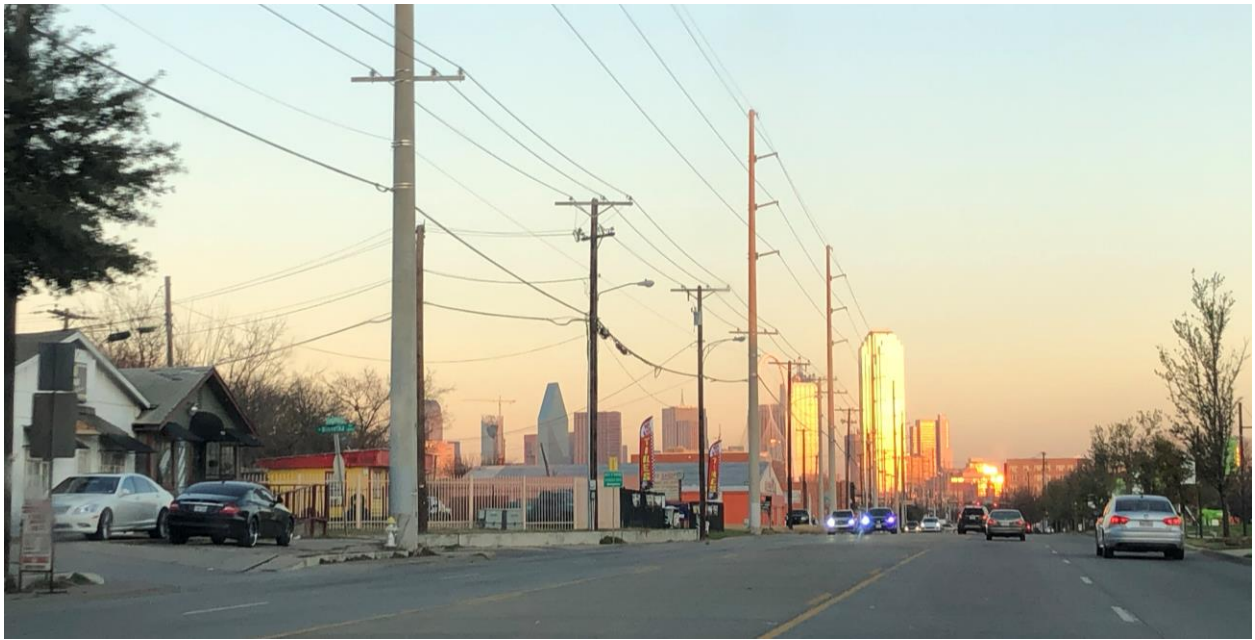


West Dallas Mobility Needs Assessment and Recommendations



West Dallas looking East towards downtown - Photo: SUMC

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Introduction

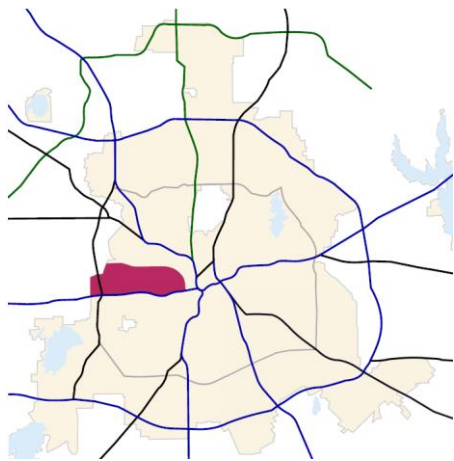
There is no silver bullet for mobility or other issues facing low-income residents, in West Dallas or elsewhere. Historically, government agencies and private investors have overlooked West Dallas and similarly disadvantaged areas of the City. In terms of mobility, some agencies are beginning to take a more holistic view, though structural challenges remain. With great regional need and limited funding, how can investments flow to benefit this neighborhood? The neighborhood is gentrifying; will those with the greatest need benefit from investments?

This assessment provides a snapshot of these issues as they relate to transportation, as well as short-term projects that can increase long-term mobility. We identify mobility needs in this rapidly changing area combining quantitative analysis, national best practices, and direct engagement with West Dallas residents and stakeholders (from a set of focus groups targeted towards low-income Hispanic residents who don't own their own car). We identify needs and short-term opportunities to improve mobility in West Dallas, especially for the transit-dependent population. We also highlight longer-term strategies for improving mobility in the area and reflect on some of the larger structural issues that need to be addressed to improve overall quality of life. All of the opportunities highlighted can benefit from private and public sector support and involvement, and we identify pathways for the private sector to facilitate mobility solutions. Direct quotes from focus groups with West Dallas residents feature throughout.

West Dallas Mobility Needs Assessment

History and Context

A Neighborhood in Transition



Source: Wikipedia Commons

The big focus in West Dallas starting in the 1930's was the lead smelter at Singleton Boulevard and Westmoreland Road. Other large industrial sites were also nearby along the river. There were many jobs in close proximity and while mobility was not the big issue, there were a variety of unsafe working conditions. The smelter closed in 1984 around the time that other deindustrialization also occurred. The community, which was primarily black and Latino, remained with the residual pollution from the smelter: lead-laden air, water, and soil. Its ten-year cleanup was one of the largest environmental remediation projects in the country and a United States Environmental Protection Agency Superfund site.

"In the past, factories were close by and people carpoled. Nowadays, people don't carpool anymore because jobs are located far away and apart from each other. Now each person commutes to work on their own."

"En el pasado, los trabajos estaban cerca y se usaba el carpool. Ahora ya no se usa porque la gente trabaja en lugares muy distintos y lejos el uno del otro. Ahora cada uno va al trabajo por las suyas."

The current neighborhood is low density, disinvested, with relatively easy access to jobs in the nearby downtown, but many jobs are scattered throughout the region and no longer located nearby. The poverty level is high and many are transit dependent. In 2017, the average household income was just over \$32,000 per year compared to over \$47,000 for Dallas at large. There is a very positive feeling of community and belonging amongst the Hispanic community. When Hispanic residents were asked about living in West Dallas, as part of a focus group, they universally agreed that they felt part of an interwoven community, and they expressed strong feelings about living in a place where they had a sense of belonging.

"There are people who think that it is not safe here, but I disagree. I have lived in this neighborhood a long time, and I feel comfortable living here. New construction has improved some streets but not others. We have also noticed that there are a lot of homeless people that have moved into some areas of the neighborhood."

"Hay gente que piensa que no es seguro aquí, pero yo pienso lo contrario. Yo he vivido en el barrio por mucho tiempo y me siento cómoda aquí. Algunas calles han mejorado con las nuevas construcciones,

otras no. También notamos que hay muchas personas sin techo que se han instalado en algunas zonas del barrio.”

Along the eastern edge of the neighborhood, near downtown, it is rapidly gentrifying. The construction of the Calatrava-designed Margaret Hunt Hill bridge in 2017 connected the downtown with the neighborhood and reduced isolation previously associated with West Dallas. This had positive and negative impacts. It opened up the neighborhood to development in the fast-growing economy of Dallas. As typical in many rapidly growing places, millennials and other professionals looking for in town locations have begun to settle in West Dallas. This has brought more amenities but has also raised housing prices and forced displacement of some long-time residents. In addition, development in downtown has also displaced the poor and some of the homeless community has also moved to West Dallas.

“The new bridge affected everybody. I was forced to leave my house after it was built. They gave me a new house but it did not have water or electricity. And now that there is interest in developing downtown, many homeless people have been displaced to this neighborhood, and I don’t feel safe.”

“El nuevo puente ha afectado a todos. Yo tuve que dejar mi casa cuando lo terminaron de construir. Me dieron una casa nueva pero sin agua ni electricidad. Y ahora que hay interés por desarrollar el centro de la ciudad, mucha gente sin techo se ha desplazado al barrio y ya no me siento segura.”

Upscale apartments were established and many new restaurants appeared in the area known as Trinity Grove along the eastern edge of West Dallas. The average household income in this eastern area is now over \$46,000/year in 2017, compared to the average West Dallas household currently earning less than \$33,000. These are not the same residents earning more money, but new residents who make more money. US citizenship along the east side of West Dallas also rose from around 70% in 2011 to over 80% in 2017. Longtime residents are not necessarily benefiting from the new service and restaurant jobs in the neighborhood. A common desire from residents in a focus group was that the new businesses and restaurants hire locally.

West Dallas is becoming less Spanish speaking and less poor. In 2011, 72% of households lived under two times the federal poverty level. By 2017, that percentage had fallen to 65%, but some areas saw a drop in that rate by as much as 30 percentage points. In 2017, 55% of West Dallas households spoke Spanish at home, down 7 percentage points from 2011. These are not necessarily bad things, but in some cases, this is due to lower-income and non-white residents being forced out by gentrification. Longtime residents have cause not to trust outsiders. A change in code that the City enforced in 2017 led to the clearing of hundreds of low-income homes. While some were saved, rising home values continue to pose instability for low-income residents. One of the census tracts along the eastern edge – the same area with the highest drop in poverty – had 735 Spanish-speaking households in 2011 but only 363 in 2017.

“Property values and property taxes are rising because of the bridge.”

“El valor de la tierra y el impuesto a las propiedades están aumentando a causa del nuevo puente”

Future projects will accelerate change. A Trinity River Park already underway will continue to transform real estate nearby, possibly at the expense of affordable housing. Trinity Park Conservancy's CEO Brent Brown called a rapid transformation of the neighborhood "inevitable." The private donors funding the park seek to eventually complete the greenspace at 10,000 acres, eleven times the size of New York City's Central Park, for \$600 Million. Construction of a planned magnet STEM school, which will attract new residents, is already well underway. While growth of green space and better schools are a definite plus for the neighborhood, the balance between adding amenities and preserving affordable housing and needed services has not been addressed.

A Hard Place to be Poor

West Dallas is not the only place in the region where the impoverished experience instability. While the regional economy as a whole has done well, finding an affordable place to live in Dallas is a challenge. The Dallas metropolitan area is tied for 6th most severe shortage of rental homes affordable to extremely low-income households. There are five low-income families for every one affordable housing unit in the region. The city of Dallas has one of the highest child poverty rates in the nation. Affordable housing shortages and child poverty are even greater for Hispanic households in the Dallas-Fort Worth region, 53-60% of which are either unbanked or underbanked, compared to 20-24% of white households. These households must rely on alternative financial services, including payday loans, pawnshops, or money orders. This limits not only their ability to build equity but also to access alternative mobility modes that rely on a credit card or bank account. With poverty also comes higher rates of obesity as well as asthma and chronic obstructive pulmonary disease, all of which disproportionately impact low-income communities of color and are higher in neighborhoods near highways, like many in West Dallas. While local measures of air quality aren't actually calculated for neighborhoods in Dallas like they are in many other cities, the general picture is bleak: auto emissions in Dallas-Fort Worth have risen by 133% since 1990. Put another way, emissions are up 27% per person between 1990 and 2017.

Growing Apart

Some of these trends have been accelerated by the continued sprawl in Northeast Texas that can spread resources and opportunities further apart. In the second half of the 20th century, Dallas-Fort Worth's population grew by nearly 1,000 percent. It greatly expanded outward, and as the region's footprint has continued to grow, many people left the City. With less than 2400 people per square mile in 2017, West Dallas is now a lower density neighborhood than many neighboring communities. Dallas as a whole is already a low-density city (3,866/mi²) with less than half the population density of famously-sprawling Los Angeles (8,484/mi²).

Distant Opportunities

As the region has spread out, so have core services and job prospects. A 2017 report by the Center for Transportation Equity, Decisions and Dollars (CTEDD) at the University of Texas at Arlington found that, based on transit network coverage and jobs data, 40% of West Dallas has transit access to less than 1% of regional jobs, with transit access defined as within 45 minutes walking and in transit one way. Most of the remainder of West Dallas households can access 4-10% of jobs in that time. The report found no part of West Dallas than can access over 10% of jobs by transit. These figures are similar to other areas with poor access to jobs by transit including Oak Cliff, Pleasant Grove and Southwest Dallas. West Dallas does have a higher than average amount of “good access” to jobs via transit in the study, likely due to its adjacent proximity to downtown, and combining the “good” and very good” categories would set West Dallas above the overall city, its transit dependent core, or the DART service area. However, even “good” under the study’s methodology indicates access to only 4-10% of jobs.

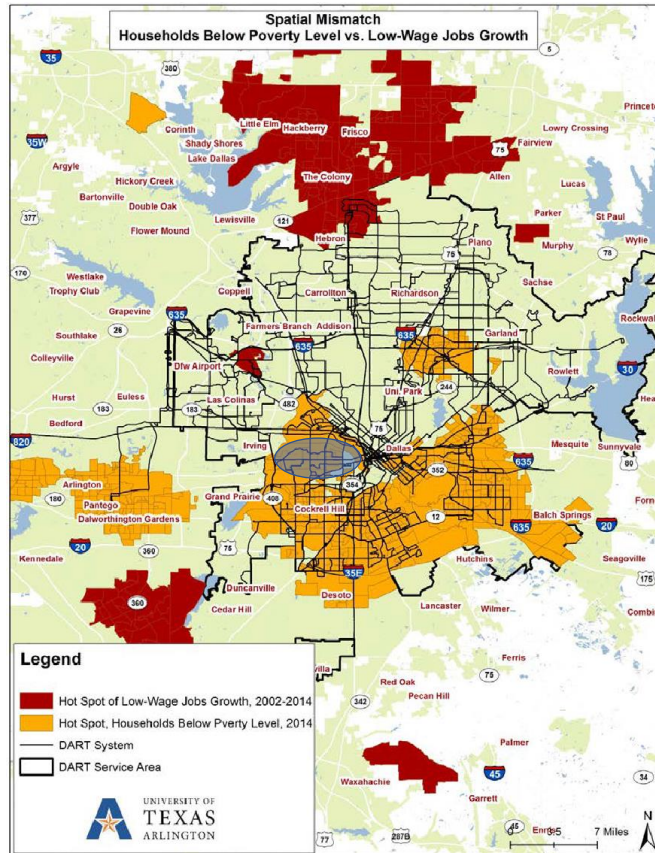
Job Accessibility by 45 Minutes Multimodal Transit Commute (one way) for Various Geographies

Geography	Poor Access (access to less than 1% of jobs)	Average Access (access to 1-4% of jobs)	Good Access (access to 4-10% of jobs)	Very Good Access (access to more than 10% of jobs)
DART Service Area	37.06%	33.41%	20.31%	9.22%
City of Dallas	30.41%	24.61%	29.64%	15.34%
Transit Dependent Core	41.57%	23.83%	26.95%	7.66%
West Dallas	40%	3%	57%	0%

Numbers from “A Comprehensive Study on the State of Transportation Equity in Dallas” released by the University of Texas at Arlington in 2017.

“I am a mom and I clean houses for a living. I bring my baby with me when I take the bus, then the train, and finally another bus to get to my job. The trip takes me an hour and 45 minutes each way. But if they want me to work on a Sunday, I have to get up even earlier and wait longer for the bus in order to make my connections.”

“Yo soy madre y trabajo limpiando casas. Llevo a mi bebe conmigo cuando tomo el autobús, luego el tren y finalmente otro autobús hasta llegar a mi trabajo. El viaje me toma una hora y cuarenta y cinco minutos en cada sentido. Pero si me ofrecen de trabajar un domingo, tengo que madrugar más temprano y esperar el autobús más tiempo para poder alcanzar mis conexiones.”



“Hotspot” areas of poverty (yellow) and job growth (red) in the region in 2014, from A Comprehensive Study on the State of Transportation Equity in Dallas. West Dallas is circled in blue.

As the above map indicates, low-wage jobs are growing in many areas that are hard to reach for neighborhoods with a lot of low-income families.

Existing Transportation Conditions

Primary Institutions

While the causes of West Dallas’s mobility challenges are many, it is primarily up to the governmental agencies responsible for transportation to improve mobility opportunities. They have mixed records on doing so for all residents of Dallas.

Dallas Area Rapid Transit (DART) has long focused on building rail to serve each of its thirteen-member cities. This emphasis on capital construction over service in a spread-out region left less funds for core bus service. For the rail system, the agency also acquired cheaper land near, but not walkable to, the destinations it serves. As a result, transit riders must rely on bus routes

(most of which are infrequent) to reach many places even near rail. Most routes don't have all-day frequent service and there are limited hours of operation. And the greatest level of job growth in the region occurs in locations outside of DART's sizable service area. Nationally, DART is notable among transit agencies for its embrace of new technologies and pioneering new mobility on demand (MOD) services. In 2019, the agency contracted a consultant to help determine how use its available resources to improve bus service, weighing the trade-off between frequent and reliable service, or covering more streets and a wider area. The process necessitates many difficult decisions and by its nature will fully never satisfy everyone. Some bus routes in West Dallas have been reoriented, as detailed further below.

North Central Texas Council of Governments (NCTCOG), the region's transportation planning organization, directs billions in federal funding toward expanding and maintaining the road and highway network. While its most recent funding plan included projects such as development of a regional pedestrian safety improvement program and some passenger rail and pedestrian safety projects, the bulk of regional funding continues to go towards expensive highway expansion projects rather than projects that can increase more affordable mobility options. Regional infrastructure investments are guided by NCTOG's Regional Transportation Council, a 44-member body of elected and appointed officials who prioritize which projects get federal and state funds. In its current multi-year plan, building more roads is a priority over other types of projects; nearly 60% of funds for new projects is allocated to road work, about 15% of funding for highways is for new projects, under 3% of revenues are for pedestrian and bicycle projects, and under 1% of funds are allocated to transit.

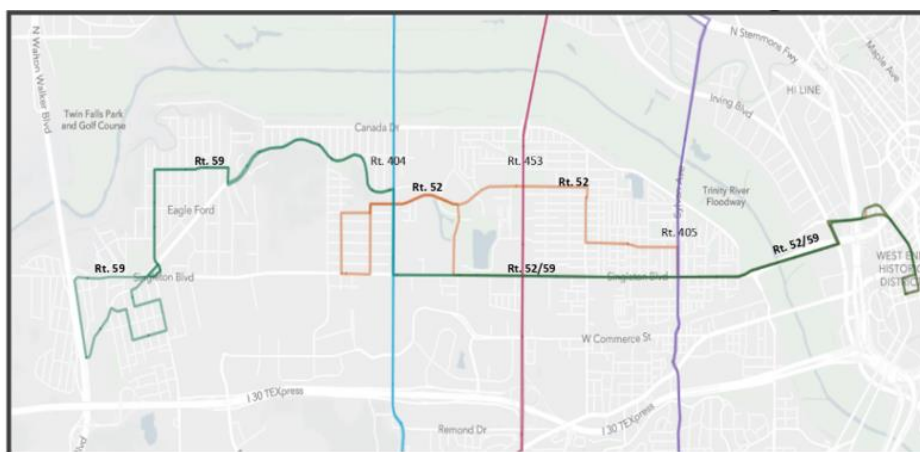
The City of Dallas has historically directed tax breaks and incentives for development far from housing and transit, and paid scant attention to pedestrian or bicycle infrastructure. Since 2010, pedestrian fatalities in Dallas County have doubled. The City's funding for transportation will be slightly lower in 2020 than 2019. There have been very positive developments with the City of Dallas to improve affordable mobility for all. The Dallas Department of Transportation, was established in 2018 and is beginning to consider the perspectives of pedestrians, cyclists, and the disabled, and is developing a comprehensive mobility plan that considers housing and economic development. The Department is making strides, and is taking a data-driven approach to decision-making to allocate limited resources. Its fourteen council districts make more requests than the department can meet for improvements like traffic calming alone. Through pursuing new approaches and partnerships and following the data, the department is catching up against its old way of doing business, prioritizing infrastructure like pedestrian signal timing. The City of Dallas is also developing a Climate Plan that emphasizes sustainable transportation. These are positive developments and this work should be encouraged and supported as it can yield great benefits for West Dallas and other communities.

Existing Transportation Modes in West Dallas

The following modes are available in West Dallas.

Public Transit: DART operates five bus routes in West Dallas, including two East/West lines connecting to downtown – the 52 along Singleton Boulevard and the 59 linking Singleton to Bernal Drive to – as well as three cross-town North/South routes – the 404 along Westmoreland Road, the 405 on Sylvan Avenue, and the 453 down Hampton Road.

In August of 2019, DART made minor revisions to the East-West routes (heading downtown, shown below) as part of ongoing effort to streamline service. Specifically, DART moved routes 52 & 59 away from residential roads and on to the major roads of Singleton and Bernal while also improving scheduled frequency. Unfortunately, this created longer distance to bus stops for many residents. There is no light rail or commuter rail service in West Dallas.



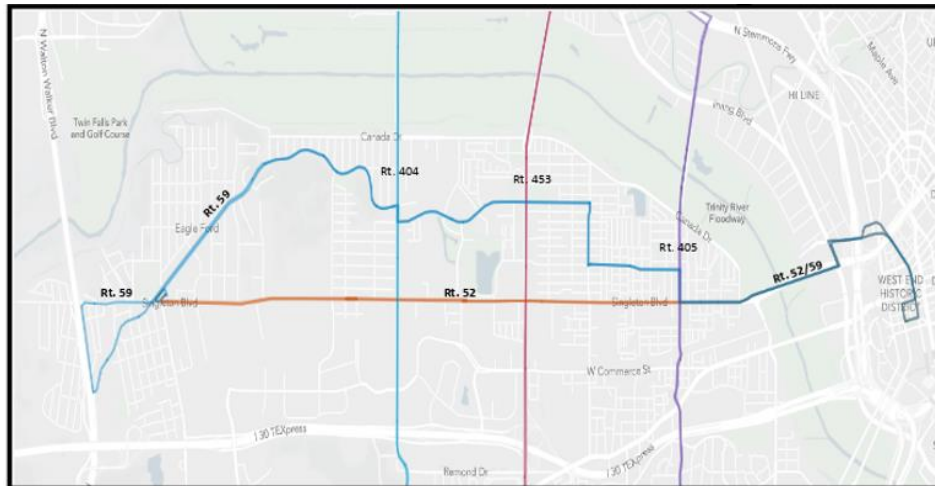
Bus Routes prior to August 12, 2019 – provided by DART

Route	Old Headway								
	Weekday Peak	Weekday Base	Weekday Night	Saturday AM	Saturday Mid Day	Saturday Night	Sunday AM	Sunday Mid Day	Sunday Night
52	30	35	45	45	45	45	60	60	60
59	30	60	60	60	60	60	60	60	60

Span of Service:

Rt. 52 M-F 4:45 a.m. til 1 a.m.
 Sat. 4:40 a.m. til 1 a.m.
 Sun. 5:24 a.m. til 1 a.m.

Rt. 59 M-F 5:00 a.m. til 11:15 p.m.
 Sat. 4:48 a.m. til 11:40 p.m.
 Sun. 4:48 a.m. til 09:44 p.m.



West Dallas Bus Routes after August 12 – provided by DART

Route	New Headway								
	Weekday Peak	Weekday Base	Weekday Night	Saturday AM	Saturday Mid Day	Saturday Night	Sunday AM	Sunday Mid Day	Sunday Night
52	20	20	20	45	45	45	45	45	45
59	30	60	60	45	45	45	45	45	45

Span of Service:

Rt. 52 M-F 4:00 a.m. til 1 a.m.
 Sat. 4:40 a.m. til 1 a.m.
 Sun. 5:25 a.m. til 1 a.m.

Rt. 59 M-F 4:00 a.m. til 1 a.m.
 Sat. 4:00 a.m. til 1 a.m.
 Sun. 5:11 a.m. til 1 a.m.

In addition to normal bus service, DART also operates a number of mobility initiatives throughout West Dallas and the broader region, including:

- Through DART's **Vanpool** program, users pool their money to rent either an 8- or 15-passenger van from DART. For a combined monthly fee of \$425-450 – which includes routine maintenance and insurance but not gasoline – 8 to 15 passengers and one driver who live in a common area share their commute. Although the program is restricted to commuters who share similar working areas, DART has 150+ vans currently in service. The vanpool service includes up to two “emergency ride home” trips per quarter in case a passenger is unable to use the vanpool for a personal or work-related emergency. According to DART, the program cost is around \$90 per person including gas.
- DART's **Paratransit Service** offers curb-to-curb transportation for people with disabilities limiting them from using DART's trains or normal bus service. DART's paratransit vans are outfitted with wheelchair lifts or ramps for further accessibility. Service areas includes Dallas and twelve surrounding suburbs, including service to and from DFW International Airport. Trips can be booked online or by telephone up until 5pm the day before, as DART does not offer same-day paratransit service. For riders who know they will make the same trip at least once per week, subscription service can be scheduled and reserved in advance.

Ridehailing: As is standard in most urban areas, the most common app-based ridehailing services available in Dallas are Uber and Lyft.

Rides Provided by Family, Friends, and the Community: Most residents and stakeholders of West Dallas who participated in focus groups described frequently receiving rides from or giving rides to not only their friends and family, but also coworkers and acquaintances. Several attributed this to their Latinx roots and a communitarian culture of taking care of one another. This was one of the most consistently reported modes of travel by members of the focus groups. While very few participants had personal experience with app-based ridehailing services, nearly all members were aware of their existence and knew friends or family who regularly used Uber or Lyft.

“I am the Uber”

“Yo hago de Uber”

Scooters: Scooters came to Dallas quietly in 2017 and made a big splash in June of 2018 when City Council lifted a scooter-ban. Current companies operating shared scooters in Dallas include Bird, Spin, Jump (Uber), and Lime which offer stand-up “kick” scooters. In November of 2019, Lyft announced that it would take its scooters out of Dallas and several other cities. Ojo also operates a shared scooter fleet in Dallas, with Ojo scooters including a seat. Unlike some cities, Dallas allows scooters to be ridden on public sidewalks outside downtown, the Cedars, and Deep Ellum neighborhoods. Following a hands-off approach to dockless bike sharing, the City of Dallas began a permitting process for dockless vehicles (including scooters) in July of 2018. This has not made the micromobility market in Dallas any less volatile. Lyft scooters recently left the market in November of 2019 after less than a year (although their service area excluded most of West Dallas). Regulations regarding fleet size and rebalancing are relatively lax. However, the City reserves the right to suspend or revoke an operator’s permit for failing to pay fees, maintain insurance, or not maintaining certain operating standards.

Additional Modes Not Available in West Dallas

Dockless Bikeshare: From 2017 to 2018, five separate micromobility companies flooded the streets with thousands of bikes while the City took a hands-off approach to regulation. All five companies have since either left the market or transitioned to shared electric scooters in 2018, demonstrating how rapidly new technologies and business models can change. For example, Uber pulled its dockless, electric Jump Bicycles from the City in summer 2019 to focus on their scooter program.

Transit Options: Services provided by DART outside of West Dallas include the **Trinity Railway Express Commuter Rail, Light Rail service**, and multiple **mobility on demand pilot programs**:

- **DART Rides** is a taxi voucher program available to eligible senior citizens (65+) and/or persons with disabilities who are *not* eligible for paratransit. This rider assistance program allows users to schedule discounted taxi service up to an hour ahead of their trip. While the service is designed to fill gaps in eligibility for DART Paratransit, it is separately funded and not available in many geographies throughout Dallas.

- **GoLink** is a microtransit pilot for point-to-point shared rides within select service areas. There are no walk-up requests for these microtransit vans. Instead, service must be scheduled in advance either through a dedicated smart phone app (DART's GoPass app). Routes and service are limited as the program is currently in its pilot phase. GoLink is also unique in that DART contracts vehicles and drivers from outside the transit agency. While users hail rides from DART's GoPass app, the vehicles themselves come from either Irving Holdings Taxis or UberPools.
- **DART FLEX Service** is a microtransit pilot that offers vehicles following fixed, circular routes while making detours to offer curb-to-curb service for riders. Like GoLink, FLEX Service does not offer walk-up requests. FLEX Service allows users to hail a ride over the phone. DART is in the process of phasing out its FLEX Service in favor of GoLink service areas.

Carsharing: There are a few Zipcars downtown. The peer-to-peer platform Turo is available in West Dallas, but for many local residents, the term "car sharing" suggest the common practice of leaning on friends and family for rides. Due to Turo's user-driven nature, cars are not always available in West Dallas at all times and vehicles on this platform are only available for full-day rentals (compared to hourly rates on Zipcar).

The Mobility Climate in West Dallas

Driving represents the majority of travel for all of Dallas. Citywide, 88% of commuters drive or carpool to work while less than 4% use transit. Although West Dallas has considerably less wealth than the rest of the City, there are more vehicles per household than the city average (1.74 compared to 1.57 for Dallas). Although this means more cars per garage, West Dallas also has more people per household than the City of Dallas, and thus less vehicles per capita than the city average (0.5 in West Dallas vs 0.6 for the entire City). The built environment makes it easy to own a car throughout Dallas. Most of the land is zoned for single-family housing and parking is abundant both in lots and on the street, while destinations are spread apart.

"I don't ride transit anymore, I drive. When I did, it was so cold in the winter, people would be shaking, and sometimes the bus drives right by."

"Ya no viajo más en autobús. Ahora manejo. Cuando viajaba en autobús en invierno, hacia tanto frio que se veía gente temblando en las paradas. Y a veces los conductores de autobús no respetaban las paradas."

Reliability

For many West Dallas residents, work does not mean five days of morning and afternoon commutes with Saturday and Sunday off. Freelance workers like house cleaners and construction workers commute to many places across the region. This makes a solution like vanpooling unlikely to serve job

access needs. It would be hard for residents to find people in the neighborhood with similar work locations.

“I’ve had multiple accounts that I had to turn down because they weren’t close enough to a bus stop.”

“En varias oportunidades he tenido que rechazar trabajos porque no tenia una parada de autobús cerca para llegar al trabajo”

Local buses and other transit connections are not always on time, despite DART’s efforts to improve the frequencies of routes 52 & 59 to and from downtown in August of 2019. Although some scheduled headways improved, off-peak headways for Bernal Drive are still at least an hour, and weekend passengers must wait 45 minutes along both Bernal and Singleton Boulevard. This creates a long commute schedule for a population with non-standard work weeks. For some, showing up late to work too often can cost them their job.

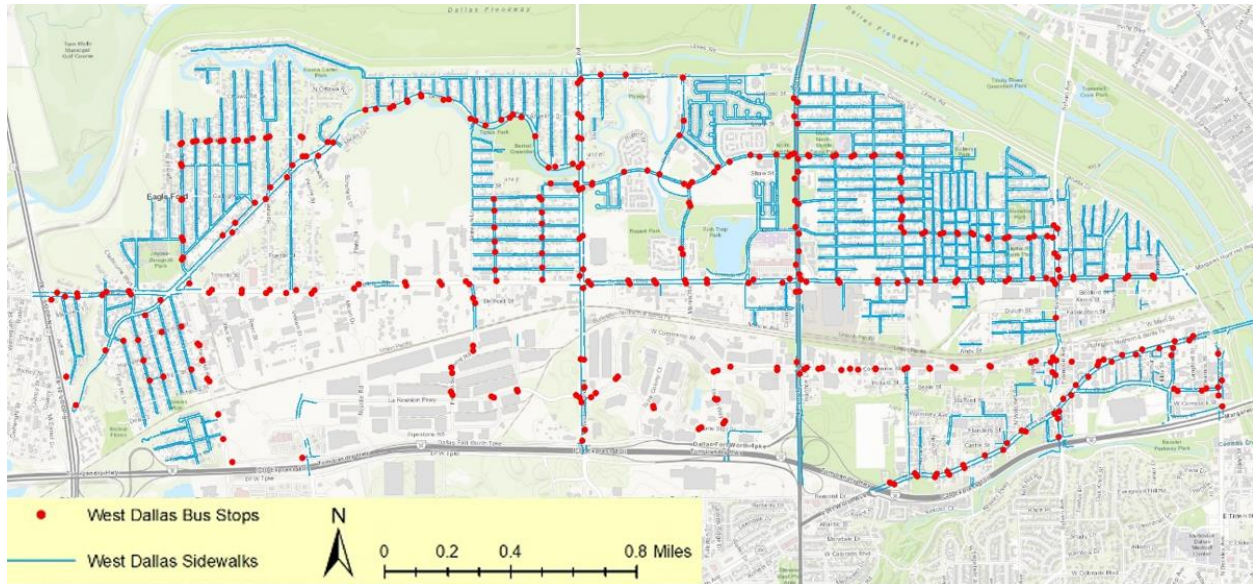
The community’s perception of late buses could be caused by factors outside of on-time-performance, from traffic to a gap in information technology. DART recently updated their bus route network and schedule. However, some stations still display legacy schedules, and many stations do not have schedules at all. DART’s GoPass app is much more accurate for real time scheduling information, but most residents do not know how to use, do not have access to, or are not familiar with the app. The current version of the app is automatically translated to Spanish for passengers with their phone language set to Spanish, but Spanish doesn’t appear as an option on a phone with the language set to English. Some users’ phones are not new enough to download the app. The more accessible SMS text service is very accurate in real time, but has no Spanish language option at all. According to 2017 data from the Census Bureau, 55% of homes in West Dallas primarily speak Spanish. Of those Spanish-speaking households, nearly a third reported that no one over 14 spoke English.

Accessibility and Safety

In addition to the language barrier, there are physical barriers between people and bus stops. The pedestrian infrastructure in West Dallas lacks sidewalks and bus shelters. While stations within commercial districts sometimes feature wider sidewalks and/or bus shelters with benches, bus stops along more residential roads like Singleton or Bernal exist without benches and in some cases, bus riders must wait on the grass, with no sidewalk available, in the dark. The below map (provided by DART) shows large gaps in walking infrastructure on Bernal Drive and Singleton Boulevard despite the downtown-bound bus routes on those roads.

“On some streets it is impossible to know whether there is a bus stop or not because there are no lights or signs.”

“En algunas calles es imposible saber si hay una parada de autobús o no porque no hay luz ni señales.”



Bus Stops and Sidewalks throughout West Dallas – Provided by DART

“There are no signals, no signs, to know where the stops are.”

“No hay señales ni carteles para indicar donde están las paradas de autobuses.”

“They should have enough money to be able to protect us from rain at the bus stops.”

“Deberían tener suficiente dinero para poder protegernos de la lluvia en las paradas de autobús”

Another primary concern of West Dallas residents is bus stop safety. Focus group members commonly expressed an interest in updated schedules to decrease wait times, as well as more street lighting, sidewalks, benches, and protection from the elements. Some routes are in areas without sidewalks, and routes with good shelters or sidewalks may not have pedestrian street crossings. For those with non-standard working hours, this can mean crossing a seven-lane road in the dark and waiting for a bus with no lighting. Transit-dependent members of the focus group consistently came back to safety as a concern. Several mentioned adequate lighting multiple times, noting that sometimes a bus wouldn't see someone at all, and wouldn't stop.

“It doesn't feel safe to take the bus, and takes too long to arrive.”

“No me siento segura esperando el autobús. Y el autobús tarda mucho en llegar.”

“There are no sidewalks at the bus stops, it is neither safe nor convenient to wait for the bus in these conditions.”

“No hay veredas en las paradas y no es seguro ni conveniente esperar el autobús en estas condiciones”

“I have seen a black woman running after the bus because the driver did not see that she was waiting at the bus stop and drove past her.”

“He visto a una mujer negra correr el autobús porque el conductor no vio que ella estaba esperando en la parada y siguió de largo.”

As bus stops and their amenities – or the lack thereof – facilitate a sense of unease, in many cases the lack of pedestrian infrastructure creates real danger. The Texas Department of Transportation processes crash data from The Texas Peace Officer's Crash Reports (CR-3), though crashes which aren't reported to police officers are unknown. Between 2010 and October of 2019, at least 195 pedestrians or cyclists were hit in West Dallas. And the number is probably higher. This figure only includes crashes that were reported to or recorded by police officers, and submitted in Texas Peace Officer's Crash Reports (CR-3) to the Texas Department of Transportation. Pedestrian and cyclist crashes are usually higher than reported, and could rise higher still in West Dallas considering that many residents prefer not to get involved with the police, whether due to cultural reasons, because some community members might be undocumented, or something else. Of the crashes involving a pedestrian or cyclist recorded by police in West Dallas between 2010 and 2019, 13 pedestrians were killed.

"The neighborhood takes matters into its own hands. It doesn't call the police,"

"El barrio arregla cuentas por sí mismo. No llama a la policía."

"You could get run over"

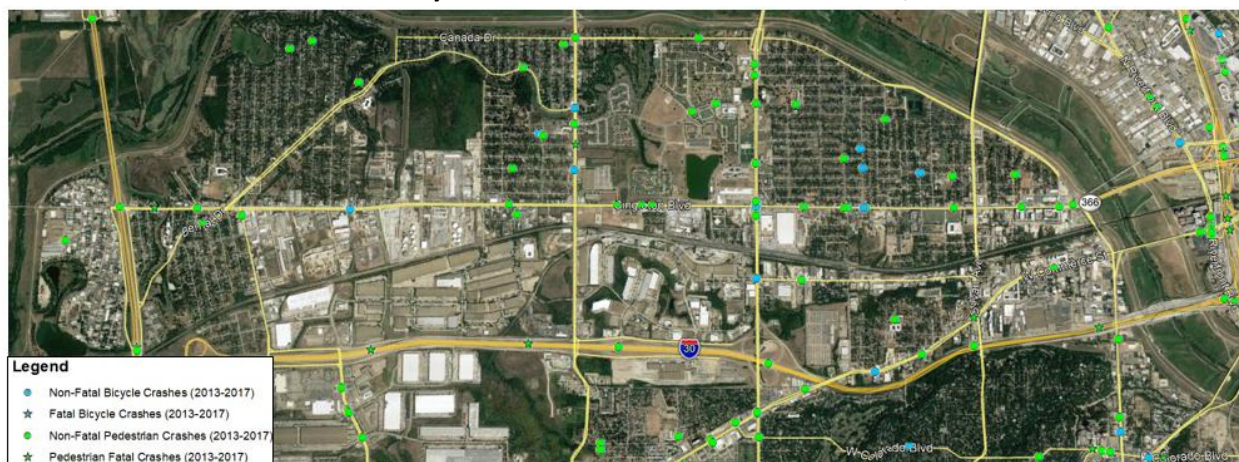
"Aquí es posible que te atropellen"

"People here get hit by cars constantly"

"A menudo la gente del barrio es atropellada por autos."

The map below shows pedestrian and bicycle crashes in West Dallas between 2013 and 2017. There is a concentration of accidents along Singleton Boulevard, Westmoreland Road, and Sylvan Avenue. All three of these roads have bus routes along a highway-like design, with few or no sidewalks or safe locations for pedestrian crossings.

Pedestrian and Bicycle Crashes and Deaths in West Dallas, 2013-2017



Source: TxDOT's Crash Records Information System, collected and located by NCTCOG

In some cases, including along parts of Singleton Boulevard, a complete gap in sidewalks means bus riders must walk to stops either on the road or in the dirt. The first focus group, which included fewer car owners and more bus riders, spent considerable time pointing that out. One single mother told the group “there are no signals, no signs to know where the bus stops are,” immediately followed by another person saying “there are places where you can’t even tell there is a bus stop; there are no signs or lights.” A 2018 study by the University of Utah found that simple improvements like benches, lighting, and walking infrastructure can lead to significant gains in local bus ridership.

“There are no ramps on the sidewalks for people with disabilities.”

“Faltan rampas en las aceras para las personas con discapacidades”

“I don’t take the bus as frequently because bus stops are dark, there is no lighting, no seating, and no shelters. I’d like for there to be cameras for safety”

“Yo no tomo el autobús seguido porque las paradas son muy oscuras, no hay luz, ni bancas, ni refugios. Me gustaría que hubiera cámaras de seguridad para protegernos.”



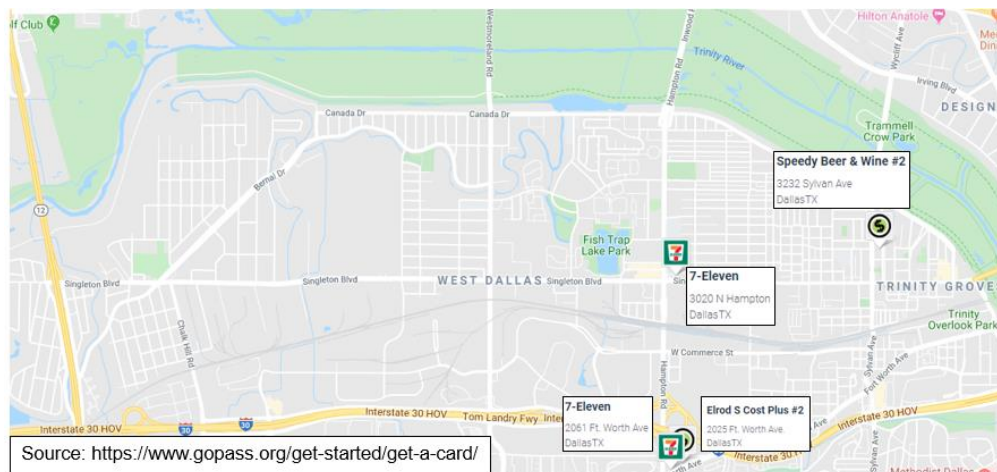


Stops along Routes 52 and 59 -- Singleton Blvd & Bernal Dr -- with no sidewalks. Potential passengers are forced to wait in the grass or on the street (Photo credit: SUMC)

Affordability

DART service is relatively inexpensive, but not without barriers to financial access. Households in West Dallas spend 20-23% of their income on transportation, well above the 15% affordability threshold established by the Center for Neighborhood Technology in their Housing + Transportation (H+T) affordability metric. CNT uses this H+T index to describe the complete cost of living in an area where housing or transportation costs alone do not paint the full picture. According to this tool, a hypothetical household in the Lake West neighborhood (central to West Dallas) with income typical to all of Dallas can spend up to \$11,000 per year on transportation. Census Data from 2017 shows the neighborhood's median household income is around \$14,000 (compared to just over \$32,000 for all of West Dallas), demonstrating the wealth gap between this neighborhood and the rest of the City.

Many local transportation modes are difficult or impossible to use for those who are unbanked or underbanked. This locks out a huge segment of the West Dallas population. FDIC data from 2017 shows that 53-60% of Hispanic households in the Dallas-Fort Worth region are either unbanked or underbanked, compared to 20-24% of white households. This means that over half of Hispanic households – and over a fifth of white households – in the Dallas metro area rely on alternative financial services, including payday loans, pawnshops, or money orders. Not only are such households at a disadvantage when building equity, they are also less able to access alternative mobility modes that rely on a credit card or bank account. While certain DART programs offer unbanked payment methods, these are often poorly advertised and involve extra steps such as putting money on a card through a retail location. Furthermore, there are very few such locations throughout West Dallas, as demonstrated below.



There are four locations in West Dallas where residents are able to put cash on the GoPass DART app. They are all on the East side of the region.

DART has existing programs to address affordability, but in some cases, they are not widely known or utilized. For example, DART caps fares at the cost of a daily/monthly pass in a single day/month when users pay with the app or a registered GoPass card. However, if users pay with a disposable, single-use card, as is common in West Dallas, they would circumvent the cap and pay more than a monthly pass in one month. No focus group member mentioned using a monthly pass, the GoPass tap card, or ticketing through the app. Assuming 21 working days in a month, a commuter could easily spend \$126 on daily passes which is \$30 over the monthly fare cap of \$96 and does not account for transit on weekends. This equates to hundreds of dollars a year spent by users who could benefit from the program.

In another example, a woman in the focus group expressed a desire to use trains and buses, but by paying full fare for herself and her children, a simple trip to the zoo could quickly become unaffordable. “If you have kids, you end up spending more.” She was not aware that children under 5 can ride DART for free, and that all resident minors qualify for reduced fares.

These examples indicate a lack of outreach and education from DART, social service organizations, or other groups to the community. Education researchers at Southern Methodist University noted that trust has not been established or maintained between residents throughout West Dallas and many public services or institutions. Residents can also be hard to reach; members of the focus group expressed receiving most of their news through the radio and word of mouth. The area also doesn’t have many central congregating points (e.g. community centers or large retail establishments).

Technology

Many focus group members said that they own a smart phone. Common uses included driving directions, checking their children’s progress at school, or reading the news. People who drive are more likely to use a smartphone for transportation purposes like maps and routes, than people who exclusively rely on transit. The group discussed rarely or never spending money on transportation or shopping through a smart phone.

Census data indicates that in 2017, only a third of households in West Dallas had a cellular data plan and over half of households had no internet subscription, including cell phones. If local residents are relying on smart phones for internet access, this may indicate that they are also dependent on public Wi-Fi hotspots. Without a reliable source of mobile data, TNCs, microtransit, and other modes of mobility on demand that require internet access become inaccessible.

“I don’t buy a pass because sometimes I end up asking a relative for a ride. It’s easier and cheaper that way”

“Yo no compro el pase (diario) de DART porque a veces mis planes cambian y me resulta más fácil y barato pedir a un conocido que me lleve.”

Community members and stakeholders often rely on each other for transportation. If a car isn’t working, people ask family and friends for rides. Although everyone knew someone else who had used Uber/Lyft, very few members of the group described themselves using such services. When asked about Uber, one woman remarked “I am the Uber,” demonstrating the community’s propensity to lean on each other.

Addressing Mobility Needs

In evaluating mobility needs in West Dallas, we observe many barriers in access, affordability, technology, and more, which prevent seamless mobility for all. The following improvements would greatly advance access to jobs, core services, and other destinations, for the residents of West Dallas and beyond. They are inclusive of many improvement opportunities but not exhaustive of mobility additions that could support residents of West Dallas and similar communities.

- Immediate outreach about the DART fare capping program and other programs that would benefit low-income and transit dependent populations – this could be included as part of the provision of other health and human services or through local community-based organizations – and extensive outreach on any new service or program
- Increased frequency of transit service, including later hours and on weekends
- Pedestrian improvements, including sidewalks, traffic calming measures, bus shelters, and lighting, as well as bicycling infrastructure
- Priority areas for the placement of scooters and other micromobility if it becomes available (e.g. minimums in different neighborhoods), and low-income fare programs
- The local introduction or development of a peer-to-peer carsharing platform, such as Getaround
- Exploration of additional on-demand services, such as a new microtransit service that would connect West Dallas residents with a few key destinations, such as light rail or a grocery store
- Increased funding at various levels of government for transit, pedestrian, and other multimodal transportation projects
- Local hire programs to make it easier for current residents to work in new service and retail positions, and positions created as a result of new developments
- Affordable housing provisions for new developments in West Dallas

The public, private, and nonprofit sectors all have roles to play, often in partnership with one another, in advancing mobility outcomes for West Dallas to promote access and opportunity for all. In the following section, we detail some opportunities that are ripe for the private sector to explore.

Private Partner Mobility Improvement Opportunities

Introduction



A view from West Dallas towards downtown over Trammell Crow Park. "From the west bank" (CC BY-NC-ND 2.0) by Whatknot on Flickr

This paper assesses opportunities to improve access to jobs, including mobility on demand (MOD) options, as well as others, with the idea of developing a pilot project in West Dallas. The Shared-Use Mobility Center works with many forms of MOD, including microtransit, new carsharing technologies, autonomous vehicle policy, micromobility, and more. In reviewing West Dallas, we considered a variety of modal options before identifying a critical mobility concern that private parties could help address on a more immediate basis: the current lack of sidewalks, bus shelters, and pedestrian street crossings. To ensure their most effective impact, these needs must be addressed in partnership with government agencies and the community. We identify opportunities for the private sector to engage in strategic partnerships to promote improved transit use in West Dallas and suggest programs and policies that will benefit West Dallas. We also detail mobility on demand (MOD) options, especially microtransit. We precede the three areas of recommendation that follow with a set of guiding principles that are essential for private philanthropic investment in West Dallas.

Transit Is the Backbone

Transit is the center of any multimodal network. The transit system in the Dallas area is limited by spread-out land use, long wait times, and limited hours, with mixed coverage in some areas. With several bus lines crisscrossing it, the West Dallas area has better transit than much of the region. Creating frequent, reliable, accessible, and comfortable transit is important to the health of an entire transportation system. It is the backbone on which mobility on demand and other forms of innovative

shared mobility like microtransit, new forms of carshare, autonomous vehicles, and micromobility work in complement. Too often, that backbone isn't strong enough even in the most well-positioned places. When amenities supportive of getting to and from transit and other modes, – like sidewalks, shelters, and crossings – are missing, trips to access any of these services can become unappealing, uncomfortable, or even dangerous.

Goals Precede Modes

Our thinking should start with goals rather than emotional excitement about technologies, and this requires some serious effort, because every technology salesperson wants us to do the opposite: first, get excited about a technology, then try to come with a goal that could justify it. As soon as 'innovation' becomes a goal in itself rather than a tool, we are headed down that slippery slope. — Jarrett Walker

Transportation modes and service models are tools to solve specific challenges. Stated goals and identified challenges should determine the identification of appropriate solutions for various mobility limitations. For example, transit is the most efficient mode for moving many people within a network and micromobility can serve the first and last mile of trips. Thus, we begin our recommendations with the goal of improving mobility for low-income transit-dependent populations in West Dallas.

Any goal or set of goals should be articulated clearly and measured against in the development of a mobility project. And it is important to consider the long term. For example, pilot projects are an important part of the development of a new mobility offering, in particular when they employ a new technology or service model. A temporary pilot may serve its purpose if a goal of the pilot is proof of concept, or improved understanding of the service. With a goal of serving low-income, transit-dependent, and other vulnerable populations, pilots would need to clear a higher bar. Testing a service that is not likely to be sustained in the long term could mean creating something that people come to rely on and then taking it away.

Facilitate Partnership, Outreach, and Engagement

Meaningful partnership is critical for a project to have meaningful impact. Private sector leaders know the importance of cultivating strategic relationships. For a mobility investment, partnerships must take place at a larger scale with a wider tent of stakeholders. Private partners can engage public sector partners for new local mobility projects as well as current work in the neighborhood. Methods may include reaching out to community-based organizations to facilitate outreach and engagement efforts around the planning of new mobility solutions or education about existing services, and considering advocacy efforts for improving mobility opportunities.

In any effort, the private sector can fund local community-based organizations to facilitate outreach and engagement efforts around the planning of new mobility solutions or education about existing services. Local groups and partnerships can help people make the most of the system now. This may include:

- Expansion of the number of locations in the community that provide cash fare payment options for transit, such as shops, schools, or health centers
- Education on the fare capping program and how to use an eligible payment method

- Outreach to shape any planned improvement or service

In Minneapolis, for example, private foundation funding matches public funding for local community-based organizations to conduct education and outreach on planning issues. West Dallas does not have a multitude of strong civic institutions or meeting points serving members of the community, and any work to strengthen community engagement in mobility can yield benefits that go beyond this arena. Potential partners include, for example:

- Los Barrios Unidos Community Clinic
- Lakewest Family YMCA
- El Centro College - West Dallas Campus
- Brady Senior Services at Marillac Community Center
- Family Care Connection - West Dallas Campus
- West Dallas Chamber of Commerce
- 3015 at Trinity Groves
- Smart Growth for Dallas Initiative (through Texas Trees Foundation)

Private sector leaders must also work closely with government agencies in West Dallas, pressing for improvements while understanding agencies' expertise. Private leaders can also champion policies from these entities that will enhance the lives of West Dallas residents: transit and pedestrian infrastructure funding, affordable housing, and increasing opportunities for West Dallas residents to fill the new jobs that are being created there, as detailed further below.

Recommendation 1: Develop Infrastructure for People

Everyone is a pedestrian at some point in their journey. Yet, much of Dallas was built without regard to pedestrian infrastructure, rendering pedestrian travel inconvenient at best and dangerous or even deadly at worst.

A pedestrian-friendly environment includes:

- Sidewalks that allow people to comfortably travel on foot
- Cutouts and accessible wayfinding for people with physical disabilities
- Physical barriers and markers to calm traffic and separate fast-moving vehicles from pedestrians
- Lighting that allows people to see, be seen, and feel safe

Current Conditions Are Unacceptable

As detailed, pedestrian and bicycle infrastructure is inadequate. Safe sidewalks and crossings, adequate lighting at bus stops, and shelter from the elements are absent necessities in much of West Dallas (and across the City). This was reiterated by focus group participants. Singleton Boulevard and Bernal Drive are priority routes for pedestrian safety improvements due to their bus routes and central connectivity.

According to West Dallas residents, investments for West Dallas should address:

- Lighting

- A lack of lighting creates a feeling of vulnerability among residents, who connect safety to proper lighting.
- Buses regularly drive past West Dallas residents waiting for the bus.
- A lack of lighting compounds traffic risks for pedestrians.
- Sidewalks
 - Many areas of West Dallas lack adequate sidewalks. This discourages walking as a whole.
 - Notably, Bernal and Singleton Blvd west of Norwich Street lack sidewalks while still including bus stops. This forces potential transit users to either stand in the mud/grass or on the street.
- Pedestrian crossings
 - More than one pedestrian or cyclist has died per year in West Dallas over the last ten years.
 - Long stretches of fast-moving roads without crosswalks do not give pedestrians adequate means to cross the street.
- Resilient structures
 - Bus shelters protect residents from the elements.
 - Amenities should be designed to withstand vandalism.

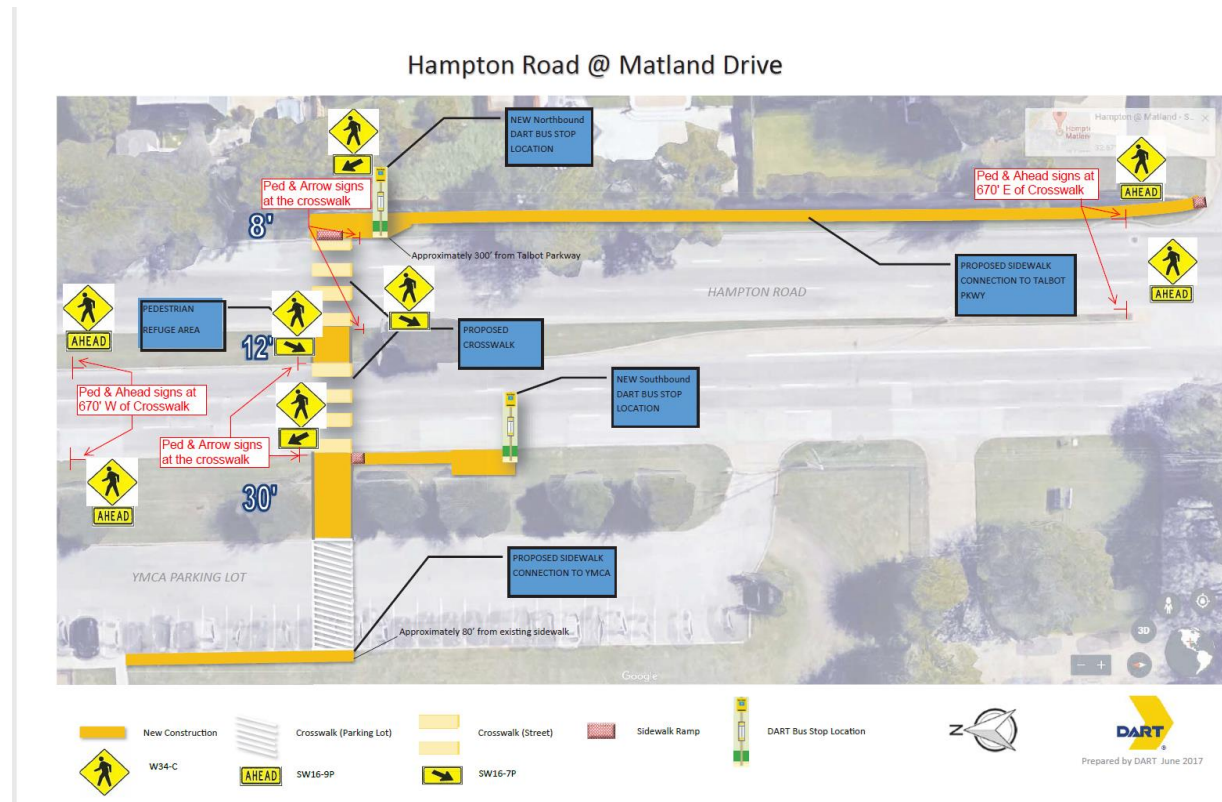
When people feel comfortable getting to transit, they are more likely to use it. Most West Dallas bus stops consist of a sign hanging on a pole. More accessible and comfortable bus stops can attract people to transit. A 2018 study from the University of Utah compared ridership at Utah Transit Authority bus stops before and after improvements including seating, shelters, better sidewalks, and improved signage. Following these changes, the researchers found a significant increase in bus ridership. Notably, the improvements also led to a decrease in paratransit demand around the areas involved, which can be a significant cost savings for the transit agency.

Pedestrian Projects Are Cheap

While many surface investments can prove costly, (milling and resurfacing a four-lane road costs around \$1.25 million per mile, for example) pedestrian and bicycle improvements are cheap. In Dallas, a pedestrian traffic signal (a lighted sign to stop cars while pedestrians cross) costs only \$15,000-\$20,000 to implement. Investment in pedestrian infrastructure would greatly leverage public investment, while providing long-lasting improvements to the community.

There is precedent for private entities to help shoulder the financial burden for these projects. For example, DART allocates new bus shelters based on a points system that factors in boardings and alightings (about two thirds of the score), and the presence of low-income and sensitive users (elderly, passengers with disabilities, and others who vocalize special needs and requests). But if a private partner constructs the amenity pad – a concrete slab for a shelter and area for passengers to wait – at a cost of approximately \$15,000, DART will install the shelter or bench, regardless of how that project might score.

In another example, DART and the City of Dallas upgraded transit and pedestrian amenities at the Hampton YMCA in South Dallas. For \$140,000, the City and transit agency added sidewalk extensions, sidewalk ramps, bus stops with covered shelters, a new pedestrian crossing, and pedestrian crossing signs. While DART would not specify the private partner which catalyzed the project or their exact role, the agency championed it as a successful partnership with the private sector to improve infrastructure.



Above: A Plan for Bus Stop and Sidewalk Improvements that Were Constructed for the Hampton YMCA

Before



After



Before and after photos of the Matland stop updated as part of DART and the City of Dallas Bus Stop-Sidewalk Improvement Project for the Hampton YMCA

While these investments may seem small, together they add up to a more complete street network for a community.

Private Investment Will Expand the Reach of Public Funds

The safety and dignity of transit riders merits additional action beyond waiting and hoping for government investments to trickle in. The private sector can do two things to move West Dallas mobility options forward: (1) employ leverage it has with the decision-making members of the City and the North Central Texas Council of Governments to encourage pedestrian and multimodal infrastructure investments, and (2) make strategic investments to leverage public investments.

Ideally, the public sector would provide usable and attractive sidewalks. Many cities across the country are struggling to retrofit the street infrastructure that wasn't built to include pedestrians in the first place. Dallas is a city that unburdens some of that expense by placing the onus on private property owners. Most sidewalks and complete streets improvements in Dallas can only be funded 50% by the City, with the remainder coming from property owners. This is out of reach for many of the residents that benefit the most. In addition, property owners pay 100% of driveway approach removal and replacement. Residential properties in West Dallas take up an average of 50 feet of roadway in length. Dallas City code states that sidewalks must be a minimum of 4 feet wide. This means a sidewalk repair in front of one house in West Dallas involves around 200 square feet of concrete surface. Accounting for

local costs of materials and labor, this would cost between \$1509 and \$1833 in total for a brand-new sidewalk. Property owners would be responsible for \$755-\$917 of this total. Where old sidewalks must be repaired, the price increases to \$1,762-\$2,140 with the property owner responsible for \$881-\$1,070. That's nearly half of a month's income for the average West Dallas resident.

The City has made progress on pedestrian improvements. In 2008, the City of Dallas released its Sidewalk Improvement Plan, which reported that 2,800 miles of relevant streets never had sidewalks installed, and found 1,830 of its 4,500 existing linear miles of sidewalks unsatisfactory. Following a similar analysis in 2018, the city's Department of Public Works documented 5,079 miles of existing sidewalks with 670 miles (13.2%) in unsatisfactory condition. Although this shows clear improvement over the past decade, there remain over 2000 miles of missing walking infrastructure that Dallas has yet to address. The City's current budget allows the department to install five miles of sidewalk per year.

<i>Proposed Five-Year IMP Sidewalk Maintenance Program Budgets</i>						
<i>Program</i>	<i>FY 19</i>	<i>FY 20</i>	<i>FY 21</i>	<i>FY 22</i>	<i>FY 23</i>	<i>Total</i>
Sidewalks	\$2.2M	\$2.2M	\$2.2M	\$2.2M	\$2.2M	\$11.0M
Sidewalk Miles*	5	5	5	5	5	25

The City of Dallas' Five-Year Budget for Sidewalk Construction

At the City level, for brand new sidewalks, there is also a Property Owner Petition Program in which the City will cover 90% of the cost of new sidewalks if a requesting citizen can obtain signatures from their affected neighbors to pay the remaining 10% of the cost for a new sidewalk. The City can also use Community Development Block (CDBG) money to assist low- and moderate- income residents with their assessments, though demand for CDBG funds across city programs far outstrips supply.

Federal transportation funds can also be applied to new or never-built sidewalks and pedestrian improvements like crossings. In 2017, NCTCOG deployed its Safe Routes to Schools program to fund 22 pedestrian improvement projects to safely connect students to schools for \$12.2 million, and other areas of funding are also eligible to be used.

Opportunity: Matching funding may be available to enhance impact in creating concrete change on the ground. A one-time investment can permanently improve the safety and navigability of streets for a community. People don't need outreach in order to know how to use a sidewalk.

Challenge: With West Dallas gentrifying, care must be taken to place new infrastructure in areas that will give the greatest benefit to long-term residents, as the neighborhood continues to change.

Getting Started: Develop a plan to engage the City's contacts, first meeting with transportation and planning leads from the City of Dallas to understand cost estimates, timelines, and funding sources. A likely next step would be a more site-specific study/plan of pedestrian infrastructure needed at a neighborhood level, looking at connections to transit as well as the expected investment in the park. The study would examine where sidewalk investments could most benefit current residents. Pedestrian

investments must also be considered as part of larger assessments of the neighborhood impact of new investments such as the park and the STEM school.

Recommendation 2: Engage in Advocacy Partnerships for a Stronger System

The private sector has an opportunity to champion not only West Dallas projects, but also supportive policies throughout the City that would strengthen the transportation and mobility network and enhance overall well-being of West Dallas residents. These include:

- Regional and citywide funding for transit, pedestrian, and bicycle infrastructure projects
- Local hire initiatives, that would make it easier for West Dallas residents to be employed in their own communities, a stated interest of focus group members
- The City of Dallas Climate Plan, which puts sustainable transportation front-and-center and came out of a committee chaired by West Dallas councilman Omar Narvaez
- Related initiatives, such as Vision Zero and expanding affordable housing

In the category of funding, for example, sidewalks and non-motorized transportation are typically covered by the Federal Congestion Mitigation and Air Quality (CMAQ) program and smaller locally maintained niche set-asides for programs to support safe routes to schools and multimodal projects. The Texas Department of Transportation and NCTCOG have the discretion to allocate millions more dollars as they deem fit. While funding sources such as Surface Transportation Block Grants are largely allocated to highway infrastructure, they are flexible under the statutes and may be used for many types of non-highway projects, like sidewalks.

Combining philanthropic efforts with other private entities would magnify impact. In Indianapolis, for example, C-level executives from the private sector convene under the Central Indiana Community Foundation's Personal Mobility Network. The group's investments in mobility-oriented community-based efforts and governmental relations are informed by a broad network and knowledge base of mobility issues across the region. Locally, the Texas Real Estate Council (TREC) is comprised of hundreds of entities representing 95 percent of the commercial real estate businesses in North Texas. TREC's efforts include public policy advocacy at the local and state levels, community lending, and philanthropic investments in Dallas. The private sector can pursue a collaboration with local entities that value innovative mobility, similar to that in Indianapolis.

Opportunity: The private sector is in a strong position to act as a convener for other private-sector entities to join in funding and supporting mobility improvements and policy changes that would make the region an easier place for people to access opportunity.

Challenge: Advocacy can be a long-term process that requires strategic partnerships and alliances with differing interests.

Getting Started: Identify other relevant private sector partners. This could be facilitated by working with the office of District 6 City Council member Omar Narvaez, which has deep relationships with community members and groups in the region. Private partners have previously developed relationships with The North Central Texas Council of Governments staff, and can further explore investments here in

multimodal infrastructure and supportive policies. In addition, the City of Dallas Department of Transportation's Director Michael Rogers is enthusiastic about innovation and partnership with the private sector and DART is an important resource for partnership and the identification of mobility service opportunities.

Recommendation 3: Mobility on Demand May be Able to Support Needs, Depending on a Project's Goals

Every transportation challenge is a context-sensitive opportunity to meet or exceed the mobility goals of a population. Transit is the backbone of any multimodal network and an efficient way to serve riders. West Dallas would greatly benefit from improved frequency and reliability of the transit service that is already serving the community, in addition to expanded service hours. Supportive infrastructure, such as sidewalks and bus stops, would support its use and riders' comfort and safety. Private entities can advocate for a range of services related to transportation and supporting access to jobs and core services.

On-demand options would also benefit West Dallas. More modes can support a multimodal system where different needs are taken into account. In this assessment, SUMC emphasizes the needs articulated by a set of West Dallas residents and stakeholders and our own research, which have informed our recommendations. As previously described, there are many West Dallas residents who are low-income, transit dependent, and/or Hispanic. Many residents with the greatest need won't choose or have access to many on-demand services due to characteristic lack of trust, a largely underbanked population, limited internet access, and the hard-to-reach nature of the population. We identify the criteria below as important for considering on-demand services for West Dallas. While they may not all be addressed by any one service, they should be considered in any instance.

- **Payment options for the unbanked that are seamless.** 53-60% of Hispanic households in the Dallas-Fort Worth region are either unbanked or underbanked. Sometimes even free services require banking information. Cash payment options or free services that don't require banking information are ideal, as even in instances where people can use a prepaid debit card, it requires a multi-step process for riders who are more comfortable paying in cash.
- **No or minimal account requirements for participation.** Many West Dallas residents expressed hesitation about creating an account through an app-based service and sharing personal information. This may be an even greater concern for undocumented residents.
- **Hours of operation that extend outside typical 9-5 timeframes and include weekends.** Many West Dallas residents do not work on a nine-to-five schedule.
- **An option for those without a data plan or smartphone,** such as the ability for people to order a ride over the phone in advance. 63% of West Dallas households do not have a cellular data plan, and 45% of households do not have any internet subscription (including cell data).
- **Clear branding of service offerings to foster trust in ride-based options.** Several West Dallas residents expressed a deep mistrust in the process of entering someone else's private vehicle (as in an UberPool).

- **A service designed with extensive outreach to West Dallas residents.** This could assist with service design and adoption, and, if appropriate, identify a few key destinations outside of West Dallas to focus on connecting with, such as light rail or a grocery store.

On-demand options can succeed, notwithstanding challenges for benefiting the most vulnerable residents. Choosing what and whether to promote a new mode is based on a public or private entity's goals. While noting that any new option would benefit some in West Dallas, we focus on microtransit, which is a likely on-demand service to enhance job access, and a growing mode in terms of the level of interest in and participation by private parties.

Carshare

Focus group members did not express an interest in carshare, and repeatedly discussed a strong communitarian culture of people giving rides to one another. Carshare also has limited use cases, such as trips to the store or to visit friends or family, as opposed to daily commuting. And it carries a higher price tag than other types of transportation. Nonetheless, some residents may use carshare and could benefit from an increased number of vehicles being available in the nearby downtown, where market conditions are more favorable for a private provider. SUMC has helped develop carshare for low-income populations, including the Blue LA and Green Raiteros programs in California.

Micromobility

Micromobility – scooters and bikes, including electric bicycles – provides valuable first mile and last mile connections to transit. Shared scooters are already available to some extent in West Dallas. Their use by West Dallas residents could be increased by: a low-income fare program, geographic distribution requirements set by the City, and a variety of outreach services, any of which a private entity could advocate for or fund. Several focus group members did not consider scooters a viable mode of transportation and did not report biking often, citing poor infrastructure. While pedestrian necessities seem to be the most compelling infrastructure need, biking infrastructure could open up new opportunities and should be part of the assessment for new infrastructure projects. Many pedestrian traffic calming measures would benefit cyclists and scooter riders.

Microtransit

Microtransit is a term for a number of on-demand, shared-ride transportation services, also referred to as flexible transit, demand responsive transit, and on-demand transit. It is a relevant option for West Dallas that could support jobs access, in addition to access to core services and destinations, and is detailed below.

Developing a “Little Bus” to the Broader Network

Focus group residents repeatedly described experiences in Latin American countries of a “little bus to get to the big bus.” In those instances, this likely referred to a neighborhood circulator service, which is essentially a small local bus line. Expanded local service or a privately developed, fixed route circulator could each function as a local “little bus.” While these options are not necessarily on-demand, they are worth noting as a free or cash-based service with predictable locations that would be easy for many to access and adopt.

Microtransit is a higher-tech take. Microtransit represents a spectrum of transportation services that fall between fixed-route transit, like DART buses, and single rides on ride-sourcing operations, like Uber and Lyft. Generally, it allows riders to request trips on demand, allows for electronic payment, and provides

users with the ability to manage personal information, payment method, and ride history. Users can also access real-time information on vehicle location before and during the trip. Microtransit may operate in a variety of service designs. It may address ADA accessibility with door-to-door rides, provide curb-to-curb rides, employ “virtual stops” that direct users to pick-up and drop-off locations near origins and destinations. It can also act like a bus or shuttle in some places and operate on-demand in others.

Most microtransit is procured publicly by transit agencies or cities, who may develop a contract with a private provider just for their routing technology, or for the technology, drivers, vehicles, and/or service planning. DART is a leading agency in its use of microtransit, specifically through the GoLink program, which has several zones and is serviced by both Uber Pool and MV Transportation (which operate taxis and shuttle vehicles with paratransit and dial-a-ride options).

Microtransit Has Limited Use Cases

Microtransit tends to cost more than traditional, fixed-route transit. Circuitous, point-to-point routes can reach fewer people per hour than straight-line ones. Payment to drivers is a major cost, and as a service becomes more popular, vehicles and drivers (i.e., cost) must be added to accommodate the growth and maintain service quality. The size of a service area and structure of where people may be picked up or dropped off also impact costs. A TCRP study reviewing self-reported agency data for microtransit found an average passengers per vehicle service hour of 3.419, and average cost per vehicle service hour of \$67.12.

Despite its higher cost, microtransit is useful in specific settings. A provider may choose to emphasize broad network coverage over costs or number of riders served. The lowest density areas may not be favorable for fixed-route service. Perhaps its most successful application has been to serve paratransit needs, in which transit agencies are required by law to provide door-to-door or curb-to-curb service, regardless of cost, for an entire service area. Indeed, microtransit is in many ways a high-tech version of the longstanding dial-a-ride option. It is also popular for some smaller political jurisdictions that choose to contribute additional subsidy for an alternative to fixed-route service.

DART’s Service Integrates with the Network While Private Service Could Deploy More Quickly

The DART Flex and GoLink services, detailed below alongside a few private options, are ideal candidates as they generally integrate with the transit network and have an operator. While DART operates microtransit in several areas, its likelihood of developing or adopting a zone for West Dallas is low without additional investment. DART views West Dallas as part of a large network, with many competing concerns for funding. Overall, providing frequency and span of service (number of hours of operation) is a priority for the agency. DART must consider how any investment takes away from other areas of the network and competing interests in an unstable funding landscape. This is even more likely with microtransit than an investment like higher frequency or later bus service, because of the trade-offs with cost and number of rides provided in microtransit. Indeed, the agency is phasing out its Dart Flex microtransit service due to costs. At least one DART staff member described West Dallas as “transit rich” compared to most of the region. But while DART may not lead a new service, there are other options. A privately developed service could deploy very quickly, and a number of vendors are competing for contracts. Additionally, DART may be amenable to selling its service at-cost privately, as transit agencies sometimes do for neighboring jurisdictions or special districts.

A Comparison of Services

The following table outlines key considerations for DART microtransit programs and a few private providers. There are many more providers than those detailed below; Circuit was selected as a service that is funded by private parties in Dallas, and Via was selected as an example because it is used in neighboring jurisdictions Arlington and Fort Worth (with specifications for Arlington featured).

IDENTIFIED MICROTRANSIT OPTIONS (NON-EXHAUSTIVE)					
	DART GoLINK	DART FLEX	CIRCUIT	VIA	
					WHY IT MATTERS
WHAT IT IS	Personalized, on-demand, curb-to-curb service for passengers who engage with the GoLink by phone or app. Assigns a shuttle or taxi to provide the trip. Users have the option of hailing an Uber pool, or a cab or van brokered through MV transportation, similar to DART Flex. Rides to or from a light rail station are free.	Microtransit vehicles following fixed, circular routes while making detours to offer curb-to-curb service for riders. It charges a DART local fare for boardings at bus stops and for trips that begin or end away from the local or fixed route. FLEX Service does not offer walk-up requests, but users can call to request a ride at least an hour in advance.	Provides electric on-demand microtransit in small, high-traffic parts of cities around the country. Service is provided free to the rider and funded by advertisements on the vehicles and corporate sponsorship. Users download an app, create an account, and hail rides. Circuit lists downtown Dallas as one of its service areas on its website, though it is not listed in the app alongside other markets.	A Transportation Network Company (TNC) similar to Uber and Lyft but that places a greater emphasis on shared rides and works primarily with government agencies. Nearby Arlington funded Via to provide point-to-point rides within its jurisdiction, in lieu of providing traditional public transportation.	There are a range of services between point-to-point shared rides like Via, and more fixed-route services, as well as service area sizes.
BENEFITS	A successful and expanding mobility on demand program that is relatively low cost. Integrated with and part of the DART network.	Distinct advantages for higher-need West Dallas constituents, including the potential to be	Because it is entirely free, it could overcome obstacles to participation for the underbanked. It is a private service that may be	A private service that may be deployed more quickly than one requiring public partnership. It has been deployed	

		made fixed route, and a more reliable dial-a-ride option. Doesn't require riders to create an account.	deployed more quickly than one requiring public partnership.	nearby. Service can be operated during hours defined by the entity procuring the service.	
CHALLENGES	DART is moving towards GoLink having an electronic fare only. DART cannot currently provide expanded hours due to the limited availability of the MV Transportation taxi option that is capable of transporting wheelchairs as mandated by ADA requirements. GoLink is the only option that can be hailed over the phone. This option is not always available.	DART is phasing out this service offering, largely due to cost. Hours are limited, similar to the GoLink service. Users cannot walk up to stops, only book in advance.	Circuit poses many of the same challenges of other app-based ride services in serving high-need constituencies, including account and smartphone or internet requirements. Circuit appears to be funded by advertising revenue in high-traffic locations, which West Dallas is not.	Via poses many of the same challenges of other app-based ride services in serving high-need constituencies, including account and smartphone or internet requirements. Point-to-point rides could come at a higher cost than other service models.	Most microtransit services center around ride-hailing apps which may not serve those without reliable internet access. Likewise, electronic payment can be a barrier; while people can use a prepaid debit card, this requires a multi-step process for riders who may be more comfortable paying in cash.
VEHICLE TYPE	Private vehicle or Wheelchair accessible mini bus	Wheelchair accessible mini bus	Electric shuttle van, not wheelchair accessible	Private vehicle or Wheelchair accessible option	Some riders don't like entering private vehicles, a wheelchair option may be a priority
HAILING OPTIONS	App or call center	App or call center	App only	App, call center in some cases	While call center options can have longer wait times and come at a higher cost to the provider, they are important to reach certain constituencies.
PAYMENT OPTIONS	Free if the ride is taken to or from a light rail station., Payment in Uber app with UberPool, or GoLink pass.	GoLink passes (half day to one-month long transit passes) must be purchased in	Free	Rides may be subsidized, or users may have the option to go beyond a service point or outside a service	The less seamless a payment option is compared to cash, the more challenging it is for people to use, particularly if they

	GoLink passes must be purchased in advance on buses, at rail stations, or on the GoPass app.	advance on buses, at rail stations, or on the GoPass app.		zone and pay a portion on the app.	don't always work in the same place at the same time, don't have a bank account, or live paycheck-to-paycheck. Many West Dallas residents mentioned using single-use tickets, since they don't always know if they will ride transit again or catch a ride.
ACCOUNT REQUIREMENTS	Users must have an Uber account linked to a payment card to use the Uber Pool option, which is linked from the DART app; for they taxi option they may use the app or call	N/A, users may call to access the service or use the Go Link app	The Circuit app requires an account and sharing of name, gender, age, and zip code.	The Via app and a Via account are required, payment card requirements are unclear.	Many focus group residents expressed a hesitation about sharing personal information and preference for cash payment options.
HOURS OF OPERATION	Currently 5:00am-8:00pm Monday-Friday	Currently 5:00am-8:00pm Monday-Friday	Unclear	As defined by an individual contract. Arlington's contract is for 6am to 9pm on weekdays and from 9am to 9pm on Saturdays.	Many West Dallas residents work outside of a typical 9-5 schedule.
NON-SMARTPHONE OR INTERNET OPTION	DART aims to eventually make the service accessible on smartphones only. All monthly passes are already exclusive to the GoPass app.	The dial-a-ride option will remain for the duration of the service.	Unclear, not readily apparent.	Defined by individual contract. Call center procurement is unclear.	Many West Dallas residents do not have reliable internet access, and some do not have smartphones at all.
WHEELCHAIR ACCESSIBLE OPTION	The Uber Pool option is not wheelchair accessible.	Yes	No	Via has wheelchair accessible vehicles available in Arlington.	Universal access is ideal, and vehicles are required if it is a publicly supported program.
CLEAR BRANDING OF SERVICE	Uber Pool - No Taxis - Yes	Yes	Yes	Although not the case in all markets, some feature well-marked vans.	Some people don't trust getting in a private vehicle.

CURRENT FUNDING SOURCES	Federal funding, private sector match in certain zones. The agency's subsidy per passenger (cost minus fares) generally runs \$15-\$18 per passenger for taxi brokerage trips and \$5 per passenger for UberPool.	Federal funding. The agency's subsidy per passenger is likely similar to the taxi brokerage for GoLink.	Advertising, local government funding	Procured and funded by government agencies save for private TNC operations in a few large cities.	Public transportation services by nature operate at a loss, a mix of funding sources aids sustainable operations.
PILOT VIABILITY	May be possible with private subsidy	May be possible with private subsidy	Likely to contract with a funding source, if it aligns with overall business model.	Can be contracted with a funding source	Any new project will require private party investment and careful design of service.

On-Demand Considerations and Next Steps

There is a growing landscape of on-demand options across the country. New technologies may bring new opportunities before long in this ever-changing field. In West Dallas, scooters are already on the ground. Enhanced regulation in the permitting process could expand their application, while infrastructure improvements could improve the landscape for riding and biking. Perhaps the most notable “on-demand” option already in place for residents is an indigenous rideshare in the form of neighbors giving and sharing rides with one another.

West Dallas residents expressed an interest in “a little bus to get to the big bus.” This can help people access jobs and the overall transit network comfortably. DART is unlikely to expand local bus network service, though private parties may be able to offer funds for more frequent or later service. A privately developed, fixed route circulator could also function as a local “little bus”.

Microtransit is the on-demand version of the little bus. It provides wide, expansive coverage for users within a service area in which it operates. This comes with a price tag, but depending on goals and budget, it may be worth the expense. The options outlined above present viable services that can be considered within the larger marketplace. For any option, many of the same issues would need to be weighed, such as payment and hailing options and hours of operations. Any service would have limitations in reaching the hardest-to-serve. Other areas of consideration include service area, staffing, vehicles, drivers, data use, insurance, development of an app, website, and call center, and more.

For any on-demand service, or any service at all, partnerships are critical to moving forward on decisions. Considerations of micromobility and carshare should begin with conversations with the city. Consideration of shuttle or microtransit service should begin with talking to DART; even if a private service is preferred, the agency can lend insight. From there, subject matter experts and vendors can provide details about options for any service of interest. Continued outreach and community engagement are also essential to developing any service. And as we suggest in the foundational recommendations, funding and working with local community-based organizations is essential to developing a service and ensuring that more people have the chance to use it.

Conclusion

West Dallas is a storied area. Many current residents feel that they are a part of a closely-knit community where they belong. In an area where a majority of residents live under two times the federal poverty level and many residents do not trust outsiders, recent gentrification has caused worry. Like many Dallas neighborhoods, the area is also challenged in its pedestrian infrastructure and transit options, even as it has comparatively more transit service than many other parts of the region.

Mobility needs identified and articulated by West Dallas residents include:

- More frequent transit service with a predictable schedule and extended hours
- Lighting, sidewalks, bus shelters
- Traffic calming and bicycle infrastructure

- New transit options, such as a neighborhood circulator “little bus” that can take people to the “big bus”
- Improved access to light rail and to retail, in particular grocery stores
- More jobs in West Dallas for residents

Several solutions could address the transportation issues, including an expanded transit program, a new service or new mode, added pedestrian infrastructure in key areas, and more funding for transit, pedestrian, and multimodal projects from different levels of government. Resourcing and facilitating community outreach and engagement on existing DART programs such as fare-capping could help people get to where they go with less financial burden in the near term. In addition, there is a need for local hire and affordable housing programs.

The private sector can play a role in developing or catalyzing many of these transportation solutions. Concrete wins in the form of infrastructure like sidewalks, lighting, and bus stops are direly needed, relatively cheap to add, and would improve the experience of transit riders and the community. The private sector can steward livability for West Dallas and the region on a number of issues through its partnerships and promotion of policy change. Finally, on-demand modes are a topic of interest, and microtransit may be a fit for West Dallas depending on a program’s goals. Regardless of technology, safe, walkable spaces and sound information are the foundation for any shared mobility program to thrive.

Through combining resources and efforts with other private entities and forging and strengthening relationships and investments across sectors, private parties can contribute to both short and long-term mobility improvements for West Dallas and the broader region.

Methodology and References

Combined with staff expertise, SUMC employed the following resources to produce this assessment.

Two Focus Groups conducted on October 24, 2019.

The focus groups hosted a total of 21 participants who met the following characteristics:

- Self-identified Hispanic men and women
- 50% Spanish dominant / 50% Bilingual
- Live, work, or use services in the West Dallas Neighborhood
- Don't own their own car, are responsible for transporting someone with limited mobility and/or use paratransit on a regular basis.

Groups were conducted in Spanish by a seasoned moderator from Synergia Multicultural Research and Strategy.

Interviews between August and November of 2019 with local partners including:

- The City Council Office of the City of Dallas
- The City of Dallas Planning and Urban Design Department
- The City of Dallas Department of Transportation
- Dallas Area Rapid Transit
- The North Central Texas Council of Governments

Interviews included follow-up correspondence and information shared subsequently in formats such as emails, figures, and PowerPoint presentations.

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