶ Cap Metro has provided Austin's regional public transportation since 1985. The agency is not managed by the City of Austin but is led by a "board of directors appointed by various governing entities within the service area" (Capital

development (Henry, 2014c). The referendum asked residents with a simple, ten-word proposal to consider light rail in general as opposed to a specific plan (Henry, 2014c).

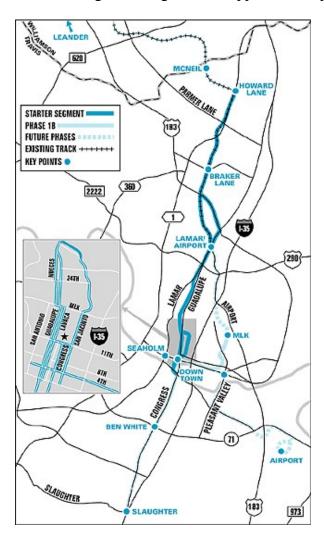


Figure 3: Same as it Ever Was: Austin's 2000 light rail plan ("Same as It Ever Was," 2000)

The actual plan was ranked by the Federal Transit Administration (FTA) as a New Starts project. Funding from the FTA for New Starts projects supports new light rail or commuter rail systems as well as additions to existing rail or BRT systems (FTA, 2015). The FTA ranked the project as a "medium" (a two on their three-point ranking system) and recommended that Congress approve half of the \$739 million project (Clark-Madison, 2000). The FTA ranks

recommended projects after reviewing several categories including, "saving people travel time, serving low-income households, reducing air pollutant emissions, saving energy, costing less to operate than the status-quo system (usually, and in Austin's case, bus service) or other alternatives" among other categories such as "transit-supportive land use and future patterns" (Clark-Madison, 2000).

While the FTA recommended that Congress provide funding for the plan, the project did not receive enough support at the local level to ultimately receive federal financing. Although a majority of City of Austin residents voted for the line, the geographic boundary of the election was bound to the Cap Metro service area and included suburban votes outside of Austin city limits that tipped the scales against the project. The referendum failed by fewer than 2,000 votes in the election (Henry, 2014c).

2014

By comparison, the 2014 election saw a much larger difference in votes for and against the route. The \$1 billion bond ended up failing by a whopping 27,289 votes (Wear, 2014a). It lost when 57% of voters disapproved and 43% approved the bond (Wear, 2014a)⁷. As pictured in Figure 5, it appears that the election was held within Austin city limits. One might assume from this history that public transportation bonds are unwanted by Austin area residents. However,

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⁷ Because many Council members were up for reelection in 2014. Mayor Lee Leffingwell was also outgoing, due to term limits. According to the ballot language for the rail bond, the next city council would have needed to authorize \$400 million for road improvements for the rail network to get built (Henry, 2014a). So even if the bond had passed, it is not guaranteed the new Council would support it.

there is more to this story. 2014 was not a favorable year for any ballot item. It was a midterm election year in which only 22% of registered Austin voters turned out to the polls or voted absentee, as compared with the 51% of registered voters who participated in 2016 (DeBeauvoir, 2014). Speculation on what went wrong in 2014 is wide, but an analysis of news articles at the time points to several themes that affected its misfortune. Less than optimal timing and a plan that did not focus on a system-wide network were the initial writings on the wall for this mobility bond.

Firstly, the bond focused on the wrong corridor. Project Connect's initial mapping imagined a 9.5-mile light rail line between Highland Mall and East Riverside Drive as shown in Figure 3 (Pritchard, 2017). A petition to develop high-capacity rail along the Guadalupe and Lamar corridor was signed by 1,035 residents; a group of seven associations and the UT student government also supported the alternate alignment on Guadalupe (Wear, 2014b). These groups believed in relieving congestion where traffic and development are most concentrated.

Nonetheless, Austin's Mayor at the time, Lee Leffingwell, was skeptical of Guadalupe and Lamar's ability to transition into a rail corridor, stating that, "nobody, least of all me, is going to be willing to turn Lamar Boulevard into a two-lane route for rail" (Wear, 2014b).

The Mayor's stance was echoed by the Central Corridor Advisory Group, a 16-member group the Mayor put together and "charged with settling on an initial route" (Wear, 2014c). The group was criticized by advocates of the Guadalupe/Lamar alignment like rail advocate Lyndon Henry, who asked for a position but was not chosen to be on the advisory group (Wear, 2014c). Henry suggested that, "Mayor Leffingwell is picking people who will basically rubber-stamp what the city has been trying to do" (Wear, 2014c). While the Mayor aimed to "make an honest

effort to keep open minds as we go through this alignment process," the decision was heavily influenced by certain interested groups, such as UT (Wear, 2014c).

For example, the UT master plan called for the center of campus to become San Jacinto. Pat Clubb, the vice president of university operations in 2014, was a member of the working group, and Mayor Leffingwell noted that, "We have to do something that is at least satisfactory with UT" (Wear, 2014c). Secondly, Mike Dahmus, another rail advocate who is quoted in Wear's article, believed that the city chose it's eastern route because, "Capital Metro only a couple of years ago accepted a \$37 million federal grant to install a rapid bus line in the Guadalupe/North Lamar corridor," and asking for rail funding along the same route would be unfavorable (Wear, 2014c).



Figure 4: Transit priority is a top priority: Austin's 2014 light rail plan (Henry, 2014a)

Secondly, the proposal did not fund a system-wide network. The plan's regional vision was sidetracked when the mobility bond chose to fund just one corridor in the plan, leaving the regional network out of the picture. The bond and federal money would be split to deliver \$600 million for light rail and \$600 million for road improvements following the proposed light rail route on East Riverside Drive, Oltorf, Stassney, William Cannon, and the Austin Bergstrom International Airport (Kanin, 2014). Funding only one line and improvements along it meant that many neighborhoods were left out of the initial vision for a broad transit network. This was reflected in the votes as well. In an election where more residents voted on the rail bond than for a mayoral candidate, voters outside of the "urban core" were the deciding factor in the bond's failure. Figure 4 shows that the votes for the rail bond were nearly exclusive to the central core of Austin (Travis County Election, 2014).

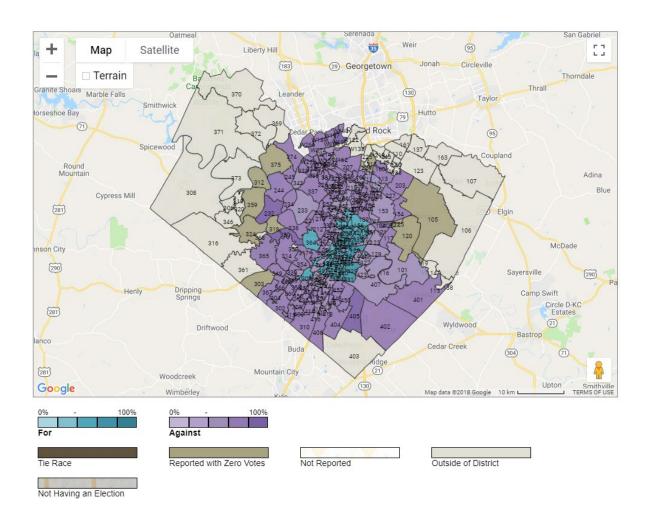


Figure 5: Travis County Election Results: Results Map ("Travis County Election Results," 2014)

Publicly, Mayor Leffingwell advocated that the city had done its part to plan the best network possible. Austin's national public radio station, KUT, noted that, "when asked if he could have done anything differently to get light rail passed in Austin, Leffingwell said, 'Not a thing. I wouldn't change one thing about how this proposition was put together" (Henry, 2014b). He named taxes and affordability as the primary culprits that led to the defeat of the proposal. Surely, suburban voters felt the influence of the bond's tax propositions for a costly light rail project they would not have used. They voted overwhelmingly against funding the proposed project. However, if the city had approached the plan through a system-wide network and

demonstrated its convenience to those voters, would suburban communities be willing to pay the price for public transportation?

2016

The 2016 Smart Corridor Plan (Proposition, City of Austin) was a referendum that successfully allocated \$720 million in bonds to fund infrastructural improvements that represented "something for everybody" (Craver, 2018c). These projects included, "\$101 million for regional road projects; \$137 million for local mobility initiatives, like sidewalks, urban trails, and bike lanes; and perhaps most important, \$482 million to overhaul nine of the city's largest transportation corridors" (Craver, 2018c). Corridor Mobility Preliminary Engineering Reports (PERs) have been crafted for each corridor to analyze safety deficiencies and "identify a vision for the long-term future of the corridor based on anticipated growth and City of Austin transportation policy" (City of Austin, n.d.-c). As Mayor Steve Adler stated the summer before the election, "Austin, over the last 20 years has only done transportation bonds in the total amount of \$640 million. I think that's one of the reasons why we have the challenges that we have" (Watts, 2016).

The Corridor Construction Program developed a plan for spending and construction that focuses on overhauling certain infrastructural changes in the streetscape. These changes will ultimately benefit both private transit and, when a public transportation bond is approved,

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⁸ The nine corridors are North Lamar Boulevard, Burnet Road, Airport Boulevard, East Martin Luther King Jr Boulevard, South Lamar Boulevard, East Riverside Drive, Guadalupe Street, William Cannon Drive, and Slaughter Lane (City of Austin, n.d.-b).

improve the infrastructural basis for a system wide network. The election was incredibly successful for the proposition. It passed by a difference of 48,598 votes where 60% voted for the bond and 40% voted against it (Cantu, 2016). It is unclear whether the proposition's popularity was due to its system-wide approach, focus on road infrastructure as opposed to public transportation, or its timing in a key presidential cycle. Ultimately, the 2016 bond lays the groundwork for transportation improvements, but additional funding will need to be allocated for public transit to thrive in Austin.

PUBLIC TRANSPORTATION AND RIDERSHIP IMPROVEMENTS SINCE 2014

In 2015, KUT released a two-part series on transit use in Austin. They found that, despite Austin's growth of 100,000 people from 2010 to 2015, public transit ridership has not increased at a similar rate (Henry, 2015). Transit ridership increased nationally in 2014, and yet, Austin saw a 4.25% decrease in ridership (Henry, 2015). While the KUT series noted there are many factors at play in the ridership decrease - including the cutback in busses for UT (which represents about half of the decrease) and "fare increases and restructuring" - there are some other issues at hand that limit ridership (Henry, 2015). Todd Hemingson, Executive Vice President for Planning & Development at Cap Metro said at the time of the series in 2015, "really, any analysis of transit ridership begins and ends with how much service you provide" (Henry, 2015). He added that, "unfortunately, the reality is we're just not keeping up. Our service hour, as we call it, has been declining since 2004" (Henry, 2015).

Since 2015, Cap Metro has been working to improve ridership with success. In June 2018, they revised the system network in an effort called "Cap Remap" that "tripled the number of MetroBus routes that operate every 15 minutes" and improved weekend frequency (Capital

Metro, n.d.-a). These changes have been successful, and ridership in December 2018 was up by 5.4% as compared with December 2017 (Flores, 2019). Cap Metro service changes have also affected suburban riders, as Metro Express routes that "use MoPac express lanes to get people downtown" saw a ridership increase by 30% (Flores, 2019). Throughout 2018, ridership overall increased by 2.2% (Flores, 2019). These upward swings in usage are helpful for arguing that, frequency is key for encouraging people to use public transportation. However, when it comes to delivering opportunities for large infrastructural investments in public transit, Cap Metro's efforts have not been so promising.

The fact is, without a successful bond election, Cap Metro has not been able to provide substantial opportunities to invest in public transportation service that is meaningful for transit users and gives them competitive options for their daily commutes. MetroRail and the failed mobility bond in 2014 are examples of how alignment on a prime corridor is necessary for projects to have successful ridership. In 2000, the Guadalupe corridor rail plan that failed by only 2,000 votes was very popular among voters within city limits, but the rest of the Cap Metro service area who sunk the election found that they could not justify the taxes for the limited

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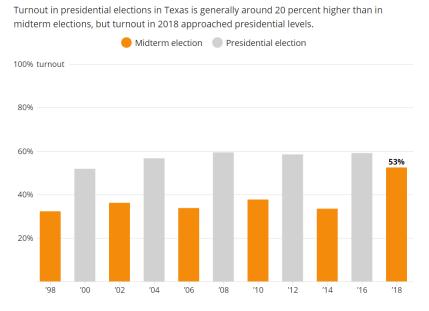
⁹ Jarrett Walker, a transportation planning consultant and professional blogger writes enthusiastically about frequency, declaring that "frequency is freedom!" (Walker, n.d.). Frequency describes "the elapsed time between consecutive buses (or trains, or ferries) on a line" and if that time is short, Walker suggests that riders will be liberated (Walker, n.d.). He emphasizes frequency's three "independent benefits" to customers as follows: "it reduces waiting," "it makes connections easy," and it supports the network in "problems of reliability" such as when another bus breaks down (Walker, n.d.).

service they would receive. Cap Metro will have to demonstrate its ability to build a plan that considers users throughout the entire system.

THE CHANGING ELECTORATE & WHY A NEW MOBILITY BOND IS POSSIBLE NOW

Austin's electorate has changed since 2000, facing both demographic shifts from within and responding to external shifts in the national political environment. The Texas Tribune recently reported high levels of voter turnout in all parts of the state, noting that "turnout in 2018 approached presidential levels" as shown in Figure 5 (Wang, 2018). In fact, Austin's participation in 2018 (52.7% of registered voters) was the highest it has been in a midterm election since 1970, when 53.9% of registered voters cast their ballot (Silver, 2018).

2018 Texas midterm turnout approaches Presidential turnout



Note: Turnout is calculated by dividing the total number of votes by the number of registered voters. Source: Texas Secretary of State

Figure 6: Look up Texas midterm turnout in your county against historic numbers: 2018 Texas midterm turnout approaches Presidential turnout (Wang, 2018)

With a very important presidential election year on the horizon in 2020 and a growing population in Austin, participation levels are likely to be high and will influence what measures pass locally. So, what have voters identified as important recently? In 2018, seven propositions to fund affordable housing, libraries and cultural facilities, parks, flood mitigation, health services, transportation, and other projects formed a total bond package of \$925 million that was approved by residents (K.U.T. Staff, 2018). The transportation piece of this package (Proposition G) was only a part of the initiative. Proposition G issues \$160 million to fund miscellaneous transportation projects including "rebuilding streets, replacing the bridge over Lady Bird Lake on Red Bud Trail and rehabbing sidewalks" (K.U.T. Staff, 2018). It passed with 82% of the vote (K.U.T. Staff, 2018). Austin is committing to putting items on the ballot to fund system wide improvements, and voters are participating in full force to make serious investments.

ELECTORATE PRIORITIES FOR AFFORDABILITY

Of note in the 2018 elections was how voters overwhelmingly acknowledged a serious gap in housing affordability through the passage of Proposition A. While not transportation focused, Proposition A is central to the overall discussion of affordability in Austin and provides a \$250 million commitment for affordable housing. Unlike the unsuccessful public transportation bond elections in 2000 and 2014, Proposition A, successfully was approved by 73% of voters (K.U.T. Staff, 2018). This reinforced that Austinites are interested in putting their taxes towards solving the city's largest problems.

Like Project Connect, the 2017 Strategic Housing Blueprint serves to "guide the city" with a specialized aim in creating both market-rate and income-restricted housing. The blueprint sets goals for the integration of 60,000 new units affordable at 80% of area median income

("\$48,200 for a single person or \$68,800 for a family of four") and 75,000 units at higher income levels "over the next decade" (Craver, 2019). Ultimately, the 2018 housing bond will only help Austin reach a small portion of its goal. Jeffery Patterson, a spokesman for Austin's Neighborhood & Community Development department (NHCD), said that he estimated "the \$250 million bond could help create 3,700 new rental units, 500 new ownership units and help repair 1,300 homes" (Craver, 2019). Meeting housing goals and transportation needs are both long range plans for the city. At this point, Austin is seeing progress, specifically in public transportation use.

Residents seem to acknowledge that there is a lot to be done within the city and are highlighting affordability as a priority. However, affordability has not been the primary theme of past mobility bonds. Instead, traffic has been the driving narrative of the need for transportation in Austin. While this has proven useful for reevaluating Austin's current system, it hasn't quite been enough to convince suburban voters that their increased taxes are worth the effort. So how should Austin make the case for expanding public transportation services? The following section discusses the Project Connect plan and factors that will contribute to decision making as the plan moves forward towards a 2020 vote.

Chapter 3: Project Connect and ASMP Goals

PROJECT CONNECT

Project Connect was first unveiled in 2013 preceding the 2014 bond election. Project Connect failed to prove its value city-wide to bond voters; however, the basis of that plan has been re-worked following a 2016 study and partnership between Cap Metro and AECOM. The resulting Central Corridor study focused on short term solutions to improve mobility on current infrastructure, identified long term modes of high-capacity transit, and developed a funding strategy and timeline for the future projects (Capital Metro, 2016).

Another study, Connections 2025, identified service gaps and evaluated the network, proposing a five-year timeline and improvements that the system needed (Capital Metro, 2016). Specifically, the Connections 2025 study laid the groundwork for changes like streamlining the fare system, improving the Metro Rapid system (BRT), and implementing Cap Remap (Capital Metro, n.d.-b). Cap Remap affected over half of Metro's 82 routes by improving frequency and making route changes to better serve east-west connections (Capital Metro, n.d.-a).

Similarly, Project connect identifies both short term enhancements to MetroRail, MetroRapid, and MetroExpress, while building infrastructure for a long-term high capacity system and changes "such as the electrification of Capital Metro's fleet, the potential automation of transit vehicles, and the use of dedicated pathways" (City of Austin, n.d.-a). Austin aims to establish a regional network focused on big improvements in a system wide approach for high-capacity rapid transit. The following subsections highlight the plan as it currently stands and the key factors that will shape Project Connect's future before it is voted on in 2020.

System wide network with an emphasis on frequency

The plan's system wide network is shown in Figures 8 through 10, as published in the Project Connect Vision Plan (Capital Metro, 2018c). Two high-capacity transit routes, the Orange Line and Blue Line, are expected to support the bulk of ridership via either light rail or BRT Lite. The Orange Line aligns more centrally along the Lamar and Guadalupe corridor like the 2000 mobility plan. The Blue Line is meant to provide a transportation route from the Austin Bergstrom Airport and up Airport Boulevard.

The remaining network expands frequency with 7 BRT Lite routes. The plan also incorporates a new Green Line commuter rail system that extends to downtown Manor; and includes existing regional express routes to Leander, Cedar Park, Georgetown, among others and new express routes to Hutto, Lockhart, and Buda. An alternative vision plan on the right side of Figure 8 outlines some additional BRT Lite and proposed express routes to further improve eastwest connectivity, further closing gaps in the original vision plan (Capital Metro, 2018c).

Central Austin improvements

The network plans also depict how central Austin's network would be impacted by Project Connect. At a larger scale, Project Connects provides an alternative Gold Line that "creates a U-shape from ACC Highland to Crestview" as shown in Figure 9 (Capital Metro, 2018c). This alternative vision would provide a half loop around the UT and the Capitol. An additional alternative exists for the two downtown transit hubs at Republic Square and the Convention Center. As shown in Figure 10, one alternative connects the two via the future Blue Line, while the other extends the current Red Line and Future Green Line from its starting point at the Convention Center to Republic Square (Capital Metro, 2018c).

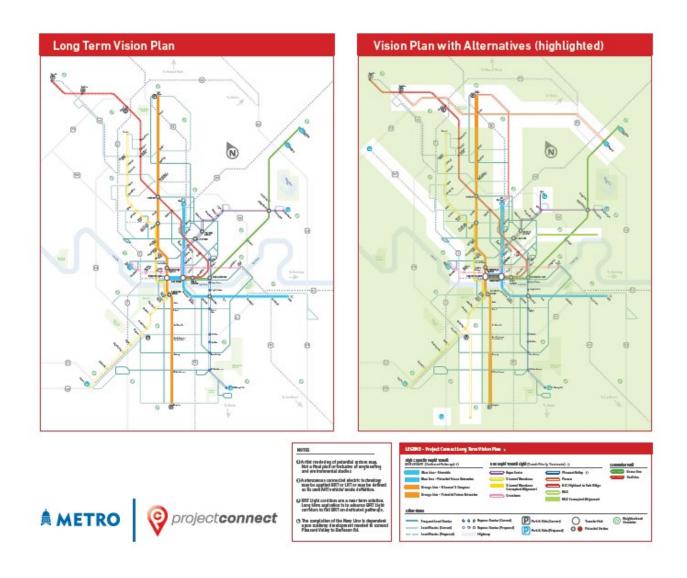


Figure 7: Project Connect Vision Plan: Long Term Vision Plan (Capital Metro, 2018c)

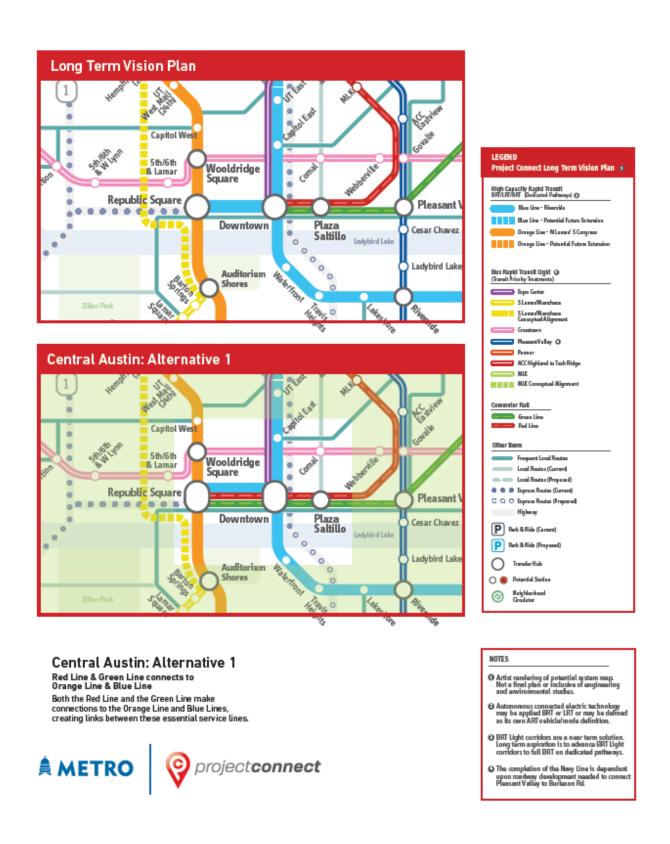


Figure 8: Project Connect Briefing Book: Central Austin Alternative 1 (Capital Metro, 2018c)

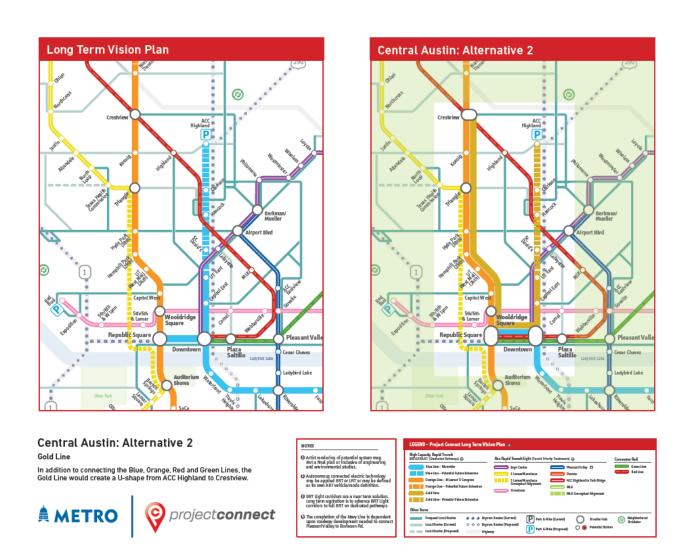


Figure 9: Project Connect Briefing Book: Central Austin Alternative 2 (Capital Metro, 2018c)

KEY DECISIONS IMPACTING PROJECT CONNECT

Since the Project Connect plan was approved by Cap Metro in December 2018, the agency has held several discussions amongst City Council and with Austin residents. Cap Metro has even opened a Project Connect Community Office downtown where they encourage community members to, "drop by to talk about the regional mobility plan and give us your input" (Capital Metro. n.d.). The City Council will field several important decisions in the coming months that further the plan's definition. As of Spring 2019, the agency has been

working "in tandem with the Austin Strategic Mobility Plan" and aim to have "final options laid out before year's end and a Cap Metro board decision by March 2020" (Marloff, 2019). Some of the key decisions facing the Council and Cap Metro are detailed below.

Determining the mode for high-capacity routes

One of the key upcoming decisions that needs to made is regarding the type of mode that will be utilized on the highest capacity corridors. In March 2019, AECOM received a \$12 million contract from Cap Metro to assist with the first phase of gathering community feedback and ultimately selecting a mode for the Orange Line by Spring 2020 (Thornton, 2019). The second phase will consist of "two years of additional preliminary engineering" and the National Environmental Policy Act environmental analysis for the Orange Line (Thornton, 2019). Other contracts will be awarded for the Blue Line, BRT Lite, and Express routes. Through Project Connect, the high-capacity transit routes would either remain BRT (with dedicated lanes) or become light rail lines. Further, the option of utilizing autonomous rapid transit (ART), which can either create autonomous command for bus or light rail remains an option on the table.

However, before a mode is determined, Clarke has noted the importance of establishing a desired level of service. Clarke summed up this sentiment by saying, "outcome should be what we're focused on. Then you fill in the pieces to get to the outcome" (Marloff, 2019). Similarly, Jeffrey Tumlin, a national transportation consultant has noted that, "whether we're talking about bus rapid transit, or light rail or autonomous rapid transit, the basic physical infrastructure needs are exactly the same" (Craver, 2018a). Following a September meeting between the City Council and Cap Metro, he added, "we're not forced to make a choice (on mode) now. What matters now is: Are we ready to get the right of way?" (Craver, 2018a).

Dedicated right of way

One of the updates to the 2014 plan includes its shift in focus towards implementing a dedicated right of way for the two high-capacity routes (Thornton, 2018). In 2014, Mayor Leffingwell staunchly opposed the idea of dedicating lanes currently used for car and bus traffic solely to high speed transportation services (Wear, 2014b). Even Austin's most utilized public transit routes, the rapid 801 and 803, operate along the future Orange and Blue lines without a dedicated lane. However, as Javier Arguello, long range planning director for the Capital Metropolitan Transportation Authority stated, "that was 2014. We're in 2017, moving into 2018. The need is increasing dramatically" (Pritchard, 2017).

Planners and city staff understand this need, and Mayor Steve Adler promotes the idea. In an interview with Community Impact Newspaper, the Mayor urged that, "regardless of the mode and regardless of the plan we need dedicated pathways because unless we get high-capacity transit out from the stop lights and the cars and if it's not moving faster than the traffic then nobody is going to get out of their car and get on [transit]," (Denney, 2018a). Figure 11, also from the Project Connect Briefing Book, emphasizes this sentiment and exemplifies how high-capacity transit can effectively transport more people in the same amount of space (Capital Metro, 2018b). But support from the Mayor and planning staff aren't the only pieces of the equation, and Arguello emphasizes that the effort, "will require support from all levels, from regional entities down to grassroots activists" (Pritchard, 2017).

Moving More People in the Same Space

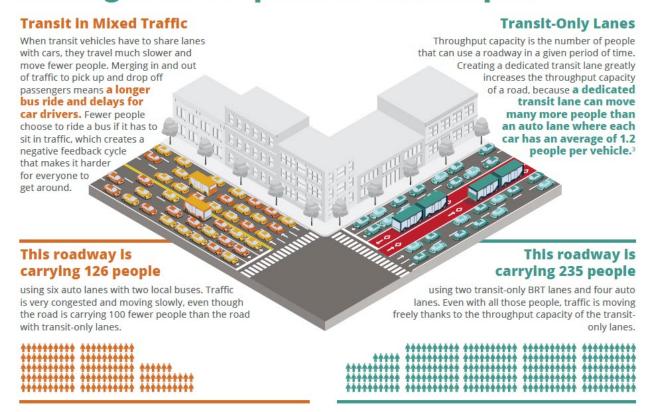


Figure 10: Project Connect Briefing Book: Moving More People in the Same Space (Capital Metro, 2018b)

Right of way "is a persistent challenge for Capital Metro," as the agency does not have jurisdiction over the roads (Craver, 2018a) That jurisdiction belongs to the city, and making the decision to reduce car lanes in favor of public transportation can be unpopular politically. "What makes it even harder is that those benefiting from the future transit system are not aware of what they're gaining until the full system is in place several years in the future, while the drivers losing access to car lanes are very much aware of what they're losing" (Craver, 2018a). The solution according to Tumlin is "that Capital Metro needs to be prepared to deliver frequent

service in those lanes as soon as possible. Those sitting in traffic need to see that the lanes they lost are going to use" (Craver, 2018a). 10

Street design

Even when the mode and the availability of right of way for each corridor is resolved, there will be many other decisions regarding the look and feel of Project Connect. For example, if Cap Metro receives designated right of way for their high-capacity corridors, the bus or rail lanes could either run through the center of the street as shown in Figure 12 or run along the sides of the street as shown in Figure 13 (Capital Metro, 2018). There are benefits to both options. Center running lanes "can usually be built without directly impacting many adjacent properties" but can make it difficult to cross along various points along the corridor (Capital Metro, 2018). Side-running transit lanes are less disruptive "to turning auto traffic" but can block "access to adjacent properties" and decrease speed and reliability (Capital Metro, 2018).

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¹⁰ Seattle is an example of a city that has successfully utilized right of way to change the city's high-capacity network. Among reducing car lanes on several major corridors, Seattle has turned Third Avenue, a major downtown corridor over exclusively to bus service and has been "running 200 busses an hour on the road" (Craver, 2018a).



Figure 11: Project Connect Briefing Book: Center-Running Transit Lanes (Capital Metro, 2018b)



Figure 12: Project Connect Briefing Book: Side-Running Transit Lanes (Capital Metro, 2018b)

Project Connect also considers transit configuration options like elevated lanes or underground transit lanes. While much more expensive, these options maintain faster speed and reliability. But ultimately, managing congestion in the Austin region is dependent on the success of a citizen approved mobility bond and building a network that supports Austin's broader transportation system goals.

THE AUSTIN STRATEGIC MOBILITY PLAN (ASMP)

City Council voted unanimously to adopt the ASMP on April 11, 2019. The ASMP focuses on the next 20+ years of transportation policies, programs, projects, and investments (City of Austin, n.d.-a). It outlines Austin's mobility related goals and objectives, policy and project recommendations, an updated street network table, and performance measures that will track success (City of Austin, 2018). Although Cap Metro released the Project Connect plan for a high-capacity system before the ASMP goals were adopted, there is a lot of overlap in how Project Connect can meet ASMP goals.

Essentially, the ASMP aims to reduce solo commuting from 74% to 50% and increase the number of commuters using public transit from 4% to 16% in 20 years (Cantu, 2019). The breakdown of the goal to reach 50/50 mode share by 2039 is shown in Figure 13. Austin envisions an improvement in active transportation, such as biking and walking, in addition to improved ridership of public transportation. To do this, the ASMP lays out several key strategies such as "move more people by investing in public transportation" and "manage congestion by managing demand" (City of Austin, 2019). The document contains policy objectives that outline major strategies. Chapter 3: Supplying our Transportation Infrastructure details policy objectives such like "give public transportation priority" by improving speed and reliability of public transit (City of Austin, 2019). One policy, "invest in a high-capacity transit system" even directly states Austin's interest in developing Project Connect to provide "a substantially higher level of

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¹¹ Speed refers to the "ability of transit to move along a route in a reasonable amount of time, competitive with a car" and reliability refers to "consistent and predicable" service at a stop (City of Austin, 2019a).

passenger capacity, speed, and reliability that will undoubtedly change the landscape of Austin" (City of Austin, 2019a).

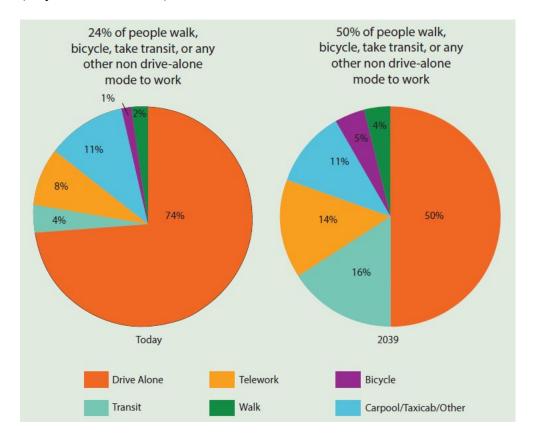


Figure 13: ASMP 50/50 mode share goal (City of Austin, 2019a)

The ASMP also promotes the Street Network Map, which lists the roads for which the City of Austin maintains jurisdiction. The map is publicly available in a digital interactive format online, and "is used to identify right of way dedication requirements needed to accommodate future roadway conditions" (City of Austin, 2019a). The Street Network Map can help the city as they allocate "dedicated space for high-capacity rapid transit on major corridors and suggests a lesser scale of "transit priority" treatments on secondary corridors such as Burnet, South Lamar, and Pleasant Valley" (Marloff, 2019).

Austin Transportation Director, Robert Spillar, says the ASMP "is truly a major milestone for Austin's mobility portfolio. The plan responds to Council's strategic direction to solve mobility issues by addressing the multimodal needs of our community, offering our residents and visitors new, affordable opportunities to travel through and around our city" (City of Austin, 2019b). Now that the ASMP has been finalized and decisions on Project Connect will be made in the coming months, Austin has an opportunity to look to other cities who have recently put public transportation bonds up to a vote. The following section will explore how other cities have experienced successes or difficulties with their proposed mobility bonds, and the lessons they have learned in the process.

Chapter 4: Case Studies and Considerations

CASE STUDIES ON MOBILITY BONDS

Several cities have dealt with the pains of managing their growth through starting, expanding, or improving upon public transportation. San Francisco, which has well-used public transportation infrastructure has struggled with funding to invest in and maintain the core network. Other cities like Nashville cannot seem to successfully pass public transportation funding referendums to jump start the beginnings of an impactful network. The following sections will detail these two cities and the lessons that Austin can take away from their successes and failures.

San Francisco Bay Area

The Bay Area Rapid Transit (BART) system that operates in the San Francisco, California metropolitan area has had a history of success in their bond elections. BART has also struggled with the misalignment of funding for key needs of the network throughout its lifespan. Essentially, the system was built to accommodate 250,000 riders daily when it was built in the early 1970s, but "during an average weekday, BART carries about 433,000 passengers...and the total often hits 450,000" (Cabanatuan, 2016). In the 1980s, BART declined to raise fares; and during the 1990s when fares were finally raised, the agency focused on building network extensions as the core network further deteriorated (Cabanatuan, 2016).

Several bonds in the 2000s aimed to reverse this pattern. In 2002, a \$1.05 billion measure (Measure BB) failed even though it received 64% of the vote (the decision required a 2/3 super majority) (Cabanatuan, 2004). Two years later in 2004, a \$980 million bond (Measure AA) was successfully passed to fund "seismic repairs" to the Transbay Tube (Cabanatuan, 2004). Ten

years after that in 2014, a \$500 million transportation bond was passed to focus on active transportation improvements for pedestrian and bicyclists and for Municipal Railway (MUNI), which operates San Francisco's light rail, cable cars, streetcars, buses and trolleybuses (Knight, 2015).

The largest and most recent bond package passed by San Francisco is 2016's \$3.5 billion measure (Measure RR). The bond aimed to "replace and repair the core infrastructure" by updating the control system (which hasn't been replaced since 1967) and electrical power mechanisms, improving stations, replacing "over 90 miles of worn-down rails", and providing seismic integrity (The Yes on RR Campaign, 2016). These changes are expected to allow BART to increase capacity by 200,000 daily riders after a modern train control system is added "to run trains faster and closer together" (The Yes on RR Campaign, 2016). And yet, the amount of bond funding still falls short of the system's actual projected needs. "BART estimates that it needs \$9.6 billion in improvements - an estimate that's a couple of years old - just to keep the trains running" (Cabanatuan, 2016).

The bond passed with the help of turnout from the 2016 election, a key presidential race. Alex Clemens, a communications strategist, noted that, "the strategy for the BART bond went exactly according to plan...to make up for soft support in Contra Costa by getting overwhelming support in the other two BART counties, to reach the two-thirds vote required to pass the \$3.5 billion measure" (Rudick, 2016). Their efforts worked well, and 81% of voters in San Francisco and 71% in Alameda voted to pass the measure, bolstering the 60% support from Contra Costa (Rudick, 2016).

The 2016 bond has recently become a topic of conversation in San Francisco once again. In December 2018, BART was fined \$7,000 for ethics violations associated with \$7,791 the

agency spent "to produce, edit and distribute videos on YouTube, and in social media posts and a text message during the 2016 campaign" (Swan, 2018a). While informing voters about the measure is legal, the videos toe the line between education and advocacy. They feature, "riders complaining about BART's aging system and urging their fellow passengers to support the bond" (Baldassari, 2018). After their production, BART did not follow state campaign law in which committees must file campaign statements and make advertising disclosures in a timely manner (Swan, 2018a). The complaint was brought up by State Senator Steve Glazer, a Democrat from Orinda and a "tireless critic of BART who often accuses the agency of mismanaging money" (Swan, 2018a). Despite the negligence and improper behavior by BART, the funding for transit upgrades remains intact, and the system will benefit from an upgrade in maintenance and network safety.

Nashville

Nashville, Tennessee, a southern city slightly smaller than Austin population-wise, has proposed and failed to deliver on two mobility plans to expand their existing bus network. The failures of funding a transportation network in Nashville offers a very different case study as compared with San Francisco.

The first plan for Nashville transit, the Amp, was a 7.1-mile BRT plan with an estimated price tag of \$174 million (Capps, 2017). It was not popular with the state, the Tennessee Department of Transportation, and many Nashville residents. The conservative group Americans for Prosperity (backed by the Koch brothers) even actively opposed it by funding an opposition campaign (Haruch, 2018). Because Tennessee is a "pay-for" state, they are unable to take on debt for transportation projects (Capps, 2017). Thus, the Amp was not a bond proposal, but a

plan funded partly by the Federal Transit Administration (FTA)'s commitment of \$70 million (which would ultimately have required Congressional approval) and partly from the state (at an estimated \$20 million) (Daniels III, 2014). The Amp, while not ultimately realized, served as a starting point for plans like nMotion, a 25-year strategic plan that incorporated "three options for Nashville: light rail and commuter lines, more BRT and bus expansions, or a limited plan for incremental growth" (Capps, 2017). The feedback on nMotion from residents demonstrated that commuter rail was the preferred option for public transportation developments (Capps, 2017).

A series of legislative actions that Nashville advocated for at the state level improved upon the city's ability to fund local transportation projects in Tennessee. The Improving Manufacturing, Public Roads, and Opportunities for a Vibrant Economy (IMPROVE) Act passed in Spring 2017 and "authorized an increase to the state gas tax for the first time since 1989" to fund road improvements (Capps, 2017). Additionally, "the IMPROVE Act also granted municipal authorities," based on the size of their population, "the power to introduce surcharges—by referendum vote—on the local sales tax rate, exclusively for the purpose of funding transit" (Capps, 2017). Finally, the Transit Oriented Redevelopment Act, also passed in Spring 2017 expanded the "definition of a redevelopment district for tax purposes" so that "transit oriented" corridors and not just "blighted" areas can establish tax-increment financing (TIF) to raise funds for affordable housing in TIF districts (Capps, 2017).

By 2017, Nashville was ready to try again and proposed a referendum raising four city taxes (the sales, hotel, business and rental car taxes) to fund "Let's Move Nashville," a large, regional plan shown in Figure 7 (Transit Alliance of Middle Tennessee, 2017). The \$5.2 billion plan considered a system wide network made up of "five light-rail lines, one downtown tunnel, four bus rapid transit lines, four new crosstown buses, and more than a dozen transit centers

around the city" (Capps, 2018). The overall cost of building the system and operating it would have been an estimated \$9 billion (Capps, 2018). The referendum for four proposed tax increases (including a sales tax increase of 1%) to fund the plan lost by about 35,000 votes in Davidson County, when 36% of residents voted for the plan and 64% voted against (Capps, 2018).

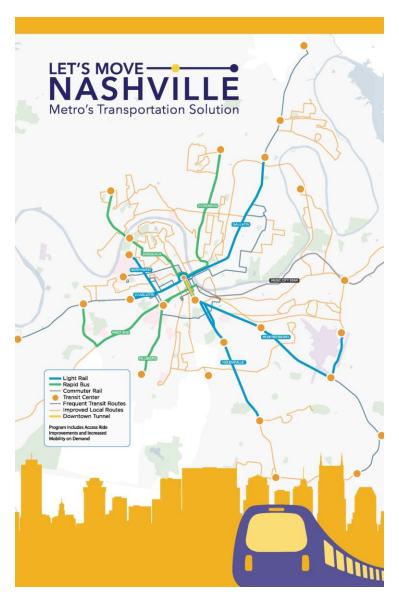


Figure 14: Transit Alliance: Let's Move Nashville plan (Transit Alliance of Middle Tennessee, 2017)

There were several reasons for its steep downfall. Emily Evans, a former municipal financial analyst and Nashville City Councilmember referenced its large cost, massive scale, funding source, "and the financing structure (a decade of interest-only payments)," as the culprits (Capps, 2018). It is also worth noting that there may have been added skepticism regarding infrastructure funding considering Nashville's very costly, large-scale projects, like a \$623 million convention center (with a current \$20 million expansion), \$91 million minor-league baseball stadium, and a future \$275 million professional soccer stadium (Capps, 2018).

Additionally, because efforts to implement inclusionary zoning in Nashville in 2016 were blocked by the state legislature, the city operates on a "voluntary, incentives-based program" (Capps, 2017). 12 Let's Move Nashville gave affordable housing advocates cause to worry that spending on transportation would overshadow the need for housing stock in Nashville. With the aggressive timeline of the vote that "lined up with the city's efforts to woo Amazon to Nashville," in Amazon's nationwide search for a new headquarters, the Nashville Area Chamber of Commerce left little room for consideration of anti-displacement measures in the transportation plan (Haruch, 2018). 13 Music City Riders United (MCRU) member Tamika

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¹² Inclusionary Zoning is a policy that was originally "developed in the 1970s in response to exclusionary and often racially segregated" zoning (Schneider, 2018). It requires developers to build a share of affordable units in their project to rent below market rate, essentially providing subsidized affordable housing.

¹³ Amazon launched a nationwide search in September 2017 to find a new home for their second headquarters. 238 cities in the U.S. and Canada sent in their proposals, and Amazon chose 20 finalists in January 2018. After visiting all of the finalist cities, Amazon decided to select Queens, New York and Arlington, Virginia. They also decided to build a smaller campus in Nashville. There was major backlash, because their selection process "shined a spotlight on how Amazon and companies like it have benefited enormously from taxpayer funds" (Matsakis, 2018). In a press

Douglas noted this sentiment in an interview with CityLab by expressing that "we want equitable transit that doesn't displace people, and we want to make sure that we're also focused on housing" (Haruch, 2018).

Finally, the plan was marked by a political scandal for Mayor Megan Barry that led to her resignation only four months after she introduced the plan in October 2017. She "resigned on March 6 after pleading guilty to felony theft, related to \$170,000 in overtime paid to her head of security, with whom she had admitted in January to having an extramarital affair" (Haruch, 2018). After her resignation and succession by Vice Mayor David Briley, the city held a special mayoral election. Residents elected Mayor Briley, who continued to support for Let's Move Nashville until its ultimate defeat in May 2018.

LESSONS LEARNED

Scandals aside, both San Francisco and Nashville provide unique takeaways for a 2020 mobility bond in Austin. The subsections below will expand upon how alignment with a popular election year as demonstrated in San Francisco can serve Austin. Additionally, Nashville provides several interesting takeaways for large, southern cities like Austin that wishes to develop a large-scale public transit network.

release after their decision Amazon said they would, "collectively receive \$2.2 billion from the three cities where it plans to open offices" (Matsakis, 2018). The immense pushback they received from elected officials, the media, and residents about the immense taxpayer subsidies eventually led them to pull out of their New York City agreement.

Alignment with popular election cycles

San Francisco's hesitation to raise fares in the 1980s led to financial struggles that neglected proper maintenance of the BART system. To secure the substantial funding needed to update their rail network, the city aligned the vote with a presidential election cycle in 2016. This proved to be a very fruitful plan for BART, and enthusiasm that propelled the plan's success in key central areas demonstrated the ability to align voters (specifically ones that lean Democratic) with support for transportation funding. Austin can surely attempt to recreate San Francisco's successful approach by aligning the mobility bond vote with the presidential election cycle in November 2020.

In the elections that took place November 2016, "50 communities, counties, and states" placed public transit measures on the ballot (Miller, 2016). The American Public Transportation Association (APTA) Acting President and CEO Richard A. White emphasized that, "with approximately \$200 billion" in proposed "funding for public transportation, this is a game changer for people and the communities they live in" (Miller, 2016). Measure RR in San Francisco raised a permanent half-cent sales tax for public transportation funding, while Seattle funded ten rail extensions and three BRT corridors (Bliss & Dudley, 2016). These transit funding proposals did not just pass in the West Coast. Columbus renewed a .25% sales tax and Atlanta passed a half-cent sales tax increase (Bliss & Dudley, 2016). However, not all cities were successful. Detroit, San Diego, and Kansas City were among the cities that did not pass public transportation funding plans for the "bus and rail jumpstarts" that they were hoping to implement (Bliss & Dudley, 2016).

On a national scale, the Democrats won a majority in the U.S. House of Representatives in 2016 and, "in an era of declining federal support for transportation, the so-called Blue Wave

of more liberal lawmakers may lift the spirits of beleaguered commuters and road users, particularly those who depend on urban transit" (Bliss, 2018a). Alison Black, a senior vice president and chief economist at the American Road & Transportation Builders Association admits that, "using transportation as a political football to increase turnout seems like bad precedent," (Bliss, 2018a). And yet, funding allocation for public transit has become stalled and infrastructure packages have "never materialized in Congress" under the Trump administration (Bliss, 2018a). In her article on midterm election votes, Laura Bliss states that, "according to a recent report from the advocacy group Transportation for America, the FTA has failed to allocate a total of \$1.8 billion" in secured funding for local transportation (Bliss, 2018a).

The federal gas tax is a key source for funding transportation projects, alongside state funding and farebox earnings. However, because the tax was last raised in 1993, states and cities have been taking on responsibility to "pay for more themselves" (Bliss, 2018a). Black notes that asking voters to tax themselves is "an increasingly popular means of getting transportation projects off the ground" with about 82% of those measures being passed over the last decade (Bliss, 2018a). Local elections, therefore, offer a large opportunity for cities to win big on transportation funding. And as Adie Tomer, a fellow at the Brookings Institution's Metropolitan Policy Program, notes "running infrastructure campaigns in an election year dramatically improves their chances of passing" (Bliss, 2018a).

Austin has taken note of this phenomenon. Before the elections in 2016, Mayor Adler stated that in a presidential election year, "you have the most number of people who will vote in an election. The largest representation of the community" (Wear, 2016). Capital Metro anticipates this opportunity as well, and "CEO Randy Clarke said the timelines of the various Project Connect components, whether the high-capacity Orange and Blue lines, commuter rail

Green Line, BRT Lite lines, or Park & Rides, are each on a schedule that should allow any individual project to be sufficiently developed by spring 2020 to be added to the ballot in November" (Thornton, 2019).

Avoiding too big, too fast, and too soon

The many challenges that Nashville faced in its attempts to implement public transit systems are not unique - especially for a sprawling, southern city. Let's Move Nashville proposed high-capacity transit, despite their minimal experience with that kind of large-scale network. The current system consists of a mix of bus routes and a few BRT Lite routes. But ultimately, the changes proposed in Let's Move Nashville were too big, too fast, and too soon. The debate surrounding the plan reflected a cataclysm of opinion with headlines in the Tennessean like "Nashville transit debate filled with fiery exchanges," "Why can't we be more civil on the Nashville transit debate?" and "Misinformation' in transit fight mirrors a familiar strategy for referendum opponents, expert says" ("Nashville Transit Debate Filled with Fiery Exchanges," 2018; Plazas, 2018; Tamburin, 2018).

Let's Move Nashville was called "simply too expensive and too disconnected from the problems it was created to solve" in an opinion piece by Bill Freeman, a Democratic fundraiser and chairman of a real estate investment, management, and brokerage company (Freeman, 2018). Freeman considers a regional planning perspective for connectivity to be integral for providing a system across jurisdictional divides; and he notes that Nashville's trends of falling population and diminishing property tax income did not justify the plan's large expense (Freeman, 2018). On the other hand, David Plazas, the opinion and engagement director for the USA Today Network Tennessee, wrote that regional mayors "unanimously endorsed the plan," but wanted

"Nashville, the state capital and Middle Tennessee economic powerhouse, to go first" (Plazas, 2018). The Greater Nashville Regional Council (GNRC), brings together 13 counties for collaborative efforts, and, Franklin Mayor and GNRC President, Ken Moor, echoed Plazas's claim. Mayor Moor referenced Let's Move as a "significant" part of moving "the region forward after years of planning and coordination through nMotion and the IMPROVE Act" (McGee, 2018). From there, Smyrna Mayor Mary Esther Reed supported that sentiment, stating that, "the surrounding counties will now be able to determine next steps for future expansion" (McGee, 2018).

In the end, the plan was advocated with futility, and attacks from well-funded groups like Americans for Prosperity built an effective campaign around the project's incredibly high cost. They painted a picture of limited results with "messages like "Highest Sales Tax in the Nation AND It Won't Fix Traffic'" (Stockton, 2018). In the end, without density to support transit, the opponents had a point. Jeff Wood, a transportation consultant and blogger for The Overhead Wire notes that, "Whenever you talk about transit, you get a lot of chicken and egg arguments. "Like, 'We don't have the density, so let's not build,' or 'Let's build it so we get the density we want." (Stockton, 2018). Robert Cervero, a professor of city and regional planning at UC Berkeley notes that the density of Nashville may have contributed to their hesitation. "You can't easily reverse 50 years of rapid, low-density development by laying track and tossing in a bunch of bus lines," Cervero says (Stockton, 2018).

These arguments support the idea that pairing a "transit initiative with a complementary zoning plan, pushing for higher population design, with mixed residential and commercial spaces" can be fruitful for the successful implementation of public transportation (Stockton, 2018). However, "it's hard enough convincing voters to increase their taxes without asking them

to curtail their living space too. And trying to do so yields another chicken and egg argument: Which one do you try to sell residents on first?" (Stockton, 2018). In a post-CodeNEXT world, building alliance between public transit funding and a contentious development plan might lead Austin into a "too fast, too soon" problem. ¹⁴ It may be better to align upcoming transportation projects with other issues that Austinites care about, namely affordability.

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¹⁴ CodeNEXT was the process to rewrite Austin's Land Development Code (LDC), as required by the city's comprehensive plan that was approved in 2012, Imagine Austin. The LDC is vital as it "sets the rules and regulations for all development in Austin, from single family homes to local stores to mixed-use buildings" (Austin Monitor, n.d.). While CodeNEXT was the process for rewriting the LDC and not the code itself, "its intention" was "to modernize" local zoning laws and regulations those laws, so that Austin could "evolve into the 'compact and connected' city idealized in the Imagine Austin comprehensive plan" (Marloff, 2018). However, it became incredibly unpopular with residents and activist groups, who feared encroaching development, displacement, and neighborhood change. Eventually, City Council voted unanimously to scrap the CodeNEXT "after six years, three drafts (well, three and a half), \$8.5 million spent, and three project leads" (Marloff, 2018).

Chapter 5: Making a Case for a 2020 Bond

ALLEVIATING CONGESTION THROUGH INFRASTRUCTURE INVESTMENT

The narrative of previous transportation bonds has been driven by Austin's congestion problem. For example, in 2014, Mayor Leffingwell said that instead of investing in rail, Austin was a city that "for years" would "mostly just sit and watch as our population grew, and our traffic got worse" (Coppola, 2014). INRIX data shows that Austin is the 14th worst city for traffic in the United States, and residents spent 103 hours in traffic in 2018 (INRIX, 2019). The question is, should the city focus on Project Connect as a method of alleviating congestion?

We know from recent Zandan Polls mentioned in Chapter 1 of this report that traffic, roads, and transportation have been key concerns for Austinites in recent years. After attempting to align mobility bonds in the past as solutions for relieving traffic without luck, Austin must consider alternative narratives to garner support for a 2020 mobility bond. There is also evidence that adding more transit to solve traffic problems is a flawed solution, as experts have argued that adding neither additional road capacity nor public transportation can significantly relieve congestion (Jaffe, 2013). In his article on the relationship between public transportation and congestion relief, Eric Jaffe surmises that, "while there are any number of reasons to support the public funding of public transportation - sustainability, for instance, or social welfare - economists don't all find congestion relief to be one" (Jaffe, 2013).

Downs (1962) highlights a "law" that urban commuter routes will fill with maximum capacity during peak-hour traffic. "In other words, no matter how many lanes of road you build in and around American cities, you can't stop cars from jamming them up" (Jaffe, 2011). Many years later, Duranton and Turner (2011) analyzed how lane kilometers of roads affect vehicle-kilometers traveled (VKT) for various types of U.S. roads. They suggest that the "law" for

congested roads upholds over time, and that it extends to public transportation as well. In describing their research, Jaffe notes that, essentially, "they believe, that whenever a driver shifts onto public transportation, another one quickly grabs the open lane" (Jaffe, 2011). Duranton and Turner highlight the implications of their work for transportation policy as follows:

Transportation policy should be based on the careful analysis of high-quality data, not on the claims of advocacy groups. Unfortunately, there is currently little empirical basis for accepting or rejecting the claims by the American Road and Transportation Builders Association that "adding highway capacity is key to helping to reduce traffic congestion," or of the American Public Transit Association that without new investment in public transit, highways will become so congested that they "will no longer work." Our results do not support either of these claims (Duranton & Turner, 2011).

Regarding public transportation's ability to reduce traffic, Anderson (2013) reviewed the impacts of a 35-day Los Angeles transit strike in 2003. During the strike, "2,000 Los Angeles County buses, light rail lines, and a subway" were out of commission following a proposed change of contract that significantly increased worker's individual health care costs ("Los Angeles transit workers hit picket line", 2003). His research tested the hypothesis, "that transit riders are likely to be individuals who commute along routes with the most severe roadway delays" (Anderson, 2013, p.1). By studying the strike and its effects on the transportation network via hourly traffic speed data from LA freeways, he observed that the average traffic delay during peak periods increased by 47% on roads, with the impacts of the strike felt most on freeways that ran parallel to transit routes (Anderson, 2013). From the research, Anderson surmised that, as opposed to reducing overall congestion in the city or metropolitan area, transportation networks tend to reduce congestion on very specific roads "that paralleled heavy transit corridors" (Anderson, 2013).

Ultimately, reducing congestion is difficult to do through transportation initiatives alone. On Efficient Gov, a website and news resource for municipal leaders, author Mary Valen brings up an interesting point. Do cities simply sell public transportation and other transit related projects as solutions for road congestion because it "impacts the vast majority of drivers and riders" and it is something they can identify with (Velan, 2015)? "Despite the continued promise of traffic reduction," she mentions, "many public transportation projects fail to make a significant impact on congestion once the initiative is complete" (Velan, 2015). What, then, should cities implement to curb their congestion?

Jaffe quotes an interview with Duranton in his Citylab article, where Duranton stated that, "as soon as you manage to create space on the road, by whatever means, people are going to use that space. Except when people have to pay for it, of course" (Jaffe, 2011). The U.S. has only recently turned to congestion pricing as the key to dramatically reducing traffic in our largest cities. ¹⁵ As congestion pricing rises in the American consciousness, it is becoming acknowledged as the most effective method for curbing congestion. New York City will implement the first congestion pricing scheme in the U.S. starting in 2021 to charge a fee for use of "certain roads during peak times" (Buerger, 2019). Other cities such as Boston, Philadelphia, San Francisco, and Seattle are debating the implementation of congestion pricing (Buerger, 2019). Congestion pricing is a more reliable method of funding transportation infrastructure and an effective

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¹⁵ Congestion pricing is used by some large cities as a tool for curbing the number of drivers on the road. Typically, a congestion zone is established, and tolls on the edge of this zone require payment for vehicles to pass through. Congestion pricing in London's city center "has seen a 44 percent decline in car entries since it cordoned off a feezone in 2003" (Bliss, 2018c).

alternative to the gas tax. It is estimated that New York City could raise \$1 billion per year for transportation funding from their congestion pricing scheme (Buerger, 2019). However, for Austin and most other U.S. cities (both small and large), congestion pricing is not feasible because high-capacity public transportation is not comprehensive enough to support commuters who would leave their cars outside of the congestion zone.

But what other methods do cities have to meet their claims that more roads and public transportation is the solution to traffic? Maybe instead of making those claims, Austin should consider reframing the impacts of public transportation by aligning what Austinites see as the most pressing problem with what they see as the second most pressing problem according to the Zandan Poll, affordability.

TRANSPORTATION, LOCATION EFFICIENCY, AND THEIR ROLE IN AFFORDABILITY

Housing and transportation are the largest and second-largest expense categories for American families, respectively (Bureau of Labor Statistics, 2016). To determine "location affordability" the Department of Housing and Urban Development (HUD) combines these two costs into a single index. If "those two expenses make up more than 45 percent of your income, the city isn't affordable," and residents can become cost burdened (Jaffe, 2014). The H+T Index, an online tool created by the Center for Neighborhood Technology (CNT), collects housing and transportation data from the Census and American Community Survey, among other sources, and relays the aspects of affordability among different U.S. cities (The Center for Neighborhood

Technology, n.d.-a). ¹⁶ The H+T Index for Austin as pictured in Figure 14 shows that an average of 47% of total income is spent on the combination of housing (28%) and transportation (19%) expenses, which is slightly higher than the HUD recommended 45% (The Center for Neighborhood Technology, n.d.-b)

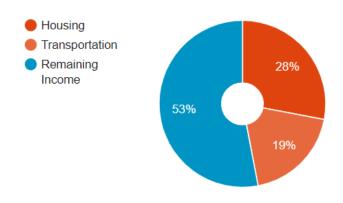


Figure 15: H+T Fact Sheet: Austin Average Housing + Transportation Costs (The Center for Neighborhood Technology, n.d.-b)

The data from the CNT and HUD has implied that residents of "transit-rich" neighborhoods spend less on transportation, effectively making that area more "affordable" (Bliss, 2018b). Some say that this data can be misleading, as the corresponding research is "built mostly on models that estimate transportation expenditures for typical households" by compiling aggregate data for a city (Bliss, 2018b). Because the actual cost of transportation is experienced differently from person to person, can researchers identify if transportation helps make a city more affordable?

¹⁶ CNT source data also includes the Longitudinal Employer-Household Dynamics database, the National Transit Database, and Consumer Expenditure Survey microdata (Bernstein & Haas, 2018).

The location efficiency debate

Location efficiency proposes that people who live in "compact, transit-accessible, and walkable neighborhoods" are more likely to take public transportation, less likely to own a car, and spend less money on transportation costs as a part of their overall living expenses (Smart & Klein, 2018, p. 1). The idea of location efficiency could be useful in determining whether aligning transportation, land use, and housing will keep Austin affordable. There is debate surrounding the validity of location efficiency, and one key research paper set the tone for this dispute.

In "Complicating the Story of Location Affordability," the researchers, Smart and Klein (2018), used the Panel Study of Income Dynamics (PSID) to apply descriptive statistics and panel regression models to test the idea of location efficiency. Their findings reveal that families that move from neighborhoods with low transit access to neighborhoods that are "transit-rich" (more walkable, compact neighborhoods) do not experience much change in transit expenses, "as the existing literature would suggest" (Smart & Klein, 2018). They surmise that what a family spends on transportation is driven by "income and household characteristics, not whether one lives near high-quality transit service" (Smart & Klein, 2018). Ultimately, policies that aim to shift drivers to transit-rich neighborhoods, may not be the solution for all households to reduce their individual vehicle miles traveled (VMT).

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¹⁷ The PSID is "a nationally representative panel study of U.S. families' sources of income and their expenditures" that allowed Smart and Klein to analyze transportation expenditures from 2003 to 2013 for 11,000 families from different census tracts (Smart & Klein, 2018).

In response to Smart and Klein's findings, Bernstein and Haas of CNT contend that decades of research points to a more significant "relationship between transit-rich neighborhoods and the cost of living" (Bernstein & Haas, 2018). They also allege that Smart and Klein's research "isn't really about location efficiency," because location efficiency "is a measure of place" that should take into account multiple attributes "such as local convenience, access to goods and amenities, walkability and transportation choice" (Bernstein & Haas, 2018). Bernstein and Haas's research has found that, "holding income and household size constant, neighborhood attributes predict vehicle ownership and use better than household income and size alone" (Bernstein & Haas, 2018). Essentially, they argue that neighborhood quality is important to consider in the relationship between location efficiency and the transportation expenses as a percentage of overall expenses.

Without measuring place attributes, Smart and Klein do in fact shortchange the realities of dynamic neighborhoods. When families move and their public transportation choices expand, and whether they use them immediately or take time to change their behavior, "the savings promise is there" (Bernstein & Haas, 2018). What is important for the relationship between transportation and affordability, Bernstein and Hass clarify, is to understand why moving to transit rich areas may "fail to increase affordability among those" in Smart and Klein's study (Bernstein & Haas, 2018). Ultimately, despite the debate on location efficiency and how it is analyzed, there is truth to both the facts that a) walkable neighborhoods decrease need for private

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¹⁸ Because Smart and Klein's research focuses on families that moved neighborhoods and measures their quality of transportation "based on the number and quality of jobs that are accessible within a 30-minute transit trip," it limits the measures of job access and opportunity for "and this one measure is not sufficient" (Bernstein & Haas, 2018).

transportation within that neighborhood and b) cars are still too convenient for people in most cities to replace them.

Location efficiency and income

Gregory Newmark researches the intersection of location efficiency and income. Newmark (2014) proposes travel behavior as an equity consideration for planners, as travel behavior is not purely a personal choice, but a "highly constrained" choice that "varies systematically across different populations" (Newmark, 2014, p. 12).

In his research, Newmark (2015) asks whether developing affordable, location-efficient housing will reduce VMT as compared with market-rate housing (Newmark, 2015, p. 2). While his research from 2015 is from the perspective of climate reductions and California's climate goals, it provides important information for cities interested in investing in transit-oriented affordable housing. Newmark testifies that "both income and location efficiency are independently associated with VMT" but "do not interact" (Newmark, 2015, p. 21). This finding may prohibit policymakers from "favoring" an income group when determining affordability levels at location-efficient developments. However, Newmark provides that "an analysis of actual population distribution suggests that lower-income households will use those sites more efficiently to yield a higher VMT reduction" (Newmark, 2015, p. 21). Newmark's reference to 'efficient' living refers to the finding that, "lower-income households own fewer cars, live in fewer rooms, and take up smaller shares of their buildings" (Newmark, 2015, p. 20). Essentially, by living "more compactly in location-efficient areas," lower-income households yield more VMT reduction within the parcels studied (Newmark, 2015, p. 22).

For policymakers, this is an important takeaway, as cities can capitalize on meeting goals to reduce VMT through specifically aligning affordable housing and transportation. In the ASMP, Austin has identified reduced VMT per capita as an indicator and target in their efforts to provide transportation demand management programming (TDM). ¹⁹ Pairing transportation and affordable housing efforts can help address Austin's outlined goals.

AFFORDABLE HOUSING AND TRANSPORTATION COLLABORATION

Overall, it is hard to argue that, on a national scale, our transportation network does not need an upgrade. Because gas taxes haven't been increased since 1993, the Highway Trust Fund "teeters on insolvency" as a result (Stockton, 2018). In 2008, the U.S. Department of Transportation (U.S. DOT) announced that the federal Highway Trust Fund "had run out of money" and Congress approved an \$8 million bailout from general funds (Davis, 2018). Since 2008, Congress has transferred more than \$140 billion from the general fund into the Trust Fund as additional bailouts (Stockton, 2018). While the Obama administration opposed gas tax increases during a recession, the hope for a legacy surface transportation bill proposed in the administration was unable to succeed in a Republican Congress, further draining the Trust Fund's financial status (Davis, 2018). Because funding is limited at the federal level, the burden for the network will typically fall on the taxpayers. A Public Interest Research Group report from 2015 surmised that an average household in the U.S. will "bear on average an additional burden of more than \$1,100 per year in taxes and other costs imposed by driving" (Dutzik, Weissman, &

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¹⁹ TDM is an approach to reducing congestion "through strategies that reduce our impact on the transportation network rather than add capacity" (City of Austin, 2019).

Baxandall, 2015). However, the report also notes that, "if mass transit's cost overruns were divvied up equally, everyone in the US would owe about \$125 annually" (Stockton, 2018). It's up to voters in Austin to commit to funding a transit system that can bring overall savings. At the same time, the city needs to make that system convenient enough for users to rely less on their vehicles through improved land use and affordability requirements for housing along transportation routes.

Austin's affordable housing bond

As referenced in Chapter 2, voters overwhelmingly supported Austin's Proposition A in 2018, a \$250 million bond committed to expanding affordable housing in Austin. The city's goals as stated in the Strategic Housing Blueprint aim to provide 60,000 new units of affordable housing and 75,000 units at higher income levels "over the next decade" (Craver, 2019). As of mid-2019, it has not been finalized where affordable housing will be built. Local consultants from Asakura Robinson, a local planning and design firm, and the Austin Community Design and Development Center, a local nonprofit, are leading efforts to evaluate housing placement for the 60,000 affordable units. Asakura Robinson has identified high opportunity areas that have "access to amenities or community attributes that can increase economic mobility for their residents," as well as, gentrifying areas, areas with high-frequency transit stops and Imagine Austin centers, and geographic dispersion of affordable housing" in each district (Clifton, 2019).

After a presentation to City Council on April 16, 2019 regarding their recommended disbursement plan, there was some discussion on the desired prioritization of opportunities of alignment with future transit routes. Figure 16 shows the proposed disbursement plan presented to the City Council. Of the 60,000 units, 40% will be built west of Mopac in Districts 6, 8, and

10 (Jankowski, 2019). The consultants and NHCD staff proposed more affordable units in Council Member Jimmy Flannigan's District 6 in suburban Northwest Austin than "a number of much more centrally located districts" because of the opportunities for upward mobility and suburban land available (Craver, 2019). Conversely, 30% of units would be built in between Mopac and I-35, and an additional 30% would be built east of I-35 (Jankowski, 2019).

Proposed affordable housing growth

On Tuesday, Austin city officials unveiled a plan that calls for building 60,000 affordable housing units over the next 10 years. Here's a look at how those units could be spread among Austin's 10 city council districts:

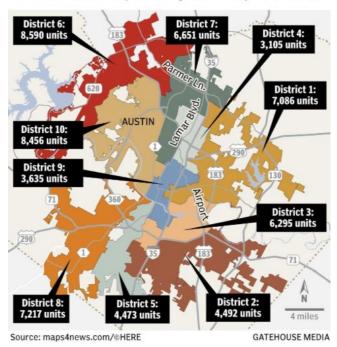


Figure 16: Bond money in hand, questions turn to where to build affordable housing: Proposed Affordable Housing Growth (Jankowski, 2019)

At the meeting, Council Member Greg Casar, who represents District 4, appeared concerned that the districts between Mopac and I-35 (Districts 4, 9, and 5) that have current and future bus routes planned did not have larger numbers of proposed affordable units (Clifton, 2019). Council Member Casar said that, "part of the hope with the high-frequency transit was to

correct for that somewhat by trying to concentrate more into smaller districts that have more high-frequency transit" (Clifton, 2019). Overall, Council Members Casar and Flannigan "both noted that the 15,000 supposedly transit-oriented units that NHCD anticipated were not targeted for some of the most transit-friendly parts of the city" (Craver, 2019). There is more work to be done in aligning housing and transportation plans, and Council Member Casar "suggested the department rework its transit calculation to focus on areas next 'to the best public transit that we have" (Craver, 2019). With the rising costs of land in core areas that will receive transit upgrades, however, it is unclear if the city be able to "produce as many units as would be possible in the cheaper areas on the city's periphery" (Craver, 2019). Clearly, there are still many unknowns left to resolve in the housing plan, and it is publicly unclear as of Spring 2019 how the consultants will move forward in aligning affordable units secured by Proposition A with transportation that has yet to be funded through a mobility bond.

Aligning housing and transportation efforts

Despite the many unknowns, one thing is clear: Austin, to convince its residents to pass a public transportation mobility bond in 2020 that funds Project Connect, should communicate first and foremost that the two bonds go hand in hand. An example of this effort was recently passed in California, when former Governor Jerry Brown signed Assembly Bill 2923 (AB2923) into state law in September 2018. The bill allows transit agencies to zone its properties and limits the ability of cities to "delay or obstruct development" (Swan, 2018b). For BART, this means zoning "an estimated 250 acres of blank asphalt" parking lots around their stations (Swan, 2018b). Democratic Assemblyman David Chiu (San Francisco) and his co-sponsor, Democratic Assemblyman Tim Grayson (Concord) hope the estimated 20,000 new homes in BART's service

area could add vertically density (Swan, 2018b). The bill provides that new construction must have "a height less than or equal to one story, or 15 feet, above the highest approved height for mixed use or residential use within a half-mile of a district station parcel" and denotes at least one-third of the structures units to be dedicated to low- and moderate-income families (Chiu & Grayson, 2018). BART is addressing this new bill and committed to develop its eligible properties by 2040 (Swan, 2018b). In addition to 20,000 new units, BART foresees development of 4.5 million square feet of commercial space, "including child care and educational facilities" (Swan, 2018b). In her article, Swan notes that the bill authors "pitched their idea as a sensible solution to two gnawing regional problems: traffic congestion and the housing crisis" (Swan, 2018b). Assemblyman Chiu confirmed his thoughts on the crisis by saying that "we can no longer afford to say no to building housing, especially around transit hubs" (Swan, 2018b). However, his conviction was met with pushback from leadership in other cities and towns in the metropolitan region, specifically in the East Bay. 20

Despite its unpopularity in certain strongholds, efforts like AB2923 would have sincere difficulty in Texas. Austin's efforts to develop affordable housing and transportation collaboratively may be better off being discussed and developed at the local level. And although a clear-cut regulation is useful, the city can begin by analyzing how best to make their decisions

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²⁰ The former city manager of Lafayette, Steven Falk, left his position because of his city's opposition to AB2923. As he stated in his publicly released resignation letter, "I believe that adding multifamily housing at the BART station is the best way for Lafayette to do its part, and it has therefore become increasingly difficult for me to support, advocate for, or implement policies that would thwart transit density. My conscience won't allow it" (Swan, 2018).

through the end of 2019 while ensuring the two efforts are developed in partnership. As Eric Jaffe states, "strong transit may not be sufficient to make a city affordable, but it's definitely necessary" (Jaffe, 2014).

Chapter 6: Conclusion

IMPROVING THE PUBLIC TRANSPORTATION LANDSCAPE IN AUSTIN

How will Austin build and pass a better and more successful public transportation mobility bond package in 2020? Looking back on prior public transportation bonds, considering the successes and failures of other cities, and exploring potential intersections within Austin's affordability goals can help us build a pathway. While the answer and the key decisions are not yet clearly defined, there is certainly justification in both the growing region and changing electorate for a new transportation plan in Austin. As the Central Texas region grows, and its population of 2 million doubles by 2040, Cap Metro imagines "a complete system of reliable and frequent transit with congestion-proof services that operates free from other traffic" (Capital Metro, n.d.-e). The various topics referenced throughout this paper have confirmed that, building a successful transportation plan as a method for solving congestion may leave the city still struggling with congestion in the future. And yet, providing options to improve mode share for residents and aligning transportation plans to affordability goals is difficult work.

Successes and failures of bond elections

Aligning San Francisco's successful Measure RR to a strategic, presidential election in November 2016 allowed the bond to pass. By determining areas of strong and weak support, San Francisco and Alameda Counties carried the two-thirds majority that the measure needed. Austin can replicate San Francisco's approach in the upcoming 2020 presidential election, where turnout is expected to be high and central Austin could make up for the surrounding suburban votes.

Nashville experienced a very different set of takeaway lessons from their May 2018 election in which the referendum Let's Move Nashville proposed raising four city taxes to a fund a large, multimodal network like nothing the city had seen before. Several factors led to its defeat, including an exorbitant cost, a rushed timeline, and a mayoral scandal, among others. These complications and an overly ambitious plan ultimately became too much for the region, and the referendum was handily defeated.

Considerations of Project Connect

In recent years, Cap Metro has been making various changes to improve frequency and ridership, such as the Cap Remap. Looking forward, Cap Metro and the City Council will need to take time to address the key decisions that will shape Project Connect such as mode, dedicated right of way, and street design. These factors are important, because they will influence the ability of Project Connect to align with the ASMP goal of reaching a 50/50 mode share by 2039. Upcoming decisions that need to be made as 2020 approaches will determine the degree to which the city is able to reach that goal. However, before those goals can be addressed directly, the bond election will be the determining factor in seeing improved mode share in Austin.

Alignment of affordable housing and public transportation investments

Both longstanding and recent research confirm that building public transportation in a city does not necessarily mean traffic is reduced citywide. Because the effects of public transportation on congestion reduction are typically aligned with the very corridors where public transportation developed, it may not be realistic to expect suburban communities to experience the benefits of traffic reduction. The city, instead of proposing the 2020 mobility bond as a

solution for traffic reduction as they have done in the past, could benefit from taking a different approach to providing another context for the benefits of Project Connect: affordability.

Austin is taking steps to address their affordability concerns, and residents overwhelmingly supported Proposition A in 2018 to fund \$250 million in affordable housing investment. Reviewing location efficiency can provide context for the dynamics of how housing and affordability interrelate. It also questions whether Austin could refocus the placement of housing units supported by the 2016 bond around Project Connects future stations. There is a lot of intersectional work the city will need to do in order to compose a comprehensive strategy, especially when it comes to the discussion of land use planning that prioritizes affordable housing and transportation. California's AB2923 demonstrated the potential and complications caused by aligning land use planning, transportation, and housing. For now, Austin can address the intersections of these factors that can be seen, like the opportunity that exists to fund public transportation in the upcoming 2020 election cycle.

FINAL THOUGHTS

Looking towards November 2020 offers a new hope for residents who would like to see a city-wide transportation network in Austin. This report lays the groundwork for the landscape surrounding Project Connect and considerations that may be helpful as transportation consultants, policy and advocacy experts, and residents alike offer their recommendations. Austin can take the familiar approach from 2000 and 2014 to no avail, or the city can seize on this unique moment and take into account several key factors that could help boost Project Connects potential for success.

The 2020 mobility bond represents an opportunity to make small edits with big results. If Austin takes advantage of the presidential election cycle, manages to avoid overwhelming residents, and promotes the whole system-wide network, the city can continue to aim big. Austin

needs to highlight its recent successes in ridership improvement and affordability gains and consider aligning more directly with the 2018 housing bond to pass a large-scale network like none Austin has seen before. This process will be important now more than ever in implementing a new transit future that the city can be proud of.

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