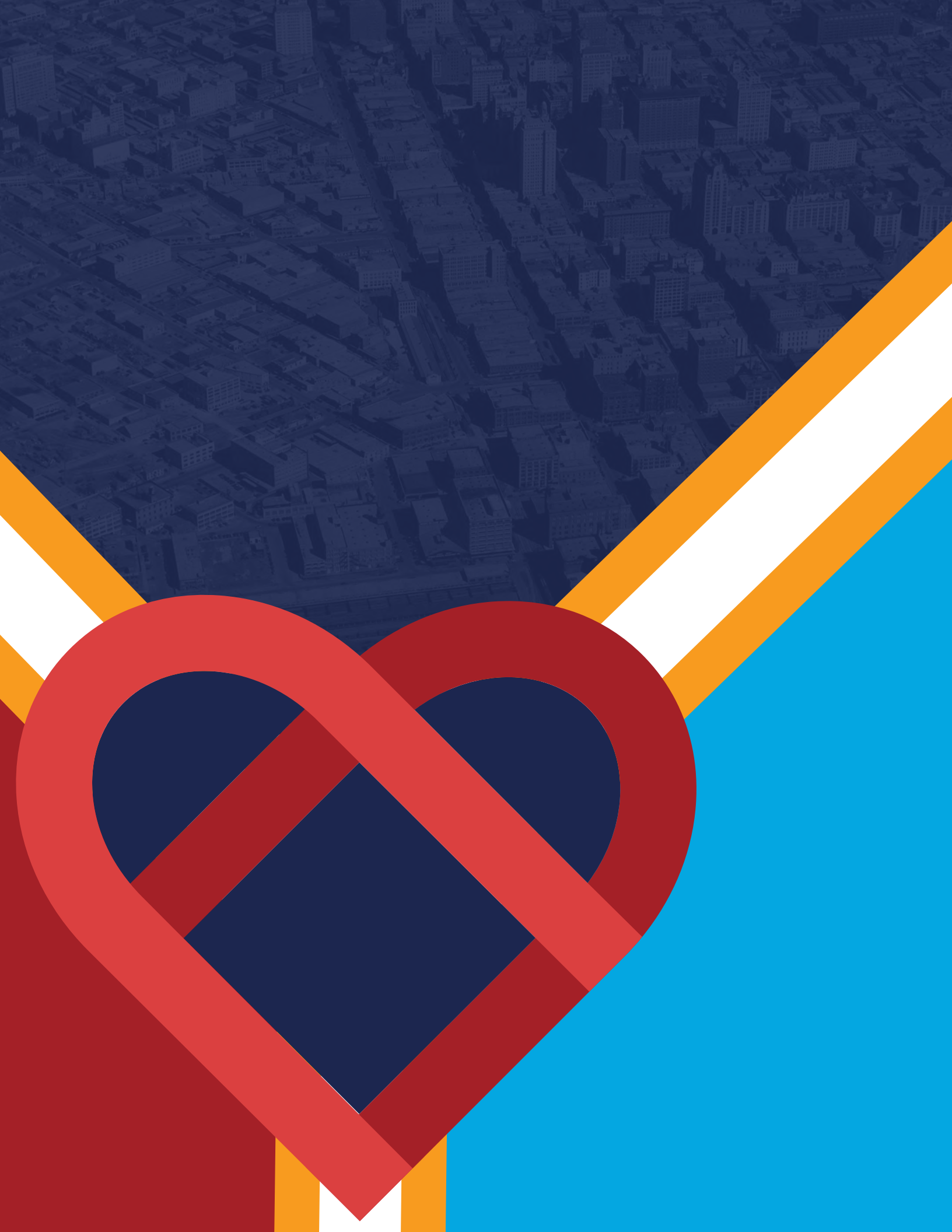


I-345/45
FRAMEWORK PLAN

DRAFT



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ACKNOWLEDGMENTS

Intended to build off the work from TxDOT’s CityMAP plan and its extensive public outreach and input. This full report, used as the baseline for this 34/345 Economic Development Plan effort, can be found at www.dallascitymap.com.

This plan is also intended to be complementary with and make reference to the City of Dallas’s Comprehensive Environmental & Climate Action Plan as well as the City of Dallas Comprehensive Housing Policy. These plans can be found in their entirety at the following websites:

<https://www.dallasclimateaction.com/cecacp>

<https://dallascityhall.com/departments/housing-neighborhood-revitalization/DCH%20Documents/Adopted%20Housing%20Policy.pdf>

The design team would like to thank the many members of the public who participated in the planning process by offering their time, ideas, concerns, suggestions and support with special thanks to the city staff and leadership who donated their time, experience, and insights into the process. Thanks to City of Dallas, Billingsley Company, D Magazine, Westdale, and 42 Real Estate for providing access to properties and space for work, meetings, or research. Lastly, we would like to thank the late Wick Allison whose knowledge, drive, and spirit has brought this effort to where it is today.



ADVISORY GROUP MEMBERS

The following list represents individuals and local officials selected to participate in each of the advisory group meetings. These meetings were held after each round of design charrettes to provide input and feedback.

Michael Mendoza – City of Dallas Assistant City Manager – Advisory Board Chair

Majed Al-Ghafri – City of Dallas Assistant City Manager

Michael Rogers- City of Dallas Director of Transportation

David Nogeira – City of Dallas Director of Neighborhood Revitalization

Courtney Pogue – City of Dallas Director of Economic Development

Peer Chacko – City of Dallas Director of Planning and Urban Design

Mo Burr - TxDOT

Ceason Clemons - TxDOT

Michael Morris - NCTCOG

Gary Thomas - DART

Kourtny Garrett – Downtown Dallas, Inc.

Stephanie Hudiberg – Deep Ellum Foundation

Victor Vandergriff – Former Texas Transportation Commissioner

Larry Casto – Coalition for a New Dallas

Jack Matthews – Matthews Southwest

Kristian Teleki – Urban Key, LLC

Linda McMahon – The Real Estate Council

Scott Rohrmann – 42 Real Estate

Wick Allison – Coalition for a New Dallas

SPRING 2019 INITIAL DESIGN WORKSHOP

INVITE LIST

The following includes the invite list for the design workshop and charrette that served as an initial kick-off and idea generator for the project. Individuals were invited for their passion and experience in design, economic development, and transportation.

Peter Park – Invited Speaker on Highway Removals, Former Planning Director for Milwaukee and Denver

Christof Spieler – Invited Speaker on Improving Public Transit, Huitt-Zollars

Lilly O'Brien-Kovari – Invited Speaker on Vision Zero, Los Angeles Department of Transportation

Cary Moon – Invited Speaker on the Alaskan Way Viaduct – Former Candidate for Seattle Mayor

Jorge Baldor

Linda McMahon

George Battle

Maureen Milligan

Tillie Borchers

Orlando Montan

Daniel Church

Krista Nightengale

Nick Dean

Benton Payne

Raquel Favela

Lucilo Pena

Eurico Francisco

Scott Rohrman

Nick Galen

Ben Reavis

Kourtny Garrett

Michael Rogers

Mike Grace

Paris Rutherford

Shima Hamidi

Katy Slade

Jon Hetzel

Arthur Santa Maria

Elissa Hoagland

Phil Puckett

Sanford Holmes

Jack Gosnell

Stephanie Hudiburg

Frank Turner

Alvin James

Victor Vandergriff

Suzan Kedron

Bob Voelker

Robert Kent

Jessie Zarazaga

Jack Matthews

STAKEHOLDER MEETING

The following is a list of individuals who were able to attend a series of individual one-on-one meetings with the design team during the initial DISCOVERY phase visit.

Adam Bazaldua – Councilmember City of Dallas District 7

Joe and PJ Beard – Westdale

Arturo Del Castillo and Daniel Church – Dallas City Design Studio

Raquel Favela – Former Director of Economic Development

Kourtny Garrett – Downtown Dallas, Inc.

Wade Gibson – Locke Lord

Jon Hetzel – Madison Partners, Deep Ellum

Mike Hoque and Arthur Santa Maria – Hoque Global

Stephanie Hudiburg – Deep Ellum Foundation

Ken Hughes – Huitt Zollars

Crispin Lawson – Downtown Residents Council

Amy Meadows – Parks for Downtown Dallas

Lucilo Pena – Billingsley

Holly Reed – Texas Central Railroad

Jim Rogers – Deep Ellum

Scott Rohrmann and Benton Payne – 42 Real Estate

Jon Ruff – Spire Realty

Steve Salin and Kay Shelton – Dallas Area Rapid Transit

Charles Shelburne - Baylor University Medical Center

Kristian Teleki – Matthews Southwest

Matt Tranchin – Coalition for a New Dallas

Elizabeth Watley and Larry James – City Square

Allan Zreet – Jacobs, DDI Mobility Chair

WINTER 2020 – 345 RACISM AND

REIMAGINATION SUMMIT INVITATION LIST

With special thanks to Amber Sims and Jerry Hawkins of Dallas Truth, Racial Healing & Reconciliation as well as One Arts Plaza for helping to put on this event. The following list includes those who were on the initial invitation list and may or may not have attended. Others not on this list also may have attended per word of mouth.

Buddy Appel

Marie Appel

Adam Bazaldua

Jody Bland

John Botefuhr

Christa Brown Sanford

Joe Carreon

Lauren Embrey

Hillary Evans

Nick Even

Baranda Fermin

Karla Garcia

Pam Gerber

Diane Gibson

Sandra Godina

Holly Hassman

Mita Havlick

Xavier Henderson

Justin Henry

Matt Houston

Sarah Jackson

Daisy Jamaica

Jon-Bertrell Killen

Joshua Kumler

Chequan Lewis

Whitney Lewis

Ramiro Luna

Alendra Lyons

Ben Mackey

Brandon Maxey

Margo McClinton Stoglin

Sonja McGill

Erik Moss

Brad Nitschke

Damarcus Offord

Joella Phillip

Jaime Resendez

Raul Reyes

Joli Robinson

Byron Sanders

Rob Shearer

Thomas Simpson

Suzanne Smith

Jamila Thomas

Taylor Toynes

Dominique Torres

Justina Walford

Shawn Wills

Chad West

OPEN HOUSE CHARRETTE INVITE LIST

The following is the list of individuals invited to visit the public open house design charrette in the flag room at Dallas City Hall as the design team refined their initial work. Special thanks to Majed Al-Ghafry and Alena Lopez-Aguirre for helping to arrange the space. This list represents the initial invite list but is not a comprehensive list of all attendees as this was an open event.

Adam Bazaldua	Chuck Hixson	Jim Rogers
George Battle III	Sanford Holmes	Scott Rohrman
David Blewett	Mike Hoque	Jon Ruff
Hasani Burton	Stephanie Hudiburg	Paris Rutherford
Sofia Bastidas	Ken Hughes	Julie Saqueton
PJ Beard	Elissa Izmailyan	Arthur Santa-Maria
Dan Biederman	Alvin James	Evan Sheets
Tillie Borchers	Robert Kent	Charles Shelburne
Kennedy Bower	Swati Khimesra	John Slack
Dustin Bullard	Lee Kleinman	Ken Smith
Arturo Del Castillo	Crispin Lawson	Miguel Solis
Daniel Church	Ashley Langworthy	Lincoln Stephens
Cullum Clark	Becky Madole	Kristian Teleki
Raquel Favela	Christopher Martini	Shawn Todd
Terry Flowers	Sonja McGill	Matt Tranchin
Eurico Francisco	Amy Meadows	Frank Turner
Kourtny Garrett	Adam Medrano	Cydney Walker
Wade Gibson	Bud Melton	Elizabeth Wattley
Matthew Giese	Maureen Milligan	Donald Wesson
Mike Grace	Benton Payne	Roddrick West
Steve Gregory	Lucilo Pena	Philip Wise
Emily Henry	Ben Reavis	Allan Zreet
Jon Hetzel	Holly Reed	

SUMMARY

Dallas is a relatively new American city, but one with a rich and diverse history, starting with its founding in 1841 by John Neely Bryan. The Dallas settlement grew rapidly; by 1872, railroads connected Dallas to the rest of the United States, while a nascent streetcar network enabled transportation within the city. In the early 20th century, the Deep Ellum neighborhood became one of the city's few integrated neighborhoods, attracting people from across the United States and around the world.

But as the city grew, there was tremendous pressure to accommodate the automobile for people who commuted into downtown from newly developed suburbs. 1960s-era highways like I-345 enabled Dallas to continue growing outward, but increasingly choked off life and investment from closer-in neighborhoods. Starting in the 1980s, new investments in housing, transit, and public amenities drew people and businesses back to downtown Dallas, which doubled in population between 2000 and 2020.

Today, downtown is the beating heart of the Dallas-Fort Worth Metroplex, but its ongoing growth and vitality is not guaranteed, and major challenges lie ahead. As the freeways circling downtown Dallas near the end of their useful lives, there's a growing conversation about removing some segments—such as I-345—entirely. Why?

MORE ROADS MEAN MORE TRAFFIC

Dallas has one of the most extensive highway networks of any major American city, and conventional wisdom says this should mean lower traffic congestion. But between 1993 and 2017, the 100 largest cities in the United States' road networks grew by 42% while traffic increased by 144%—nearly three times as much. Closer to home, the Katy Freeway in Houston actually became worse after it was expanded 23 lanes.

As cities build more highways, they incentivize people to make more frequent and longer trips by car. Highway construction also takes limited public resources away from opportunities to make other travel modes safer and more attractive, like sidewalks, bike lanes, and. Fewer resources toward active and public transportation discourages people from using these modes, which in turn leads to more car trips.

MORE ROADS MEAN MORE INEQUALITY

Decades of highway construction through poor communities and communities of color have resulted in a substantially worse quality of life for the people in them due to loss of property and reduced access to social and economic opportunities. The 2019 Dallas Equity Indicators report found substantial discrepancies between Black, Hispanic, and Asian residents in Dallas and their white counterparts on several social and economic indicators, including education, unemployment, household income, and family wealth.

Highways also negatively impact the health of people who live near them. Children and teenagers living within a quarter-mile of highways are more likely to experience asthma, impaired lung function, or death from cardiovascular diseases. Even children who simply attend school near a highway are more likely to have asthma or cognitive difficulties from exposure to pollution. As schools and homes in less affluent and majority-non-white communities are typically closer to highways, historically disadvantaged people bear the largest burden of bad health over the long term.

MORE ROADS DON'T MEAN MORE ECONOMIC VITALITY

I-345 creates a large physical barrier that impedes walkability and occupies limited downtown space. Investment in Dallas's core neighborhoods is imperative, and the City must create opportunities to build more walkable, urban places to meet the growing demand.

Removing the highway would not only free up valuable land for inclusive, equitable development, but it would also lower pollution while growing the city's tax base. Dallas follows in the footsteps of other American cities that are reconsidering their freeways, from Rochester to San Francisco, and that have found significant benefits in reclaiming space for people and urban life.

In recent years, the bulk of Dallas's residential and job growth has occurred in a small slice of the city and region: "walkable and urban places," or WalkUPs for short. These areas are economically vibrant: a house in a WalkUP has a 71% price per square foot premium over the average house in the region. However, there aren't many of these places: The Center for Real Estate and Urban Analysis at George Washington University identified 38 WalkUP areas in Dallas-Fort Worth, and they make up just 0.1% of the metro area's total land.

Not expanding the limited supply of these spaces, which includes increasing development potential, will ultimately reduce housing affordability and lead to displacement. More affluent people will bid up the price of land in the central business district area, which will push out the disadvantaged. In the long term, this will limit the city's ability to attract new residents and businesses.

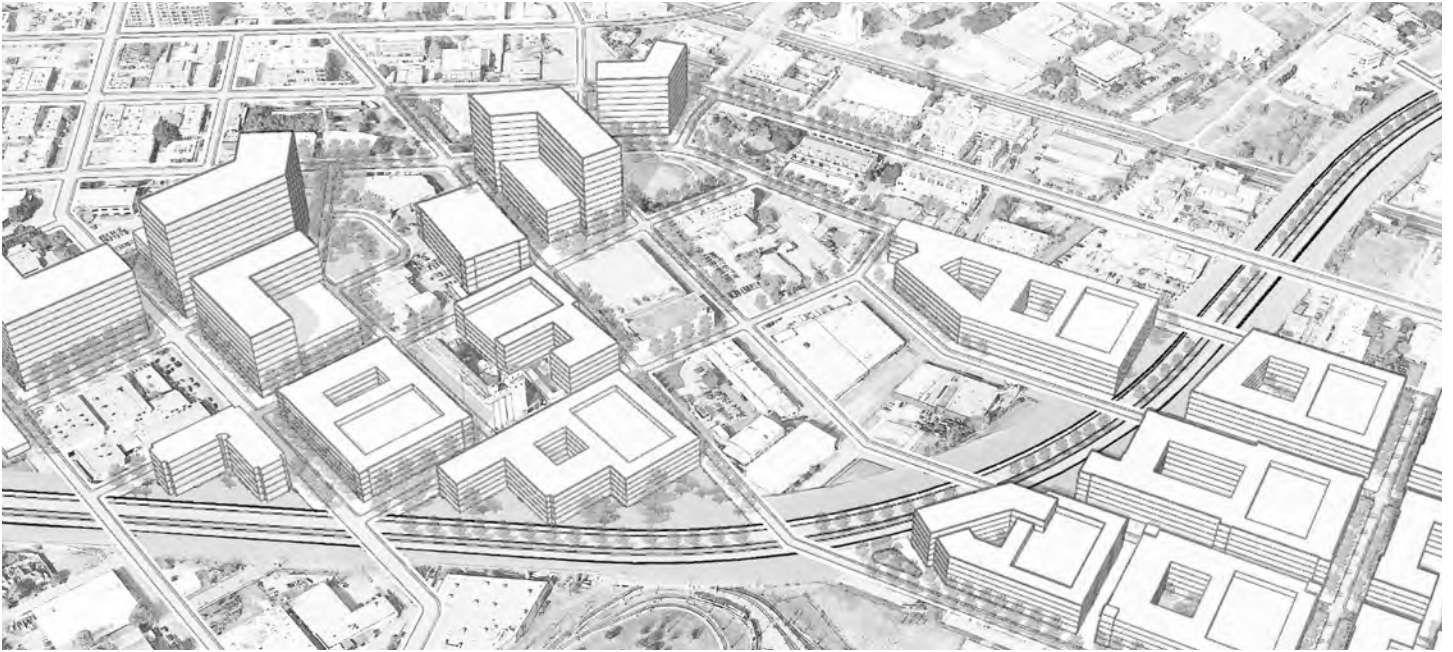
Today, Dallas is still struggling to keep up with the demand for residential development. To make economics work, city should pursue all options to leverage public land to help write-down costs of building housing and mixed-income housing. Similarly, the City should remove, reduce, and mitigate all infrastructure that reduces real estate demand.

THIS I-345 FRAMEWORK PLAN

This document looks at the feasibility of reconfiguring or removing I-345 between Highway 366 and about 1 mile south of I-30. Two different design options investigate how to accommodate traffic to or through downtown Dallas with multiple parallel or alternative routes. Additionally, this document explores the impacts that removing or reconfiguring I-345 would have on surrounding neighborhoods, local and regional mobility, and economic development. There's also a discussion about ways to further expand transit service and tie together neighborhoods and the region by building on DART.

The places we love in Dallas embody everything that makes cities great: the sense of belonging that comes from seeing people from all backgrounds mingle together; the element of surprise when discovering a new restaurant or stumbling upon a live performance; the feeling of wonder when you watch the "sidewalk ballet" on a lively street as people go about their daily lives. We have the chance to create more places like this. We have the chance to create the thriving, equitable, integrated community that Dallas deserves to be. As James Baldwin said, what holds us back is a "kind of apathy and ignorance, which is the price we pay for segregation. That's what segregation means, that you don't know what's happening on the other side of the world because you don't want to know."

For decades, Dallas has allowed itself to ignore the barriers and "other side" that I-345 has created. It's time to take a space used to divide and bifurcate the city and make it one where people can live, work, gather, and celebrate. The vision for downtown Dallas and its core neighborhoods outlined here is only the beginning of a broader conversation about how to make that happen.



CONCLUSION

To help create a better vision for Dallas, this document focused on providing two options, 1) maximizing surface street network connectivity and 2) a depressed highway version, wherein the size and access points to the depressed highway are minimized to separate local traffic from pass-thru traffic.

The findings of this report are similar to the CityMAP report – the surface street option will provide the greatest development potential and highest quality of life. The depressed highway option comes with a higher price tag and the mobility benefits are minimal. Further on the development potential, the high quantity of real estate development will help increase the amount of affordable housing, which is badly needed in Dallas. Modifying the zoning and land use policies will also support a more equitable outcome.

We hope this document will support consensus-driven decisions to help create a more sustainable and prosperous Dallas, for all.



1

CONTEXT

HISTORY



John Neely
Bryan's cabin

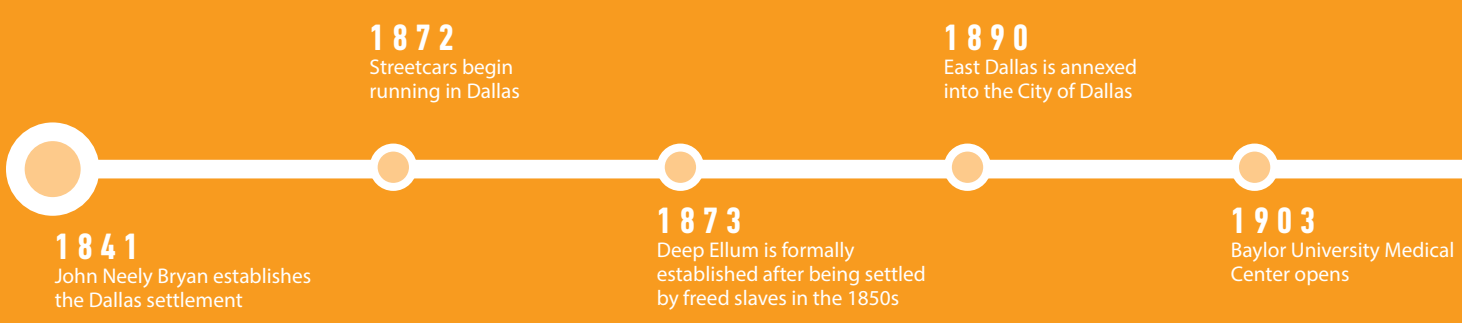
Dallas is a relatively new American city, but one with a rich and diverse history, starting with its founding in 1841 by John Neely Bryan. The Dallas settlement grew rapidly; by 1872, railroads connected Dallas to the rest of the United States, while a nascent streetcar network enabled transportation within the city. Neighboring East Dallas was annexed into the city in 1890, by which time the city had 38,000 residents, making it the largest city in Texas and one of the 100 largest cities in the United States.

Deep Ellum, settled by freed slaves in the 1850s, was a crucial part of Dallas's expansion and prosperity. Henry Ford built one of his first automobile factories there in 1914. By the 1920s, it had become one of the city's largest Black commercial districts and one of the few integrated communities in Dallas, attracting traditionally excluded people from around the nation: African-Americans, Mexicans fleeing oppression in Mexico, and Jewish people. Deep Ellum was also a hub for the nascent jazz and blues scene, home to several music venues and nightclubs that hosted artists like Blind Lemon Jefferson, Lead Belly, Billie

Holiday, and Ray Charles, who later made his home in Dallas.

This vibrant community existed despite decades of racist local, state, and federal planning policies crafted to disenfranchise and subjugate minorities, especially Black people. There are numerous examples of these pernicious policies, beginning with the City Council's 1917 racial exclusionary zoning ordinance, which designated separate neighborhoods for white and Black residents, and was struck down by the Supreme Court. Later on, race-based housing covenants prevented non-white people from buying

TIMELINE



homes in wealthy white communities. Beginning in the 1930s, the federal practice of redlining graded each neighborhood in Dallas based on its demographics, giving unfavorable ratings to integrated or majority-Black communities. Under redlining, which was only outlawed in 1977, Black homebuyers were barred from taking out mortgages to buy homes in white neighborhoods, restricting them to only a few impoverished areas.

The most dramatic and explicit segregation tactic employed by planners and politicians was the creation of the highway system through the city. As the city grew,



Shops in Deep Ellum in the 1950s.



Downtown Dallas in 1943.



The Harlem Theatre in Deep Ellum, demolished to build I-345.

1914

Henry Ford builds one of his first automobile factories in Deep Ellum

1939

Wholesale markets merge to form the Dallas Farmers Market

1950s-60s

I-30, Woodall Rodgers Expressway, and Central Expressway are built and open to traffic

1920s

Deep Ellum becomes one of Dallas' first black commercial districts and a jazz hub

1956

Streetcars stop running in Dallas



The Stringtown neighborhood before construction of the Central Expressway.

there was tremendous pressure to accommodate the automobile for people who commuted into downtown from newly developed suburbs. Plans in the 1940s called for wider and reconfigured roads to allow for more vehicle traffic. The streetcar shut down in 1956, eliminating a travel option for people who could not afford cars.

Shortly after, a ring of highways was constructed around downtown Dallas: I-30, I-45, the Central Expressway, and the Woodall Rodgers Freeway. These roads enabled Dallas to continue growing outward, but increasingly choked off life and investment in closer-in neighborhoods. Many of these roads traveled through or alongside redlined neighborhoods, effectively



The Central Expressway under construction.

walling them off from other, more prosperous parts of the city. They led to the destruction of Stringtown, Short North Dallas, Little Mexico, Little Egypt, and many other historically non-white neighborhoods. The prevailing wisdom of the time is that these communities, despite having a strong economy and middle class residents, were a blight solely because

1974

I-345 built through Deep Ellum, destroying the heart of the neighborhood

1989

McKinney Avenue streetcar opens

1990

Central Expressway rebuilt

1983

Dallas Arts District established

1980s-90s

Deep Ellum warehouses converted to housing, nightlife district emerges



The Central Expressway shortly after opening.

of who lived there, and that they should be removed: “Another Dallas negro problem is Deep Ellum,” read a 1935 editorial in the Dallas Morning News. “There is a great need of improvement in this section as to avoid a black eye in the appearance of Dallas.” Members of these communities were then displaced and ultimately



The McKinney Avenue streetcar brought rail transit back to Dallas in 1989.

forced into areas of concentrated poverty which lacked investment—both back then and today.

The final piece of the ring of highways around downtown, I-345, was constructed in 1974 through Deep Ellum, one of the few places in Dallas and nationally where Black people had access to economic opportunities. The Harlem Theatre, built in 1920 and the cornerstone of the city’s musical culture, was directly in the path of the road and was demolished.

Each of these policies and actions contributed to making Dallas hyper-segregated along lines of race and status, and they have led to stark intergenerational poverty that lasts to this day.

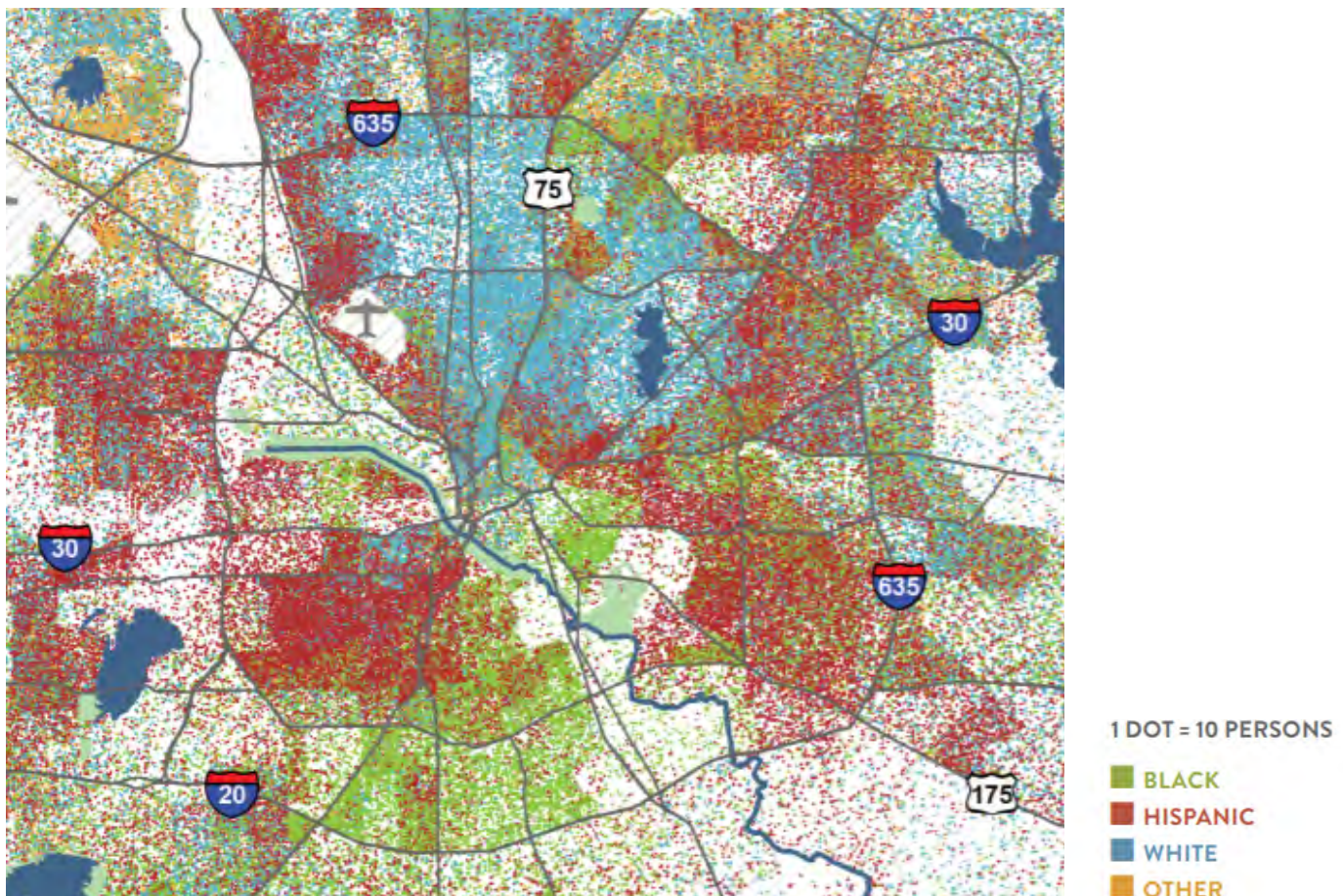
- 1996**
 DART opens
- 2009**
 DART Green Line opens, connecting the east and west sides of 345
- 2012**
 Klyde Warren Park bridges over the Woodall Rodgers Freeway, reconnecting downtown to uptown
- 2015**
 McKinney Avenue Trolley extended

TODAY

Today, downtown Dallas and its core neighborhoods sit at a crossroads. Ongoing growth and vitality is not guaranteed, and major challenges lie ahead. As the conversation around removing I-345 continues, here are three issues that leaders should keep front of mind:

ENVIRONMENTAL JUSTICE

The 2019 Dallas Equity Indicators report found substantial discrepancies between Black, Hispanic, and Asian residents in Dallas and their white counterparts on many indicators. People of color were more likely to be unemployed, to have lower rates of business ownership, and to have lower incomes.



Population Density by Race and Ethnicity

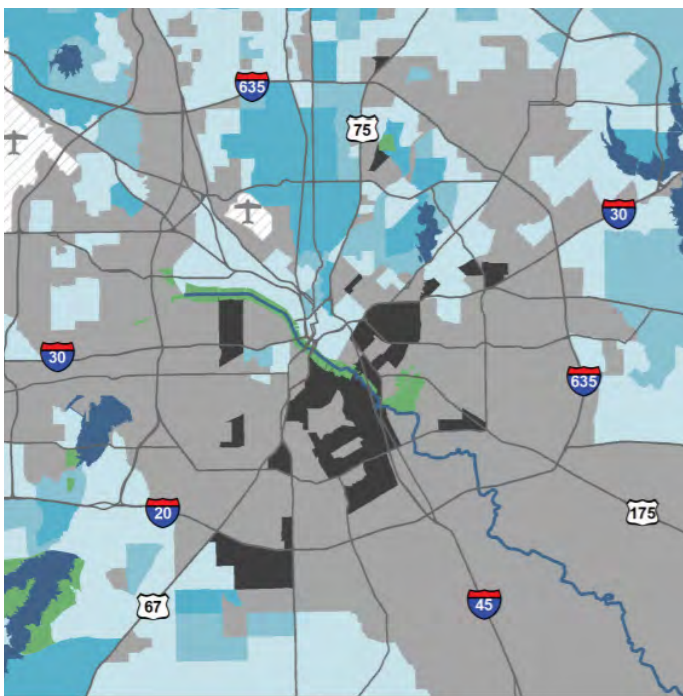
Additionally, Black, Hispanic, and Asian people in Dallas have lower homeownership rates, use more of their income to pay for housing, and have less access to a car. In turn, they are more likely to live in neighborhoods with longer commutes to jobs and fewer opportunities for physical activity, which results in worse health outcomes. These things are all related to access and transportation: the ease with which someone can reach daily needs and economic opportunities indicates their ability to climb the economic ladder.

Highways like I-345 are not just a physical barrier, but also an impediment to social and racial environmental justice in Dallas. They divide neighborhoods, make it difficult for people to get around without a car, and divert funding that could go to improving public transportation. These highways also consume land that could go to affordable housing, employment opportunities, and recreational space. The result are communities that are more segregated by race and class, and a substantially decreased quality of life for people of color.

HIGHWAYS

Over the past several years, there has been a lively conversation about the future of highways in downtown Dallas. Many of these roads were built decades ago and are nearing the end of their useful lives. Replacing them would be extremely expensive and disruptive and would also serve to maintain a physical barrier between downtown and surrounding areas, occupying valuable land that could be put to other uses.

In 2014, D Magazine endorsed getting rid of I-345, noting that it was a serious impediment to future growth in downtown and Deep Ellum. Columnist Wick Allison wrote, “The highway runs smack-dab through some of the most potentially valuable real estate in the city, land that could connect downtown and the Farmers Market with Deep Ellum and Baylor University Medical Center. To replace that elevated interstate with an urban parkway would allow that area to be transformed into a new Uptown, with mixed



Median Household Income

MEDIAN HOUSEHOLD INCOME

- Less than \$25,000
- \$25,000 to \$49,999
- \$50,000 to \$74,999
- \$75,000 to \$99,999
- \$100,000 or more

development, retail, and entertainment options for residents.”

This article ultimately led to CityMAP, an effort from the Texas Department of Transportation (TxDOT) that investigated ways to rebuild or even remove highways around downtown Dallas. It included several alternatives that would remove I-345 and portions of I-30 and replace them with urban boulevards that tie together the street grid and create opportunities for new green space and development parcels.

However, much of the document simply proposed expanding other highways, and TxDOT simultaneously drew up plans to substantially expand I-30 with six additional lanes, bigger overpasses, additional exit ramps, and wider frontage roads. This would only exacerbate the barriers around downtown, involve the taking of homes and businesses, and leading to increased traffic congestion.

Beyond the damage that highways have done to Dallas’s communities and neighborhoods, there are two major reasons to pass on expanding I-30: there is currently a national trend of driving less, and Texas budget shortfalls make it even harder to justify spending \$300 million on the highway replacement as a way of meeting the area’s transportation and housing needs.

ATTRACTING NEW BUSINESSES TO DALLAS

As Dallas residents reembrace urban living, some of the nation’s largest companies are taking notice. Uber, a Fortune 500 company, announced last year that it will open an office at The Epic, an 8-acre mixed-use complex currently under construction in Deep Ellum. Uber will employ 3,000 people in high-tech, high-paying jobs in Dallas. When considering where to locate, Uber sought out places that support creative work and attract young, forward-looking workers. The company chose Dallas because it was a “vibrant, diverse, innovative and welcoming” community, and it investigated locations exclusively in Uptown, downtown, and Deep Ellum. Uber’s new office is one block from the Deep Ellum DART station, and blocks from bars, restaurants, and concert venues.

Stories like this are a testament to the city’s ongoing commitment to urbanism. Investments in public transit, active transportation facilities, downtown housing and retail, and cultural amenities have made Dallas’s core neighborhoods an attractive place for young workers who, in turn, draw the companies that want to hire them. On top of that, the region stepped up to make additional investments for Uber and its employees. In August 2019, the North Central Texas Council of Governments offered \$10 to \$15 million in transportation improvements around Uber’s offices, including new sidewalks and bike lanes, additional recreational space, and a new shuttle between Deep Ellum and downtown.

Combined with the region’s historically low cost of living, Dallas is positioned to compete with more expensive coastal cities for companies like Uber. However, this can’t last forever. The city has a limited supply of existing walkable, urban places. Not expanding these spaces, including by increasing development potential, will ultimately reduce housing affordability and limit the city’s ability to attract new residents and businesses.

WALKABLE AND URBAN PLACES (WALKUP)

The Center for Real Estate and Urban Analysis identified 38 established WalkUP areas, which are objectively “walkable and urban places.” However, these 38 areas only account for 0.1% of the total land in the metro area. The good news is that WalkUP areas have a 71% price per square foot premium over the average house in the Dallas Fort-Worth area, which means creating more walkable areas will increase the economic value for the region. Unfortunately, these WalkUP spaces need sufficient

LINKS

- <https://texashistory.unt.edu/ark:/67531/metaph610711/m1/>
- <https://www.dmagazine.com/publications/d-magazine/2018/march/lost-dallas-history-secrets/>
- <https://www.dmagazine.com/publications/d-magazine/2014/may/why-we-must-tear-down-interstate-345/>
- <https://www.dmagazine.com/publications/d-magazine/2014/may/the-next-uptown-dallas/>
- <https://dartdallas.files.wordpress.com/2015/04/1925streetcar-large.png>
- <https://www.tsl.texas.gov/exhibits/highways/greatage/centralexpressway1950s.html>
- <https://www.dallasnews.com/business/technology/2019/08/20/uber-makes-it-official-it-will-set-up-major-hub-in-downtown-dallas-by-end-of-year/>
- <https://www.wfaa.com/article/news/local/uber-wants-to-hire-3000-people-in-its-deep-ellum-offices/287-f56c4d1e-950f-417f-a1ef-6f39f4a8dfef>
- <https://www.papercitymag.com/culture/dallas-number-one-america-population-growth-houston-texas-domiante/>
- <https://www.bisnow.com/dallas-ft-worth/news/neighborhood/why-downtown-dallas-has-another-decade-of-growth-ahead-96355>
- <https://southernspaces.org/2007/deep-ellum-blues/>

contiguity and interconnectedness to be viable and I-345 creates a large physical barrier that impedes walkability and reduces quality of life. It's imperative that Dallas continue investing in core neighborhoods and to create opportunities to build more walkable, urban places to meet the growing demand.

INCREASING DALLAS' JOB POTENTIAL

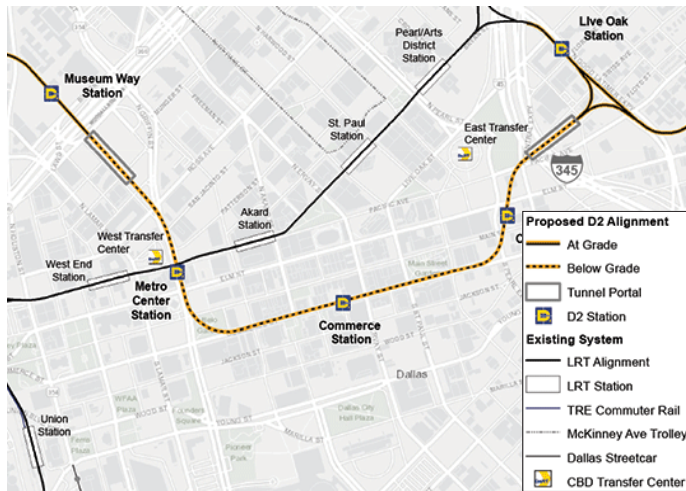
A critical issue facing Dallas is the North-South disparity of jobs and housing, with I-30 serving as the rough line of demarcation. It has been estimated that about 45% of residents live south of I-30 but only about 15% of jobs exist south of I-30, with the vast majority of job growth occurring further to the north and beyond the city limits. This means that jobs are getting farther and farther away from many Dallas residents.

Some job analysis has been performed to calculate how many more jobs can be created under different scenarios. The economic impact analysis in TxDOT's CityMAP (the aforementioned effort to investigate ways to rebuild or remove highways around downtown Dallas) suggested that moving I-30 below grade option would generate 28,618 new jobs and 5,338 new residents within the corridor. Removing I-345 would create 39,300 new jobs and 11,519 new residents, and the Coalition for a New Dallas initially estimated the potential for 28,000 new residents and 22,000 new jobs for the same I-345 removal scenario.

Given the realities of the local real estate market, particularly the high rate of vacancy of commercial properties and the high need and demand for housing, particularly affordable and attainable housing near jobs and transit, land use plans should prioritize new housing that will in turn create the demand for new jobs. The next phase of this analysis will run new economic impact projections based on the new framework plans presented in this document.

“Given the realities of the local real estate market, particularly the high rate of vacancy of commercial properties, and the high need and demand for housing, particularly affordable and attainable housing near jobs and transit, land use plans should prioritize new housing that will in turn create the demand for new jobs”

RECENT PLANS AND INITIATIVES

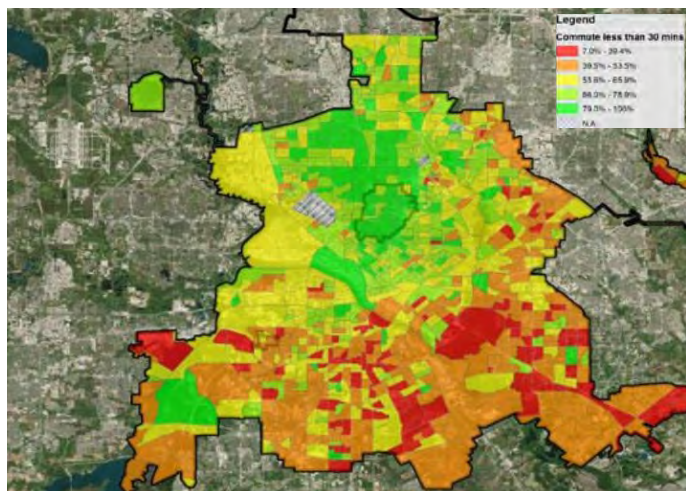


D2 SUBWAY

Dallas Area Rapid Transit (DART) is advancing D2, a future second rail line for downtown Dallas that will run from Victory Park to Deep Ellum. Planning began in 2007 and a Locally Preferred Alternative was selected in 2017 (see alignment at left). Four new stations will be created along the line. The new line will also increase overall system capacity, allowing DART to enhance light rail service frequency throughout downtown.

CLIMATE ACTION PLAN

The City of Dallas's Comprehensive Environmental and Climate Action Plan is an initiative to reduce emissions and address environmental risk. The City aims to reduce greenhouse gas (GHG) emissions by 43% by the year 2030 and 100% by 2050. With transportation accounting for 35% of the city's GHG emissions, one of the Climate Action Plan's goals is to tackle land use and housing challenges in tandem with those related to transportation infrastructure to increase access to walking, biking, and transit while reducing single-occupancy vehicle trips from 88% today to 62% in 2050. All long range planning should take this mode share target into account when the transportation modeling is performed, otherwise it will not be reached.



CITYMAP

The Dallas City Center Master Assessment Process, otherwise known as CityMAP, was commissioned to enhance transportation mobility for the Dallas-Fort Worth area. The focus of the study was on Dallas's urban core and how to best use aging highway infrastructure while also addressing the needs of the stakeholders. The study also examined how to balance livability and economic development opportunities based on investment.

Key stakeholders as well as officials from TxDOT and the City of Dallas worked together to develop scenarios for modifying, removing, and lowering I-345/I-45, all to be evaluated as part of the CityMAP planning effort. The scenarios were evaluated with the criteria of mobility, livability, and economic vitality in mind.

To the right is a summary of the assessment of each of these scenarios.

IMPROVING ON THE CITYMAP EFFORT

The I-345 framework plan is a deeper dive on the CityMAP effort. The framework plan focuses on the details of how modifying I-345 will impact mobility, land development, and environmental justice. More analysis was performed to forecast how traffic would be diverted and whether there is sufficient capacity on the existing thoroughfares. New connections between roadways have been identified, as have ways in which the developable land could be increased.

The I-345 framework plan effort is also significant because of additional outreach to stakeholders and environmental justice groups in the Dallas area. The additional efforts documented in this report are crucial to better understanding the impacts of modifying I-345, which will help identify the best solutions for the region.

CITYMAP SUMMARY



Modify I-345

This scenario would remove the Central Business District (CBD) interchange ramps to create more developable land and enhance non-auto accessibility.

Mobility Congestion Relief

Because this scenario would close ramps that run from I-345 to the CBD, the existing vehicular traffic would likely seek other routes toward the I-30 and I-45 ramps, as well as Elm St, Main St, Commerce St, and Cesar Chavez Blvd.

Livability/Quality of life

This scenario would create some space under I-345, which could be turned into park or other programming space.

Economic Development/ Growth

This scenario would lead to minor increases in real estate potential.

Remove I-345

This scenario would remove the I-345 highway as well as the I-345 interchange connection with I-30.

Mobility Congestion Relief

Under this scenario, existing vehicular traffic would seek other routes and use the major thoroughfares in other neighborhoods such as East Dallas, Deep Ellum, and Cedars.

Livability/Quality of life

This scenario would greatly increase street connectivity, which would help support more redevelopment varieties.

This scenarios would also increase affordable housing potential in the CBD and could reduce use of the regional highway system for some-to-work commuting.

Economic Development/ Growth

This scenario would substantially increase development potential for mixed use office and residential buildings.

The former highway ROW could be used for redevelopment opportunities.

Below Grade I-345

This scenario removes would remove some direct freeway access to the CBD but primarily maintain the prevailing highway lanes by moving them below ground.

Mobility Congestion Relief

Under this scenario, minor amounts of traffic would shift to major thoroughfare routes because of removing some highway access to the CBD.

Livability/Quality of life

This scenario would enhance some street connectivity, particularly for the pedestrian and bicycle movements.

Economic Development/ Growth

Mixed-use development would be encouraged on the eastern part of the CBD under this scenario.

This scenario would lead to a modest increase in development potential.

WHY THIS PLAN IS NEEDED

THE STATE OF TRANSPORTATION TODAY HIGHWAYS

Dallas is at a pivotal moment for its transportation and land use system. Based on recent trends, people are driving less than before and have a stronger desire to live closer into the city's downtown. These trends will make automobile-based transportation facilities—in particular, highways—less necessary. Being aware of this trend will make it easier to steer resources toward economic success, increase quality of life for Dallas residents, and address historic and ongoing injustices and inequities.

Look at an aerial picture of the Dallas region you'll see and highways dominating the canvas. With transportation and land use trends moving away from everyday automobile use, new highways projects are serving the wrong need.

More highway expansions are currently being constructed, funded, or considered across the Dallas region. These highways cost Dallas residents billions of dollars now and ignore other ways to improve people's quality of life, such as by improving parks or creating more affordable housing.

Beyond building, it's also very costly to maintain highways. Forty percent of Texas' transportation budget (\$8.6 billion dollars) goes to maintaining the transportation system, with the next largest proportion (30%) is allocated to constructing new highways. I-345, it is due for a major overhaul that essentially requires the highway to be torn down if it is to stay serving its current function—and that doesn't include future maintenance costs.

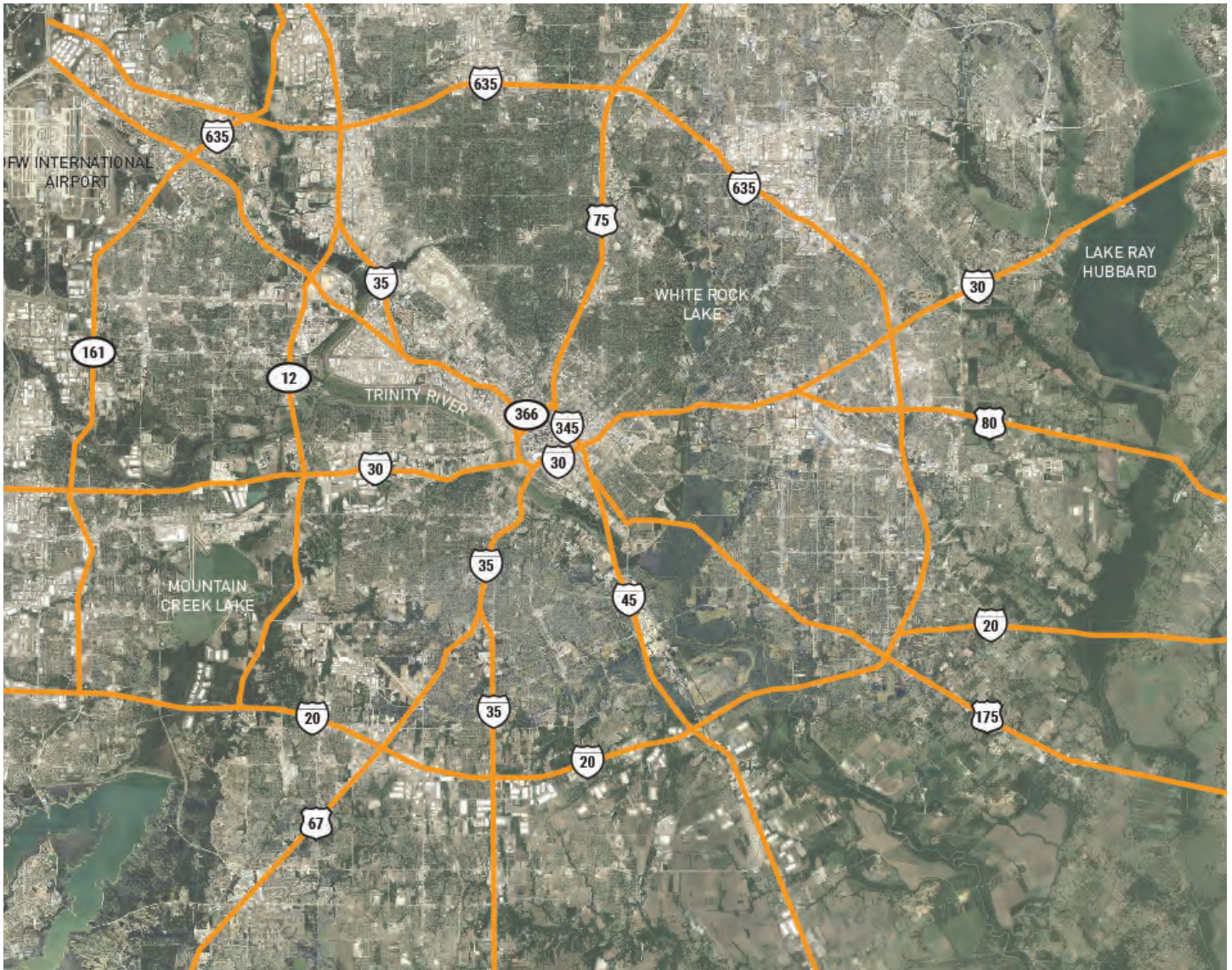


Figure 1. Existing Highway Network

Instead of spending millions to rebuild a highway which counters a downward driving trend, what if we used the same funds to reduce the 12-mile average commute length for Dallas residents? Vehicle miles traveled reductions (VMT) can be part of a broader strategy to locate more housing near jobs. Moving the large amount of money that funds highways to go to other types of land use and transportation projects would be a great way to minimize the need to use highways in the Dallas region.

TRANSIT – WALKING – BIKING

Transportation trends also indicate that taking transit, walking, taking scooters, and biking are rising in popularity. However, there are hardly enough facilities and services to make moving around by these modes truly viable for a person without an automobile. Dallas is making some efforts to increase the quantity and quality of active transportation facilities, but the demand for these improved amenities is outpacing the supply.

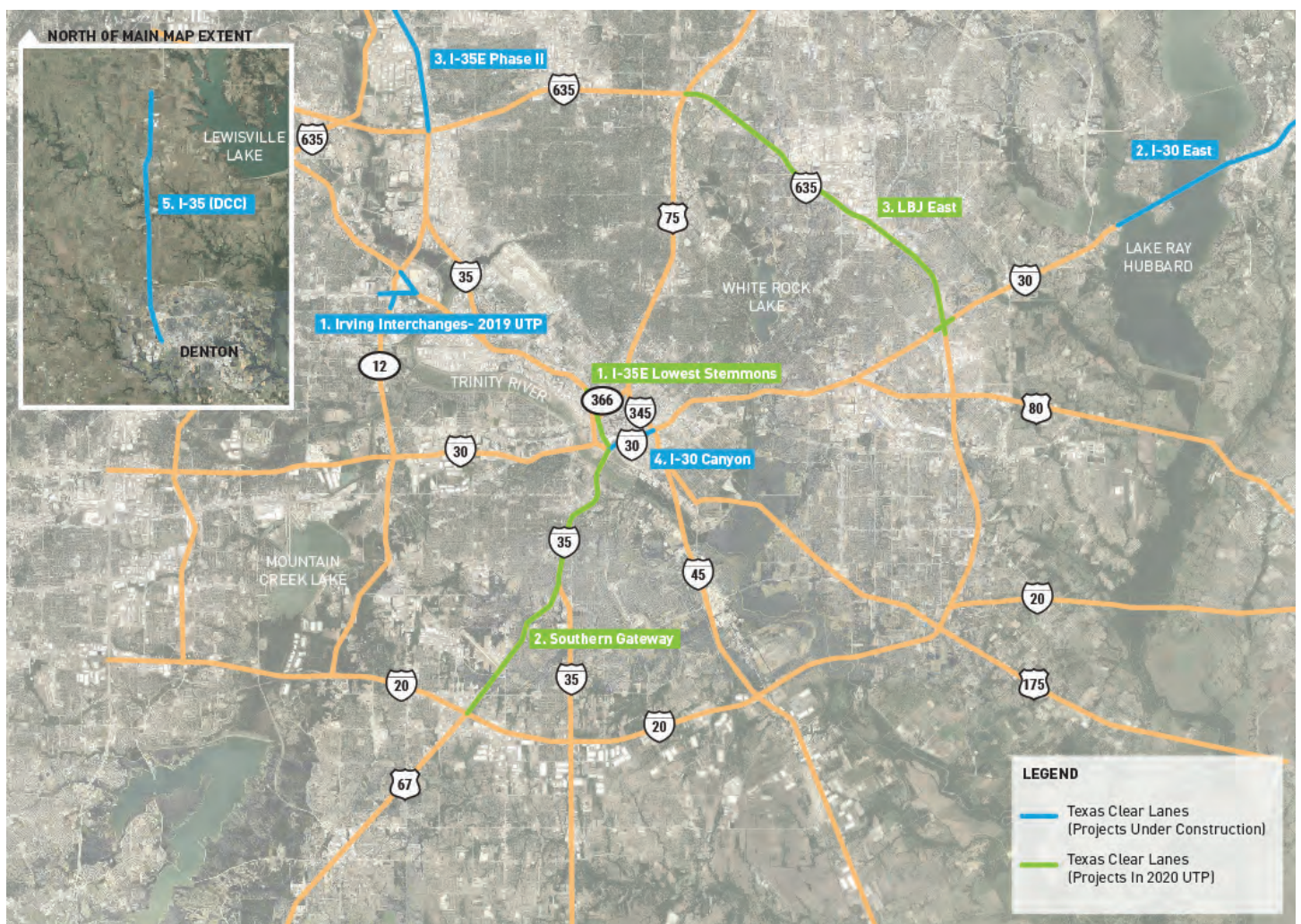


Figure 2. Existing and Planned Highway Construction Projects



Increasing transportation options can take many forms. Regional high-speed rail is coming with private investment, but construction could accelerate if the government partnered with these investors. Transit service networks could become denser and run more frequently to serve more residents. In particular, there is an opportunity to re-allocate underutilized streets for dedicated transit lanes, which would drastically improve transit travel times to the downtown area. Separated bike lanes and trails could be formalized with curbing and asphalt. Walking connections currently that are currently dirt

paths could be upgraded to concrete. Trees could be installed along sidewalks to encourage walking in summer conditions. Right now, few people use active transportation facilities primarily because there are too few to access. Constructing more active transportation facilities into a better-connected network would be a smart response to today's trends, and with the right momentum, Dallas could become a world-renowned leader in this sector.

ENVIRONMENTAL JUSTICE

When I-345 was planned and constructed, it destroyed Black neighborhoods and displaced Black communities throughout the region. The displacement of Black culture is perpetuated by the current existence of the highway, and it would be the right thing to repair this broken bond.

I-345 does provide transportation for the rich and poor residents of the Dallas Fort Worth area, but transportation is just one aspect of environmental justice. In the South Dallas neighborhood, transportation is needed to travel to other parts of the metropolitan area to earn a living, and I-345 is a useful amenity. But being able to own and improve your own residence, which many residents cannot afford, is a critical link to breaking the cycle of disinvestment in the South Dallas neighborhood.

In the *Death and Life of Great American Cities*, Jane Jacobs write about integration being a key to reversing disinvestment and improving the circumstances of disadvantaged people. “If the conditions for generating city diversity can be introduced into a neighborhood while it is [disadvantaged],” she writes, “there is no reason that [it] need be perpetual.” Diversity can be introduced with not only taking down the highway, but by also creating policy to preserve and support South Dallas residents to own homes, improve their homes, and generate value within their community.

A change in conditions will begin to reverse displacement and foster prosperity for current South Dallas residents. New conditions will reinvigorate Black neighborhoods to the boom town they once were, before I-345 displaced Black culture.

INSPIRATION FROM OTHER CITIES

A city's success depends on how it approaches its transportation and land use system. Cities that have chosen to remove highways have been successful to meet or exceed goals in traffic/mobility, housing/land use, and environmental justice. Importantly, these cities have repurposed the former highway space for more valuable uses. The following case studies describe how other cities have envisioned their city with fewer highways.

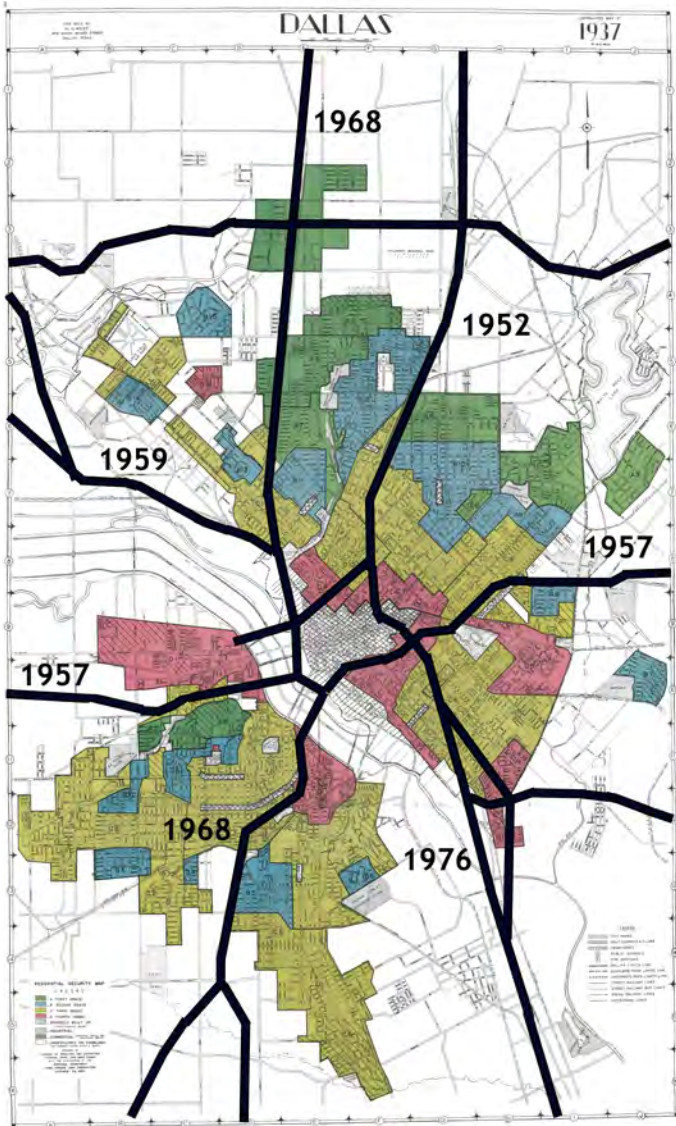


Figure 3. 1938 Dallas Home Owner's Loan Corporation (HOLC) Map



Case Study: I-90 in Seattle

When it was upgraded to interstate standards in the 1970s, Interstate 90 in Seattle sliced through several established neighborhoods. The highway carried over 140,000 cars per day between Seattle and points east while cutting neighborhoods off from the water and from easy access to other parts of the city and region. Its construction was controversial, and strong

local opposition delayed its completion for over 20 years.

As part of a compromise, I-90 was constructed in a depressed section through the suburb of Mercer Island, while two concrete platforms were built above the road in anticipation of a future use. In 1992, the lid was transformed into Aubrey Davis Park, named for the 1970s-era mayor who opposed

the highway's expansion. The largest freeway lid in the United States, the 13-acre platform (which is part of a larger 90-acre park) spans several blocks and contains sports fields, playgrounds, and public art. A network of local streets crosses the park, connecting Mercer Island's downtown to Lake Washington.

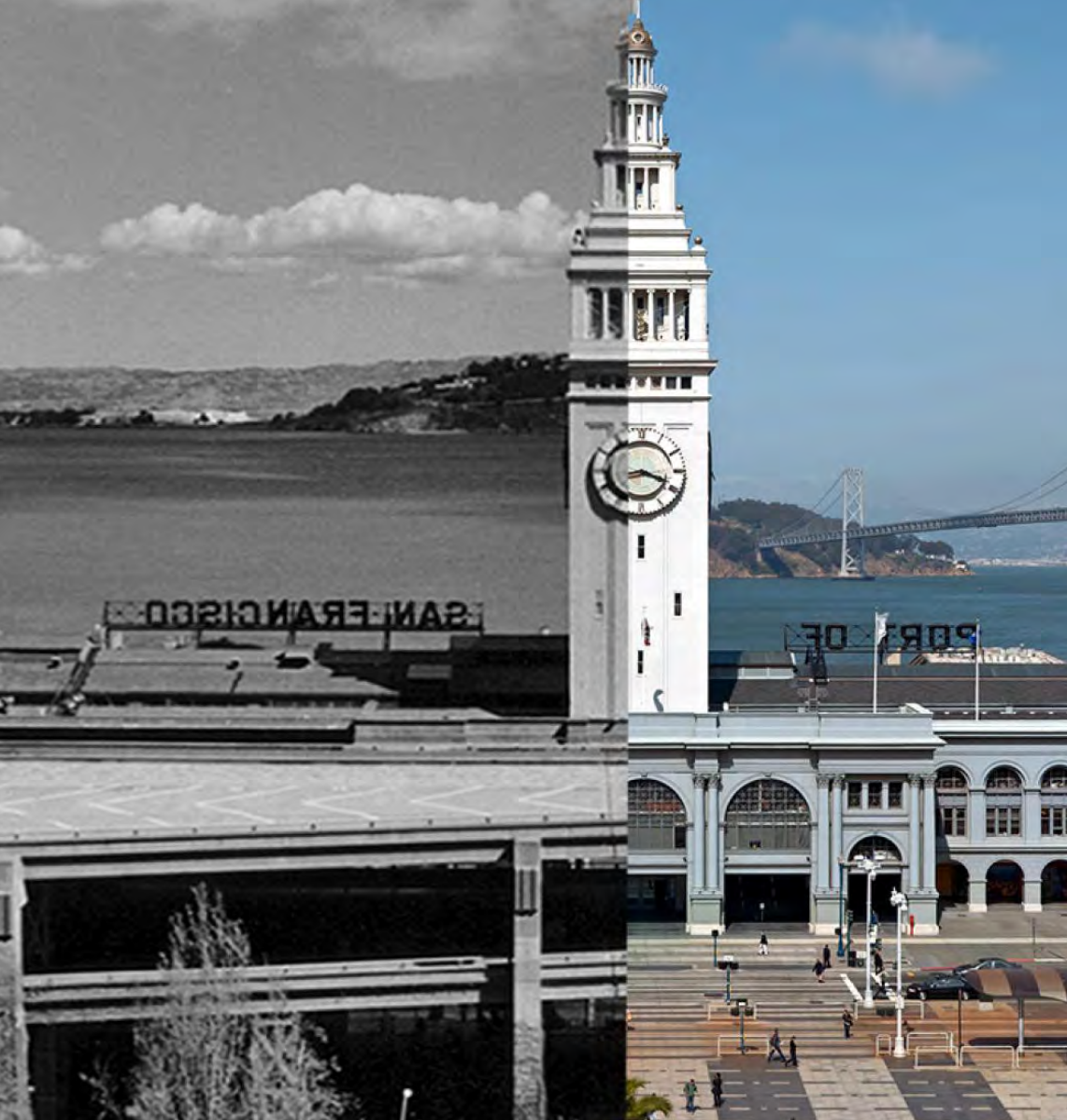


The Mountains to Sound Trail, a regional trail, crosses the park, connecting Mercer Island to downtown Seattle and Bellevue, the region's two main job centers.

Aubrey Davis Park cost \$146 million to build (\$257 million in 2020 dollars) and has had significant benefits to the Mercer Island community,

which has become one of the highest-value real estate markets in the Seattle region. The city's population has grown 20% since the park's opening, from 21,000 in 1992 to 26,000 in 2018. In 2019, the City of Mercer Island completed a new master plan for the park, with a focus on restoring vegetation, increasing trail capacity, and improving connections to the

surrounding neighborhoods. A new light-rail station will open adjacent to the park in 2023 and is anticipated to attract new visitors and private development to the area.



Along the Embarcadero

Total Population increased by

238%

from 1990 to 2010

Number of Children increased by

118%

from 1990 to 2010

Jobs increased by

43%

from 2002 to 2013

Percentage of Driving Commuters decreased from

38% to 32%

from 1990 to 2010

The Ferry Building (Source: CNU)

Case Study: The Embarcadero in San Francisco

Constructed in 1968, San Francisco's Embarcadero Freeway cut the city off from the waterfront. It was a stub road that divided neighborhoods while failing to meet its original purpose of connecting the Bay Bridge and the Golden Gate Bridge. During the 1980s, as many as 100,000 vehicles traveled on the double-decker free-way each day.

While the highway was unpopular, discussions about removing it began in earnest only after the 1989 Loma Prieta earthquake, which damaged the structure beyond repair. Surprisingly, closing the road to traffic did not lead to permanent congestion, as the adjacent street grid was able to absorb a large amount of traffic. The adjacent BART regional rail system also

picked up some slack, with a 15% increase in ridership. The rising cost of repairing the freeway—estimates ranged from \$15 million to \$69.5 to reconstruct the entire thing—turned public opinion towards replacing it with a boulevard, which ultimately cost \$50 million.

The Embarcadero boulevard was successful shortly after



it opened in 2002. It carries three lanes of traffic in each direction and has a streetcar line running down the center, along with a bike lane and an adjacent waterfront trail. While it accommodates substantial car traffic, it also increased transit options and introduced a substantial amount of public open space.

Removing the Embarcadero Freeway has revitalized San Francisco's financial district, freeing up over 100 acres of land from the freeway for a new waterfront promenade and public plaza. It led to the redevelopment of historic buildings like the Ferry Building and recast entire districts like the formerly industrial South of Market (SoMa) neighborhood as a

hub for tech companies. By 2006, housing in the area has increased by 51% and jobs by 23% since the freeway's removal. The freeway's removal has also led to other efforts to reclaim street space for people, including the recent closure of Market Street, which ends at the Embarcadero, to private cars.

THE ROLE OF LAND USE AND TRANSPORTATION

Land is a finite resource. We must choose whether it should be used for housing, recreation, or transportation. Land in the center of the city is inherently in greater demand than land farther from the core. In facing these choices, Dallas has a tremendous opportunity to seize this pivotal moment and push toward future success. Below are descriptions of how some of those choices can play out:

HIGHWAYS

Highways between cities have generally been a boon for national productivity. President Eisenhower’s vision was that our metropolitan areas would be connected to each other with a seamless transportation system, which he helped support with the Federal Aid Highway Act of 1956. There are positive economic indications that this act has helped America grow. However, there are downsides to highways, such as evidence that their benefits are overshadowed by the cost incurred

(which a study commissioned by the Federal Highway Administration found).

Highways have split cities in half and severed community connections—this is particularly true in south Dallas. While highways are a useful tool to connect metropolitan areas together, it was a mistake to use them as a hammer to solve all transportation issues for our cities. Running a highway through a city is also not what President Eisenhower had in mind:

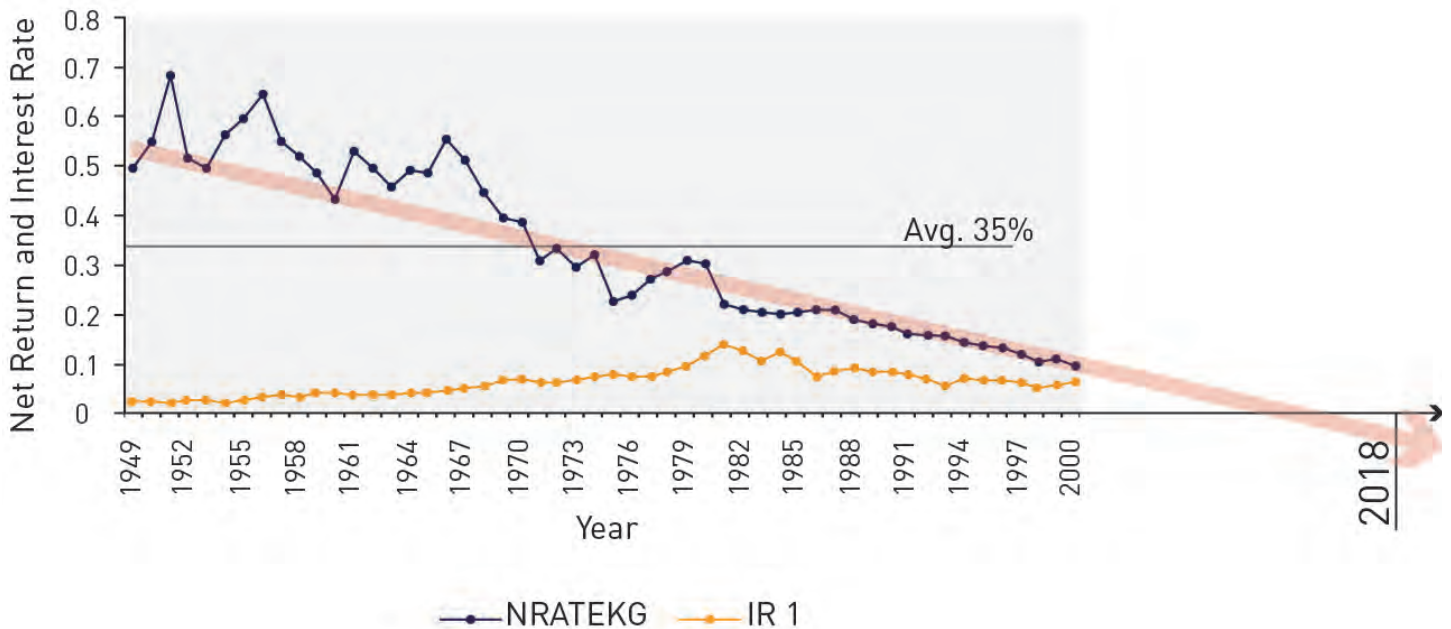


Figure 4. Net rate of return to highway capital and long term interest rate
 Data Source: 2006 FHWA Commissioned Report on Economic Returns of Highway Investment



“President Eisenhower went on to say that the matter of running interstate routes through the congested parts of the cities was entirely against his original concept and wishes;”¹

The highways connecting Texas cities together has helped build Texas’s economic strength. But whether highways belong in the core of Dallas, which should be the heart of economic exchange and culture, is another question. Splitting a heart in two will force the heart work twice as hard to create the same output. The most central space in Dallas could be used more effectively.

HOUSING

The American Dream must be attainable, period. There is currently not enough affordable housing in Dallas to support a diverse and prosperous community. If there were more housing, people wouldn’t have to live so far away from their job, from everyday errands, and from what they do for recreation. The housing market is not creating opportunities for people to augment their quality of life. For the poor, the American Dream needs to be designed as a step ladder, not a lottery. Enacting housing policies and increasing the housing stock will help low income communities work their way upward.

Increasing the development potential of Dallas’s land area will increase the overall quantity of affordable housing. Working with developers can help identify

1. Eisenhower Presidential Library Archives. Notes from Meeting – April 6th, 1960.



which pieces of land can be most readily developed. Also, regional and City policies should encourage the ability to create more housing; removing by parking minimums, for example, helps increase developable land.

JOBS

Increasing the land-use with denser buildings helps support more jobs, which can be supplemented by smarter transportation infrastructure. High-rise mixed-use buildings are more successful if there are walkable streets and a variety of regional transportation options to get to those areas. Is point is also illustrated when a place is classified as a WalkUP.

Employers are interested in locating corporate headquarters in desirable urban locations because happier employees means better talent retention. Improving a person's commute to their job the journey from someone's residence to the job also increases the quality of life for that person, regardless of their income class. For low-income jobs related to those offices, the reduced transportation costs that come with living closer to work mean a better ability to support their family.



QUALITY OF LIFE

The foundation of a good quality of life is a pleasant place. This means somewhere that offers clean air, the ability to control your own destiny, and good health. Places and streets that epitomize a good quality of life may include parks, calm streets, and places where children can play.

In contrast, highways aren't associated with a good quality of life because of the poor air and noise they generate. Further, highways create walls, which often force people to use a car to get around. Having no choice but to wear a car doesn't help you control your own destiny.

Providing a good quality of life should be heavily considered in any project or solution developed to help Dallas residents thrive.

PARKS

Green space in a city is a public good and provides stress relief for residents. Parks are an important amenity to provide an escape from the warmer hardscape of the urban area.

Parks can also provide some sanctuary from a noisy roadway or area, which helps build a high quality of life. Softer spaces like parks enable mean places to recreate and make connections with others.



ENVIRONMENTAL JUSTICE

In the time after WWII, largely in the 1960s, Black communities across the country were disrupted by the construction of highways. Constructing highways were deemed as “progress,” when in fact these concrete structures were used as tool to further segregate society—rich from poor and white from Black or other people of color. Sometimes, highways were even planned to split communities in two so as to drown out a combined voice.

Projects and solutions should be generated to help mend Black and low-income communities. New connections should be stitched together so that opportunity can be realized. Policies need be implemented to preserve existing homeownership, as well as provide resources to foster low income people to improve their neighborhood. Opportunities through programs and transportation/housing projects need to be equitable so that the prior imposed injustices from the 1960s are not perpetuated.



OUR VALUES

The project team has connected and gathered ideas from key stakeholders to think about the success of Dallas's transportation and land use system. We believe that everyone who has engaged with this project development process is interested in leveraging a project that will help maximize the prosperity potential of the Dallas region. We hope that the project decided upon helps create a stronger and more positive Dallas community.

Further, an objective of this project's process is to try and create as much consensus as possible. We recognize that achieving full consensus may be challenging, but the closer that we get, the more well-rounded and accepted the outcome will be. Ultimately, we want to do what is best for Dallas so that we can also increase the quality of life for Dallas residents.

HOW DO WE MOVE FORWARD

Moving forward means creating a more vibrant and successful Dallas metropolitan area. To that end, residents need an efficient and equitable transportation and land use system. To meet those needs, projects need to be developed with efficiency, environmental justice, and cost in mind. These projects also need to be monitored against the goals and objectives established through the planning and analysis process. If we can align a project with its goals and are able to meet people's mobility solutions, we will move Dallas's transportation system forward.

TRANSPORTATION AND TRAFFIC ASSUMPTIONS

For our proposed projects, we need to understand what will happen if a highway is modified. While this analysis is primarily focused on impacts to the automobile roadway user, this project is largely rooted in a recognition that taking transit, biking, and walking are other viable ways residents can move around the region.

A challenge of this highway modification analysis is that we lack tools to quantify the nuanced performance measures that are intertwined with highways. There are also no tools to forecast the traffic impacts of removing a highway; there are analysis tools to evaluate the impact of adding a highway, but reversing that tool is ill suited for the purposes of this analysis. Given the lack of tools, the project team has operated using several key assumptions to establish a fair evaluation of the proposed concepts. The key

stakeholders should accept these assumptions or accept them with modifications. Otherwise, there is no way to deliver a project that will benefit Dallas with any sort of consensus.

EXISTING I-345 ROADWAY CAPACITY AND HIGHWAY COMPARISONS

To begin assessing Dallas's highway system, we collected travel data on vehicles traveling on I-345 using TxDOT's Traffic Count Database System. In 2018, the average daily traffic on I-345 was 180,000 vehicles and the 30-hour Design Hour Volume (DHV) was 18,000 vehicles. Based on I-345's existing eight highway lanes at the point of TxDOT's data collection, 2,250 vehicles are moving per hour, per lane (veh/h/ln). Importantly, this does not mean 2,250 veh/h/ln are served 24 hours of the day; it means that 2,250 veh/h/ln are served in the peak hours of the day, typically the morning and evening commute. If somehow the peak

hour of traffic were to be sustained during the whole day, 432,000 vehicles could travel on the highway per day.

To help describe some highway complexities of observed versus theoretical capacity of highways, Figure 5 illustrates observed highway speeds versus vehicles per hour, per lane.

As seen in the exhibit on the x-axis, the throughput of vehicles per hour per lane does not exceed 2,000, which is lower than TxDOT's 30th-hour DHV veh/h/ln of 2,250. For clarification, the 30th-hour DHV represents the 30 times a year the traffic will reach 2,250 veh/hr/ln, and is generally the upper limit of a highway's vehicle lane capacity.

The y-axis indicates that the highest throughput occurs at 40 MPH. Often, driving in the morning or afternoon peak hour may be slow for the individual but very efficient for the highway system. Further, several state DOTs, like Washington, implement variable speed limits from 35 to 45 MPH on highways to maximize throughput during the morning and afternoon peak commuting hours. Also, the 40 MPH throughput efficiency of highways is similar to the speed limits of arterial streets, which are typically between 35 and 45 MPH. The important point is that the highest vehicle throughput occurs at lower speeds than the highway free-flow driving speeds of 60 to 70 MPH.

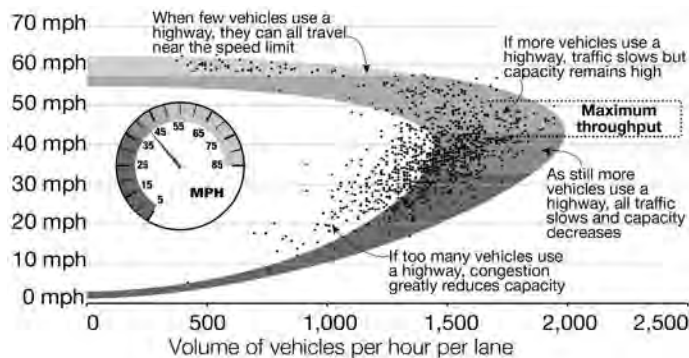


Figure 5. Understanding Maximum Throughput: An Adaptation of the Speed/Volume Curve

*Speed limit is 60mph

Source: Washington State Department of Transportation. WSDOT's Handbook for Corridor Capacity Evaluation

ASSUMPTIONS FOR SERVICE VOLUMES

The Highway Capacity Manual (HCM), 6th edition, published in 2016, is the authority on determining service volumes and traffic flow. To make the HCM more accessible to a broader range of users, namely planners, a research project that simplifies the HCM 6th edition method with satisfactory accuracy was completed. The National Cooperative Highway Research Program (NCHRP) Report 825: Planning and Preliminary Engineering Applications Guide to the Highway Capacity Manual, also published in 2016, is a companion to the HCM 6th edition. This document enables planners to understand how many vehicles can be moved by a highway, arterial roadway, and local roadway. We will be using assumptions from this NCHRP Report to best forecast the impacts to modifications to Dallas's transportation system.

From NCHRP Report 825, we use the following key assumptions:

- Highways have service volumes of 2,300 veh/h/ln
- Arterials can carry 860 veh/h/ln.

Arterials have lower service volumes than highways because a driver’s average speed is impacted by access to destinations and traffic signals. These service volume assumptions mean that approximately 2.5 arterial streets equal the carrying capacity for one highway lane.

CARRYING CAPACITY OF THE ROADWAY NETWORK

If we consider removing the I-345 highway link, which carries 18,000 vehicles per hour, we need to know the carrying capacity of the surrounding streets and whether they can accommodate additional traffic. To assess this potential modification, Table 1 illustrates the street parallel to I-345, the existing traffic volumes,

the maximum capacity, and how many additional vehicles can be added.

Capacity was calculated using the 860 veh/h/ln assumption listed above, with four or six lanes assumed for the corridor. Good Latimer Expressway currently has six lanes, and therefore can be assumed to have a greater carrying capacity.

Currently, Riverfront Boulevard does not extend to I-45. However, for better network connectivity and to make up a potential highway link removal, we are assuming this roadway would be completed to I-45. This project would also improve connectivity and mobility for developments in the Cedars neighborhood. Figure 5 illustrates these streets in relation to I-45.

TRAFFIC EVAPORATION

Another key assumption for this traffic analysis is traffic evaporation. This phenomenon occurs

Table 1. Existing Capacity and Available Capacity of Streets Parallel to I-345

Street	Existing (veh/hr)	Capacity (veh/hr)	Difference (veh/hr)
Good Latimer Expressway	500	5,160	4,660
Cesar Chavez Boulevard	1,200	3,440	2,240
Harwood Street	350	3,440	3,090
Ervay Street	350	3,440	3,090
Lamar Street	1,200	3,440	2,240
Riverfront Boulevard	1,800	3,440	1,640
Total	5,400	22,360	16,960

*Existing traffic volumes collected from TxDOT’s TCDS system. Traffic volumes along the streets corridor were collected and averaged. Traffic data are either from 2014 or 2018.

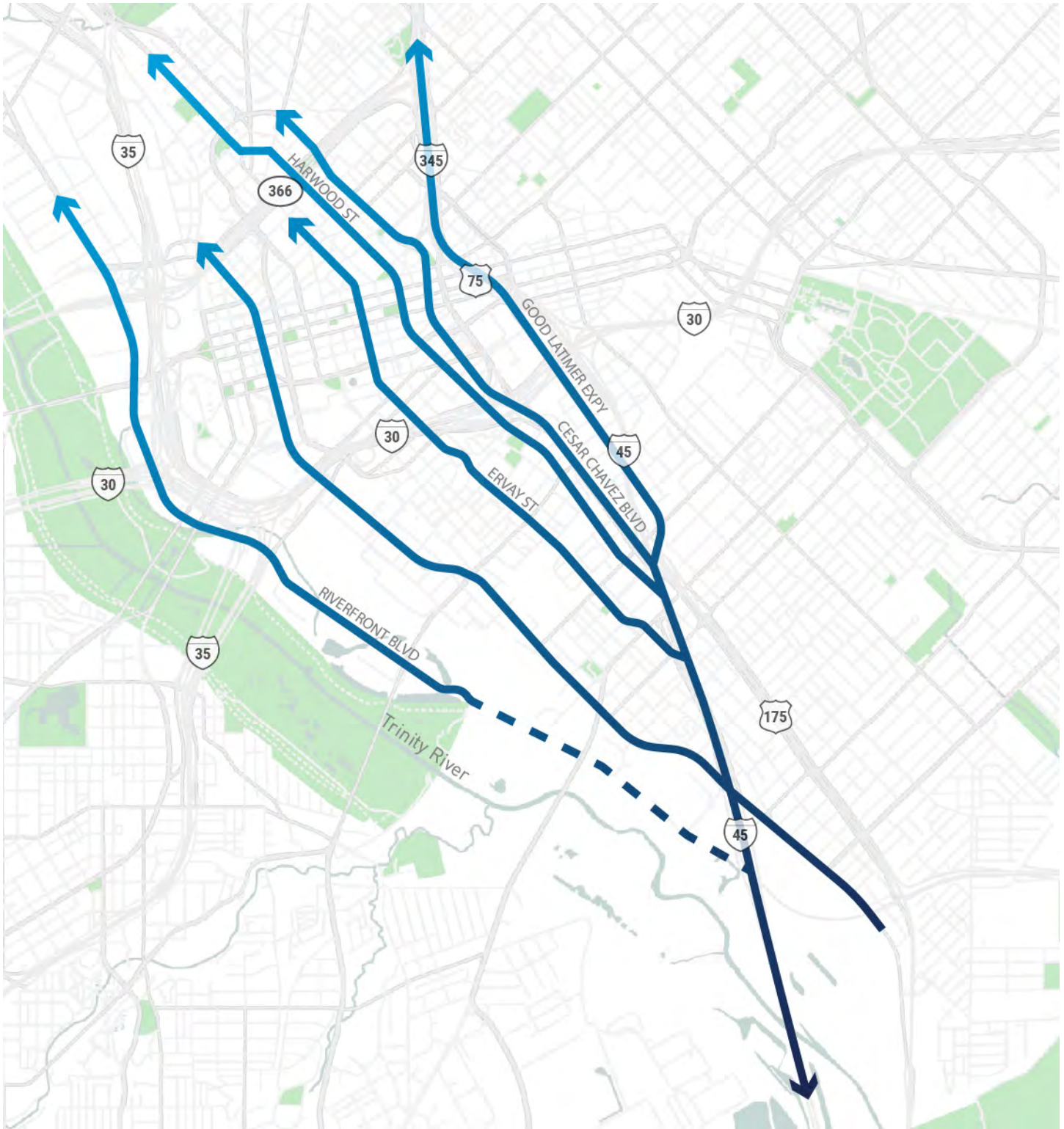


Figure 6. Streets Parallel to I-45 that Connect to Downtown Dallas

when fewer people drive to and through areas after highways are removed; traffic evaporation is the opposite of induced demand, meaning fewer people will drive because there are no facilities to do so. Traffic evaporation has been observed when San Francisco's Central Freeway collapsed in the 1989 Loma Prieta earthquake. Traffic also evaporated when New York City removed its highway on the west side of Manhattan. A comprehensive study of those two examples and other locations across the world yield traffic decreases of approximately 14-25% in the vicinity of the highway removal (Cairns, 1998). To be conservative, we will assume a 10% reduction in pre-COVID-19 traffic volumes. **This means anticipating 1,800 veh/hr will evaporate with the I-345/I-45 link removed.**

TOTAL CARRYING CAPACITY

I-45 currently carries 18,000 veh/hr and the surrounding roadway network appears to have capacity for approximately 17,000 veh/hr. With 1,800 veh/hr anticipated to evaporate if a highway removal were to take place, there is sufficient capacity of the surrounding roadway network to handle additional traffic.

TRIP TYPES CONSIDERED

The CityMAP plan used regional traffic models to understand a range of trip types throughout the entire Dallas metropolitan area. These trips were boiled down into local and regional trips which rely on existing highways, arterials, and major streets. A limitation of CityMAP's analysis was that the highway was not considered a barrier to travel across. But if the highway is replaced with surface streets, then cross-town capacity will expand. To account for this factor, we propose three different types of trips to be evaluated for this analysis:

- Regional to regional trips – pass through I-345 and I-45
- Regional trips to/from the neighborhoods around I-345 and I-45
- Neighborhood to neighborhood trips that intersect the highway but not use it.

These trip types will assist with evaluating the two concepts presented in this analysis and also with assessing the across-town carrying capacity of the Dallas's transportation system.

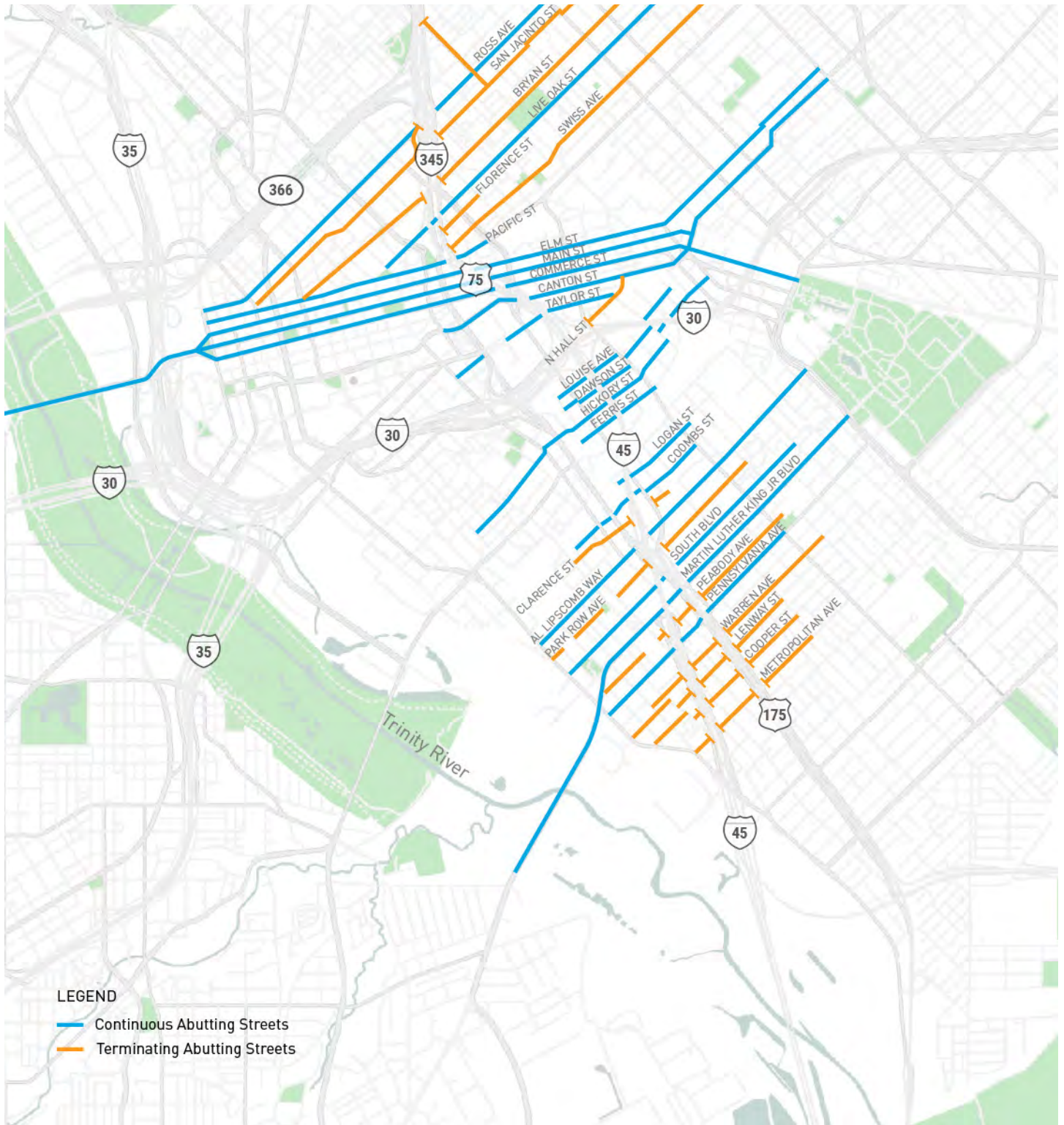


Figure 7. Streets Abutting I-45

CUT THROUGH TRAFFIC ON I-345

The CityMAP effort used Bluetooth technology to identify the origins and destinations of motorists using I-345. The report produced a series of maps to help illustrate the origins of motorists traveling north using I-45/I-345, which also indicates the quantity of cut-through traffic that could use the robust regional highway system. In particular, I-45 to the south of Dallas consists of low density, meaning that there are additional regional choices for these motorists. Figure 7 indicates that 38% of the total users originating from the south on I-45 have existing route choice options for the AM peak hour. Also, TxDOT's new GPS data suggests 24% of trips are long-trip interstate traffic, and are therefore cut-through traffic which should go around on I-635.

24% of trips are long-trip interstate traffic, which should go around on I-635

Additional Across-Town Carrying Capacity

A highway is a natural barrier against intersecting traffic because of the concrete columns and access control needed to maintain a highway's grade separation. This barrier prevents vehicle movements to perform cross-town travel. Figure X illustrates every street intersecting and abutting I-45 from downtown Dallas to the Trinity River.

As shown in Figure 6, there are 13 abutting streets that do not connect across the highway and that could be additional across-town capacity added to Dallas's roadway network. Using arterial figures but with two total lanes instead of four, 22,360 veh/hr could travel across Dallas that had not been able to before.

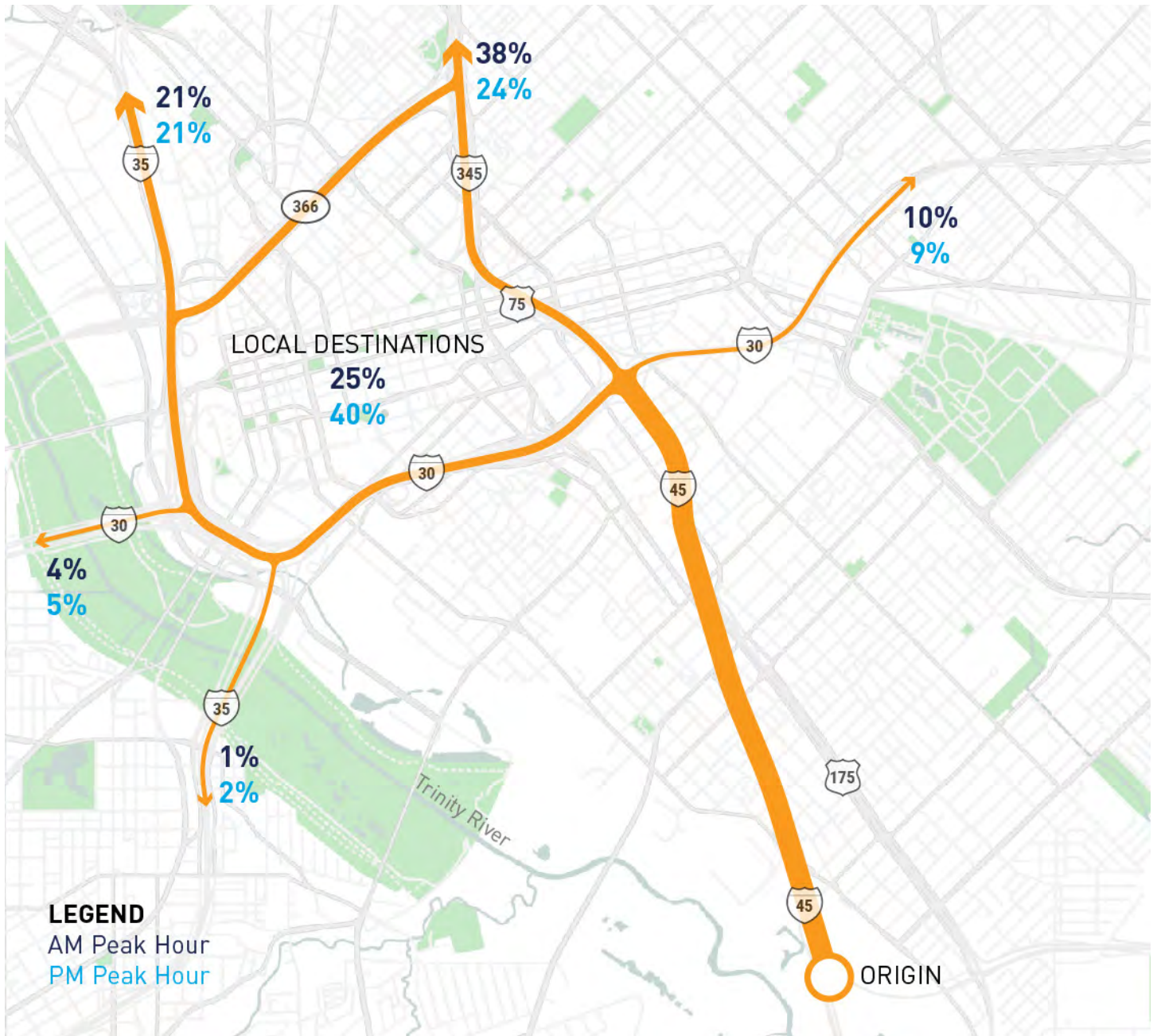


Figure 8. Motorist destinations

Data Source: CITYMAP

TRAFFIC

Managing traffic in the Dallas region has been challenging due to the majority of resources spent on trying to enhance transportation for the automobile. If other efforts are made to encourage non-auto travel, this could help minimize the region's reliance on single occupancy vehicle travel.

REGIONAL SHIFT

Figure 8 illustrates the highways planned or funded to be upgraded in the Dallas region. These new highway projects will encourage automobiles and trucks to use the exterior highway system instead of going through the center of the City if they are passing through the area.

Coupled with the myriad transportation options available to reach the downtown area (like DART) further enhancing the automobile mode to go downtown is unnecessary because the downtown area should be prioritizing goals of housing and environmental justice.



Figure 9. Existing and Planned Highway Construction Projects

MODAL SHIFT

The Dallas Comprehensive Environmental and Climate Action Plan (CECAP) was released in April 2020, which outlines many goals and targets toward reducing greenhouse gas emissions. Goal #3, which is for Dallas’ communities to have access to sustainable, affordable, transportation option, could be achieved by encouraging people who drive to work to use public transportation, walking, and biking.

CECAP Goals: **Single Occupancy Vehicle** Travel Mode Shift from **88% to 62%** in 2050 **(26% Reduction)**

In the City of Dallas, highways encourage people to drive simply because the infrastructure is there. If highways were to be repurposed for housing, for example, residents could live closer to work and wouldn’t necessarily need a car to commute to work. There are many ways to achieve CECAP’s Goal #3 and its subsequent targets, but constructing more highways would act in opposition to this goal

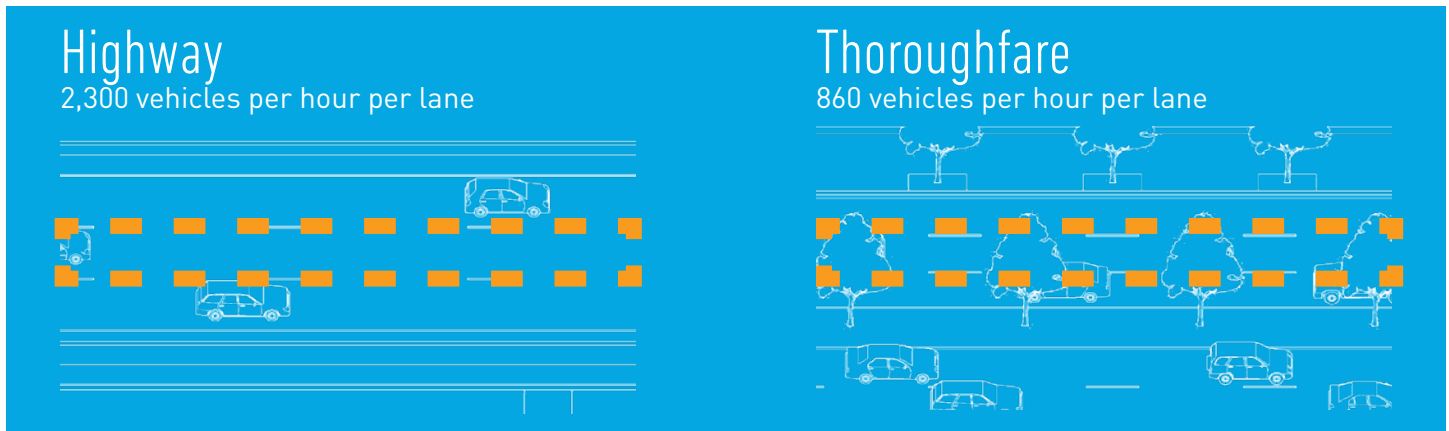
TRAFFIC EVAPORATION

When highways and/or major roadway connections are removed, traffic evaporation occurs. People find other ways to get to their destination because the original road is gone. This phenomenon has been quantified through analysis of examples such as San Francisco’s Central Highway collapse and the removal of the highway on the west side of New York City. Typical traffic evaporation is between 14 to 25 percent of present traffic volumes (Cairns 1998).

To be conservative, we are estimating that if I-345 is removed, there will be a **10% reduction in traffic in the vicinity**. Based on the existing traffic volumes on I-345, we are anticipating that 1,800 veh/hr will evaporate.

HIGHWAY VS. THOROUGHFARE CAPACITY COMPARISON

NCHRP Report 825 is based on the latest Highway Capacity Manual and describes the estimated capacity of highways and arterials





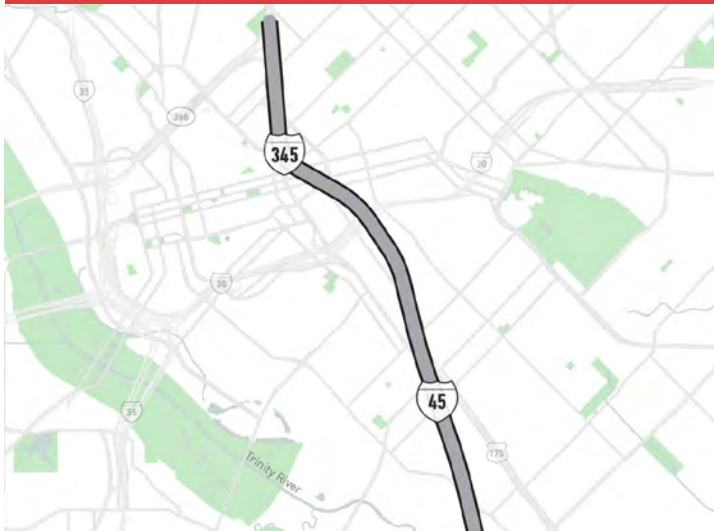
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CONCEPTS

DESIGN OPTIONS

The options described in this chapter are better for Dallas's neighborhoods and transportation system, and they provide better economic redevelopment potential than the existing highway. The two options have many nuances and design details that could make these elements stronger or weaker, but the descriptions of each focuses mainly on the elements of city building they impact the most.

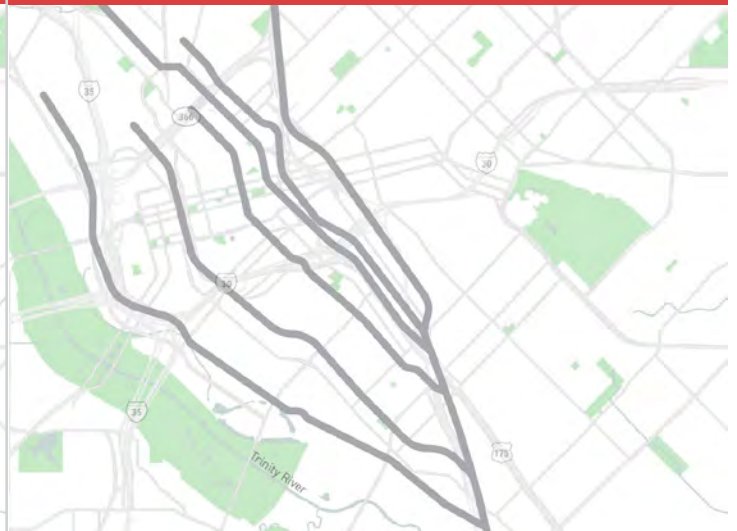
Option 1: Depressed Highway



BIG MOVES

1. Existing highway corridor remains, but in a narrower depressed trench
2. Traffic is diverted from the highway onto some surface streets to reduce volume of traffic in trench
3. Bridges retain cross-street connectivity. No additional bridges across other streets that were once blocked by the elevated highway.

Option 2: Surface Street



BIG MOVES

1. Traffic is diverted at multiple points along the highway to distribute the traffic volumes across the roadway network
2. Surplus volume on surface streets is used to absorb the diverted traffic
3. New connections can be made for across-town traffic
4. New development land is available from the removed elevated highway

CITY BUILDING MATRIX

The two options were evaluated based on their how they line up with the principles of creating a successful city. The varying levels of support help show how this corridor can do more for Dallas than simply moving vehicles. Each option will heavily influence the outcomes of Dallas’s growth as a sustainable, just, and prosperous region.

		Elevated Highway (Existing)	Depressed Highway (Option 1)	Surface Streets (Option 2)
Housing and Neighborhoods	Increase affordable housing	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	Stabilize neighborhoods	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	Improve job/housing balance	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Transportation	Improve the short trip	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	Increase downtown/neighborhood access	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	Capitalize on the transit dollar	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	Balance transportation system	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	Separate regional and local trips	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Economic Development	Improve market confidence	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	Create resiliency	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	Sustainable life-cycle cost	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	Improve public health	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Does not support
 Partially supports
 Largely supports

OPTION 1: DEPRESSED HIGHWAY

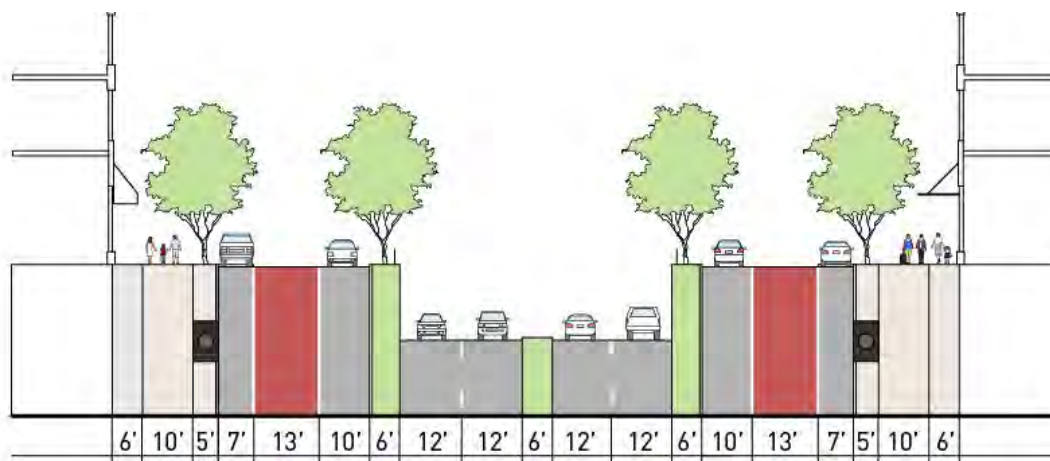
The depressed highway option uses the existing highway corridor and maintains motorists' ability to pass through Dallas quickly. This option would require the existing highway to be torn down, with the corridor being excavated under the highway and then a new depressed highway being constructed below the ground surface. A key feature of this option would be maintaining most of I-345's highway miles through Dallas. However, this would also mean maintaining a similar highway barrier through the city, which would limit the amount of developable land.

CONCEPT

The depressed highway design concept consists of four highway travel lanes that would be strictly for pass through traffic. The depressed portion of the concept would extend from approximately Cesar Chavez Boulevard in the south to highway 366 in the north, using the existing I-345 and I-45 corridor right-of-way. The depressed highway concept would likely decrease the number of interchange access points for a motorist to enter and exit the highway, as compared

to the existing elevated highway. A minimal number of highway access points is desirable to maintain sufficient traffic flow, minimize cost, and maximize the potential for developable land adjacent the highway. The most likely highway access points would be Cesar Chavez, I-30, and highway 366. Figure 10 illustrates a plan view of Option 1.

Figure 10. Cross Section of Option 1



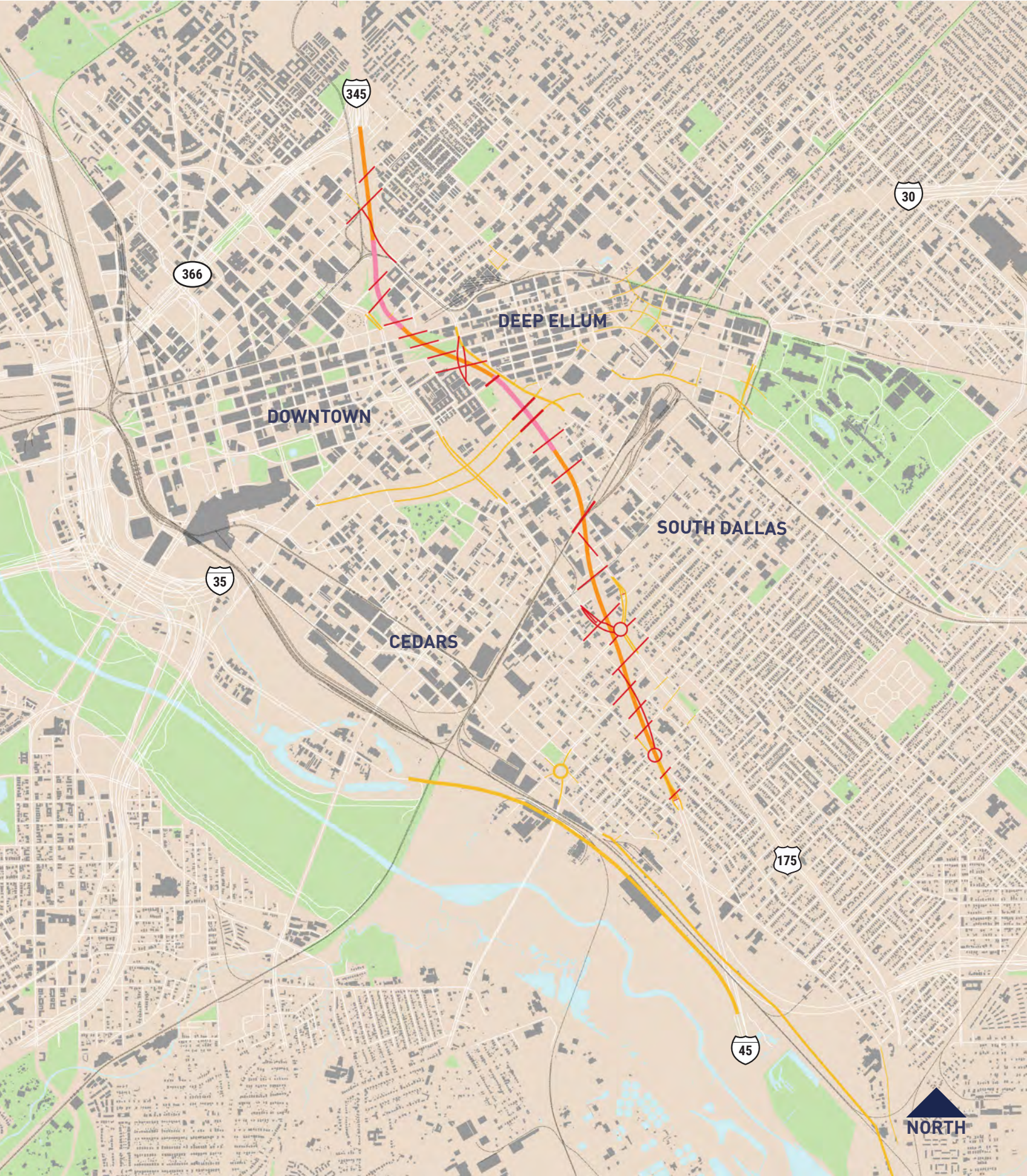


Figure 11. Plan View of Option 1

At the northern and southern ends of the depressed highway, the elevated portion of the existing highway would need to transition toward the depressed highway section. This would require modifying the existing highway structure to accommodate a ramp section to slope toward the depressed section. The length of transition would vary depending on the depth of the depressed highway, but a ¼- to ½-mile transition length may be needed.

TRAFFIC

Implementing Option 1 would result in various traffic impacts to the existing traffic flows on the I-345 corridor and the surrounding roadway network. This section further describes these impacts as they pertain to key assumptions described in a prior section of this report.

As stated previously, 18,400 vehicles per hour (veh/hr) currently travel on I-345. Option 1 consists of a four-lane depressed highway cross-section, which is

projected to serve 13,800 veh/hr. That leaves 4,600 veh/hr that would need to be served by the surrounding roadway network.

Fortunately, Dallas has a well-connected roadway network with key parallel streets that can carry additional traffic when the highway reaches capacity. Table 9 illustrates the existing streets parallel to I-345, their current capacity, and how many additional vehicles they can handle. Figure 11 also shows these streets spatially as they connect from I-345 through downtown Dallas.

As shown in Table 9, there is sufficient capacity to handle an additional 4,600 veh/hr on the existing roadway network.

Across-town Traffic

Option 1 also considers the impact of a depressed highway on across-town traffic flow. For simplicity, the depressed highway option assumes that the existing

Table 9. Existing Capacity and Available Capacity of Streets Parallel to I-345

Street	Existing (veh/hr)	Capacity (veh/hr)	Difference (veh/hr)
Good Latimer Expressway	500	5,160	4,660
Cesar Chavez Boulevard	1,200	3,440	2,240
Harwood Street	350	3,440	3,090
Ervay Street	350	3,440	3,090
Lamar Street	1,200	3,440	2,240
Total	3,600	18,920	10,660

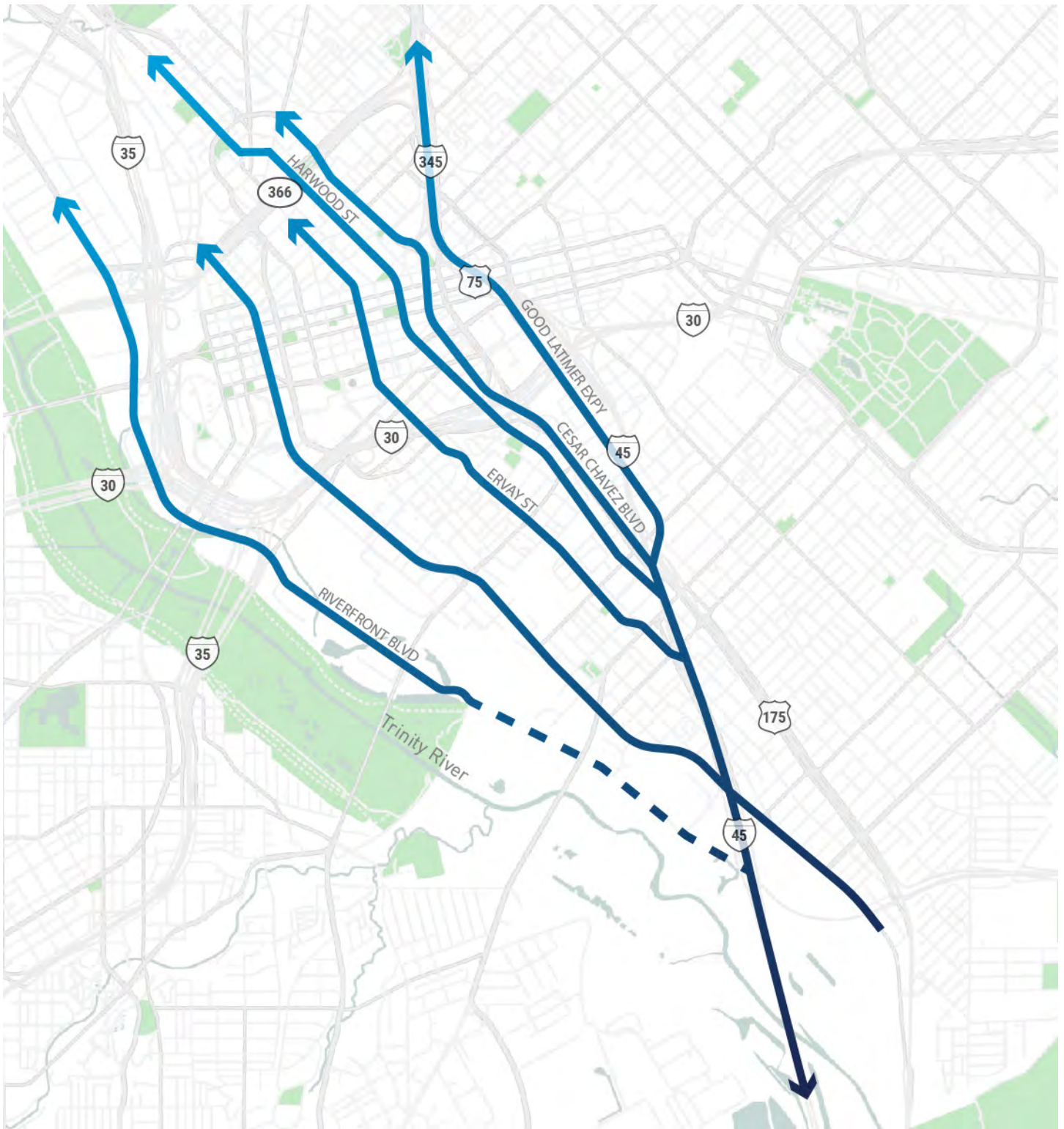


Figure 12. Streets Parallel to I-45 that Connect to Downtown Dallas

streets intersecting the existing highway would be re-connected to travel over the depressed highway. No additional connections with streets abutting the existing highway would be made.

It is feasible to construct a highway lid to be used as a multi-purpose space for Dallas residents. This could replicate the successful Klyde Warren highway lid in the northern part of downtown Dallas. However, highway lids are expensive to construct, and they require regular park maintenance. Option 1 assumes no highway lids at this time

ECONOMIC DEVELOPMENT

Option 1 would likely generate a positive economic development impact as compared with the existing elevated highway, but there would still be drawbacks, largely because the depressed highway would maintain a barrier similar to the existing elevated I-345/I-45 highway corridor. However, the depressed highway would be slightly narrower and bridges/highway lids could be constructed to help connect the surface street network. The narrower footprint of the trench would open up some land for development adjacent to the highway, but the diagonal nature of the corridor would limit development potential due to the odd block structure and the sizes of the assembled parcels. Narrow strips of new land, which may be angled and odd shaped parcels, would lend themselves to open space or plazas rather than new building sites. These parcels would be adjacent to a highway, so the value of these properties would be relatively low.

HOUSING

The amount of newly available land that would result from Option 1 would be well-suited for housing of all affordability types. Narrow strips of land could be developed into townhouses or three- to five-story mixed-use developments, while larger blocks could be developed into high rise towers and dense, mixed-use nodes. The context of the existing neighborhoods and the market capacity for different housing and affordability types would dictate where affordable housing should be located, but several of the dense urban nodes may have the most potential once highway lids are added. Highway lids are not viable with the existing elevated highway.

JOBS

The construction of Option 1's depressed highway would generate the need for numerous short-term jobs. Long-term jobs would be contingent on how many buildings were constructed on developable land. The CityMAP effort has also developed employment estimates based on constructing a depressed highway. 28,618 long-term jobs are anticipated with the amount of developable land created (while the number with Option 2, as detailed below, is 39,300 jobs). Increasing the quantity of jobs in the downtown area would also increase the liveliness and amenities needed to support this additional employment, which would likely increase the quality of life for people who work downtown.

QUALITY OF LIFE

We anticipate that Option 1 will increase the quality of life for Dallas residents. New parks and open space will be made available from the narrower highway cross-section width. Also, visible obstructions from the elevated highway will be removed, yielding views of downtown. Noise pollution from removing the elevated highway will decrease with a depressed highway design. Option 1 would also maintain the excess traffic capacity of the existing roadway network so that additional transportation options, such as transit and bike accommodations, could be more rapidly constructed .

ENVIRONMENTAL JUSTICE

In considering environmental justice, we must start with looking at how the construction of the elevated highway through southern Dallas and downtown in the 1960s damaged neighborhoods that were predominantly home to Black and communities of color. While I-345 currently gives residents vehicular access between their neighborhood and services/jobs away from the neighborhood, it also disrupts the urban fabric and exposes nearby residents to air pollution. For the most part, Option 1 would not address this disruption, though it would create some potential to add pockets of public space, additional bridge crossings, and highway lids. Increasing connectivity is a start to repairing the damage done by the elevated highway to southern Dallas and the Martin Luther King Boulevard corridor, but the depressed highway in Option 1 would maintain the disrupted character of the adjacent neighborhoods.

OPTION 2: SURFACE STREETS

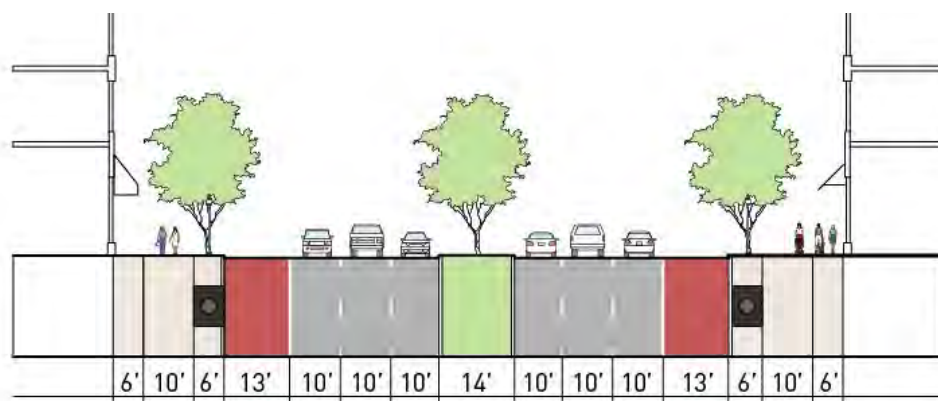
Option 2 would remove most of the elevated highway from the corridor. This option would rely on the underutilized surface streets to absorb traffic from I-345, as the highway would be designed to incrementally narrow and eventually disappear. Because the highway would be removed, this option provides the greatest amount of developable land. Option 2 is anticipated to provide the greatest benefit to the businesses and residents in southern Dallas and downtown, and to help rebuild the urban fabric damaged by the highway's original construction in the 1960s.

CONCEPT

Option 2 would remove the elevated I-345/I-45 from highway 366 in the north to the convergence of US-175 and I-45 in the south; this amounts to approximately 2.5 miles of the hundreds of highway miles in the Dallas region. At the northern terminus, the ramps connecting highway 366 to I-345 would be removed. In the south, the two highways' carrying capacity would need to be tapered down over ½ to 1 mile so that the traffic would not accumulate to one point,

which would cause a bottleneck. Tapering traffic would be achieved by constructing highway ramps to encourage motorists to branch off the highway prior to a highway terminus. Further, both I-45 and US-175 highways would need transitions to terminate into surface streets so that commuters could seamlessly travel between an urban environment and a highway environment.

Figure 13. Cross Section of Option 2



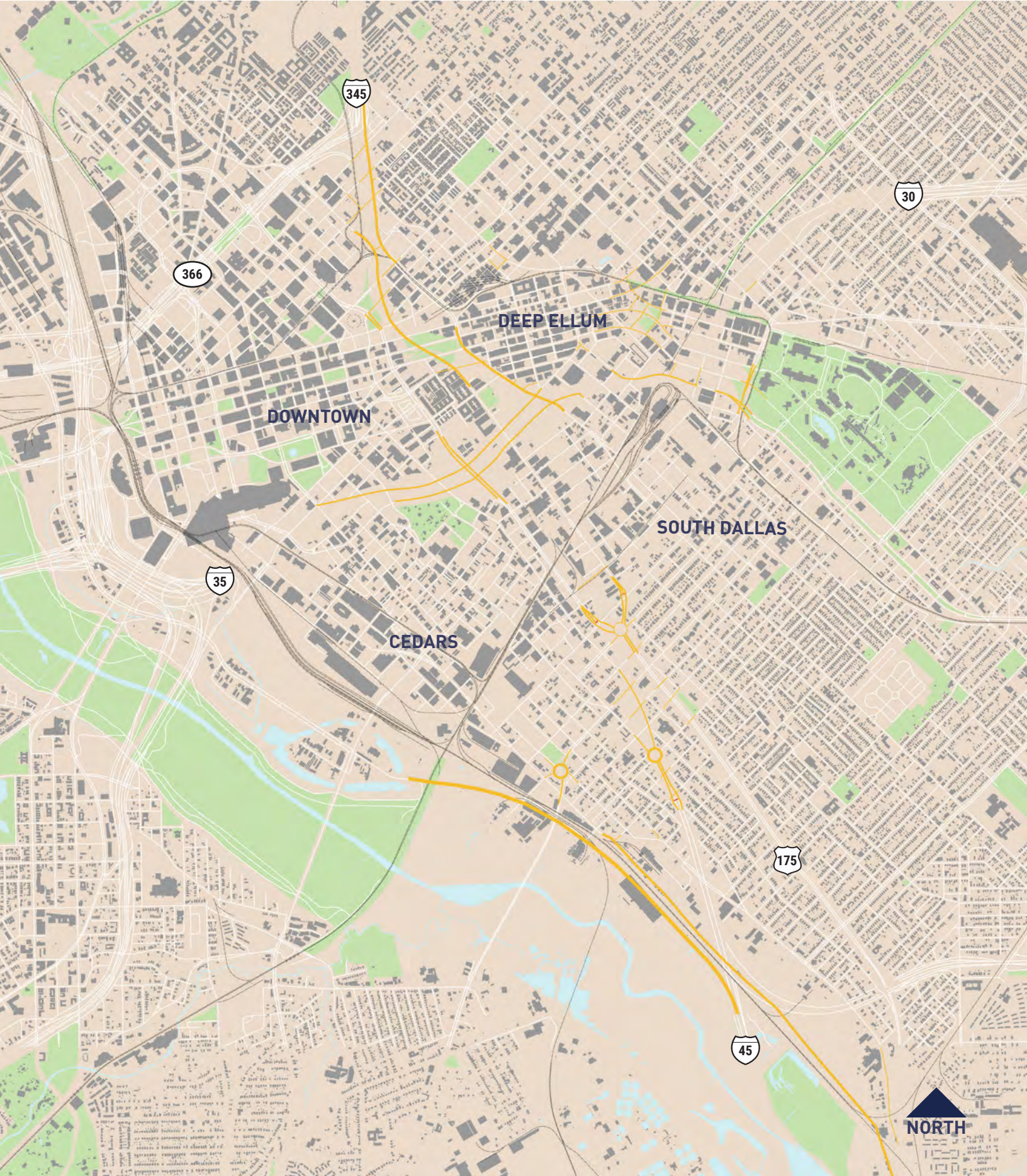


Figure 14. Plan View of Option 2

The southern highway terminus is complex because I-45 and US-175 would need to terminate at two different locations to minimize a traffic bottleneck. The transition terminus for I-45 could be designed at Colonial Avenue, while US-175's transition could be designed at Forest Avenue and Al Lipscomb Way. The distances between these termini would be large enough for traffic to diffuse into the existing roadway network to minimize traffic bottlenecks. Last, both of the termini could accommodate roundabouts, which assist with speed control and traffic management and don't require as much maintenance as compared with traffic signals. When properly designed, these termini would also act as natural gateways between the highway and Dallas's urban fabric.

TRAFFIC

Option 2 would require removing a highway, which can have a range of traffic impacts. Travel behavior would be affected for vehicle commuters on the highway and also for residents whose across-town paths may intersect with the highway. Successfully implementing Option 2 would require several modifications in the vicinity of the I-345/I-45 corridor.

The first question to answer when removing a highway is, "can the surrounding roadway highway network accommodate the additional traffic?" As previously noted, a total of 18,400 veh/hr currently travel on I-345. Based on these highway and arterial roadway capacity assumptions from NCHRP Report 825, the surrounding streets parallel to the I-345/I-45 corridor have 16,960 veh/hr of available capacity, which is shown in Table 10.

Table 10. Available Network Capacity

Street	Existing (veh/hr)	Capacity (veh/hr)	Difference (veh/hr)
Good Latimer Expressway	500	5,160	4,660
Cesar Chavez Boulevard	1,200	3,440	2,240
Harwood Street	350	3,440	3,090
Ervay Street	350	3,440	3,090
Lamar Street	1,200	3,440	2,240
Riverfront Boulevard	1,800	3,440	1,640
Total	5,400	22,360	16,960

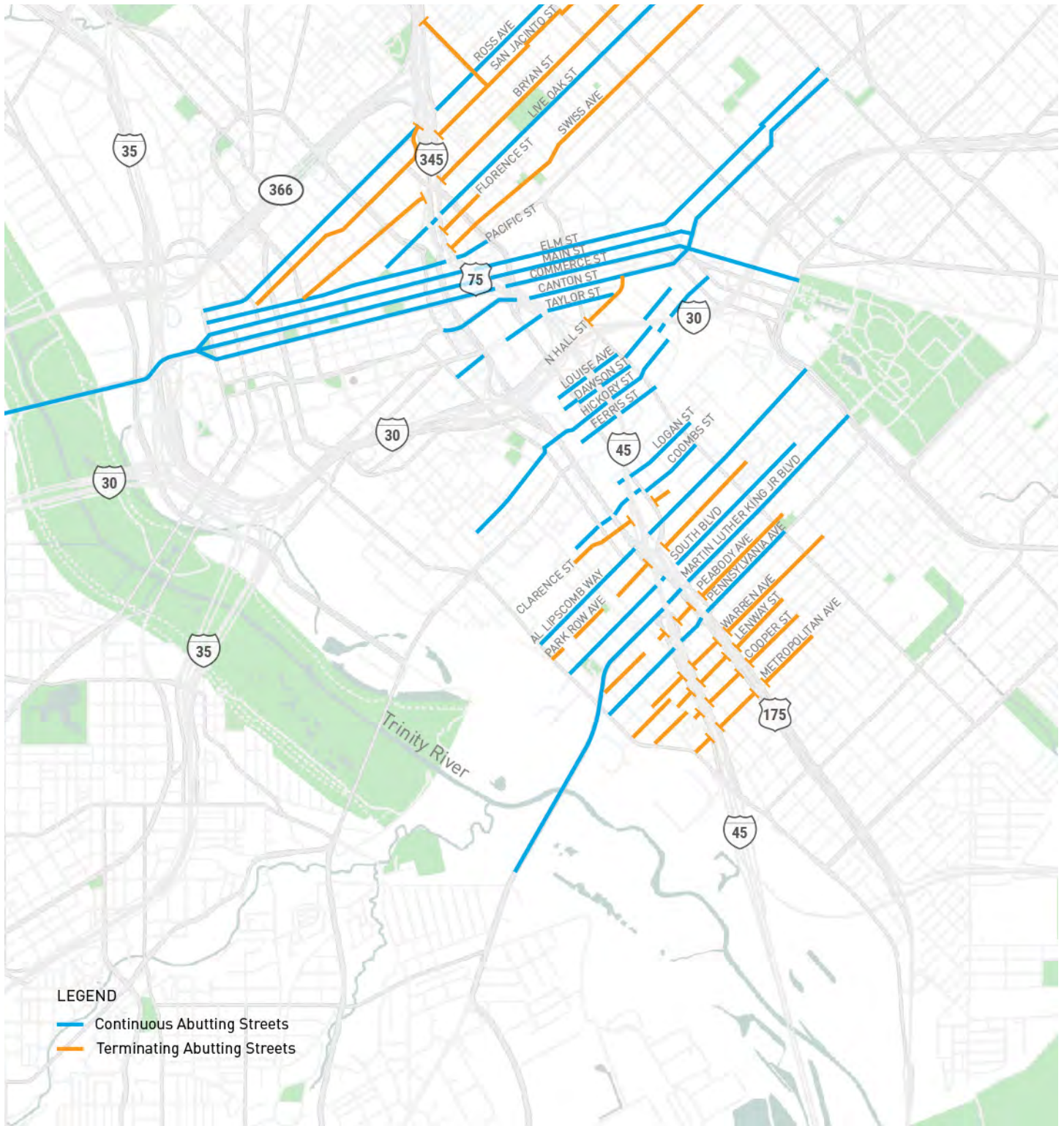


Figure 15. Streets Abutting I-345/I-45

Of note, it is assumed that Riverfront Blvd will be extended to I-45 from its current terminus at Cornith St. The cumulative streets and their available capacity mean that 1,440 veh/hr would need to be accounted for elsewhere.

As described earlier, we are anticipating that removing the highway will result in 10% traffic evaporation from the existing veh/hr measurements. Therefore, we are assuming 1,840 veh/hr will evaporate, which means that existing highway traffic can be accommodated using the existing street network.

An advantage of removing the highway and replacing the corridor with surface streets is that the intersecting streets, which once abutted the highway, could be reconnected. Figure 13 illustrates all the current streets that intersect and abut the existing I-345/I-45 highway corridor. If these streets were to be reconnected, Dallas's roadway network would increase in capacity because each street could carry traffic across the city. Table X illustrates the 12 streets that could be reconnected. To be conservative, we have assumed each street is a two-lane street, which means each street could carry 1,720 veh/hr. In total, the capacity of the roadway network could increase by 20,640 veh/hr for across-town traffic.

ECONOMIC DEVELOPMENT

Option 2 would provide greater economic development opportunities in all areas of the corridor as compared with Option 1. The elevated highway would completely disappear in the majority of the corridor, and the existing streets and arterials could be used for transit, short vehicular trips, and bicycle and pedestrian connectivity. This option would increase the developable land and the potential to construct mixed-use buildings and affordable housing. With Option 2, neighborhoods of the Cedars, Deep Ellum, and even downtown could revitalize existing streetscapes and focus could go to re-stitching them back together.

HOUSING

Option 2 would result in the largest amount of reclaimed land. The other benefit to the new land made available in Option 2 would be that it could be developed to suit the distinct needs of the neighborhood. This versatility would allow housing to be an easier element to develop because it could occur in multiple phases and adapt as neighborhoods react to market changes and enhanced development environment along the corridor. This positive environment would allow for choices in housing affordability and other amenities. Adding residential housing would provide enough density to support more retail and grocery stores in neighborhoods that are lacking in those today.

JOBS

With the highway removed and with greater amounts of developable land available, increased employment in the Central Business District is possible. Buildings could be constructed as mixed-use that would likely include retail and office. In the bigger picture, these centrally located centers would attract larger employers, such as Uber. Importantly, these larger employers need office space and increasing the amount of land for buildings sets up employers to look downtown instead of far away from the city center. Diversifying the housing and jobs downtown would also decrease the need for long commutes and decrease the reliance on the automobile to travel around.

The CityMAP effort anticipates that 39,300 new jobs would be created by removing the highway. The Coalition for a New Dallas estimates approximately 22,000 new jobs. In both projections, the amount of jobs created by Option 2 is greater than by Option 1.

QUALITY OF LIFE

Converting highways into places is a powerful way to improve someone's quality of life. The new space can be designed as a place to linger from newly planted trees and soft grass. These places would be constructed to reflect a different pace of life than before, which also means they can be much quieter and may create more opportunities to rest and catch some fresh air.

Even if the prior highway is replaced by buildings, developers are typically interested in creating spaces that people like to use. These high-quality spaces

are also what employers and residents enjoy, as they improve their quality of life during all times of the day, not just a singular commute time. Because of the increased flexibility of the space created with removing the highway, we anticipate that Option 2 will yield a greater increase in quality of life than Option 1.

ENVIRONMENTAL JUSTICE

Removing the highway would be a direct step toward re-knitting the Black communities disrupted by the highway construction in the 1960s, but policy to preserve existing Black businesses and residences would be needed to prevent rapid gentrification. These policies will help provide space for people to focus energy on improving their quality of life, which should help increase culture building opportunities. These cultural development opportunities will reconnect Black neighborhoods and also increase diversity in Dallas as a whole.

Black community leaders in Deep Ellum and South Dallas need to be engaged early to help shape the newly created space so that it becomes a thriving place. Doing so would give ownership and increase the chances of success of the suggested programs, policies, and projects. This would also mean connecting the community leaders with developers and the City to make sure the various efforts and interests are coordinated.

SUPPLEMENTAL HIGH CAPACITY TRANSIT

Public transportation is a critical part of the transportation system for any metropolitan area. Dallas residents need a way to travel to employment, essential services, or to see friends. Both previously mentioned concepts propose to modify the existing elevated I-345, which could affect travel times for residents in the immediate vicinity. This supplemental option proposes to upgrade existing transit routes by re-allocating street space for transit-only lanes and to increase headway frequencies, which will speed trips for Dallas residents, particularly those in the South Dallas neighborhood.

This supplemental concept consists of upgrading bus lanes to better connect the South Dallas neighborhood with the Dallas region. Overall, increasing the frequency of transit routes would help provide residents with connections to more destinations downtown and other destinations in the region. Due to excess vehicular capacity on north-south thoroughfare streets, such as Hardwood St., Malcom X Blvd, Cesar Chavez Blvd., etc., reallocating two total lanes per roadway as transit-only lanes would be a boon for transit travel times and would help increase the quality of service for a traditionally underserved neighborhood.

There are a couple different methods for upgrading both bus lines. On the thoroughfares, installing red paint along the entire stretch of the corridor toward Dallas downtown would be an inexpensive way to designate transit lanes toward downtown. Other intersection treatments would be needed, but this would be an easy-to-implement project overall.

A slightly more expensive option would be maintaining high-frequency transit to achieve 15-minute headways. This would require coordination with DART and also informing residents that transit service would be more frequent.

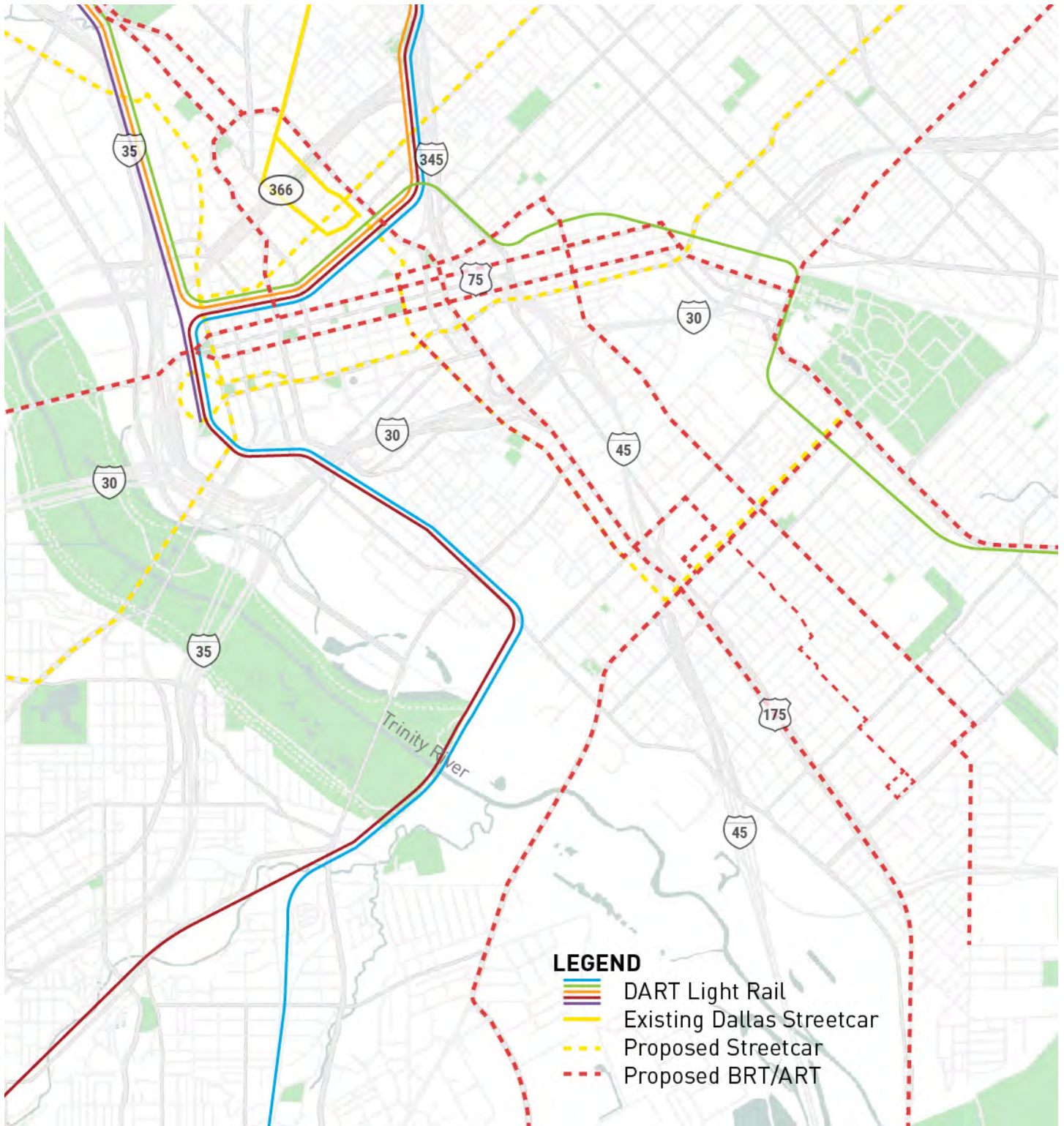


Figure 16. Proposed streetcar lines and dedicated bus lanes



ENVIRONMENTAL JUSTICE

Any option, whether surface streets or depressed highway, must increase the quality of life, transportation options, economic opportunity, and housing affordability for South Dallas residents. South Dallas must receive essential transportation services such as frequent transit; otherwise, inequities in South Dallas will persist.

Currently, DART does not plan to increase transit service for South Dallas neighborhoods. This must change so that South Dallas residents can have better access than many other Dallas neighborhoods have. Increasing transit service to South Dallas and beyond with either the surface street or depressed highway option would be a step in addressing long-standing inequities, which is aspect of this supplemental option.

ECONOMIC DEVELOPMENT

Adding more frequent transit service would be a step in increasing economic potential for Dallas residents. These new transportation connections would begin to increase the value of land surrounding new high frequency transit, which would be similar to a Transit Oriented Development (TOD). Importantly, policies and programs are needed to make sure existing neighborhoods can access economic opportunities involved with the TOD or related development activities.

The economic activity of the surface street option (Option 2) with supplemental transit service is likely greater than the depressed highway (Option 1) and transit service. With the surface street option, there would be increased connections between the transit line and the quantity of land to develop on, which would increase parcel flexibility and overall land value.

QUALITY OF LIFE

Providing increased access to public transportation would increase the quality of life for people living in the vicinity of the new transit lines. People will have faster ways to get from their neighborhood to the DART network, which would ease the reliance on using an automobile. Also, people often walk to transit stops, which can help meet daily exercise needs and increase people's health.

The community should also provide input on improving transportation stops, which can be stronger hubs for meetings and activities. Upgraded transit stop locations should be chosen by the community, as its members know first-hand what they need to more easily travel around the Dallas region.

Providing transit with both Option 1 and Option 2 would increase the quality of life for residents in the vicinity. Choosing the surface street option with transit would likely result in more accessibility toward other community hubs or parks associated with the upgraded transit corridor. Therefore, the Option 2 with transit would likely increase the quality of life for Dallas residents more than Option 1 with transit.

TRAFFIC

Adding transit to either the surface street or depressed highway option will greatly enhance the passenger carrying capacity of the I-345/I-45 corridor. The National Association for City Transportation Officials (NACTO) reports the quantity of people that could be moved by different transportation modes:

The proposed transit lines are anticipated to carry at anywhere from 4,000 to 8,000 passengers per hour, per lane, which would substantially increase the passenger carrying capacity into South Dallas and beyond. Upgraded transit lines would have passenger carrying capacity similar to a major highway. Further, the enhanced transit lines would also more quickly connect passengers into the existing 93-mile DART railway network, serving 13 different cities in the Dallas-Fort Worth geographic area.

HOUSING

Upgraded transit would increase the potential for affordable housing because more reliable public transportation would decrease the cost of living for residents. Further, more frequent and dedicated transit lanes would increase the development potential of the surrounding area, particularly adjacent to the transit stops. However, special consideration will be needed to increase the amount of affordable housing around the new transit lines. Additional housing must be affordable in conjunction with the enhanced transit lines, otherwise neighborhoods may be left out of additional benefit provided by the new transit amenities



3

DISTRICTS

THE DISTRICTS

The removal of the I-345 elevated highway improves the character and access to different neighborhoods districts within the project corridor. The four main districts are in the Cedars neighborhood, Martin Luther King Boulevard corridor, Deep Ellum, and the Baylor Hospital campus. The improvements range from large development sites, new parks and open space, better connectivity to transit and I-30, and higher quality of life with access to affordable housing, employment, and transportation options.

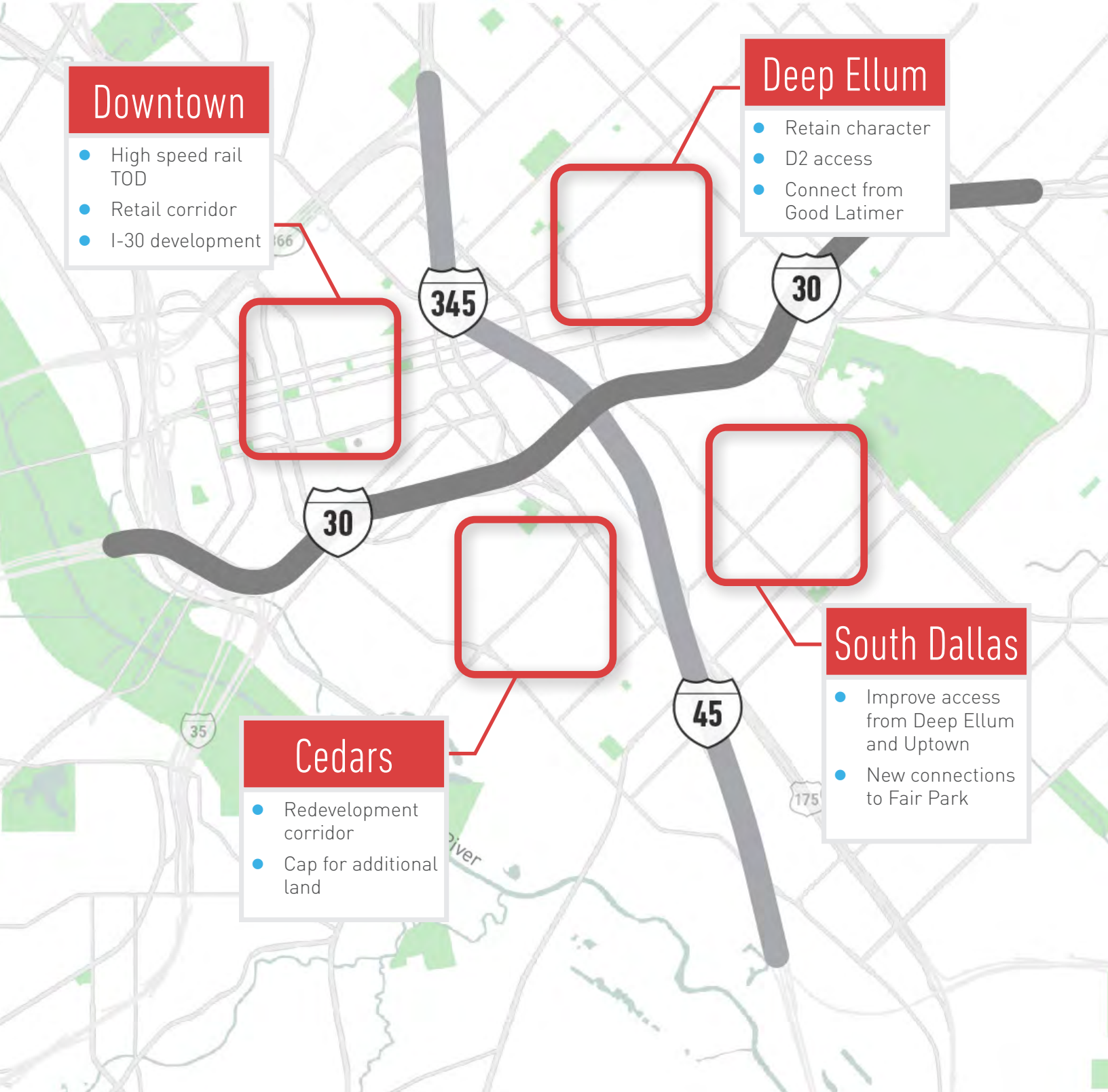
The four districts that we will discuss in this chapter are defined by their distinct character, development potential, and access to various transportation modes. Each one of them will benefit from the elevated highway being removed, but the benefits will vary depending on which option is implemented and from the existing context.

The Cedars District is already going to be impacted from the introduction of the proposed high speed rail station and development associated with new form of transit. The I-30 narrowing, trenching, and capping in certain areas will introduce new high rise developments and a dense node of commercial office and residential development. It will also transition Lamar into a retail corridor with new shops, restaurants, and smaller nodes of infill mixed-use residential. The extension of Riverfront Boulevard will also provide greater access into the Cedar District and into downtown.

The biggest impact from either highway option will be to the southern Dallas and Martin Luther King Boulevard corridor. Depressing the highway in

southern Dallas and capping it over MLK will add new land for development, parks, and better street connectivity. A new streetscape along MLK will help encourage additional economic redevelopment and better transit access to the neighborhood. The additional housing density will also create opportunities for more jobs in the area and increase the potential for a grocery store in southern Dallas.

Deep Ellum has been experiencing redevelopment for several years already, and the removal of I-345 will help unlock its western edge and reconnect it back toward downtown. The new D2 alignment and Uber headquarters buildings will help anchor that western edge, and the new connections from Cesar Chavez and Good Latimer will provide options for access. A strong, existing neighborhood character will need to be retained, but the business leaders and residents will help guide the growth of this district over time as the impacts of a different I-345 corridor are realized.



The Baylor and Fair Park district are improved from greater vehicular access from the north and the south. The existing elevated highway precludes options from entering these areas, but with the highway removed they benefit from new connections. This is especially

important for the hospital, since emergency travel time can be reduced from the resilient network of streets.

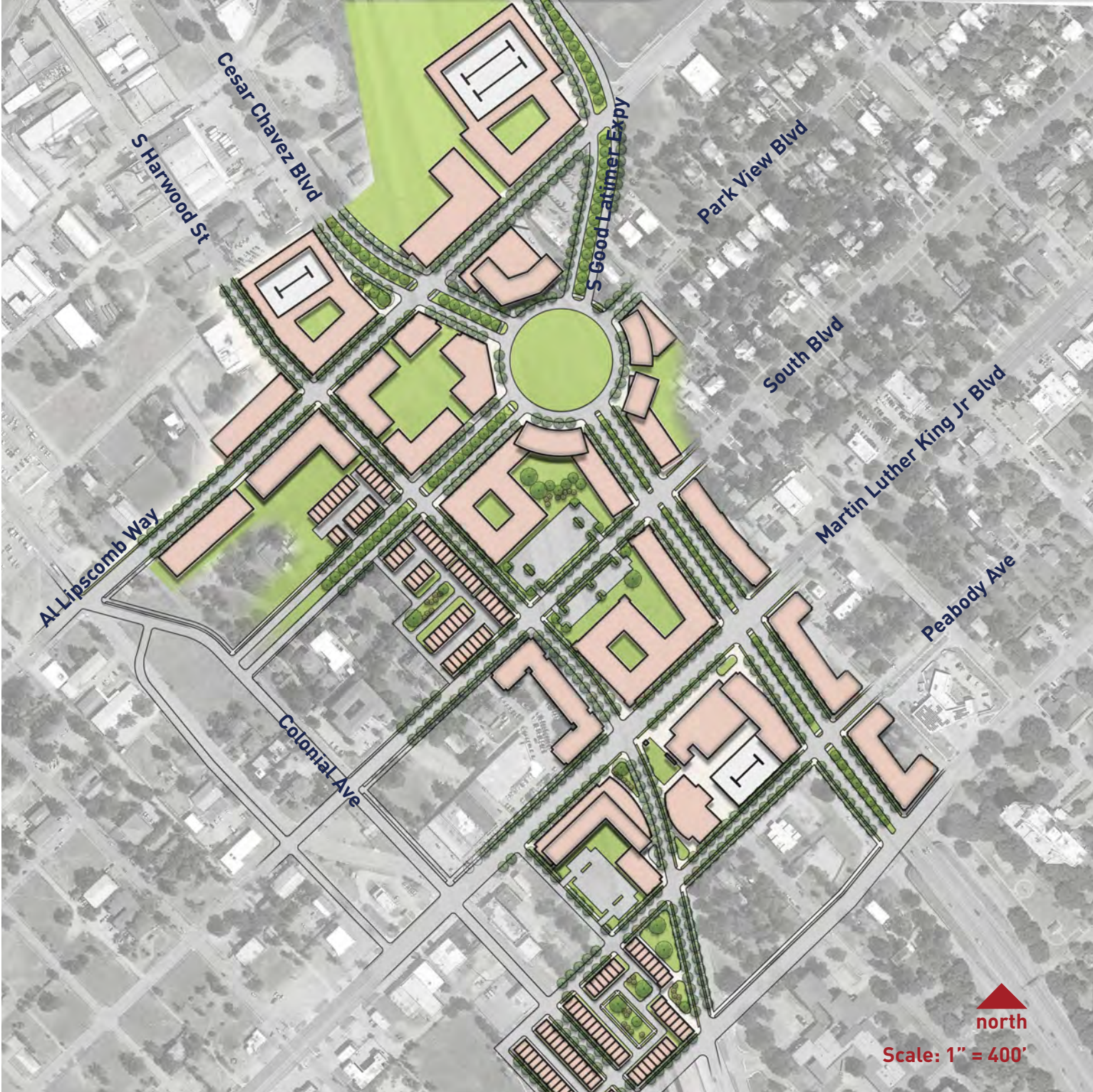
The condition in either of the highway removal options is similar in this district, because of the lack of options to divert traffic off of I-45 before it crosses the Trinity river. This means I-345 will be in a depressed highway condition from Cooper Street to Park Row Avenue. This will provide the opportunity for a highway cap remediation to cover the trench and have new land for development.

The new development and district can also be enhanced by a new streetscape project along MLK. This will help restitch the neighborhood back together and provide a linear node of new retail and housing development. The additional residential density will provide opportunity for a grocery store in this district and access to new, local jobs.

Key Initiatives

1. Cap the proposed depressed highway and develop with mixed-use and affordable housing options
2. New streetscape on MLK with separated bicycle lanes and better transit access
3. Restitch the neighborhood back together with connected streets
4. Add housing density, new retail, and grocery store options





Scale: 1" = 400'





The major challenge with the Baylor Hospital and Fair Park district is the restricted access that the highway creates for the campuses. The downtown street grid can be realigned to connect these two campuses back into the local network. This is most critical for the hospital so that emergency response time can be lowered and visitors can visit the hospital with intuitive routing. Just as I-345 needs to divert traffic in southern Dallas, it also needs some reduction in volume to the north. These new connections will allow more direct access to the hospital than the current patterns and relying on only a couple of streets to get from the highway to the hospital entrance.

Lastly, the realignment of the district streets will help correct the intersection at Main and Exposition and help align Commerce and Canton, so that there is a more direct connection from Deep Ellum into Fair Park.

Key Initiatives

1. Enhance access to Baylor Hospital for improved emergency response times
2. New connections from I-345 north through Bryan Place neighborhood
3. Correct the Main Street and Exposition intersection
4. Align Commerce and Canton directly from Deep Ellum to Fair Park



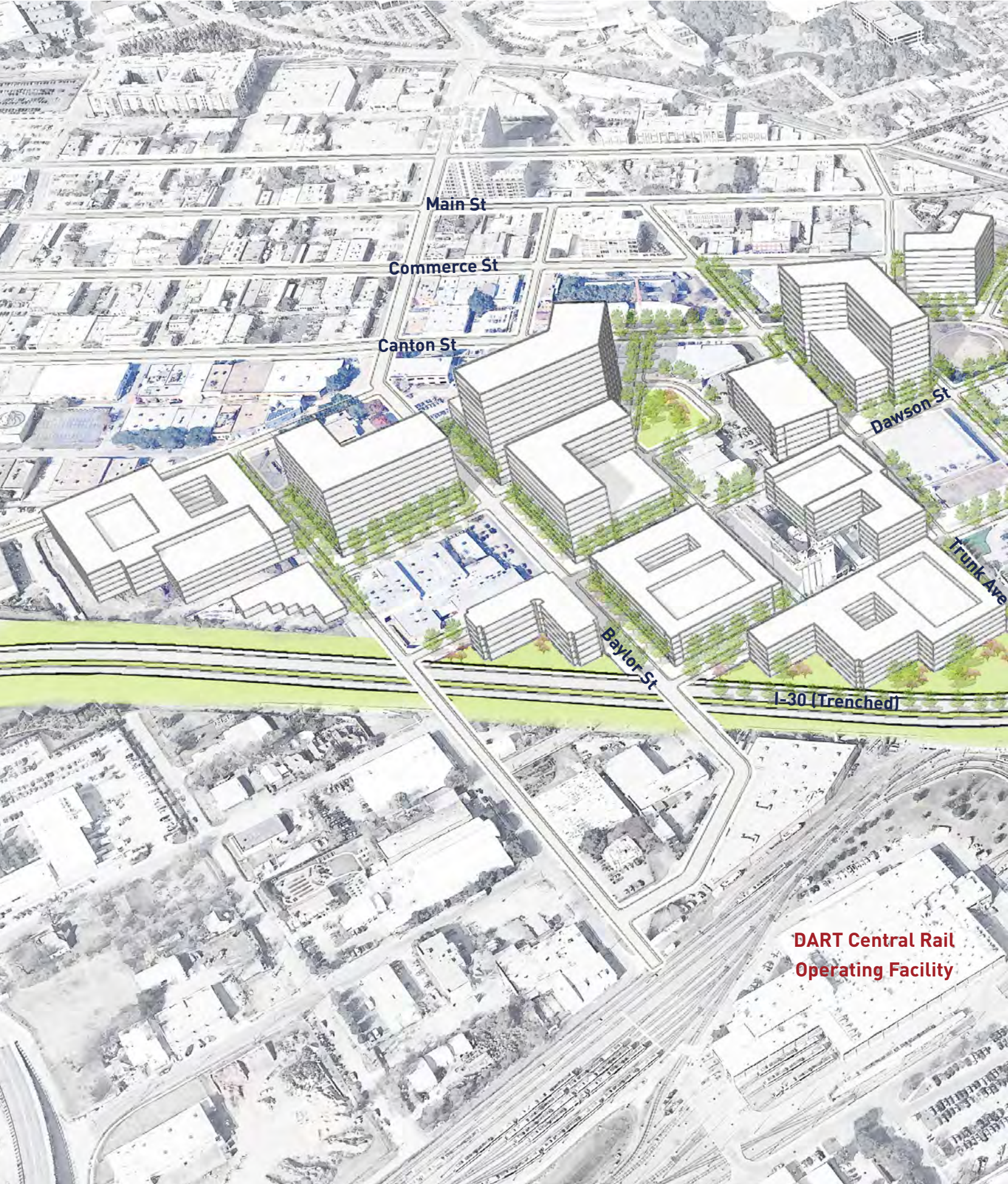


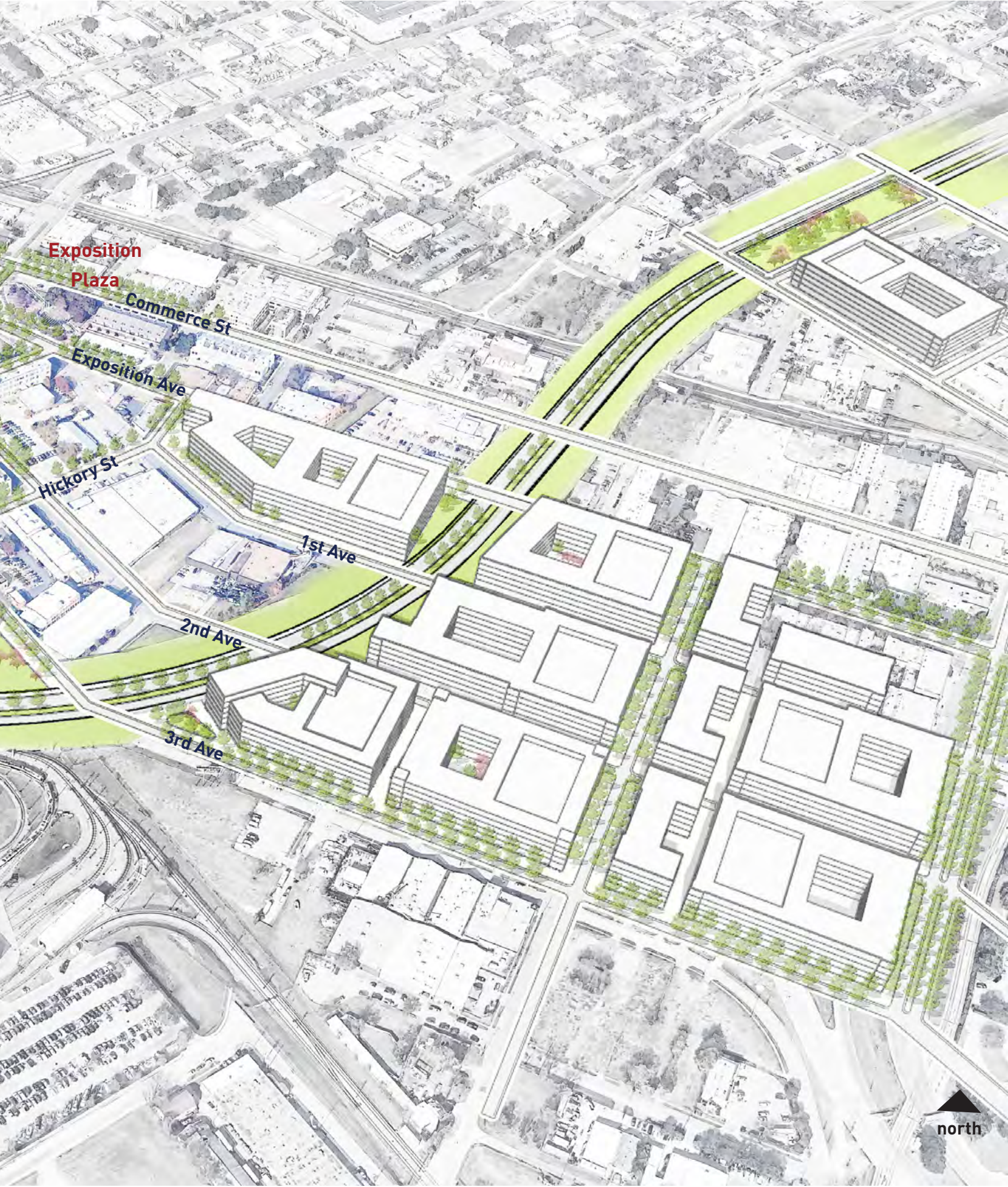
Exposition Plaza

DART Central Rail Operating Facility

north

Scale: 1" = 400'





Exposition
Plaza

Commerce St

Exposition Ave

Hickory St

1st Ave

2nd Ave

3rd Ave



The critical connections from Riverfront Boulevard and Lamar to the new high speed rail station are key to the station's success. Getting cross track access will depend on the final elevation and location of the station, but having redundant options to access the station will help with traffic flow in the district.

Another critical project for this district is the highway cap project associated with I-30. This new cap will better stitch the Cedars into downtown Dallas, but also provide land for dense urban infill development. This new node will provide housing, office, and parks directly adjacent to the Convention Center and City Hall.

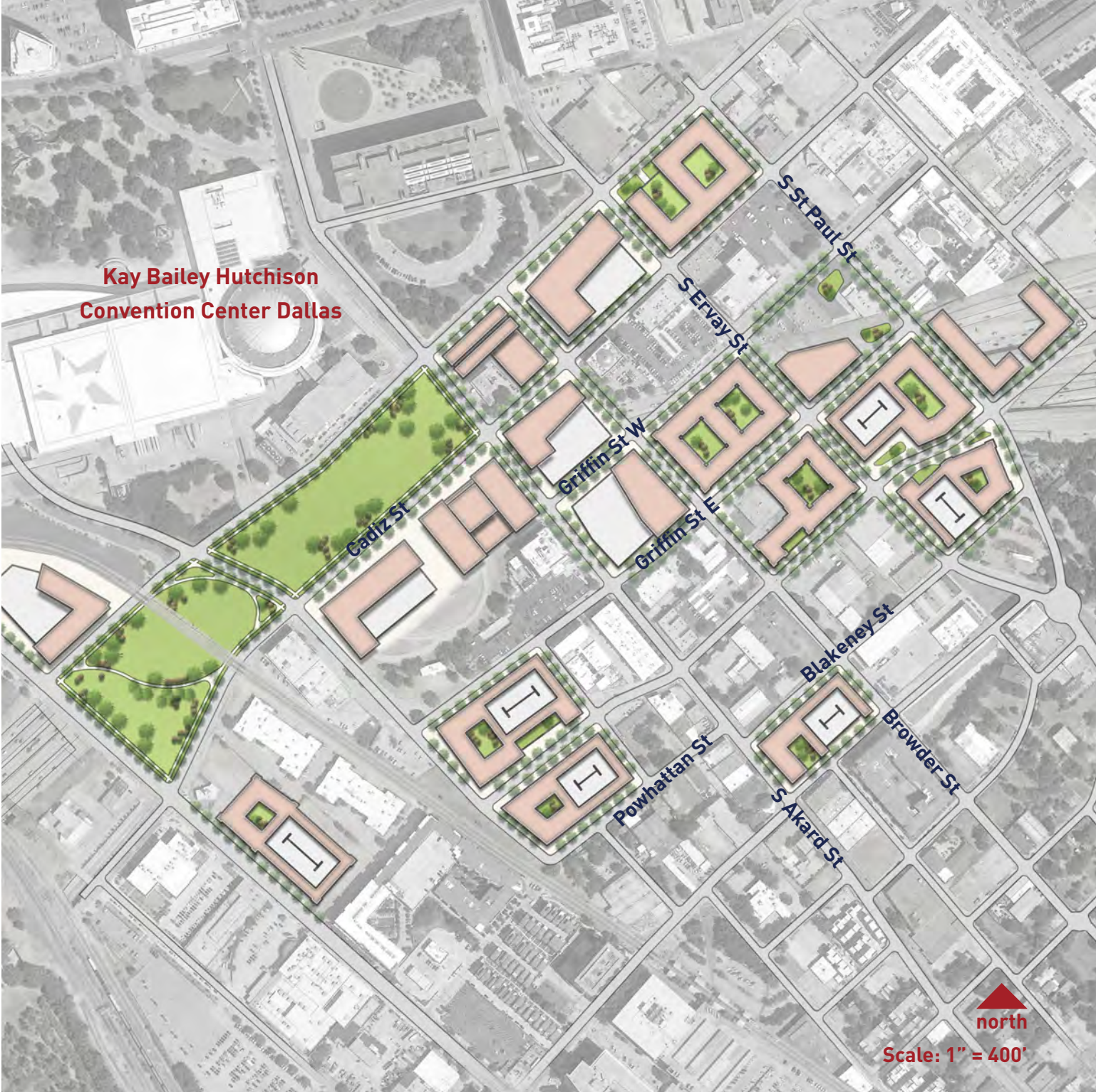
Lamar is a neighborhood arterial that is a large street, but has the capacity to do more than simply move vehicles. New mixed use developments and retail can be supported by implementing a streetscape project along Lamar.

Key Initiatives

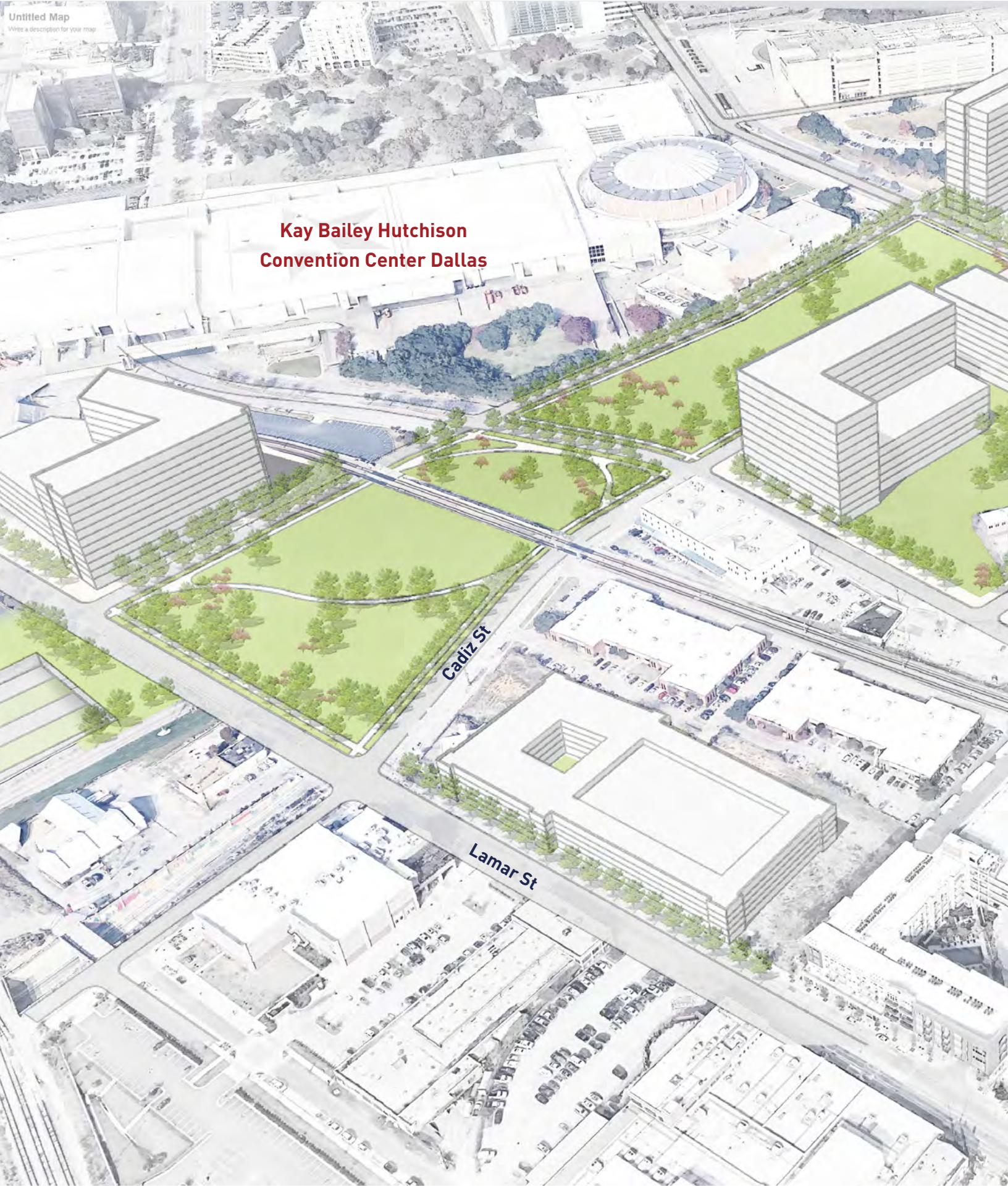
1. Connect Riverfront Boulevard to I-45 and connect to high speed rail station
2. Streetscape project along Lamar
3. Cap project at I-30 to connect into downtown and provide a new node of dense development
4. Enhance connectivity from Lamar to the high speed rail station



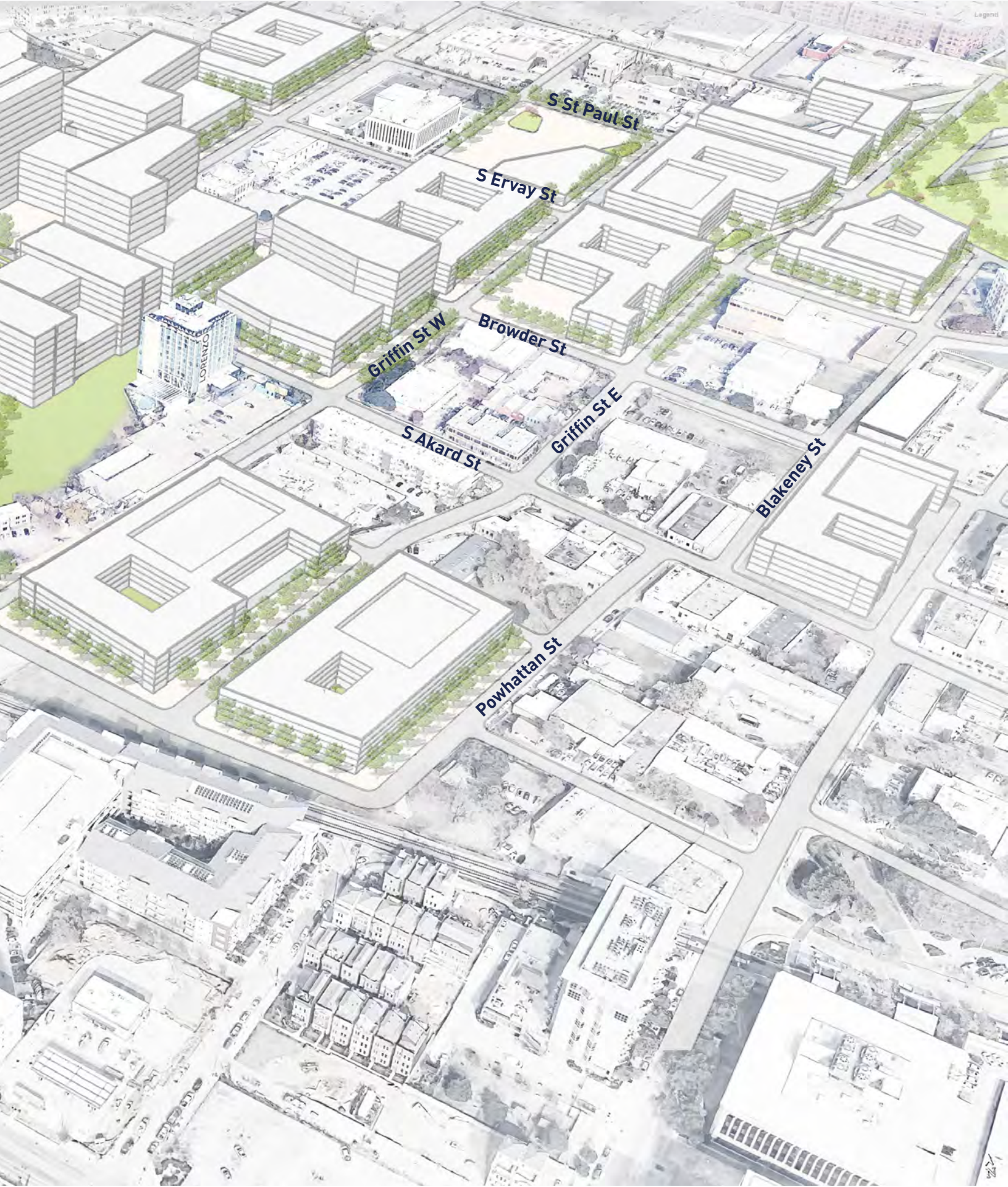
**Kay Bailey Hutchison
Convention Center Dallas**



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**Kay Bailey Hutchison
Convention Center Dallas**



Deep Ellum and Pearl district have already begun to see reinvestment and development come into the district before the highway has been removed. Uber located its second headquarters in Deep Ellum and an influx of housing and development has come to the area. The main concern for the residents and business owners is to keep their unique character and to not transition into a similar character to other parts of downtown or Uptown Dallas.

The new connected street grid and better access into Deep Ellum are the main benefits from the highway removal options. The historic street intersects with the highway today, so removing that barrier will open up the western edge of Deep Ellum.

The new D2 alignment and station location will further enhance the western edge connectivity and allow people to access the district by multiple modes of transportation, instead of just by automobile.

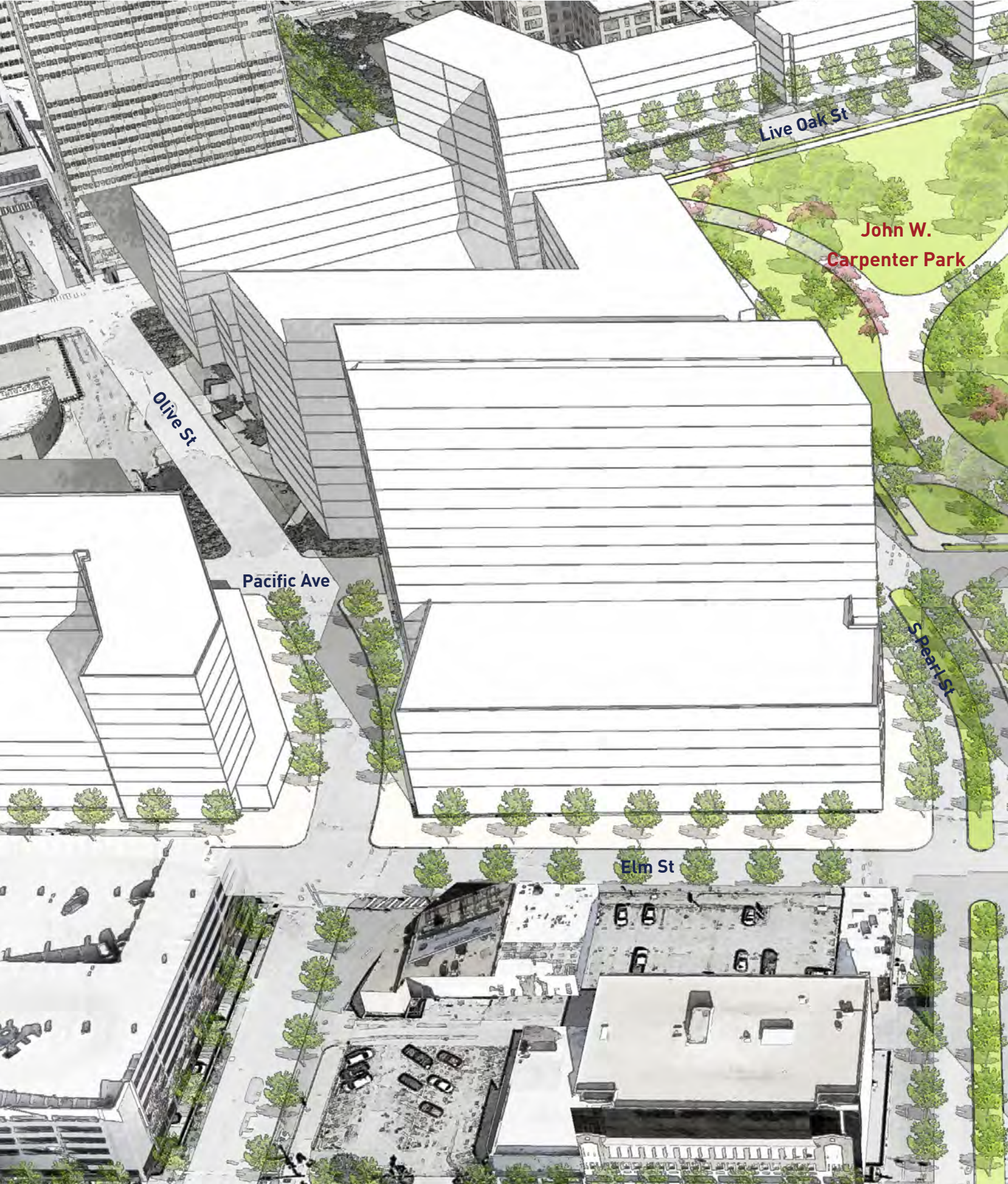
Key Initiatives

1. Maintain unique character within district
2. Improve connectivity into downtown on western edge after highway is removed
3. Streetscape projects to restore two-way traffic flow and add bicycle lanes
4. Coordinate new D2 alignment and station location with Carpenter Park, Uber HQ2, and impacts from the different I-345 options





Scale: 1" = 400'







4

SYSTEMS

BICYCLE FACILITIES

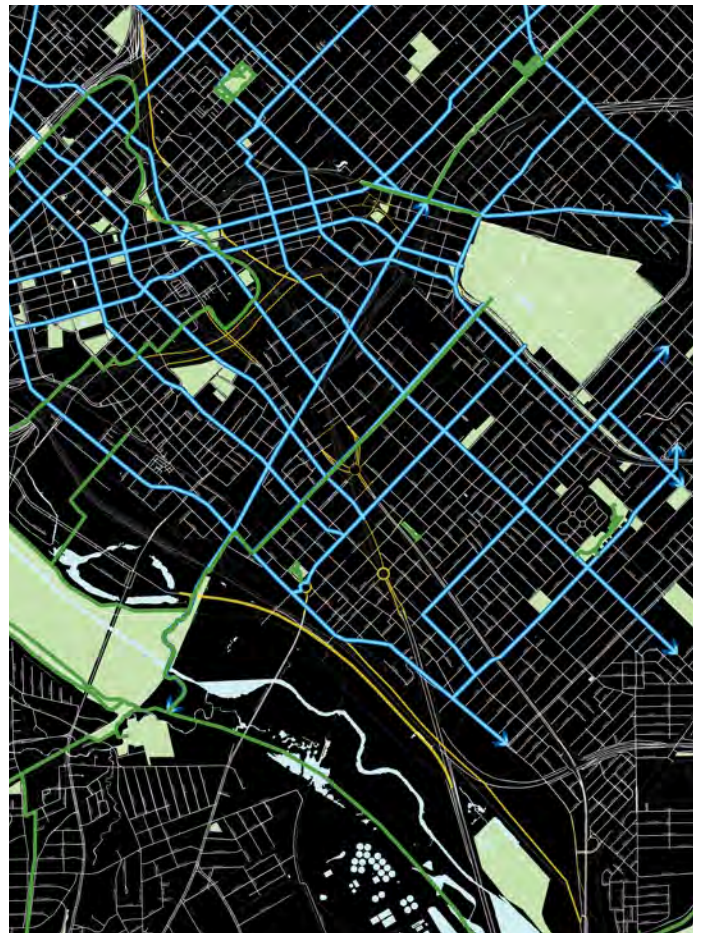
Now is a perfect time for Dallas to make a big push in becoming more bicycle friendly and make biking in the City as easy as possible. Many of the streets that are being impacted by the removal of I-345 can be re-imagined with new streetscapes and add high quality bicycle facilities to make them comfortable and safe for all ages and ability riders. A network of separated bicycle lanes and trails can connect all of Dallas with direct routes to and through the City.

The key to a robust bike network in Dallas is to rely on several parallel and perpendicular routes that create a grid of separated, comfortable bicycle facilities within a few blocks of every resident in Dallas.

The major north-south routes are Pine, MLK, Al Lipscomb Way, and an extension of the Santa Fe Trail along the existing railroad ROW. The east-west routes correspond with many of the streets impacted by the I-345 removal.

The Trinity River Levee Trail extension is parallel to Riverfront Blvd, Lamar, Ervay, Harwood, and Good Latimer all connect southern Dallas to downtown. Jackson also is parallel to Hwy 352 and connects Deep Ellum to Fair Park.

Finally, Canton and Main provide direct east-west connections through downtown, Deep Ellum, and Fair Park and ca connect to the Santa Fe Trail to the north.



THE PATH FORWARD

The I-345 Framework Plan document is by no means the final document or final discussion point. There are several ongoing efforts overlapping with the I-345 framework plan, such as further TxDOT-led technical traffic studies and City-led conversations about reallocating space under I-345. Further forums will be needed, such as collaboration with environmental justice groups and additional analysis on what project will work best for the Dallas-Fort Worth region. This document represents one of many steps.

In the big picture, moving forward is critically important. Our nation and the world need leaders who can weigh complex problems and deliver bold solutions. If we allow challenges to turn into roadblocks or we punt on responsibilities, other regions will gain a competitive advantage over Dallas. Decisions made now will define history's view on how leaders cared for their region; they will make the difference between more years of an uneventful archive and a meaningful shift in Dallas's history. This choice is ours.

We look forward on continuing to shape Dallas's future with y'all. Please reach out to us so that we can continue to collaborate and carve a path forward.



