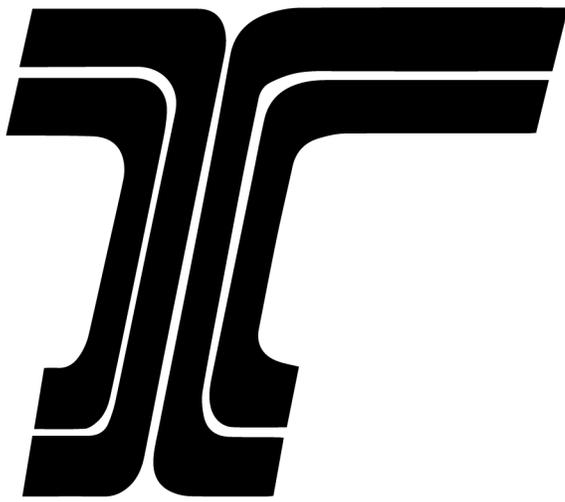




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## Oregon Transit and Housing Study

Memorandum 8: Non-Oregon Case Studies

February 25, 2022





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## Acronyms and Abbreviations

DART	Dallas Area Rapid Transit
ETOD	Equitable Transit-Oriented Development
FTA	Federal Transit Administration
GIS	Geographic Information System
ING	Interagency Network Group
LRT	Light Rail Transit
MoD	Mobility on Demand
NCSG	National Center for Smart Growth
ODOT	Oregon Department of Transportation
OTC	Oregon Transportation Commission
PLCC	Purple Line Corridor Coalition
RLF	Revolving Loan Fund
RPM	Route Performance Maximization
SAP	Strategic Action Plan
ST2	Sound Transit 2
ST3	Sound Transit 3
TAZ	Travel Analysis Zone
TIF	Tax Increment Financing
TOD	Transit-Oriented Development

# 1 Executive Summary

The two largest expenses of a typical household are transportation and housing, and the relationship between the two can have large impacts on an Oregonian's quality of life. Therefore, the policy choices made by local, regional, and the state government concerning these areas can affect environmental and physical health outcomes, economic mobility, educational and cultural opportunities, a household's financial well-being, and more. As a result, there is a desire by the state of Oregon to better understand the benefits of aligning housing and transportation policies to improve housing affordability and mitigate transportation's impact on climate change.

This technical memorandum contributes to the understanding of the housing and transportation relationship by looking at different tools used by entities outside of Oregon to tackle this issue. A case study approach was done to perform this analysis. Case studies allow the project team to ask questions to about the environment where these tools were used, how they were applied, and the lessons learned.

The selected non-Oregon case studies represent a diverse group of geographic areas ranging from dense urban areas to small cities and sparsely populated rural counties. They include projects ranging from transit-oriented development (TOD) and transit route realignments to greater accessibility through strategic stop placement. In addition, the selected case studies are from different stages of implementation — projects being proposed or researched, projects that are currently active, under development, currently in effect, or projects that are completed with tangible results. This allows an assessment of the goals of the approaches, the decisions made, how the program or tool was applied, and the lasting impact.

From these case studies there are five key findings that can be applied to the Oregon Department of Transportation (ODOT), municipalities, and transit agencies as they implement transit improvements to urban corridors, plan new development in suburban areas, or reduce accessibility barriers in rural areas (Figure 1). These findings are:

- Look beyond the fixed route
- Collaboration is key
- Better connections mean more affordability
- Connecting affordable housing to transit improves access
- Support those building the affordable housing

Many of the tools and strategies featured below should sound familiar as several are already being explored or implemented in Oregon. The next step is to take innovative approaches from outside Oregon, learn from them, and identify opportunities where existing Oregon programs could be improved, and new approaches could be applied.

Figure 1. Five Key Findings.



## 1.1 Look Beyond the Fixed-Route

Looking beyond the fixed route means more than just looking at alternate ways to provide a bus service. It is about focusing on the unique social and geographic needs of the community and devising a system that meets those needs. Rural, tribal, and small urban areas have unique challenges requiring a flexible approach to serving residents. The destinations and residents in these areas are spread far apart, which can make fixed-route service challenging to operate. Fixed-route service is when a bus runs along a predetermined, regularly scheduled route with fixed stops along the way. This type of transit service is predictable and easy to understand, but it is more efficient in areas with a higher density of both riders and destinations. When residents and destinations are more spread out, there are longer distances between homes and bus stops, creating a barrier to using the service. Other types of service, such as Deviated Fixed-Route and Mobility on Demand, can bring transit service to where people live as opposed to having people come to the transit service. Either by deviating from the main road to pick someone up or by even taking someone from their home to their destination, these flexible options allow a transit provider to cost-effectively provide more coverage in rural or small urban areas. These services can also be tailored to accommodate the unique needs of a community.

## 1.2 Collaboration is Key

Collaboration is vital for enhancing transit and housing planning and connections. It allows stakeholders, be they transit providers, planners, housing advocates, or developers, to achieve more convenient connections between transit and housing than if they operated on their own. This efficiency occurs both in the public and private realm.

Public agencies, particularly among rural jurisdictions, can collaborate by coordinating transit operating funds, administrative staff time, and even transit fleets. Reducing the duplication of services and coordinating how a region is serviced can also result in a more efficient transit service that is easier for riders to use. The collaborative efforts of non-profits and community-based organizations (CBO), both with each other and with public agencies, demonstrate the transformative effects working together can have on a community.

### 1.3 Better Connections Means More Affordability

The location of housing in relation to transit service plays an important role in increasing the overall affordability of a housing development. Low-income communities more often need more affordable transportation options than personal car ownership. If a developer or city chooses to place a housing development on the urban fringe where land is cheaper, but transit service is sparse, then the financial benefits of living there can be eroded by potentially higher transportation costs. Housing developments sited near high quality transit service provide low-income communities, especially those without the means to own a car, more affordable transportation options.

### 1.4 Support Those Building the Affordable Housing

There are times when prime locations for both affordable housing and transit come available, but land values are so high they simply make developing it as affordable housing infeasible. As previously mentioned, siting housing developments adjacent to transit creates the most amount of benefit for low-income populations. Rather than simply building on the cheapest land available, which is usually not transit adjacent and often far from transit, public agencies and other organizations can support affordable housing developers' ability to build where the residents would be best served by transit. Developers can be incentivized to build within proximity to transit service through such strategies as allowing density bonuses, tax benefits, or other financial benefits for the developer. These case studies identified other strategies, by either subsidizing the cost of the land or by saving the developer time in designing a proposal.

### 1.5 Engage Consistently

Public engagement does not end when the project is implemented or when the problem is solved. Continual engagement with those who will use the service brings better understanding of their needs and ultimately a better designed service and better integration with housing. It is also vitally important that engagement be done through an equity lens. This means acknowledging that not all communities are starting from the same starting point and actively bringing underrepresented voices to the table.

## 2 About the Transit and Housing Study

Transportation and housing have large, interrelated impacts on Oregonians' quality of life. Not only do they comprise the two largest expenses for a typical household, but the policy choices that governments make about transportation and housing affect environmental and physical health outcomes, mobility, economic, educational and cultural opportunities, the financial well-being of households, and more.

A desire to better understand the benefits of aligning housing and transportation policies has grown across the state, prompted by declining housing affordability and concerns about transportation's contributions to climate change. Last year the Oregon State Legislature asked the Oregon Department of Transportation (ODOT) to study policies and actions that could improve households' quality of life through increasing housing opportunities with easy connections to transit. Moreover, the Oregon Transportation Commission (OTC) – the body responsible for setting statewide transportation policy – recently worked with ODOT to adopt a 2021-23 Strategic Action Plan (SAP) that includes climate equity and addressing climate change as key goals, along with improving access to active and public transportation and taking steps to address congestion.

While ODOT is first and foremost a transportation agency and housing policy is not directly a part of its mission or vision, it seeks a better understanding of transportation and housing connections and recognizes that better alignment of housing and transportation can help to achieve the policy goals in the SAP among others. With these goals in mind, ODOT is pursuing this Transit and Housing Study for the following reasons:

- ODOT recognizes the bidirectional relationship between transportation planning and land use decisions and understands that a well-designed transportation system can bring economic value to a region by improving the connection between communities and their destinations, can enable vibrant neighborhoods where commercial and social activities take place, and can reduce the need for major transportation investments in the future.
- ODOT and its partners also recognize the importance of **ensuring transportation, transit, and housing plans work together**, which is why partnerships and coordinated planning are important.
- ODOT helps fund transportation, transit, and coordinated land use and transportation plans; **this study can inform those plans and funding allocation.**
- ODOT's public transportation division and planners throughout the agency **can work to help implement or promote results of this study.**
- This work will **help implement the Oregon Public Transportation Plan**, which calls for integration of plans, supporting transit with housing, and other topics to be addressed in this study.
- ODOT understands that regional plans that do not evaluate social and environmental impacts can negatively affect housing affordability, cause displacement, and increase greenhouse gas emissions via sprawl and long commutes.

- The SAP identifies **equity** as a priority, specifically, “Prioritize diversity, equity and inclusion by identifying and addressing systemic barriers to ensure all Oregonians benefit from transportation services and investments.” Transportation and land use plans that do not prioritize equity, including addressing current inequities, may inadvertently contribute to or continue racial and economic segregation of neighborhoods.

As this Transit and Housing Study progresses, a glossary of key terms will accompany each white paper. Throughout each document, an \* denotes that a term is defined in the glossary, which is organized by topic area. The \* is only provided on the first instance of the word.

This Transit and Housing Study will provide a foundation and understanding of how housing and public transportation are linked and affect households’ quality of life. At the conclusion of the study, the goal is to identify actionable strategies that local housing and transportation planning departments, Tribal governments, and transit providers can take given the unique mobility needs and circumstances throughout Oregon.

## 3 Introduction to Non-Oregon Case Study Evaluation

The purpose of this technical memorandum is to summarize examples of transit and housing connections outside of Oregon to understand how stakeholders—including transit agencies, local jurisdictions, and advocates—are tackling issues of connecting transit to housing, especially affordable housing. This assessment is being done through a case study approach. Case studies allow researchers to ask questions and learn approaches to better connecting transit and housing, including those approaches and strategies that can be replicated in Oregon. The case study analysis focuses on asking questions to understand the circumstances that led to a course of action, the stakeholders and their level of involvement, how the approach was applied, and the lessons learned.

### 3.1 Selection Methodology

The case study selection process consisted of identifying examples with different approaches to connect housing to transit options either through policies, funding programs, community engagement strategies, or collaboration and partnerships. These approaches were then assessed to learn where and how they were applied to provide lessons learned for possible application in various locations throughout Oregon. The selected non-Oregon case studies represent a diverse group of geographic areas ranging from dense urban areas to small cities and sparsely populated rural counties. They include projects ranging from transit-oriented development (TOD) and transit route realignments to greater accessibility through strategic stop placement. In addition, the selected case studies are from different stages of implementation — projects being proposed or researched, projects that are currently active, under development, currently in effect, or projects that are completed with tangible results. This facilitates an

assessment of the goals for each approach, the decisions made, how the program was applied, and the lasting impact. This selection methodology was flexible and identified replicable tools and a diversity of experiences and lessons learned to develop recommendations for Oregon stakeholders.

The purpose of the case studies is to answer the following questions:

- How does connecting housing decisions with transit affect access to jobs and other services? Do these connections improve opportunities for different population groups?
- What conditions support connecting housing to transit to make both feasible and achievable? Why? Do the conditions differ by geographic setting or population size? What other factors made a difference?
- Who were the champions that helped make the co-location of housing and transit come to fruition?
- Was the case study successful? Were there any key moments of coordination or key actions?

Not every case study fully answers these questions, but each address several. This allows an assessment of the tools or techniques used to find the best combination of approaches to meet unique situations faced by Oregon communities.

## 3.2 Approach Limitations

The selection process consisted of searching for articles, documents, or reports that are available through an internet search. This limited the pool of potential case studies to public records, media sites, and databases that are not placed behind a pay wall or require primary research, such as interviews. While the approach provides a great degree of flexibility in selecting case studies, some of the desired approaches, such as transit in rural and Tribal settings, are difficult to find, and those that are available have limited documentation. As a result, this analysis evaluated third party research to answer some of the desired questions.

# 4 Case Studies

## 4.1 Redesigning Transit Networks - Tallahassee & West Palm Beach, Florida

### 4.1.1 Introduction

With increasing transit costs, decreasing revenue sources, and changing commuter travel behavior, transit agencies across the country are considering or conducting major route redesigns to improve system performance and attract new riders. A network redesign\* refers to the “planning and implementation of significant changes to a transit

agency's network of bus routes, informed by any evaluation of the network structure as a whole rather than solely a collection of routes" (Byala et al. 2019).

Since 2011, many agencies across the country have completed a major system redesign, either all at once or in a phased approach. These redesigns are an emerging trend in transit planning and occur for the following reasons:

- Improve the system for both current and potential riders
- Improve riders' experiences by better matching the transit network to both current and forecasted travel patterns
- Support urban sustainability and to reduce congestion
- Counteract ridership losses
- Curb or control operating costs (Byala et al. 2019)

From an affordable housing perspective, transit network redesigns provide an opportunity to meet community needs by identifying coverage gaps and missed opportunities.

This case study reviewed two different transit redesigns: StarMetro (Tallahassee, FL) and PalmTran (West Palm Beach, FL). These two transit agencies had different motivations and approaches to their network redesigns, leading to different impacts to low-income residents in their respective communities.

#### 4.1.2 What Did They Do?

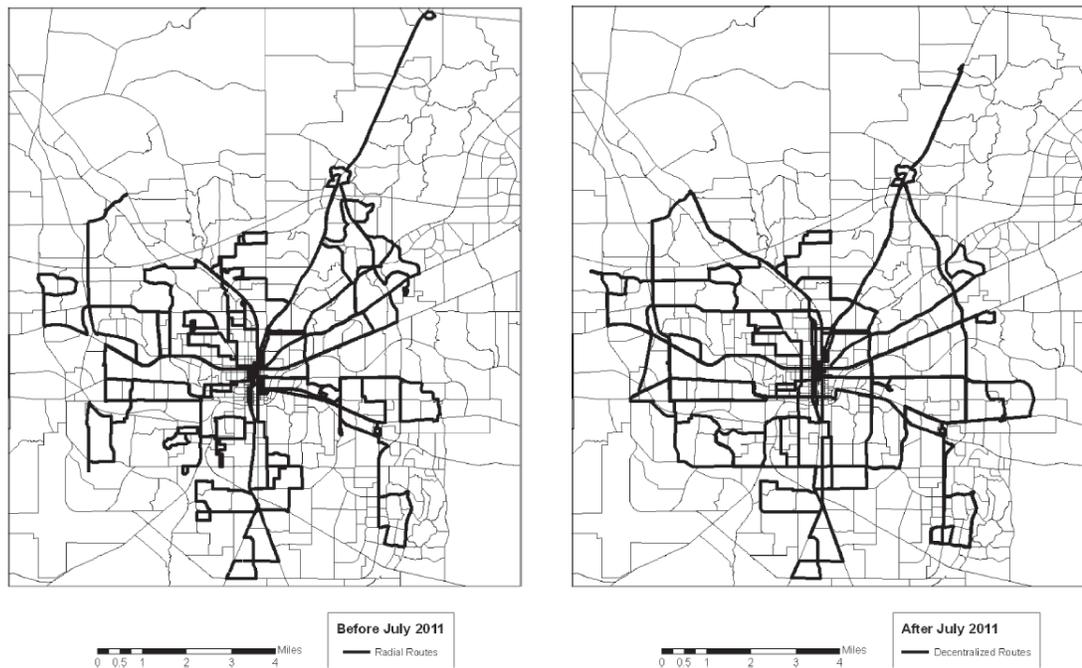
Transit network redesigns occur to address changes in ridership, funding, a community's needs, or the organization's mission, or to implement new technologies and/or modes. From a case study standpoint, they provide a clear before and after analysis of public transportation's impacts on accessibility, mobility, and travel behavior without factoring in the influence of other variables. In addition, the processes leading up to the launch of a complete network overhaul are usually very well documented. Reviewing these processes will reveal how and why decisions were made regarding route design logistics, frequency, and access to low-income and affordable housing. Understanding if and how the system redesign improved access for affordable housing communities and low-income individuals is key to this analysis. They also provide a long, well documented analysis process consisting typically of significant community engagement, Geographic Information Systems (GIS) based market demand and service analysis, policy development, and an implementation schedule that culminates in a final report with governing board approval. When compared to a major service change or a periodic route change, analyzing the impacts of a network redesign allows for more controlled variables to see how changes to the network affect system access for low-income individuals and affordable housing communities. This makes a before and after assessment of the changes possible and illustrates how access to jobs and services is affected by a transit agency's actions.

#### 4.1.2.1 StarMetro - Tallahassee, Florida

StarMetro is the public transportation agency for Tallahassee, Florida. Tallahassee is the capital of Florida and has an urbanized area population of 255,510 (2020). The urbanized area includes the City of Tallahassee and extends into portions of unincorporated Leon County and adjacent Gadsden County. The system is currently comprised of 22 routes, of which 7 routes are dedicated to serve Florida State University. 55 buses are assigned to these routes, attracting an annual ridership of 3,289,053 in 2018. The network redesign (Figure 2) was completed in 2011 (Bhattacharya et al. 2013).

- 
- Tallahassee Urbanized Area:
- Population: 255,510
  - Percent Minority: 42%
  - Percent Poverty: 23.4%
- 

**Figure 2. StarMetro Network Pre and Post Redesign**



The impact of the redesign was reviewed by two academic teams. The first team, Bhattacharya et al., sought to understand consequences of system restructuring, especially to those who are transit-dependent and legally protected groups under Title VI (minority communities, seniors, low-income residents, and those without access to automobiles), through an accessibility analysis. Accessibility was defined as the number of destination opportunities accessible by transit, discounted by the total travel time it takes to reach them (Bhattacharya et al. 2013).

The accessibility analysis consisted of two separate approaches: a review of survey data provided by StarMetro and a more analytical analysis on a Travel Analysis Zone (TAZ) basis. The survey analysis showed a decline in the number of riders who used the system more than five times per week (69 percent to 57 percent). The results suggest a modest increase in the use of the system by infrequent riders. Other findings from the survey showed an increase in the proportion of medical and other trips compared to work

and school trips, indicating greater opportunities to reach these services. When looking at the TAZ analysis, the results showed a general increase in overall accessibility as indicated by an eight-minute shorter travel time. The study concluded that the decentralized system could provide higher accessibility than a radial system for a typical resident of the service area.

The second study, Jaroszynski et al., looked more explicitly at the changes in travel time at the TAZ level and the impact of the route changes on socially or economically disadvantaged population groups, as identified by the 2010 Census. The authors examined changes in origin-destination travel times, and the change in accessibility before and after restructuring. Low-income communities in Tallahassee are in the western and central parts of the city (Figure 3). The two significant communities of color (Frenchtown and Southside) are located at points 1 and 2, respectively. The time reductions were observed primarily in outlying areas, while travel times for trips originating in many inner-city zones increased (Figure 4). Jaroszynski et al. found that accessibility was reduced by 1.18 percent. The changes were generally more positive in the outer areas. Accessibility in many core areas decreased because of lower service levels and increased travel times (Table 1). Reduced accessibility also affected TAZs located at some distance from the major arterial roads (Jaroszynski et al. 2017).

Figure 3. Selected socioeconomic characteristics of Tallahassee, Florida

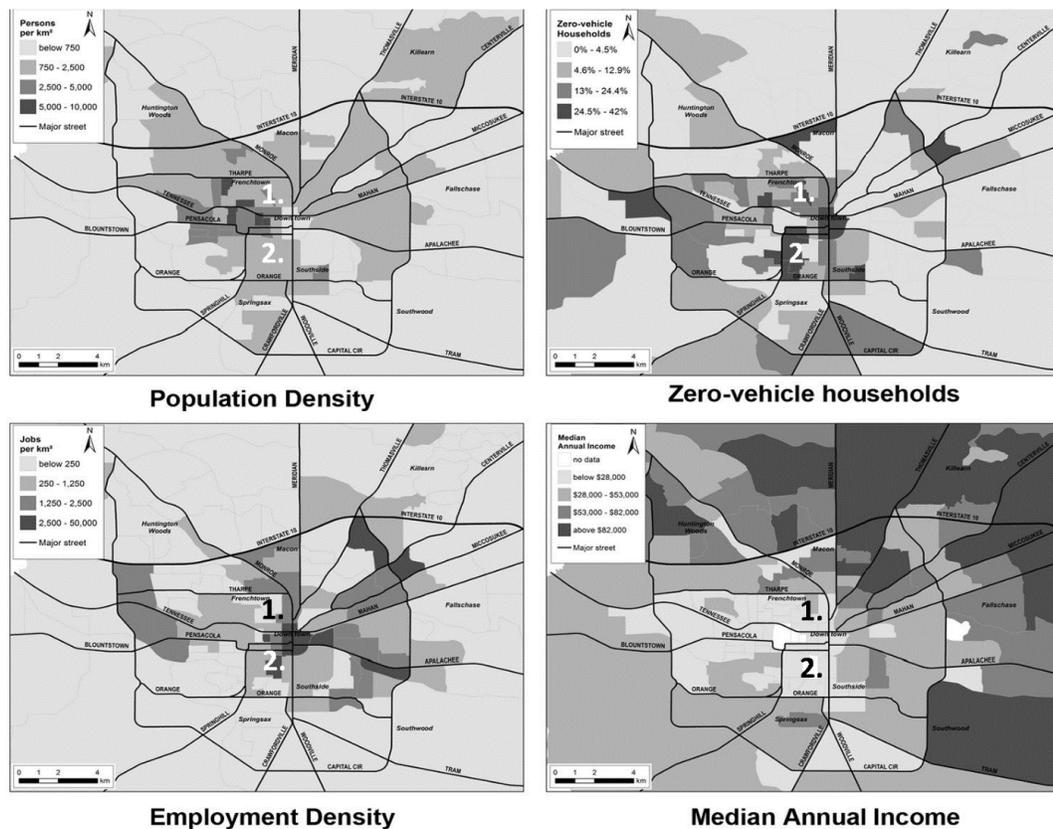


Figure 4. StarMetro Redesign - Impacts on Travel Time & Job Accessibility

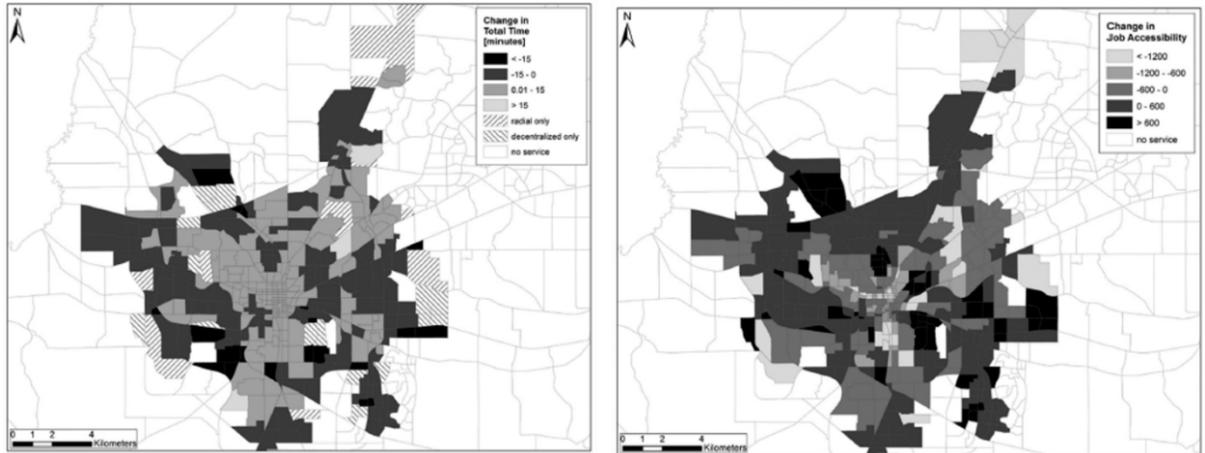


Table 1 StarMetro Redesign Accessibility Impacts

Trip Origin TAZ Characteristics	Trip Destination Job Characteristics	Accessibility Change
All Zones	All Jobs	-5.1%
18-24 years share above average		-11.9%
African American share above average		-0.7%
Below poverty line share above average		-10.6%
Zero-vehicle households share above average		-13.2%
18-24 years old share below average		3.5%
African American share below average		-7.9%
Below poverty line share below average		3.6%
Zero-vehicle households share below average		7.5%
All Zones	Jobs held by employees under 29 years	-4.3%
18-24 years old share above average		-10.6%
All Zones	Jobs held by African Americans	-4.6
African American share above average		-0.1%
All Zones	Jobs with monthly wage under \$1250	-4.0%
Below poverty line share above average		-8.0%
Zero-vehicle share above average		-10.6%
Below poverty line share below average		2.4%
Zero-vehicle households share below average		6.6%

Trip Origin TAZ Characteristics	Trip Destination Job Characteristics	Accessibility Change
All Zones	Jobs with monthly wage above \$3333	-7.3%
Below poverty line above average		-14.0%
Zero-vehicle households share above average		-16.7%
Below poverty line share below average		2.8%
Zero-vehicle households share below average		6.8%

There was a negative impact on accessibility for low-income individuals because of the service redesign, potentially moving them away from transit to other modes of transportation. Therefore, the conclusion may be drawn that the StarMetro redesign either did not change or increased the overall transportation costs for low-income households within the community. In the years after the redesign, StarMetro has moved back toward a centralized, hub-and-spoke system with only one route no longer going to the main terminal.

While the planning and analysis associated with designing the network was comprehensive, the agency could have done a better job with community outreach and listening to the affected customers. As a result, post launch problems that would have potentially resolved themselves quickly became loud complaints requiring immediate resolution by the elected officials. This reactionary approach exacerbated the situation, leading to the reversion to the previous model. To address this, redesign efforts should include continual public engagement and a thorough understanding of travel behavior in the community, especially by low-income individuals.

#### 4.1.2.2 PalmTran - West Palm Beach, Florida

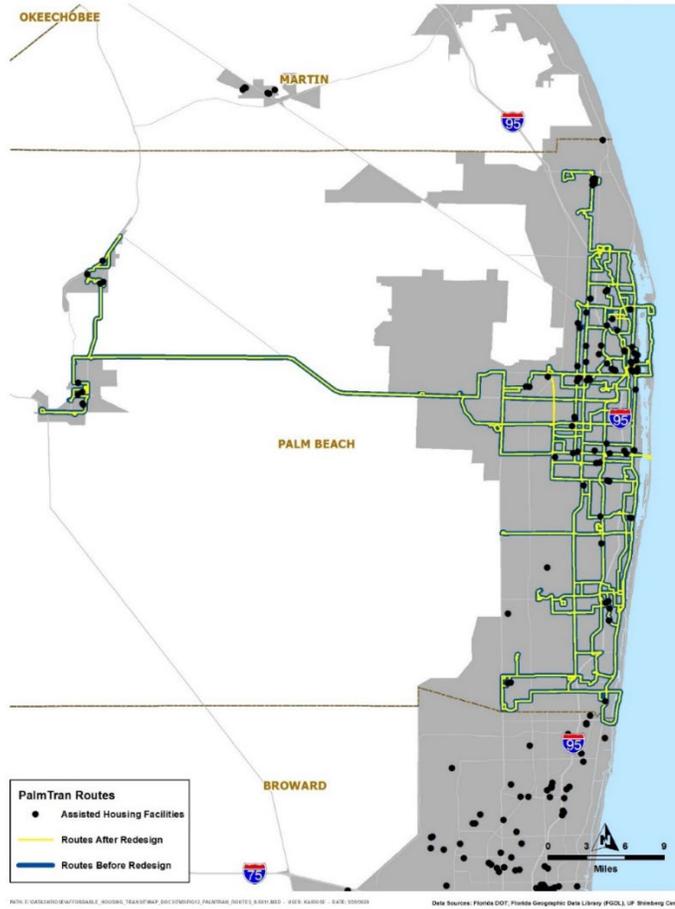
While the StarMetro approach was not successful, the PalmTran redesign shows where good public engagement can lead to success. PalmTran has provided public transportation in Palm Beach County since 1971. PalmTran currently operates over 150 buses and serves over 3200 bus stops. There are 34 bus routes strategically situated within the area serving Jupiter to Boca Raton, and West Palm Beach to Belle Glade. PalmTran provides service to the Palm Beach International Airport and routes connect with service at each of the six Tri-Rail Stations within the county. This includes service at the two Amtrak stations (West Palm Beach and Delray Beach) and connections to the Greyhound Terminal at the West Palm Beach Intermodal Center. The redesign was initiated in 2018 (Figure 5) and demonstrated the impact route redesigns can have on both operations and access (Figure 6, and Figure 7).

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#### West Palm Beach Urbanized Area:

- Population: 1,471,150
  - Percent Minority: 44.2%
  - Percent Poverty: 17.0%
-

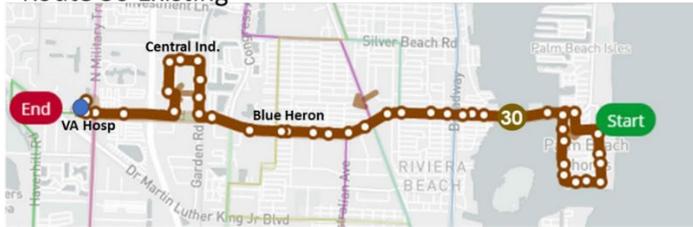
Figure 5. PalmTran Pre and Post Redesign



(Florida Department of Transportation, 2020)

Figure 6. Changes to Route 30

Route 30 Existing



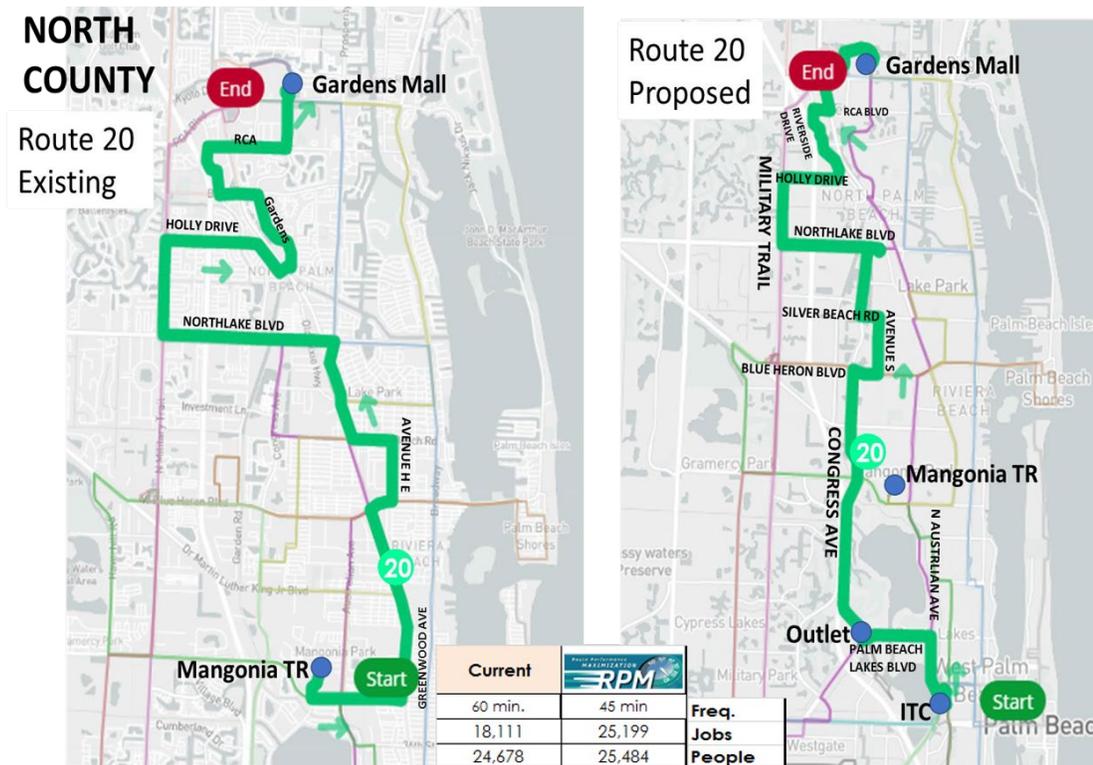
Current		
30/60 min.	60 min.	Freq.
5,802	6,972	Jobs
11,406	11,738	People

Route 30 Proposed



(Palm Beach County Board of County Commissioners, 2018)

Figure 7. Changes to Route 20

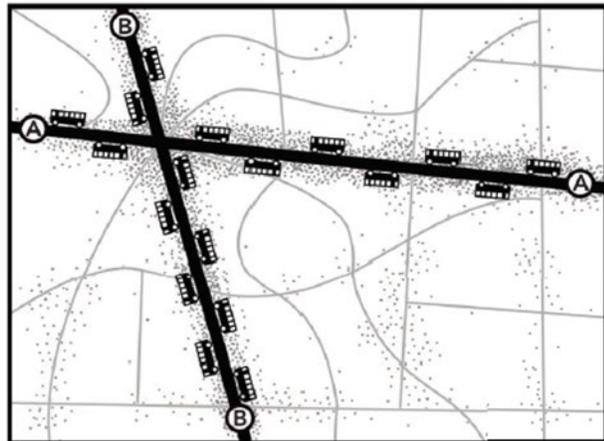


(Palm Beach County Board of County Commissioners, 2018)

PalmTran’s annual revenue hours have failed to keep up with the county’s growth in the 20 years leading up to its system overhaul. Unlike its peers within the state who expanded service between 1996 and 2015, PalmTran’s system remained constant without service level increases. In 2018, PalmTran offered the least revenue hours per-capita in the state. Prior to its overhaul, PalmTran saw roughly 9 million unlinked passenger trips. These boardings were concentrated along corridors with high density and walkability adjacent to I-95. Recognizing the need to adapt to the county’s growth since its founding and prepare for the future, PalmTran began planning its first system-wide service overhaul in 2017. The initiative was titled “Route Performance Maximization” (RPM). The RPM developed two alternative service concepts: “ridership” or “coverage.”

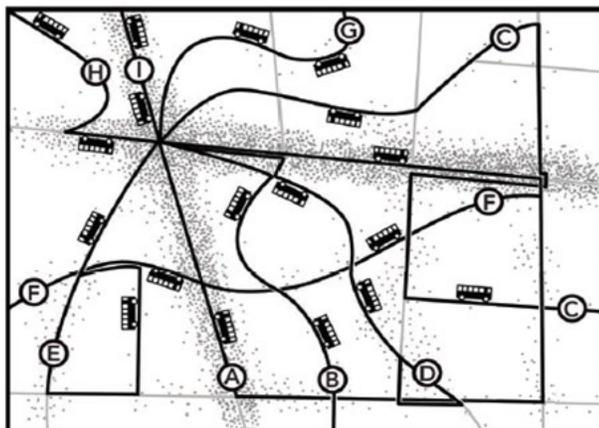
A ridership approach (Figure 8) concentrates services along corridors with the greatest potential ridership (dense, walkable areas, employment centers). The ridership approach is like a private sector service, maximizing efficiency and revenue. A “coverage” oriented approach (Figure 9), on the other hand, treats transit as an essential public service. It spreads the service network across a wider area at the expense of frequency and efficiency to provide some level of service to as many constituents as possible. All networks fall somewhere in-between each approach.

Figure 8. Ridership Network



(Walker, Jarrett 2012)

Figure 9. Coverage Network



(Walker, Jarrett 2012)

coverage” network that streamlined circuitous routes, making improvements to both coverage and ridership.

The PalmTran Network Redesign led to significant improvements for low-income accessibility to both the major transit hubs, where individuals can access other routes or modes (Table 2). In addition, it expanded opportunities to access jobs and services with neighborhoods who previously had no or limited access now experiencing access to life sustaining activities, reducing their transportation costs. One year after the new system was implemented PalmTran reported a 5 percent increase in ridership, breaking a four-year trend of annual decreases.

In November 2017, the Palm Beach County Board of County Commissioners directed PalmTran to move forward with a “coverage” network to minimize negative impacts and disruptions to current system riders. This decision recognized the needs of PalmTran’s senior population. These riders favor coverage with shorter first mile/last mile walks over high frequency ridership-oriented systems. Following the council decision, PalmTran staff refined the plan into the “enhanced

**Table 2. PalmTran Pre & Post Redesign Accessibility Impacts**

Major Hub	Time of Day/Week	Population	Jobs	Population	Jobs
<i>Pre-RPM Within ¼ Mile</i>			<i>Post-RPM Within ¼ Mile</i>		
Intermodal	7a, Weekday	240,141	171,293	286,368	177,990
Intermodal	11a, Weekday	174,667	129,014	305,112	187,773
Intermodal	5p, Weekday	196,365	151,016	286,771	182,615
Intermodal	10p, Weekday	138,352	111,709	294,791	178,729
Intermodal	530p, Sunday	133,831	99,181	219,880	150,208
Gardens Mall	7a, Weekday	92,235	58,091	143,212	94,832
Gardens Mall	11a, Weekday	115,237	68,205	147,338	91,778
Gardens Mall	5p, Weekday	111,042	65,811	151,759	96,574
Gardens Mall	10p, Weekday	142,443	93,922	204,534	117,655
Gardens Mall	530p, Sunday	92,150	64,307	84,991	55,021
Wellington Mall	7a, Weekday	136,308	33,624	274,955	123,373
Wellington Mall	11a, Weekday	156,718	47,678	256,640	89,002
Wellington Mall	5p, Weekday	157,306	48,422	249,189	85,268
Wellington Mall	10p, Weekday	78,340	29,456	301,593	101,592
Wellington Mall	530p, Sunday	47,820	14,542	92,101	24,372

Source: PalmTran Route Performance Initiative

The RPM system redesign included three innovating approaches for minimizing the potential adverse impacts of network redesigns on low-income communities. First, PalmTran clearly articulated their vision for the RPM initiative using the coverage/ridership dichotomy. Although no system is simple enough to fit perfectly within one of the two approaches, this framing of the choices inherent to the planning process facilitates a dialogue that is understandable and meaningful for non-subject-matter-experts. The coverage/ridership frame appears in documents and publications throughout the planning process. Second, not only did PalmTran actively engage the public through a variety of forums and mediums during the planning process, but they also clearly incorporated public sentiment into the final RPM system. One of the central concerns of the public raised through the 1,400 survey responses was a lack of service at night and on weekends. This is especially important for low-income workers whose schedules often require commuting during these times. The RPM redesign offered increased service and frequency for both times. Lastly, the planners designing the RPM initiative understood and tailored the system to the demographics of their constituents.

Recognizing the needs of the low-income population groups, PalmTran’s new system did not compromise coverage for ridership. Where circuitous routes were identified, streamlined redesigns-maintained coverage, creating the “Enhanced Coverage Network” ensuring that no existing rider lost access to the system. This balancing act required a careful evaluation of both service gaps and duplication.

### 4.1.3 Lessons Learned

The lesson learned from these projects include the following:

- Public engagement is an ongoing effort. It does not end once the new project is in place, or the route design is implemented. Failure to continue to listen to the needs of those who use the transit service can lead to minor issues or become political problems to be hastily solved.
- A ridership-based system values improving overall ridership by concentrating services along corridors and in dense areas where there is the greatest potential for ridership. A “coverage” oriented approach treats transit as an essential public service and focuses on providing equal levels of transit to all areas in the community. Focusing exclusively on one or the other either limits ridership growth or disenfranchises population groups.
- Low-income residents have different needs with work outside of the traditional 9 to 5 hours and a greater need for access to services.
- The expansion of transit services at night and on weekends helped to contribute toward the increased ridership reported by PalmTran.
- Meeting with operators is equally important as engaging with the community at large. Operators are on the front line and can explain the challenges some people may face when using the system.

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Minneapolis Urbanized Area:

- Population: 2,854,190
  - Percent Minority: 26.3%
  - Percent Poverty: 8.7%
- 

## 4.2 Grass Roots Community Organizing - Minneapolis, MN

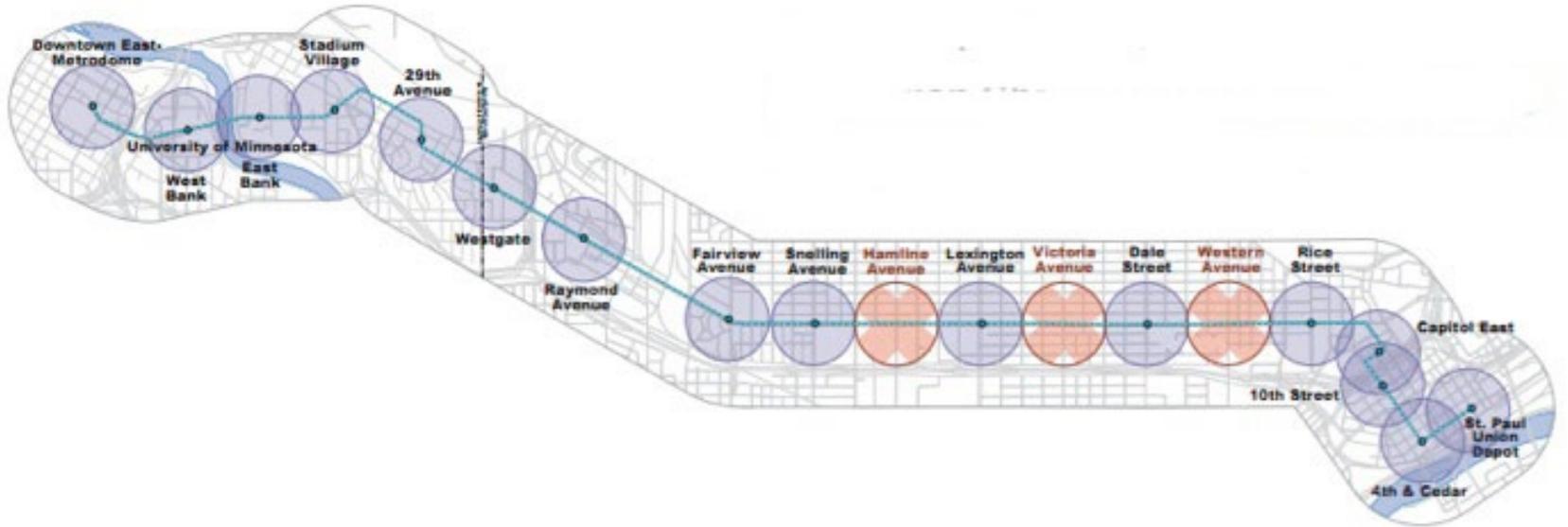
### 4.2.1 Introduction

Sometimes when planning for major transit investments, staff and procedures do not consider the impact of the projects on the different communities it traverses. It takes advocates, community leadership, and a receptive organization to change the decision after it is made. This is the situation with the “Stops for Us” grass roots campaign in Minneapolis, Minnesota. Here, a wide coalition of organizations rallied together to get stations added to a proposed light rail transit (LRT) to serve distinct, historic communities of color along University Avenue. This case study provides valuable insight on how listening to a community can lead to change and investments in these disenfranchised communities.

## 4.2.2 What Did They Do?

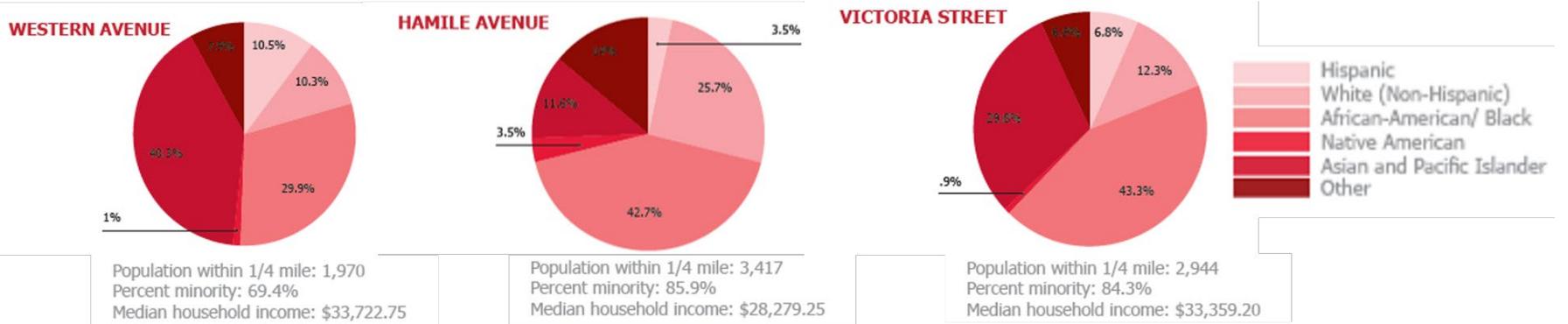
Planning for the Central Corridor LRT, now known as the Green Line, in Minneapolis began in the 1980s, however, interest in the project ramped up in the 2000s. The route's alignment and planned stations were announced in 2006. The stations were planned along University Avenue approximately every 0.5 mile apart however there were gaps in areas where the largest populations of low-income people and people of color lived (represented by the red station areas in Figure 10). In the eastern University Avenue section, home to significant populations of color, the proposed stops were one mile apart, requiring residents to walk up to 0.5 mile enduring a climate with average winter temperatures of less than 25°F. Many of the residents of these communities are dependent on public transportation to reach daily services. Adding to the situation is that bus service would be reduced to accommodate the LRT. Therefore, the low-income communities and communities of color did not see how they were going to benefit from this investment in University Avenue.

Figure 10. Central Corridor LRT Alignment & Station Location



(Szczepanski, Carolyn, 2011)

Figure 11. Eastern University Avenue Station Area Community Breakdown



(Stops for Us Coalition, District Councils Collaborative of Saint Paul and Minneapolis, 2011)

This synopsis does not suggest that the staff was negligent in their assessment of the needs of the low-income residents of the corridor. Rather, the methodology at the time put a preference on the overall travel time of the corridor and the amount of traffic diverted to assess the overall cost-effectiveness of the project. This placed livability and economic factors at a lower rating in the evaluation criteria. As a result, key decision makers were opposed to the additional stops in part because they believed the project would be disqualified from a federal grant if they were added. There was also doubt in local leadership that there was any discrimination involved in the original route and station planning.

In addition, there was a general lack of trust from the communities of color in the overall process. In the 1950s and 1960s, local government constructed Interstate 94 right through the heart of the Rondo neighborhood, a predominantly low-income African American community. Like Portland's construction of I-5 through the Albina neighborhood in the early 1960s, the residents and businesses in Rondo were not involved in the decision-making process and many were displaced. The Central Corridor LRT process was viewed as reminiscent of that dismissive, top-down approach from the 1960s.

However, the Central Corridor LRT also provided an opportunity for those wounds to heal and trust between those communities and the local government to be established. A grass roots advocacy group called "Stops For Us" formed, comprised of local community councils, coalitions, and neighborhood groups. Stops For Us members educated themselves and the community by attending committee meetings, conducting their own outreach, learning jargon, and submitting comments. A consultant was even hired to analyze transitway developments around the country

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"This is not the case where the federal government moved a local community to do the right thing. This is the case where the local community move the federal government to do the right thing."

Peter Rogoff, Department of Transportation

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and compare those to what was happening on the Central Corridor. Stops For Us wanted to utilize data-driven analysis and conclusions to argue their case because it added credibility. Their goal was not to be left out of the decisions associated with a major transportation investment that had the potential to benefit their lives.

With this clear objective, the community leaders began to lobby local, state, and federal leaders for the addition of three additional stations along the alignment: Hamline, Victoria, and Western. Due to constant pressure, the city started to try to figure out ways to construct the stations without compromising their Federal Transit Administration (FTA) grant eligibility. It was discovered that a local agency could commit 100 percent of the funds to build the requested stations and not have to submit the change to FTA for a funding match. The City committed to this idea and promised one station to be built. This pleased the communities as they saw it as a step in the right direction. With one station out of the way, the organization ramped up their efforts to get the other two. The direct conversations with federal policy makers, such as Peter Rogoff who was FTA Administrator at the time, made it clear that FTA funding regulations needed an update. The policy was changed so that "cost-effectiveness" was not the sole pass/fail driver for determining project eligibility, rather "livability factors" were added to the mix. At the end,

Stops For Us was able to lobby the local and federal government planners to add three stops to the \$1 billion Central Corridor light rail project to increase transit access to low-income and minority communities.

### 4.2.3 Lessons Learned

The lesson learned from this project include the following:

- Consistent dialogue between organizers and project leadership is critical and led to the addition of the three new stations along the Central Corridor LRT.
- As with transit network redesigns, there is no right time for community engagement. It needs to be a constant effort throughout the process. This ensures community leaders, planners, and public are continually aware of what is going on, what changes are being made, and where the project is in the process.
- Community engagement is not just conducting meetings and presenting project information. It is sitting down with the leaders and residents of the affected communities, listening to them, and working together to come up with solutions. These actions help to gain an understanding of the needs of the community and to make sure they are incorporated into the project.
- Coalition building is key to the success of a project. The more voices of support that are included, the more likely the project will succeed. This is best summed up by Vic Rosenthal of Jewish Community Action who said, “This victory points the way toward future victories for equity. It shows the community can pull together, gain some power and influence the outcome of a major infrastructure project. It demonstrates how important coalition-building is. Without getting the right people in the room, you’re never going to have enough power to win. We learned never to give up on something. It is possible to win” (Stops for Us Coalition, District Councils Collaborative of Saint Paul and Minneapolis, 2011).

## 4.3 Equitable TOD in Suburban Neighborhoods - Montgomery and Prince George’s Counties, MD

### 4.3.1 Introduction

Large-scale transit investments can bring about new opportunities for employment and housing, upgraded transportation features, and a boost in economic development.

However, the same investment can also cause the displacement of low- and middle-income residents and small local businesses through rising rents and long-term construction impacts, such as the permanent reduction of parking spaces and prolonged access issues caused by construction. To mitigate displacement risks and improve equitable distribution of benefits, some communities have built a coalition of public, private, and nonprofit stakeholders to ensure minority, immigrant, and other

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Montgomery & Prince George County:

- Population: 1,971,566
  - Percent Minority: 66.1%
  - Percent Poverty: 7.8%
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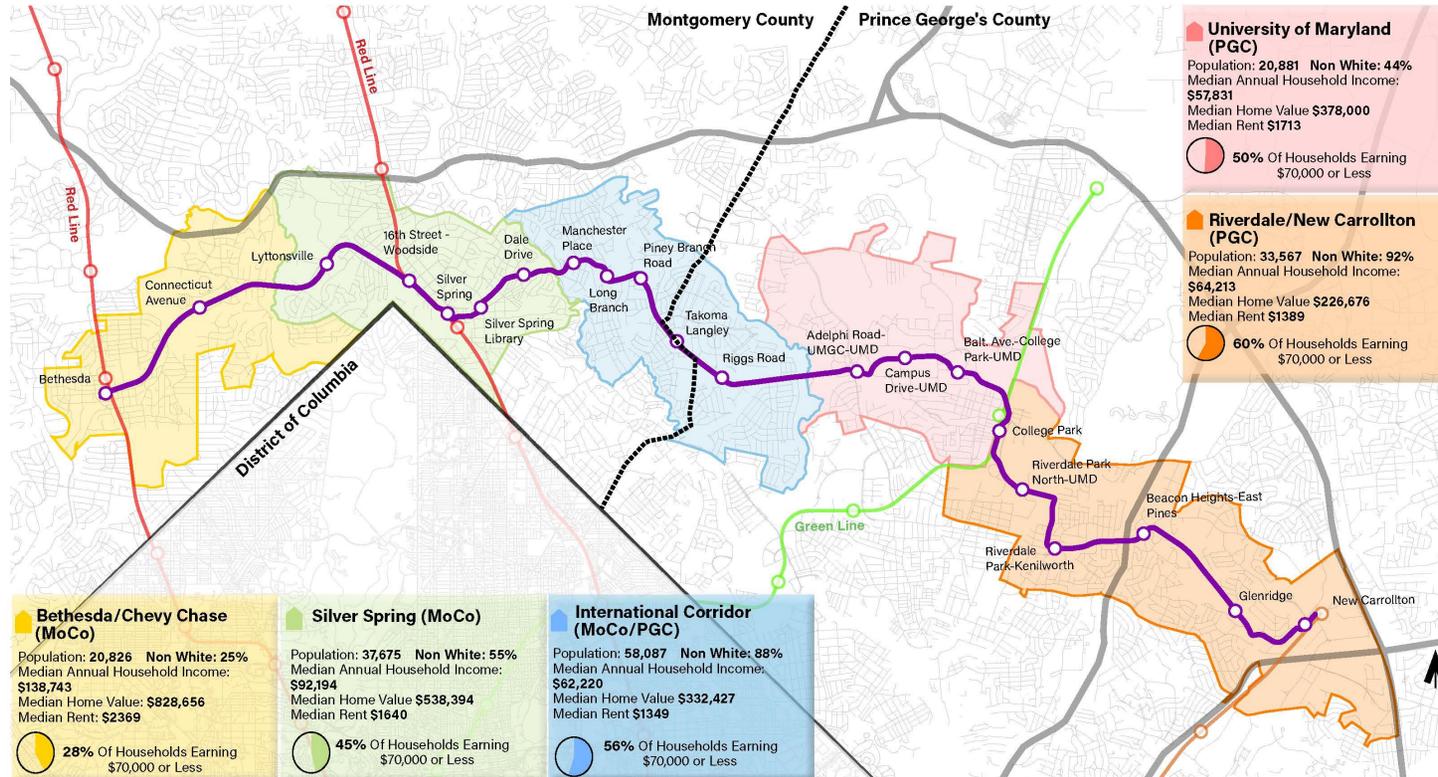
underrepresented communities receive their fair share of benefits from these transit investments.

The Purple Line is a forthcoming light rail/streetcar line just outside Washington, DC that is owned by the Maryland Department of Transportation Maryland Transit Authority and will be operated by a private concessionaire called Purple Line Transit Partners. The rail line (Figure 12) is slated to run suburb-to-suburb through Montgomery and Prince George's Counties, linking neighborhoods that vary substantially in demographics and socioeconomic conditions. The line will serve both affluent and relatively job-rich communities, such as Bethesda and Silver Spring, as well as racially diverse communities that are home to many small, local businesses like Langley Park and New Carrollton (National Center for Smart Growth 2017). It also connects to the University of Maryland's College Park campus and multiple existing light rail lines that link to other employment centers. This creates both opportunities and challenges for equitable transit-oriented development and community development.

Figure 12. Purple Line Corridor Demographics

# THE PURPLE LINE CORRIDOR

More than **170,000** people currently live along the corridor, representing broad economic, racial and ethnic diversity. To better understand this diversity of population and housing conditions, the PLCC's work breaks out the corridor into the five subareas\* shown on the map below.



\*Subarea geographies are aggregated from census block groups which have geographic centroids within 1/2 mile of a purple line station. Data comes from US Census, ACS 2013-2017 (data are estimates) data are rounded estimates.

Purple Line Corridor Coalition, Progress Report, 2020 - UMD\_PLCC\_2020\_Report.pdf (purplelinecorridor.org)

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“We believe that through collaborative, comprehensive, inclusive, and committed planning and policymaking, existing residents will not be forced to disproportionately bear the costs of the Purple Line and will also share in the benefits. Development without displacement is possible in Langley Park.” (National Center for Smart Growth Research and Education Center, 2017)

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The Purple Line Corridor Coalition (PLCC), formed in 2013, is a multi-sector collaborative of community organizations, state and local governments, nonprofits, philanthropies, and businesses established to support inclusive development along the Purple Line Corridor. The PLCC’s Steering Committee includes representatives from both counties (elected officials and planning agencies); key philanthropic supporters; leading advocacy organizations and service providers for area small businesses and residents; and the University of Maryland’s National Center for Smart Growth (NCSG), which provides research, grant-writing, and administrative support to the organization.

The PLCC led the creation of a Community Development Agreement for the 16-mile corridor, which articulates a collective vision for vibrant and inclusive economic and community development. Since establishing the initial agreement, the coalition has been developing and working to implement strategies to address four core goals along the length of the Purple Line: housing choices for all, supporting and growing local businesses, building a thriving labor market, and supporting vibrant communities<sup>1</sup>. The organization has received grant funding and financial support from state and local government and philanthropies as well as charitable contributions from the private sector to support this work<sup>2</sup>.

### 4.3.2 What Did They Do?

The Purple Line and PLCC offer an example of coalition-building, multi-sector collaboration and community agreements to rally and align other resources to support housing preservation and affordability in tandem with an investment in the transit system. These efforts include the following strategies:

- Diverse, well-organized, and well-funded, collaborative coalition consisting of the University of Maryland, local governments, nonprofits, philanthropic institutions, and community stakeholders.
- Place persistent pressure on decision makers, keeping the community’s priorities front and center.
- Produced a voluntary, non-binding agreement that publicly commits decision makers to uphold equitable development goals established by the community.
- Produce community oriented, equity-focused reports that clearly illustrate the needs of the corridor and the actions required to assure the light rail project provides the maximum opportunity to all residents and businesses along the corridor.

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<sup>1</sup> Purple Line Corridor Coalition, “About Us”, <https://purplelinecorridor.org/about/>

<sup>2</sup> Purple Line Corridor Coalition, “Our Sponsors”, <https://purplelinecorridor.org/about/#sponsors>

- Leverage and align resources from public, private, and philanthropic sectors to support community goals.

The PLCC and the Community Development Agreement emerged out of advocacy work by a coalition of immigrant rights organizations and others<sup>3</sup>. Many low-income and minority residents were concerned that they were more likely to experience displacement rather than improvement as this rail line was constructed and began operation. Early in the planning process, the wealthier suburbs, such as Bethesda, were well organized and highly engaged, while engagement levels in lower-income communities, such as Langley Park, were much lower due in part to a high percentage of residents who do not speak English as their first language, have low education levels, and are undocumented and fear deportation. In 2008, CASA de Maryland, the largest immigrant advocacy organization in the Mid-Atlantic, led an initial coalition that organized many other organizations serving or representing the diverse communities in the corridor to advocate for their needs and interests. In 2013, NCSG, a research arm of the University of Maryland, convened the PLCC—a broader coalition that combines advocacy and community-based organizations as well as local governments, philanthropies, nonprofit groups, and businesses all along the line. One of the PLCC’s biggest victories was creating a Community Development Agreement in 2017, which is a voluntary, non-legally binding agreement signed by key stakeholders and decision makers committing them to pursuing the following four project goals throughout the entire corridor<sup>4</sup>:

- Diverse, locally established businesses prosper both during and after the construction period.
- Workers in the corridor are well-trained, grow in number, and are well-matched with employers in skills and location.

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### Purple Line Plan and Regulation Tool

Having the right stakeholders at the table early and consistently is crucial to making sure the community’s voice is heard when it really matters. However, even when decision makers have heeded the community’s concerns and prioritized affordable housing development, it can be a challenge for a developer to decipher the complex web of regulations, plans, and overlapping jurisdictions that affect a potential building site. The University of Maryland worked with the PLCC to develop an online tool that quickly identifies all plans, zoning regulations, and other regulatory designations that would need to be considered when developing a given parcel of land.

This tool does not replace the need or requirement to coordinate with local planning staff. What it does is provide developers better information with which they can more aptly navigate different regulatory environments. Using this alongside an expert planning staff can save the developer time and money, which is crucial when developing affordable housing.

Check out the tool at [Research & Tools: https://purplelinecorridor.org/corridortools-2-2/](https://purplelinecorridor.org/corridortools-2-2/)

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<sup>3</sup> Purple Line Corridor Coalition, News, “Forging a Strategy for Development Along the Purple Line,” January 2014. <https://purplelinecorridor.org/news/forging-a-strategy-for-development-along-the-purple-line/>

<sup>4</sup> <https://purplelinecorridor.org/wp-content/uploads/2020/10/CDA-with-signatures.pdf>

- Housing opportunities are available for people of all incomes in communities throughout the corridor, especially current low- and middle-income, and transit-dependent residents.
- Vibrant and sustainable communities enhance health, culture, and a sense of place.

With this agreement the signatories pledged to pursue and annually review progress toward these four goals as well as the strategies and actions in the “Pathways to Opportunity: Purple Line Corridor Action Plan.” This plan creates detailed actions and strategies on how to accomplish four project goals<sup>5</sup>.

Before the agreement and since, the PLCC along with NCSG have created several reports highlighting existing housing conditions, public transit access gaps for residents and businesses, and the need for an economic development strategy. These reports bring technical expertise and analysis to inform and support government actions while representing the perspectives and priorities of the community-based coalition. The PLCC is also developing and working to implement strategies to address their goals, including a Housing Action Plan with strategies to:

- Increase the supply of affordable housing
- Establish and improve coordination between organizations and jurisdictions
- Improve PLCC’s advocacy, research, and monitoring of housing trends

The PLCC is supporting and helping to coordinate funding and efforts from JPMorgan Chase, Kaiser Permanente, National Housing Trust, Enterprise Community Loan Fund, and others to implement the Housing Action Plan, and providing technical support for affordable housing developers in the corridor.

The coalition, with help from the National Center for Smart Growth, has also produced design tools with the aim of informing planning, policy, and investment in the corridor. One such tool is called the Purple Line Plans and Regulations Tool, which is an online geospatial tool intended to help developers quickly identify all plans, codes, or zoning regulations impacting a particular project site. It can be difficult and time-consuming (i.e., expensive) for developers to navigate the labyrinth of overlapping jurisdictional boundaries, making it harder for smaller firms or nonprofit developers to compete in the real estate market. This tool saves developers time and money by helping them fully understand how a project needs to conform to local plans and zoning laws. This lowers their costs, making it more feasible for smaller firms and nonprofit developers to develop projects, especially affordable housing.

### 4.3.3 Lessons Learned

The lessons learned from this case study include the following:

- A voluntary, non-binding agreement that publicly commits decision makers and the community coalition to specific equity-based goals offers leverage to move the project toward more equitable outcomes. A proper legal contract may have more “teeth” but is less likely to be signed by all parties.

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<sup>5</sup> Pathways to Opportunities: Purple Line Corridor Action Plan, Fall 2017. <https://purplelinecorridor.org/wp-content/uploads/2017/10/PLCorridorActionPlan2017.pdf>

- Involvement by an academic institution can offer access to research and analysis as well as administrative support to further a community coalition’s objectives.
- The PLCC is a well-organized coalition that exerts consistent pressure on the public agencies while partnering with them identify and advance shared interests and mutually beneficial solutions. It also communicates clear, concise, community-focused goals. Both the representative voice and the clear messages are important attributes for influencing long-term transportation infrastructure projects.
- Generating interest and focus on an area and its needs and creating a coalition to advocate for and celebrate investments to support community goals can encourage private and philanthropic contributions that go beyond what local governments can implement on their own.

## 4.4 Sound Transit’s Affordable Housing Revolving Loan Fund - Seattle, Washington

### 4.4.1 Introduction

Sound Transit is the regional transit authority serving the greater Puget Sound area including and surrounding Seattle, WA. The agency is responsible for regional high-capacity transit which includes the Link Light Rail service, the Sounder commuter rail, and the ST Express bus system. The agency is part of the Puget Sound Regional Council, the region’s planning and growth management body. Sound Transit’s service began in 1996 and has been steadily expanding ever since. In 2008, voters approved a second phase of development called Sound Transit 2 (ST2), and then approved Sound Transit 3 (ST3) in 2016. This third phase in system expansion further connects Pierce, King, and Snohomish counties and formally establishes Sound Transit’s policy for Equitable Transit-Oriented Development (ETOD), which is described below.

State legislation in 2015 required Sound Transit to develop its revolving loan fund (RLF) and build out its ETOD plan. However, prior to that specific legislation, the region’s focus on ETOD strategies and plans was growing. Puget Sound Regional Council created the Growing Transit Communities Strategy in 2013, which focused on encouraging equitable transit communities throughout the Puget Sound Region. These equitable communities provided a range of housing types and affordability; safe, walkable neighborhoods; community services, and easy access to transit. Another ETOD RLF was established in 2014 called the Regional Equitable Development Initiative Fund, which focused on affordable housing.

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#### Seattle Urbanized Area:

- Population: 3,436,084
  - Percent Minority: 35.6%
  - Percent Poverty: 7.9%
- 

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Equitable TOD places a high priority on ensuring that the benefits of TOD investments are distributed equitably throughout a community. This can happen through equitable engagement strategies targeting underrepresented groups, through investments geared toward lower-income populations, and through policy changes.

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After ST3 was passed in 2016, the state legislature again made ETOD the focus with Resolution R2018-10. This resolution called for Sound Transit to enhance their ETOD program by utilizing the 80-80-80 rule. The rule stated that eighty percent of surplus Sound Transit-owned land that was adjacent to a high-capacity transit station, would be made available to public agencies, housing authorities, or nonprofits that were committed to developing quality affordable housing. Eighty percent of those units are required to be affordable to those earning eighty percent of the area median income.

#### 4.4.2 What Did They Do?

The ETOD tool evaluated in this case study is Sound Transit's RLF. A Revolving Loan Fund is a financial tool that can provide a stable, self-replenishing source of capital for all kinds of infrastructure investments over long periods of time. It works by having the operating agency--Sound Transit in this example--contribute to the fund annually for the first few years to build up to a stable amount. The agency loans money to eligible recipients, and as they pay it back with interest, the fund is replenished so that new loans can be offered.

This tool has been successfully used by other public agencies across the country. For example, the Environmental Protection Agency's Clean Water State Revolving Fund has been operating for over 30 years and provided over \$190 billion in loans for clean water infrastructure projects in every state.<sup>6</sup> The Oregon Business Development Fund is an RLF that has loaned out more than \$14 million to small businesses in rural and distressed areas since 2016.

RLFs are a tool used to fund affordable housing developments and ETOD because they can lend private money at below-market interest rates, thereby reducing development funding gaps and increasing construction feasibility. Because affordable housing properties have below-market rents that are affordable to lower income households, they have a development funding gap they need to fill with low-cost sources of funding, such as public funds, low-cost loans, equity investments, or grants. More information about how the housing market works plus the tools and policies to finance market-rate and affordable housing can be found in the [Housing Market Primer that was produced for this Transit & Housing Study in December 2020](#).

RLFs can be helpful for ETOD specifically, because the high cost of land and fast-moving real estate transactions near transit stations can make it infeasible for affordable housing developers to build on the land that provides the best connection to transit, namely near transit stations. This results in affordable housing developments being built wherever land is cheapest, not necessarily where the low-income, minority, and transit-dependent populations these developments are targeting could reap the most benefit. It is likely that having Sound Transit simply reserve high-value land for affordable housing developments has a bigger impact on affordable units getting built than operating the RLF. However, the RLF is a relatively simple and resilient tool that certainly plays a part in making it easier for affordable housing to be built in prime locations.

Sound Transit's RLF was enabled by the Washington State legislature in 2015. Sound Transit will contribute \$20 million (\$4 million each year for five consecutive years) to help

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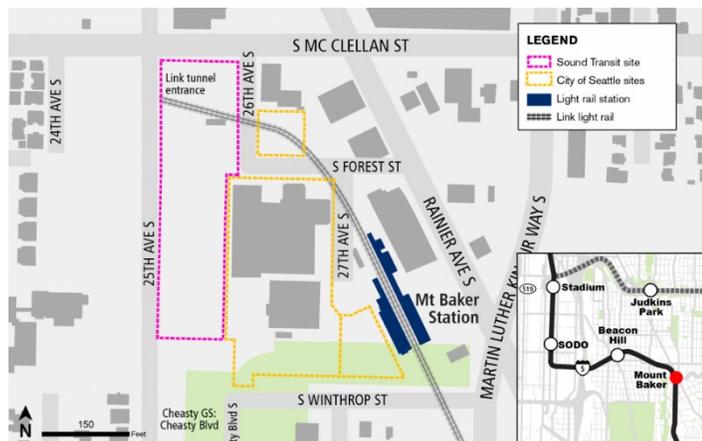
<sup>6</sup> [Learn about the Clean Water State Revolving Fund \(CWSRF\) | US EPA](#)

developers who are committed to building affordable housing compete for the high land prices near transit stations. A specific component of this RLF is that the fund will help to “facilitate the development of equitable transit-oriented development on sound transit properties.”<sup>7</sup> The legislation directing Sound Transit to develop the RLF also requires it to prioritize the disposition of surplus land for the development of affordable housing near transit stations. The Mt. Baker light rail station and several parcels of land were eligible for potential affordable housing developments (Figure 13). This policy is often referred to as the 80-80-80 rule, stating that 80 percent of surplus land within Sound Transit’s boundaries (e.g., at transit stations), that is suitable for housing must be developed as housing, and 80 percent of those housing units developed must be affordable to households making at or below 80 percent of the area median income of the county in which it resides.

In 2018, Sound Transit partnered with the City of Seattle on creating a Racial Equity Toolkit to “guide the development, implementation and evaluation of policies, initiatives, programs, and budget issues to address the impacts on racial equity” as part of their ETOD strategies<sup>8</sup>. The Racial Equity Toolkit is intended to accomplish the following outcomes:

- Enhance mobility and access for communities of color and low-income populations
- Create opportunities for equitable development that benefit communities of color
- Avoid disproportionate impacts on communities of color and low-income populations
- Meaningfully involve communities of color and low-income populations in the project

**Figure 13. Potential Sound Transit- and City-owned Parcels for ETOD at Mt. Baker Link Light Rail Station**



Source: Soundtransit.org

The following year (2019), Sound Transit hired a consultant to help further develop the revolving loan fund by first conducting a needs analysis for the region. The needs analysis confirmed that the land where “diverse, vibrant, mixed-use and mixed-income” communities would be most desirable is too expensive for affordable housing

<sup>7</sup> Sound Transit Revolving Loan Fund. From: <https://www.soundtransit.org/system-expansion/creating-vibrant-stations/transit-oriented-development/revolving-loan-fund>

<sup>8</sup> West Seattle and Ballard Link Extensions Level 2 RET Memo, September 2018. <https://www.soundtransit.org/sites/default/files/project-documents/west-seattle-and-ballard-link-extension-equity-inclusion-level-2-racial-equity-toolkit-memo-201809.pdf>

developers. However, the cost of land is not the only barrier. Nonprofits typically don't have the capacity or expertise to navigate the complex regulatory environment around different grants, funding mechanisms, and the high-speed pace of the real estate market. The RLF and Sound Transit's 80-80-80 rule were established to help overcome several of these challenges.

### 4.4.3 Lessons Learned

The lessons learned from this case study include the following:

- A Revolving Loan Fund is a stable financial tool that can allow agencies to support and encourage affordable housing developments around high-capacity transit stations.
- Reserving funding and prime real estate parcels for affordable housing development reduces the speed at which a developer would need to act to secure a project site, which can make affordable housing development more feasible in high-value areas with good transit connections. The Housing Market Primer produced in December 2020 as part of this Transit and Housing Study describes the real estate development process and elaborates on why timing is important when developing affordable housing.
- The RLF is effective, though, by itself, it's an insufficient tool for fully realizing ETOD. Reserving prime real estate on Sound Transit's surplus land adjacent to transit stations for the exclusive use of affordable housing developers is likely more beneficial than reducing the cost of development from the RLF's low-cost loans. Nonprofit affordable housing developers typically do not have robust land acquisition strategies or sufficient capital to purchase and hold land for long periods of time. Without the same capital and staff capacity as for-profit developers, they are also less nimble and cannot act quickly when land opportunities arise.

## 4.5 TOD TIF District - Dallas, Texas

### 4.5.1 Introduction

New transit infrastructure presents a real estate-based financing opportunity for jurisdictions. Research has shown that transit infrastructure investments tend to increase the value of property near transit stations, both by increasing demand for the locations and by triggering policy changes that

enable new real estate development. Jurisdictions have an opportunity to capture the increased property value through property taxes. Tax Increment Financing (TIF) is a tool that jurisdictions can use to ensure the increased property tax revenue will directly benefit a geographical area, and to fund other investments needed to support development goals for the area. Depending on local enabling legislations, jurisdictions can generally use TIF revenue to fund a range of capital investments, including housing development, "place-making" investments, and needed infrastructure upgrades. In 2008, twelve years after the Dallas Area Rapid Transit (DART) system opened to the public,

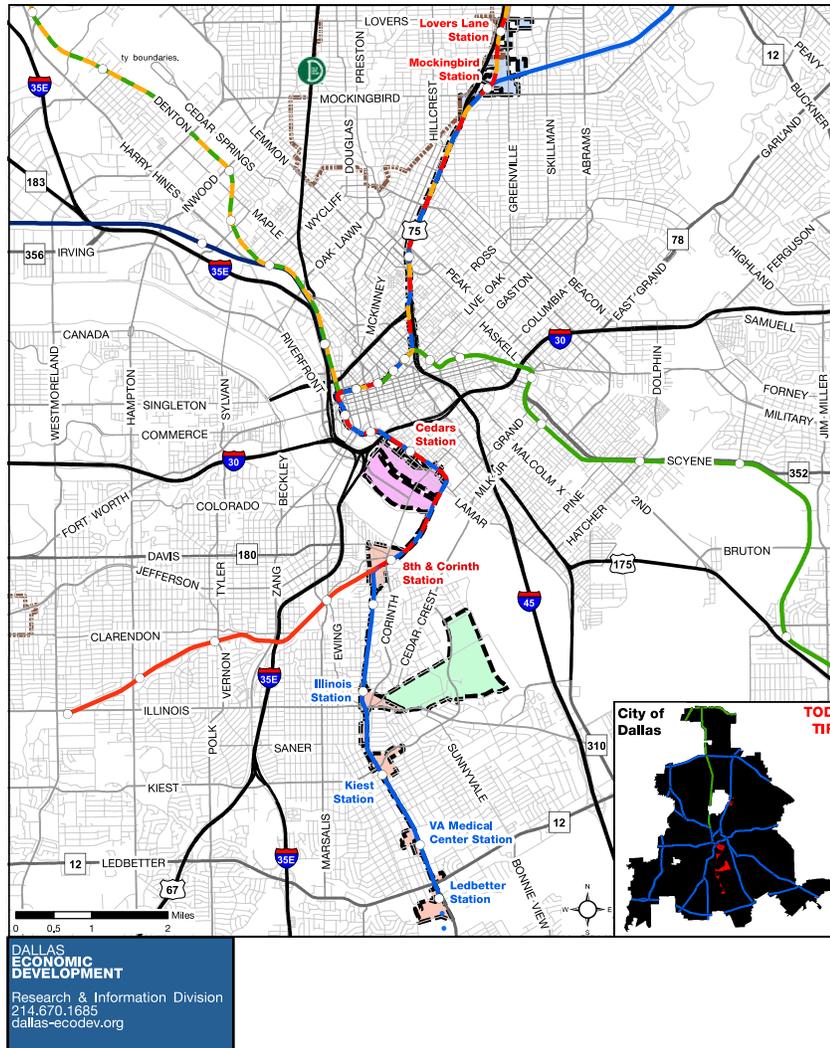
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#### Dallas Urbanized Area:

- Population: 5,897,934
  - Percent Minority: 35.4%
  - Percent Poverty: 11.0%
-

the City of Dallas, and Dallas County set up four TOD TIF districts (Figure 14). Combined, these districts cover 1,641.6 acres, surround eight stations, and are budgeted to produce over \$21 million for affordable housing. The transit system serves as a geographical tie between the districts and differential TOD opportunities along the light rail alignment inspired the development of the funding tool.

Figure 14. Dallas TOD TIF Districts



(City of Dallas Office of Economic Development. 2020)

#### 4.5.2 What Did They Do?

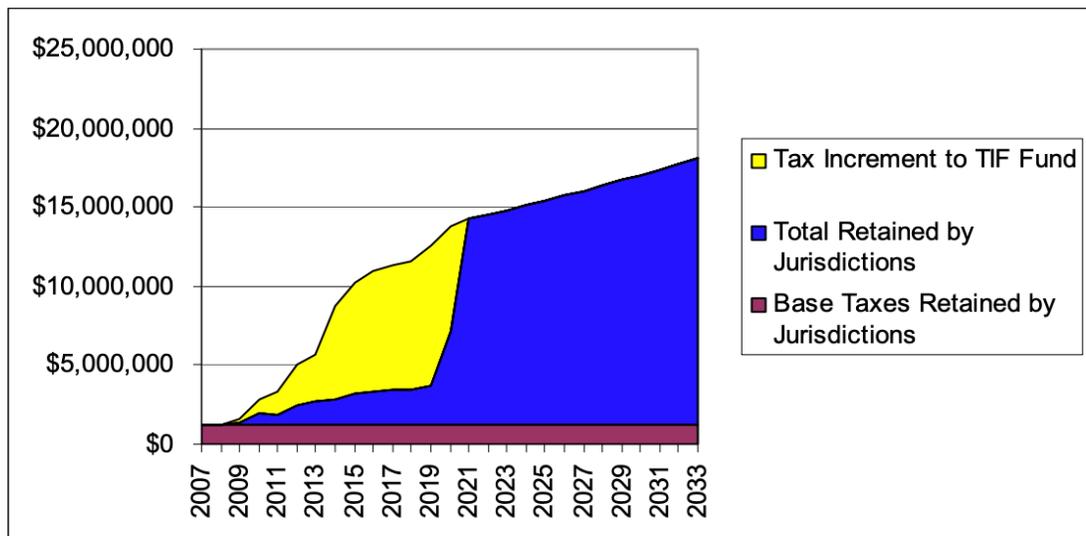
DART's partner agencies implemented TIF, a value capture tool, to capitalize on new development and support public benefits.

*Value capture* is a strategy that relies on increased property value generated from public investments or changes in public policies. Direct investment in public projects—such as a new transit line—or changes in land uses (e.g., zoning laws, development standards)

can result in increased property values that generally accrue to the property owner. Because most land is owned by private individuals and businesses, most of the increased value typically accrues to the private sector. A value capture strategy enables the public sector to gain access to the increased value to fund or finance public benefits or projects.

*Tax Increment Financing* (Figure 15) captures incremental increases in property tax revenues within defined areas to pay off bonds used to finance investments in the district. The premise behind a TIF is that investment in the district leads to an increase in property values. If property values increase after an infrastructure improvement, as they often do, then the additional tax revenue over the base amount can be used to pay off the bonds or fund additional improvements. TIF revenues must be spent on eligible capital investments within the area where the revenues are collected.

Figure 15. Illustration of a TIF



Source: City of Dallas

DART’s TOD TIF program implemented an approach that furthers housing affordability: among the four TIF subdistricts, two have specific percentage allocations toward an affordable housing fund (10-20 percent of TIF revenue) and another percentage of the revenue (10-40 percent) is transferred to a third subdistrict to enable investments in an area with lower property values.

The County’s goal is that their TIF districts will help to attract and retain new residents. TIF districts accumulate funds over time and may influence outcomes over the many decades that they exist. These districts have already made an impact. According to the FY 2019-2020 annual report, 198 residential units including 98 affordable units have been built to-date using TIF funding, along with 1,449 residential units built without the TIF District subsidy.<sup>9</sup> The County considers the new high-quality mixed-use multifamily developments a positive step toward their goal.

<sup>9</sup> City of Dallas – Economic Development, TOD TIF District Annual Report FY 2019-2020

### 4.5.3 Lessons Learned

The lessons learned from this case study include the following:

- Creating sub-TIF districts under a larger TIF district is possible and allows for the transfer of TIF funds from one sub district to another district that might need it more
- Transit infrastructure can often increase property value; TIF districts are a useful tool for capturing the increased value
- Reserving a percentage of TIF funds for affordable housing can ensure that future low-income families benefit from the transit investment

## 4.6 Small Urban, Rural, and Tribal Case Studies

These case studies and corresponding lessons learned were consolidated into a single section due to the similar challenges faced by these areas in providing transit service.

### 4.6.1 Mobility on Demand - Valdosta, Georgia

#### 4.6.1.1 Introduction

Rural areas and small cities, defined as urban areas with populations from 50,000 to 200,000<sup>10</sup>, face challenges in providing transit service to their communities. These challenges range from low housing and/or employment density and dispersed activity centers, making designing cost-effective and efficient fixed routes difficult. Competing departments and community goals can lead to insufficient resources to fund transit operations. In addition, the road network through poor access management, single entrance subdivisions, and/or multi-lane major highways bisecting the towns may contribute to these challenges in providing transportation options. As a result, cities or counties these communities may limit their public transportation service to demand response only or use deviated fixed routes to try to serve more of their residents. Deviated fixed routes add extra time to the routes and demand response service is typically limited in scope such as limited hours, limited eligibility, and/or requiring reservations sometimes days in advance of a trip, making these types of services unattractive or inefficient. A solution, being pursued by many agencies, is adopting same day mobility on demand (MoD) service. Same-day MoD service can provide flexibility in meeting transportation demand in small urban areas through customization and designing a system that is unique to each small urban area.

One such example is in Valdosta, GA, a small city located in southwestern Georgia with a 2020 urbanized area population of 78,786. For several years, the city has debated operating a public transit system and how to fund it. Rural service is provided through Lowndes County and is

funded through the FTA Section 5311 program and a \$3 base fare. However, this program is limited to residents of the unincorporated area, must be scheduled at least 24

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#### Valdosta Urbanized Area:

- Population: 78,786
  - Percent Minority: 55.0%
  - Percent Poverty: 25.4%
- 

<sup>10</sup> <https://data.oecd.org/popregion/urban-population-by-city-size.htm>

hours in advance, and must either originate or end outside of the Valdosta Urbanized Area. Prior to 2021, public transit service within the Valdosta Urbanized Area consisted of shuttles associated with Valdosta State University. The City was also turning down their FTA 5307 fund allocations. While the university system is open to the public, it is geared toward people who have business on or near the campus. The service averages approximately 700,000 trips per year. A goal of the City of Valdosta and Lowndes County is to create a multi-modal transportation system (highways, public transit, bicycle, pedestrian, freight, rail, air, etc.) that is affordable and accessible to the community and promotes economic prosperity for all residents. To meet this goal, a request for qualifications and proposals was released in mid-2020. The selected provider started same day MoD in April 2021<sup>11</sup>.

#### 4.6.1.2 What Did They Do?

The tool being evaluated is same-day MoD. Under the Valdosta program, \$2 allows residents and visitors to travel anywhere within the city limits. The system operates with seven vehicles (two are American with Disabilities Act accessible), and all drivers are hired and trained by VIA<sup>12</sup>. VIA fully operates the system. MoD can achieve several goals for transit agencies, including:

- Providing transit in previously underserved areas (transit deserts)
- Providing suburban mobility
- Replacing under-performing and high-cost, fixed-route services
- Providing first- and last-mile connections to fixed-route services
- Mitigating traffic congestion
- Reducing parking demand
- Upgrading a paratransit offering

The Valdosta system launched on April 27, 2021, providing same day service. Trips are scheduled through a smartphone application or by calling a customer service number. Since the launch of the new system, it has averaged 279 trips per day leading to over 14,000 trips over the past three months. If the system continues to grow, additional service may be added.

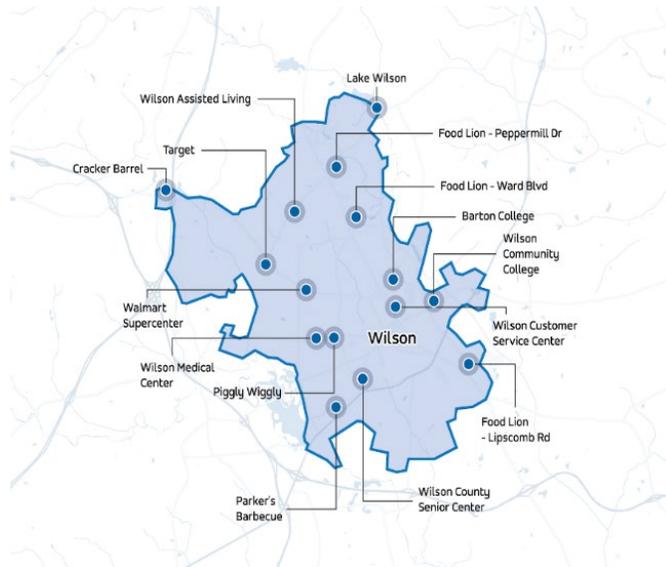
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<sup>11</sup> <https://www.walb.com/2021/04/27/valdosta-launches-first-on-demand-public-transit/>

<sup>12</sup> <https://ridewithvia.com/>

Valdosta is just one example of MoD systems. They are being employed in small to medium agencies across the country. Wilson, North Carolina (population under 50,000) replaced their bus system with a MoD. Their previous system mainly provided service to those without access to private vehicles to get to work, health care, and essential errands. The previous route system was inefficient, making it challenging for the people who need the system to get around. In response, the City in September 2020 partnered with VIA to launch the RIDE program (Figure 16 and Figure 17), which replaced the fixed route network, expanded coverage, and reduced wait times for riders. The fixed route buses are no longer in operation, and the shelters are being integrated into the MoD system.

**Figure 16. Wilson (NC) MoD Service Area**



(RIDE | Wilson, N.C., n.d.)

Under the RIDE system, individuals can book trips through mobile application, dedicated web portal, or by phone, and the service accepts payments made by prepaid debit cards—operational solutions crafted to serve those without smartphones or credit cards. The convenience of the service makes public transit attractive to new riders, who previously shunned the inflexible, legacy fixed routes. The program maintains a 4.96 out of 5 riders' rating with one-third of riders using the app very frequently (five times or more).

**Figure 17. RIDE Vehicles**



(RIDE | Wilson, N.C., n.d.)

On average, each vehicle in a MoD system can carry between 40 to 90 riders per day depending on the capacity of the vehicle and its service area. If employed correctly, MoD can be a successful replacement for limited fixed route transit service or can be used to augment fixed route service by replacing underproductive routes. These systems can provide the flexibility needed to provide public transit service in rural and small urban areas.

## 4.6.2 Connecting Housing in Rural Areas - Traverse City, Michigan

### 4.6.2.1 Introduction

Connecting rural transit with housing comes with its own unique set of challenges. Destinations are spaced farther apart from each other, and public transit is less effective when riders are more dispersed. Many times, rural transit improvements are more about bringing transit out to where housing already is as opposed to bringing housing in to where transit can more easily serve it. On the one hand, lower land values in rural and less urbanized areas make affordable housing development more feasible. However, placing affordable housing in these locations makes it harder to serve these residents with transit, which may affect these individuals' access to jobs and services. Lower land values should not be the primary consideration for developing affordable housing in rural settings. Destinations and residents are much more spread out, so it is vitally important for cities to partner with transit providers to locate the optimum site for affordable housing units that has good connections to transit.

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#### Traverse City Urbanized Area:

- Population: 148,671
  - Percent Minority: 5.7%
  - Percent Poverty: 11.7%
- 

Traverse City is a small town of around 15,000 in the northern region of Michigan. Within city limits there is a reliable and consistent transit service that is popular among residents. There is a large rural population outside the city that depends heavily on tourists visiting Lake Michigan and the surrounding vineyards. Many of the residents living in the rural areas work within Traverse City, and while they pay less in housing, they pay more in transportation costs.

### 4.6.2.2 What Did They Do?

Building affordable housing in rural areas is common because city land prices can be a significant barrier to a developer. However, the location of the development and its relation to transit service should also be a crucial consideration. Traverse City and the surrounding counties worked to develop three different affordable housing

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“A typical household earning \$48,900 in 2007 drove 4,900 additional vehicle miles and spent \$2,300 a year more on transportation than one living within city boundaries.” (Center for Transit-Oriented Development 2014)

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developments. Two of these developments were successful in that they provided low-income residents, many of whom did not own a car, with reliable transit service to job and education centers. These were largely successful due to a multitude of factors:

- The location was an infill site that was already rich with existing amenities such as grocery stores, bike paths, and transit service.
- One of the developments has a bus stop on the property because the developer coordinated directly with the transit agency prior to construction.
- The city and surrounding counties worked together to split the costs for purchasing the land and providing infrastructure.

The third affordable housing development was not as successful due to its isolated location and complete lack of transit access. Many of the 65 families in this housing development are transportation-challenged, and accessing jobs, education, and other basic needs continues to be a struggle.

Prioritizing strategic locations for affordable housing developments that connect residents with transit service is important, but the way in which Traverse City and surrounding Counties collaborated also contributed to their success. The effort to

address these issues began in 2009 with them participating in a regional visioning process, leading to the creation of the “The Grand Vision”, which linked land use, transportation, economic development, and sustainability. This collaborative approach helped the city and surrounding region receive much needed federal grant money to produce a housing strategy, a new master plan for Grand Traverse County, and an implementation framework for the Grand Vision. A single rural community may not have the resources to achieve a housing or transit strategy, but a region of communities coordinating with one another can be bigger than the sum of its parts.

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### Coordinated Transportation

“A process in which two or more organizations interact to jointly accomplish their transportation objectives through shared responsibility to improve resource management applied to achieve greater cost effectiveness in service delivery” (*Towards Coordinated Rural Transportation: A Resource Document* 2014)

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## 4.6.3 Coordinated Transit - Deseronto Transit, Ontario

### 4.6.3.1 Introduction

This case study will focus on the small Canadian town of Deseronto (population <2,000), which sits on the northeast shore of Lake Ontario. Since 2008, the town has been the lead organization of a deviated fixed-route regional transit system that follows the Centralized Control model.

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#### Deseronto:

- Population: 1,620
  - Percent Minority: 19.8%
  - Percent Poverty: 26.2%
- 

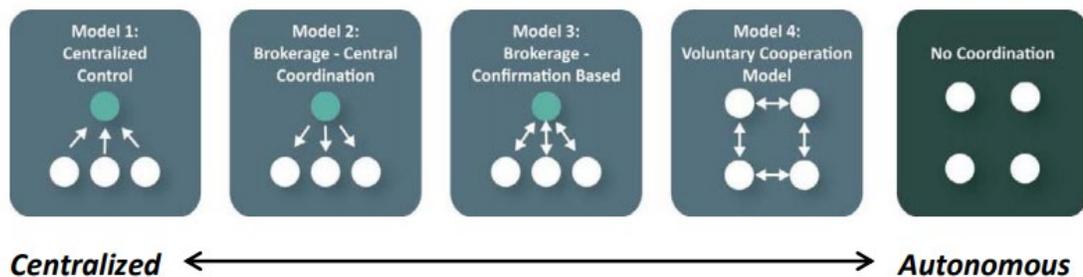
When multiple public entities in the same area have similar needs and goals, it can be beneficial to all parties to coordinate their transportation services. This can save administrative costs, avoid duplicate trips, increase service coverage, and improve the overall user experience. This is especially applicable in rural areas. The Royal Institute of Ontario in Canada published a guidebook instructing rural communities how to identify and implement a coordinated transit service. The guidebook presents several models of coordination that could be achieved depending largely on how much autonomy/control the municipal partners want to have (Figure 18). The models are:

- **Model 1: Centralize Control** – A single entity operates and manages the entire system while the other partners mainly contribute funds and other resources. The user would experience this as a single, unified transit system.
- **Model 2: Brokerage, Central Coordination** – Partners maintain ownership of their own vehicles, though a single organization acts as dispatch for the whole system,

utilizing the fleets as they think best. Users would seek out transportation services from a single website but may use transit vehicles from different entities.

- **Model 3: Brokerage, Confirmation Based** – Similar to Model 2 except that the dispatch organization must ask permission to use another entity’s vehicle before assigning it to the user.
- **Model 4: Voluntary Cooperation Model** – Very little coordination aside from different transit systems coordinating their vehicle purchases, operations policies, and dispatch software. The user would likely not notice any coordination at all.

Figure 18. Five Models of Coordinated Transportation



(Towards Coordinated Rural Transportation: A Resource Document, 2014)

#### 4.6.3.2 What Did They Do?

In the early 2000’s, Deseronto and neighboring municipalities formed an Interagency Network Group (ING) to share resources and attempt to address the challenges faced by residents of the town. The ING commissioned a study to assess the needs of the residents, and it determined that transportation was a “major barrier” because so many employment options and healthcare services were located beyond the town’s borders. Later in 2006, another report that focused on homelessness and affordable housing revealed that 40.6 percent of residents were in receipt of social assistance payments, and the lack of transportation options made it difficult to access daily needs, employment, and education opportunities. The result was a federally funded pilot project for the town of Deseronto to provide limited transit service within the town borders and into the surrounding urban areas. It was so successful that it has continued to this day and steadily gained ridership ever since.

#### Objectives of Deseronto Transit Service

1. Provide low-cost affordable transportation that will meet the transportation needs of all individuals in the service area by providing mobility options to ensure access to work, education, health care, shopping, social and recreational opportunities
2. Sustainability

Deseronto is the controlling agency and owns and operates the entire fleet of vehicles. The Deseronto Transit Transportation Committee is comprised of local and regional decision makers, and it determines how the transit system will evolve and expand. In addition to major support from the federal gas tax, the county of Hastings, the towns of Belville and Napanee, and the Mohawk First Nation’s Tyendinaga Township all are

coordinated partners and provide transit funds to Deseronto. A unique partner from the beginning is the Prince Edward, Lennox & Addington Social Services (PELASS) organization which is a local organization connecting people with the social services they need. Prior to the formation of Deseronto Transit, PELASS provided the region with taxi rides, especially for those who were requiring addiction treatment. Like Oregon's Group Pass Program, PELASS partners with Deseronto Transit by purchasing a guaranteed number of bus passes in exchange for a route that facilitates transportation to key medical destinations for their clients. This guaranteed purchase is enough to cover the cost of one route, and it is an innovative way to expand the kinds of service transit can offer.

The challenges are familiar to any transit service, big or small: the community wants more coverage and higher frequency service, but adequate funding is difficult to secure. Also, broad policy changes, like requiring all transit vehicles to have automated voice announcement technology, can affect smaller transit agencies very differently than larger ones. The cost to comply may not be different between small and large agencies but the impact is greater. These challenges are well-met by the method of coordination this region participates in. Coordinating these communities means that not only does Deseronto transit receive funding from a variety of sources but also there is greater capacity for applying for grant money.

Coordinated Transportation is a way in which a collection of municipalities organizes a shared transit service and includes the following attributes

- The participating municipalities decide what model of coordination they wish to have over the transit service being provided (Figure 18, above).
- In Deseronto, they decided to use the Centralized Control model which meant Deseronto owned and operated the transit service and was the public's central point of contact.
- The other municipalities and Tribes wanting service provided operating funds for Deseronto to use. This combined with the federal gas tax contribution meant the town of Deseronto only was responsible for 9 percent of the transit service's budget.

## 4.6.4 Transportation & Housing Connections on Tribal Lands

### 4.6.4.1 Introduction

The needs are great for public transportation services in rural, Tribal areas, and the available resources can be very limited. An extensive research effort was conducted from more than 100 Tribes in the United States to examine the characteristics of successful Tribal transit services as well as of those that are not successful. The researchers established five characteristics for sustainable Tribal transit programs:

- Planning
- Local Leadership
- Cooperation and coordination
- Trained key staff

- Multiple funding sources

The research culminated in 2012 with a guidebook that describes the operations, funding mechanisms, partnerships, challenges, and successes of 15 different Tribes' transit programs. With the remote nature of many Tribal lands, the unique sovereign governance structure, and an overall lack of resources, these examples exhibit some of the more innovative strategies for providing much-needed transit service. Below are some examples of the main themes of the guidebook. The connection to housing is not explicit as these examples primarily focus on transit programs. However, the implied connection is that transit is brought to where housing is already located to make it possible for people to access their daily needs.

#### 4.6.4.2 What Did They Do?

In summarizing these case studies, it is first necessary to understand that tribes are sovereign nations with unique needs. Several of them described how public agencies and funding institutions did not fully understand that Tribes are not just another rural community, rather they are sovereign nations with unique needs and rules. For example:

- Both the Eastern Band of Cherokee from North Carolina and the Oglala Sioux Tribe in South Dakota felt that the FTA required Disadvantaged Business Enterprise plan would undermine their Tribal Employment Rights Office.
- The Navajo Nation extends over three different states, and each has a different method for grant applications and reporting. A unified reporting structure across all fifty states could save Tribes time and money.
- The Southern Ute Indian Tribe designated a Tribal nonprofit as its transit authority to receive FTA funds and ensure the Tribe's sovereignty.

In addition, many Tribes simply do not have the staff capacity to develop grant applications or even spend the grant money to develop a transit plan, such as:

- The Lac de Flambeau Indian Tribe in Wisconsin was not able to use some grant money because of difficulty in navigating online processes. A larger grant that could have allowed them to hire a planner to start a transit service because existing staff did not have the necessary time or technology skills.
- The Eastern Band of Cherokee partnered with the North Carolina Department of Transportation on a planning grant to provide the Tribe a contractor to produce a transit plan.

It also important to understand the value of collaboration. When Tribes and other public entities collaborate to provide a transit service, it can end up creating more than the sum of its parts. It can save on administration costs, use grant money more efficiently, avoid duplicate transit service, and make it easier to use for the transit rider. Examples of collaborative efforts outside of Oregon include:

- The Couer d'Alene Tribe in Idaho has the only known public transportation system in the United States (2012) where Tribal, local, and state governments have collaborated to create a free public bus service.

- The Menominee Indian Tribe in Wisconsin partnered with a health clinic to provide all non-emergency trips the clinic had once provided. This saved the clinic money, increased ridership, and illustrated to the community how relevant transit is to their lives. Income from this service goes in part to providing the local match for transit grants with Wisconsin DOT.
- The Sitka Tribe of Alaska partnered with a nonprofit umbrella agency that is responsible for leveraging federal funding and contracting for transit services.
- The Standing Rock Sioux Tribe coordinated with the Sitting Bull College that operates a combination fixed-route and on-demand transit service.

Since these Tribal programs are in rural areas that may receive less in formula-based transit funding, innovation is needed to fund the service. The farebox revenue does not cover transit operations in any transit system and procuring grant money has proved to be difficult. Many Tribes have begun trying other ways in which revenue could help enhance transit service. These innovative revenue generation efforts include:

- A transit program for the Confederated Salish and Kootenai Tribes in Montana also operates a gas station, convenience store, and laundromat to generate funds to be used as the local match (contributions to receive) for federal funds.
- The Standing Rock Sioux Tribe transit service provides automobile service and sells tires to increase revenue.

#### 4.6.5 Lessons learned

The lessons learned from these case studies include the following:

- Often, rural and small city transit is more about bringing transit to where housing already exists rather than building housing where transit can more easily serve it.
- MoD systems are flexible and customizable that can expand access in rural and small urban areas beyond the traditional demand-response client base to the larger community and allow them to tailor the system to their size and available budget.
- An ill-placed housing development that has no access to transit can hamper a family's ability to access their daily needs as well as increase their transportation costs.
- Promote inter-jurisdictional collaboration, so small cities can expand their capacity to plan for, fund, and implement housing and transportation programs.
- Siting an affordable housing development needs to be carefully considered. Centrally located, infill locations for affordable housing more efficiently use existing programs and infrastructure.
- Make space for developers to play a bigger role in linking housing with transit. They must consider location and accessibility in siting affordable housing due to the impact on residents' quality of life.
- Encourage developers coordinate directly with transit agencies early in the project to assure good transit connections.

- Providing access to jobs and services for low-income and mobility impaired individuals can be a challenge for rural and small urban areas.
- In Deseronto, coordinating with neighboring cities, counties, and Tribes resulted in being eligible for more funding, being able to offer more transit coverage, and overall provide a better service to the community than if Deseronto offered the service on its own.
- Expanding the definition of ridership will not only increase ridership but also make the service more relevant to the community, i.e., Deseronto partnered with PELASS who purchased a set amount of bus passes each year to replace the taxi rides it provided for those seeking addiction treatment.

## 5 Summary of Case Study Findings

The non-Oregon case studies provided a variety of approaches to improve connections between housing and transit. From these case studies, there are five key findings (Figure 19) that can be applied to ODOT, municipalities, and transit agencies as they implement transit improvements to urban corridors, plan new development in suburban areas, and reduce accessibility barriers in rural areas:

- Look beyond the fixed route
- Collaboration is key
- Connecting affordable housing to transit improves access
- Support those building the affordable housing
- Engage consistently

More information on the findings and how they can be applied is provided below.

Figure 19. Five Key Findings



## 5.1 Look Beyond the Fixed-Route

Rural, Tribal, and small urban areas have unique challenges that require a flexible approach to serving those residents. The destinations in these areas are spread far apart much like the residents who need to get there. Fixed-route service is predictable and easy to understand, but it is best used when there is a higher density of riders and destinations. It is typically not the optimal option for rural conditions. Looking beyond the fixed route means more than just looking at alternate ways to design a transit network. It is about understanding the needs of the community and then building a transit system that meets those unique conditions.

### *Flexible transit service*

- Valdosta, GA decided that their residents would be best served by making everywhere within city limits a potential transit stop.
- As part of their transit program, the Stillaguamish Tribe of Indians in western Washington has a rideshare program which uses volunteer drivers to get people where they need to be.
- **Oregon Example** – The [Greater Oregon Behavioral Health Institute Non-Emergency Medical Transportation Pilot project](#) in rural Eastern and Central Oregon uses Remix, a transportation planning tool, to connect existing routes with Medicaid members.

### *Understanding the transportation needs of current and potential users*

- StarMetro saw that by prioritizing transit service to serve commuters and increase ridership, a large portion of low-income riders were not adequately served. They

altered their priorities to focus on increasing coverage rather than maximizing ridership which better served a greater diversity of the community.

- The Menominee Indian Tribe coordinated with the local health clinic, so the Tribal transit service will provide all non-emergency transportation that the clinic once provided for itself. For smaller systems, the more services that are offered, the more relevant the transit system is to the community.
- **Oregon Example** – Origin and destination work is done in transit development plans through rider surveys and other data.

## 5.2 Collaboration is Key

Collaboration and integration are critical ingredients that lead to better transit and housing planning outcomes. They allow a single municipality, organization, or individual to achieve greater success in meeting transportation needs than if they operated on their own. Planning efforts and the communities they affect will certainly benefit if public agencies pool their resources and partner together. However, a consistent theme in these case studies is the transformative power of the collaboration that occurs outside public agencies. These partnerships bring the community together and help to create a more unified vision these advocates can take to decision makers. These case studies illustrated the importance of recognizing the numerous collaborative possibilities that could be explored either between the public agency and the community or completely outside the government sphere. The collaborative efforts from the case studies include:

### *Nonprofit and County Collaboration to build Affordable Housing*

- Grand Traverse County collaborated with two nonprofits to develop affordable housing with homeownership opportunities. The County is contributing by purchasing the land and providing infrastructure improvements, which can be a major cost barrier to nonprofits developing affordable housing.

### *Developer and Transit Agency Collaboration*

- The developer of the Village at Grand Traverse Commons, a combination residential and retail development, worked directly with the local transit agency early in development to ensure patrons and residents would have transit service.

### *Intra-Community Collaboration*

- The Stops for Us campaign created “coalitions that cross the boundaries of race, culture, geography, and issues to advance equity and justice in the way growth and development happens in the Twin Cities region. [They] unite policy and advocacy organizations with place-based and culturally specific organizations to amplify their efforts.”
- The Purple Line Coalition collaborated in a similar fashion as the Stops for Us campaign, except that they partnered with a university. This enabled the community-based organization to leverage the university’s research expertise to produce data-driven reports that supported their mission.

### *Tribal and Community Services Collaboration*

- With what seems to be the fewest resources available to them, Tribal governments are well-versed in collaborating with a diverse set of partners. This ranges from the North Carolina Department of Transportation awarding the Eastern Band of Cherokee Indians a planning grant for a transit development program, to the Sitka Tribe of Alaska partnering with a nonprofit umbrella agency that is responsible for leveraging federal funding and contracting for transit services.
- **Oregon Example** – Transportation Development Plans are one way that Oregon fosters collaboration between transit providers and local jurisdiction planning departments including Tribal transit services.

## 5.3 Better Connections Means More Affordability

As low-income communities are more often reliant on transit service to meet their daily needs, affordable housing needs to have quality access to transportation to be most beneficial. Taking the time to work with other agencies, developers, transit authorities, and low-income communities prior to construction may indeed take more time and add complexity to the project. However, in the end, the development will be better positioned to provide a greater degree of mobility and access than what the residents had before.

- Traverse City and the neighboring counties used infill development and interagency collaboration to develop two affordable housing units that were directly connected to existing transit lines as well as a host of other amenities.
- The Washington State Legislature passed a law making it easier for Sound Transit-owned land at transit stations to be developed into affordable housing. This was especially important as land values were so high in areas where affordable housing would be most beneficial, it was not feasible for affordable housing developers to compete in the real estate market.
- **Oregon Example** - As part of ODOT's Transportation Safety Action Plan work safety was analyzed for bikes, pedestrians, and transit for BIPOC communities versus just for Single Occupancy Vehicles. This work can help with first and last mile connections to transit.

## 5.4 Support Those Building the Affordable Housing

There are times when prime locations for both affordable housing and transit come available, but land values are so high they simply make developing it as affordable housing infeasible. As mentioned above, siting affordable housing developments adjacent to transit creates the most amount of benefit for low-income populations. Rather than simply building on the cheapest land available, which is usually not transit-adjacent, public agencies and other organizations can support affordable housing developers' ability to build where the residents would be best served by transit. In these case studies, this is done by either reducing the cost of the land or by saving the developer time in designing a proposal.

- Sound Transit set up a Revolving Loan Fund to make surplus Sound Transit-owned properties more affordable to nonprofit developers committed to making quality affordable housing.
- The Purple Line Corridor Coalition made an online geospatial tool that quickly identified all plans, regulations, and zoning codes that a developer would need to consider when designing a proposal.
- **Oregon Example** - ODOT has implemented the [Transportation Planning Online Database](#) which allows users to identify all planning documents associated with any specific part of Oregon.

## 5.5 Engage Consistently

This is an underlying strategy to most everything done in these case studies. Direct engagement with those who will be using the service brings better understanding of their needs and ultimately a better designed service. It is vitally important that engagement be done through an equity lens to ensure that all communities reap the benefits of major transit and housing investments.

### *Communities engaging with the decision makers*

- The PLCC and Stops for Us were all about communities consistently engaging with decision makers to see the change they knew they needed. It was most effective that these groups didn't content themselves with just providing comments on a survey. These groups engaged in a wide variety of ways from directly lobbying the US Department of Transportation and participating on planning commissions to publishing data-driven reports and attending open houses. Communicating a clear message consistently via a multitude of communication methods increased their message's reach.

### *Decision makers engaging with communities*

- PalmTran transit agency actively engaged with the community in a variety of forums to determine how best to design a "coverage" based transit service. Through this engagement they changed their initial plans to include better service for seniors and low-income populations.
- Sound Transit is tasked to collaborate extensively with local jurisdictions to implement TOD and to engage with communities of color, immigrants, refugees and other underrepresented and vulnerable populations actively and transparently.
- The counties and cities surrounding Langley Park engaged with the PLCC in an innovative way: they signed and accepted the terms of a non-binding voluntary agreement, thus pledging to pursue and annually review progress toward agreed-upon goals as well as the strategies and actions in the "Pathways to Opportunity: Purple Line Corridor Action Plan." Even though this didn't have any legal weight to it, this symbolic act demonstrated to the community that public leaders were bound to a social contract to follow through with their promises.

- **Oregon Example** – ODOT developed the [Equitable Engagement Compensation Policy](#) to bring underrepresented voices to the table in transportation planning.

## 6 Conclusion

The non-Oregon case studies highlight approaches from different municipalities and transit agencies across North America to connect affordable housing to the transportation network and improve transportation options to better serve pre-existing housing locations. Improving these connections are shown to expand opportunities and access for low-income residents and communities of color. These approaches include collaboration, consistent engagement, employing different transportation modes, and supporting those involved in planning or constructing affordable housing units. As highlighted in the Summary above, many of these tools should sound familiar as several are already being explored or implemented in Oregon. The next step is to take the innovative approaches from outside Oregon, learn from them, and identify opportunities where existing Oregon programs could be improved, and new approaches could be applied. If necessary, the case studies provide policy recommendations the state could use to further the goals of making Oregon an affordable place to live and promoting use of transit.

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