



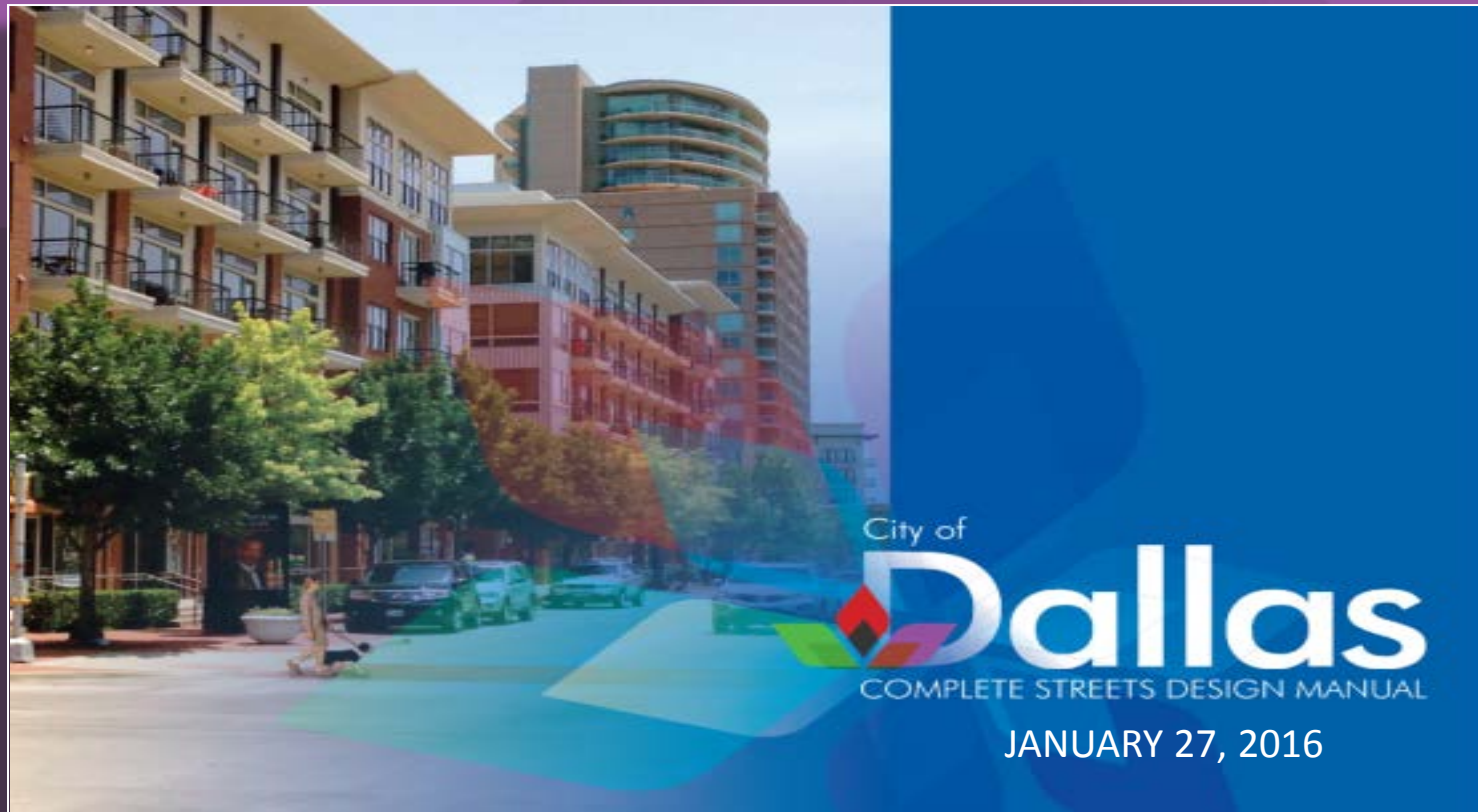
City of Dallas Complete Streets Program

SAME Infrastructure Forum

February 2, 2018

Complete Streets Design Manual

Adopted by City Council – January 27, 2016



What are Complete Streets?

- Streets that are safe and comfortable **for everyone**: all ages and abilities; motorists and bicyclists; pedestrians and wheelchair users; bus and train riders alike.
- Streets that are designed for **all modes** of travel including pedestrians, cyclists, public transit, automobiles, freight, emergency and private vehicles.
- To design the entire right of way to suit the surrounding neighborhood character based on public input.

What Complete Streets are not?

- One size fits all strategy for all streets;
- A design prescription, it's flexible and dependent on the adjacent context;
- A mandate for immediate retrofit of all roads;
- A policy to repair potholes

Complete Streets Policy-

- Provides strategic direction
- Changes how and who makes decisions about street design
- Promotes improvements over time
- Produces long-term results

Complete Streets Policy Is Not -

- A prescriptive solution for specific streets
- A mandate for immediate retrofit
- A silver bullet; other site specific issues must still be addressed:
 - Site specific land uses and architectural treatments
 - Site specific environmental concerns
 - Transportation demand management
 - Project specific community engagement

Complete Streets

Why Do They Matter?

- Complete Streets help our streets become more livable and walkable;
- Complete Streets have potential to be Economic Development catalysts;
- Complete Streets have the opportunity to transform areas by providing connectivity.

Benefits of Complete Streets

Although there may be an increased capital and maintenance costs to provide Complete Streets amenities on our roadways, there are many benefits of Complete Streets including:

- **Health Benefits**
- **Lowers Transportation Costs**
- **Environmental Benefits, particularly for stormwater**
- **Mobility Benefits, including street capacity**
- **Environmental Benefits, particularly for stormwater**
- **Economic and Fiscal Benefits**

Benefits the Elderly, Disabled and Children

Why

- Complete streets

- Traffic

- Pedestrians

- Bicyclists

- Public transit

- Community

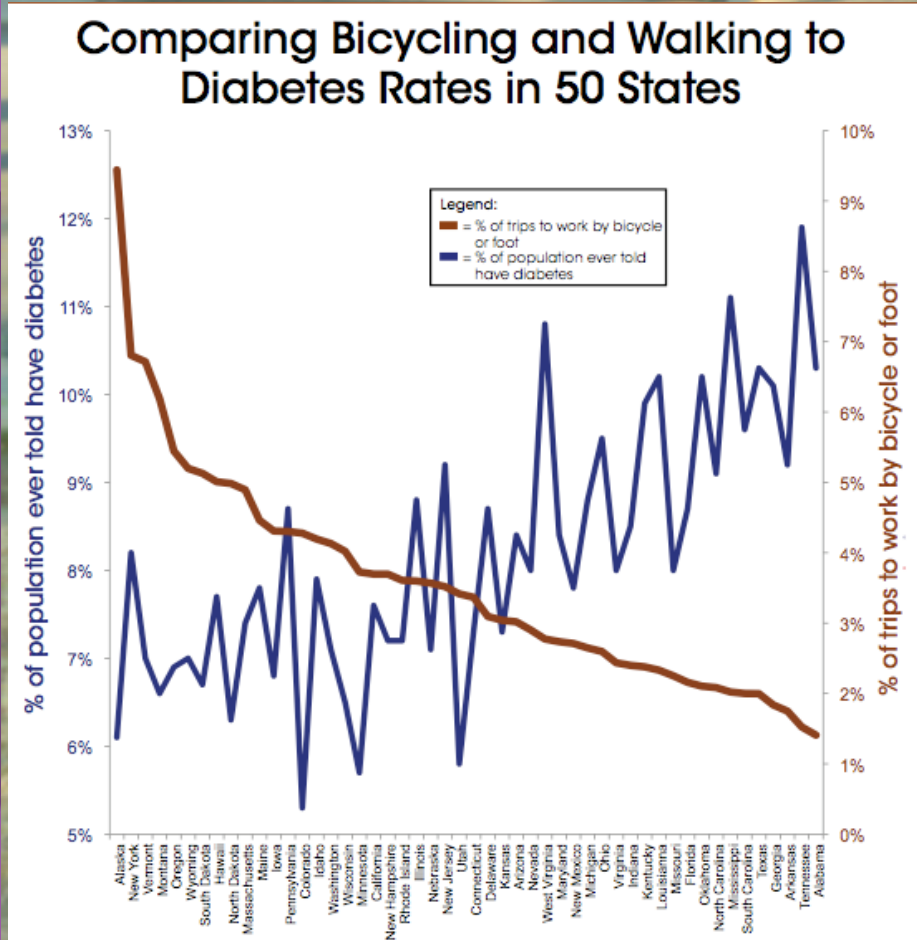
- Health



1.

Twenty (20) percent of Americans have a disability that limits their daily activities and more than 1/3 of our children are obese. Complete streets reduce isolation and dependence, and provides space to help children be physically active and gain independence.

Benefits Long Term Health



2.

States with the lowest levels of biking and walking have, on average, the highest rates of obesity and diabetes. Complete streets promote a healthy lifestyle.

Lowers Transportation Costs



3.

Complete Streets help lower expenses by replacing car travel with less expensive options like walking, riding bikes, and taking public transportation.

Reduces Stormwater Runoff



4.

Stormwater may wash pollutants, sediments and trash directly into natural water resources. Complete streets help reduce and filter stormwater runoff.

Benefits Street Capacity



5.

Complete streets help move more people while using the same amount of road space.

Complete Streets as an Economic Development Catalyst

Example from another city -

Washington, DC

Barracks Row/8th Street SE

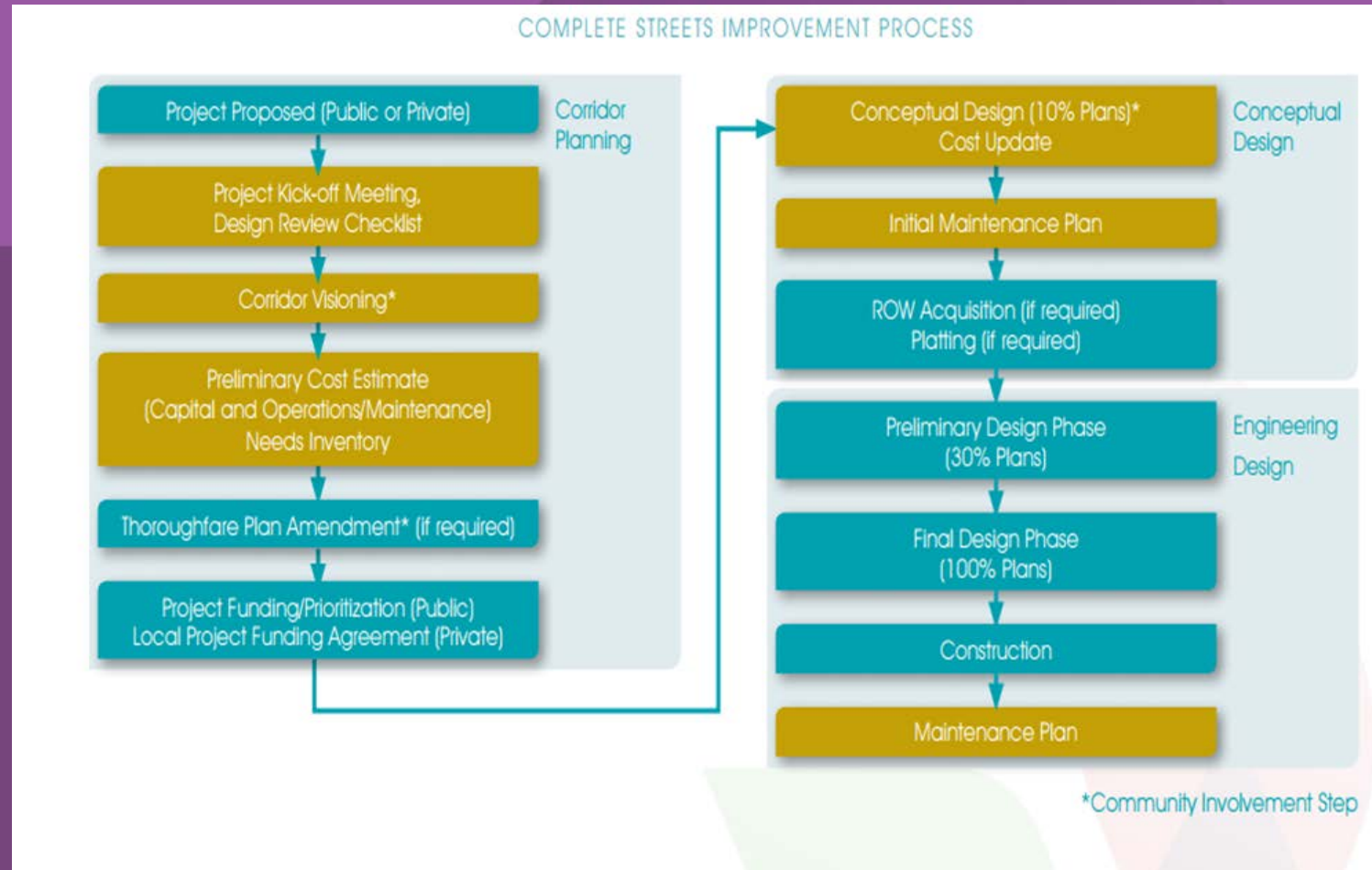
- Public street investment: \$8 million
- Results:
 - Private investment over two (2) years: \$8 million
 - Thirty two (32) new businesses and \$80,000 in annual sales tax
 - Increased property values

An analysis of the economic impacts from Dallas' pilot Complete Street Projects is underway.

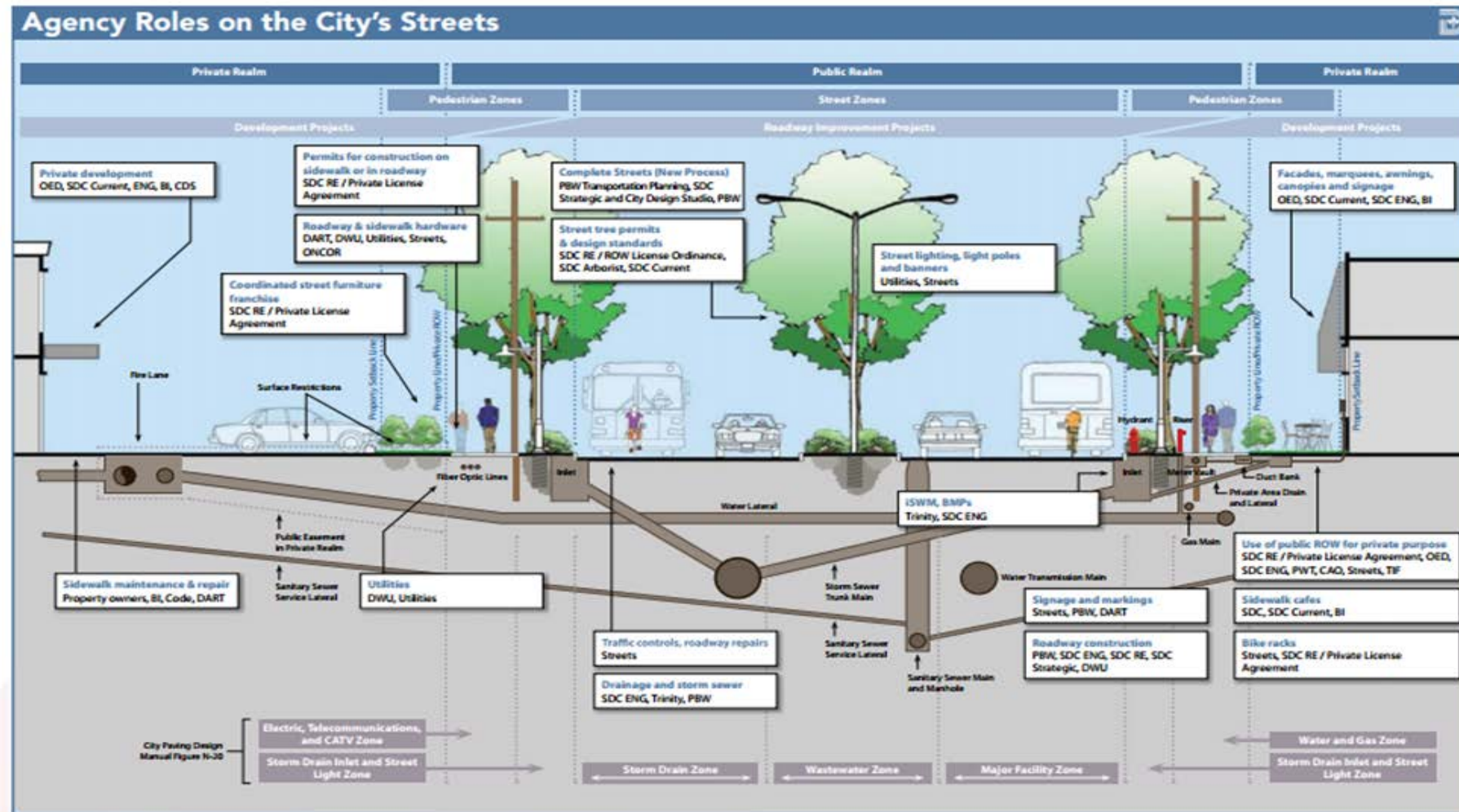


Complete Streets: Multi-Disciplinary Coordination and Community Engagement Tools

Complete Streets Project Implementation with Public Involvement



Multi-Disciplinary Planning and Implementation



Departments/Agencies Involved in Roadway Planning and Construction

- City Attorney's Office
- Code Compliance
- Dallas Area Rapid Transit
- Dallas Police Department
- Delivery Companies and Valet Companies
- Dallas Water Utilities
- Dallas Fire Rescue
- Housing and Community Services
- Office of Economic Development

Departments/Agencies Involved in Roadway Planning and Construction-Continued

- Public Works
- Planning and Urban Design
- Sanitation
- Sustainable Development and Construction
 - Arborist, Building Inspection, Current Planning, Engineering, Real Estate Division, Strategic Planning
- Street Services
- Trinity Watershed Management
- Utility Companies
 - Atmos, Verizon, ATT, Oncor

Community Workshops

- ▶ *Interactive workshops*
- ▶ *Citywide participants engaged*



Knox Street Demonstration

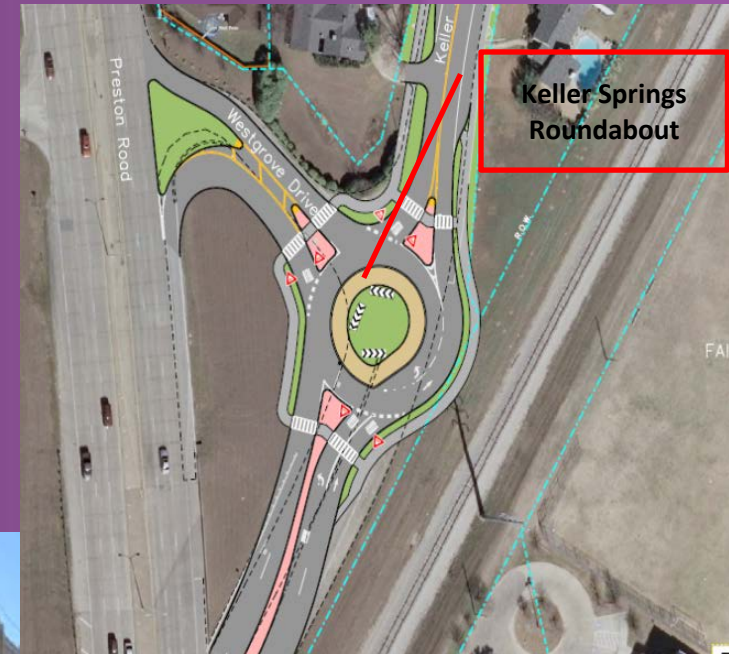
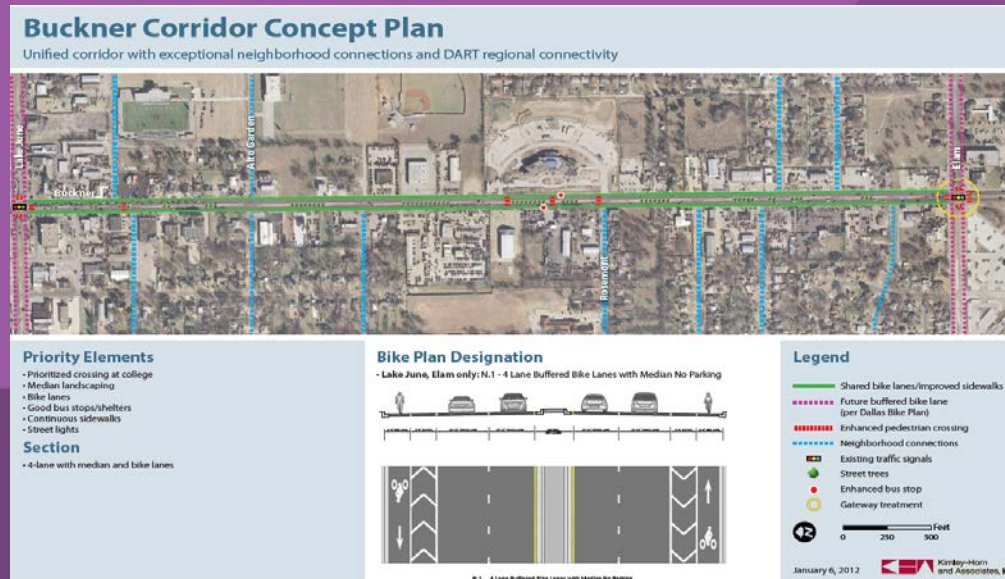


Four-day installation from Katy Trail to McKinney Ave

New design concept tested in real conditions with community feedback and technical evaluation

Complete Approach, Different Outcomes

One size/design does not fit all



New Policy Development

Complete Streets Design Manual

- Street design policies and guidelines
- Multi-disciplinary project planning and implementation process
- Complete Street Vision Map overlay



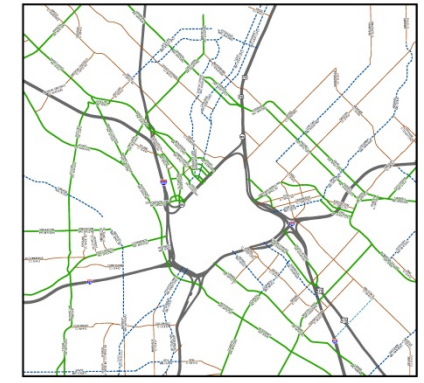
Street Design Policy and Guidelines

- Intended to work alongside the Dallas Thoroughfare Plan and the Dallas Development Code to provide the policy framework for street design
- All new projects that impact the street right-of-way will consider the context of the roadway, community design priorities, the roadway's functional classification, and the drainage needs



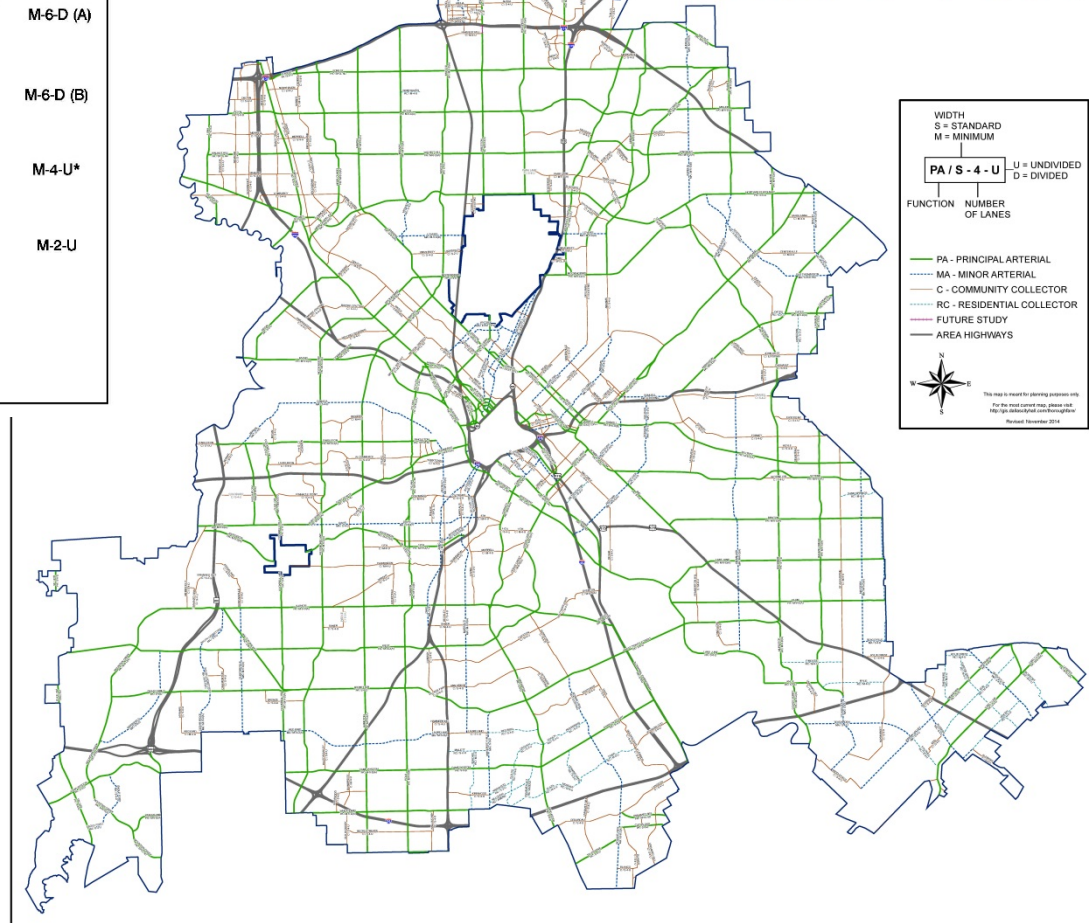
Planning & Urban Design
Department

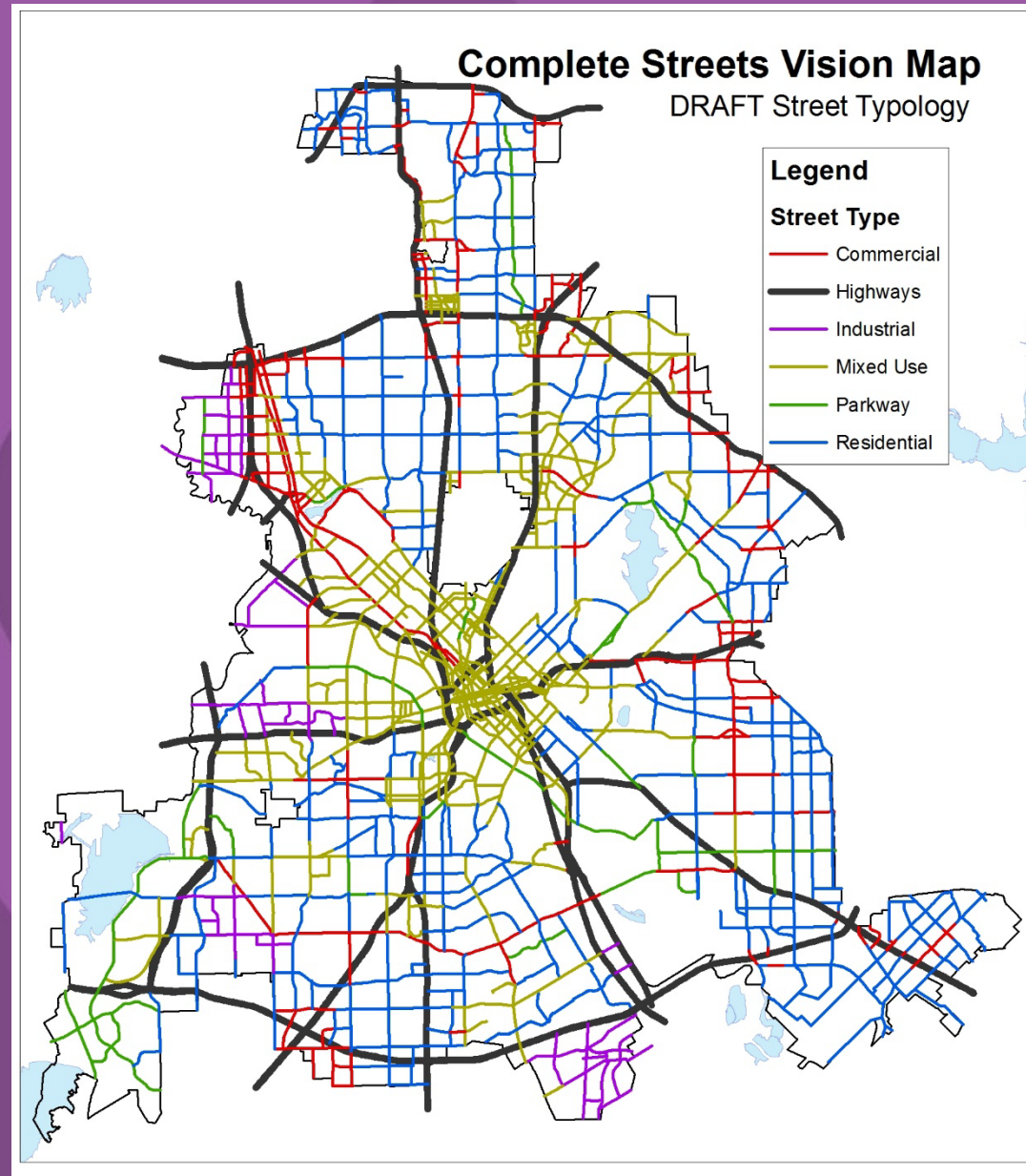
City of Dallas Thoroughfare Plan



STANDARD ROADWAY SECTIONS		MINIMUM ROADWAY SECTIONS	
S-8-D		M-6-D (A)	
S-6-D		M-6-D (B)	
S-4-D		M-4-U*	
S-4-U		M-2-U	
S-2-U			

*M-4-U can be striped and operated as 2 or 4 lanes.





*Minor Streets are not mapped

Complete Streets Typology

- Complete Streets Typology considers classifying streets based on their context and function and seeks to accommodate all modes.
- Complete Streets Typologies include:
 1. Mixed-Use Streets
 2. Commercial Streets
 3. Residential Streets
 4. Industrial Streets
 5. Parkways

Mixed-Use Streets

Mixed-Use streets serve a diverse mix of land use types, including Downtown and Main Streets.

Example: McKinney Avenue

Context Design Emphasis

- Design for slower speeds
- Design that supports high levels of walking, bicycling and transit
- Accommodates some on-street parking



Commercial Streets

Commercial Streets serve mostly commercial areas with lower densities.

Examples: Preston Road at shopping centers and Harry Hines

Context Design Emphasis

- Maintain automobile capacity
- Manage egress and ingress
- Design to serve faster moving vehicles
- Provide for pedestrian safety at intersections and through landscaping buffers between pedestrian and moving traffic
- Less use of on-street parking



Residential Streets

Residential streets serve residential land uses as well as schools, churches, and businesses within residential neighborhoods.

Examples: Winnetka Avenue, Royal Lane from Inwood to Marsh

Context Design Emphasis

- Safety for pedestrians and bicyclists
- Design for slower speeds to encourage walking and cycling
- Provide increased sidewalk buffering from traffic through on-street parking, bicycle lanes, and landscaping



Industrial Streets

Serve industrial corridors and are built to accommodate trucks and larger vehicles.

Examples: Bonnie View Road and Singleton from Westmoreland to Loop 12

Key Features

- Emphasis on managing large truck traffic
- Ability to safely mix industrial traffic with vehicular and pedestrian traffic



Parkways

Parkways serve natural areas where there is a desire to maintain or create a park-like feel to the roadway.

Example: Turtle Creek Boulevard

Context Design Emphasis

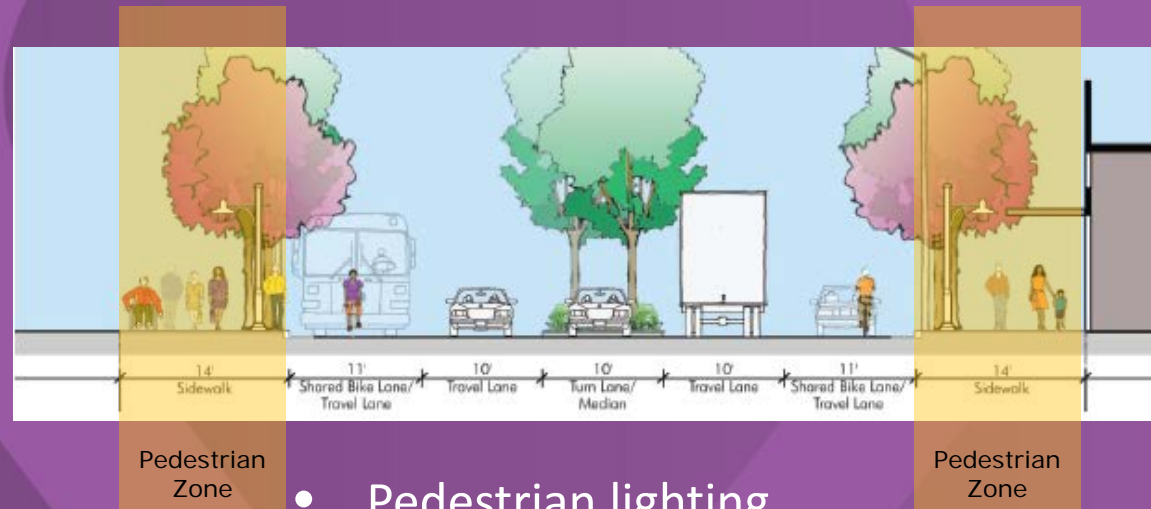
- Providing for vehicular, bicycle and pedestrian access to natural areas
- Landscaped medians and edges
- Shared use bicycle and pedestrian pathways



Pedestrian Zone Design Guidelines

Design guidelines for elements between the street curb and the building face

- Street Furniture
 - Seating
 - Bike racks
 - Bollards
 - Recycling/garbage bins
 - Newspaper racks
- Transit Stops
- Driveways
- Urban Open Space
 - Plazas, pocket parks, parklets
 - Sidewalk cafes

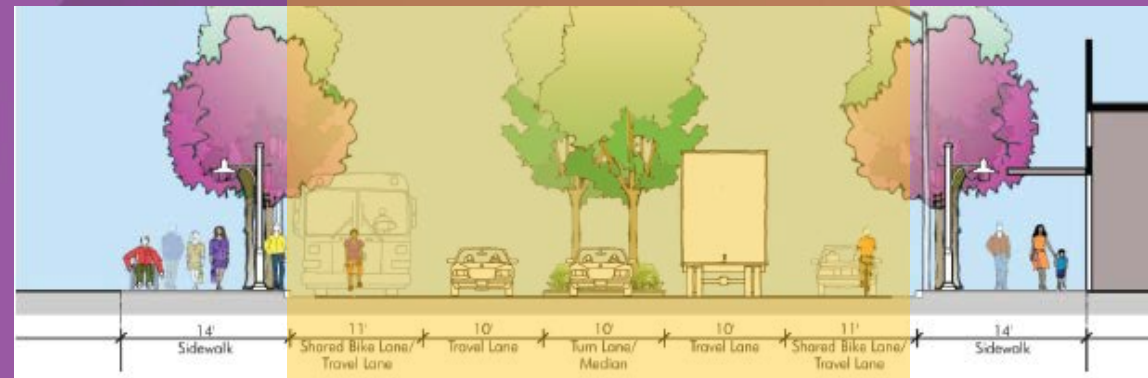


- Pedestrian lighting
- Informational kiosks
- Way-finding and signage
- Public Art
- Landscaping
- Banners

Street Zone Design Guidelines

Design guidelines for street elements between the curbs

- Slower speeds
- Crosswalks
- Couplets
- Slip streets
- Shared streets
- Bikeways
- On-street parking
- Transit lanes
- Road diets
- Chicanes
- Raised Intersections

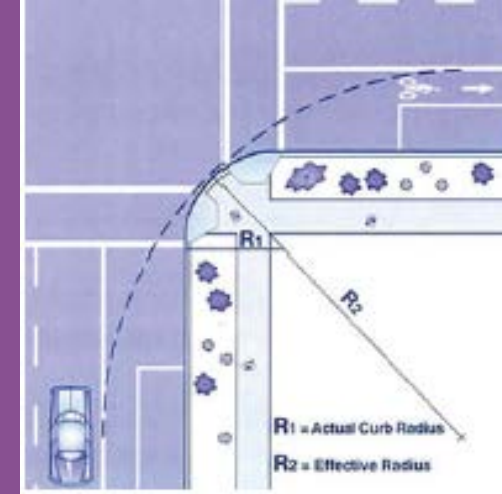


- Median / islands
- Paving treatment
- Street lighting
- Crosswalks
- Banners

Intersection Zone Design Guidelines

Multi-modal design guidelines for street intersections

- Controlled and uncontrolled intersections including roundabouts
- Geometric design guidance
- Key pedestrian treatments
- Key bicycle treatments
- Key transit treatments



Green Street Design Guidelines

Design guidelines for green drainage elements

- Landscaping
 - Bioretention
 - Infiltration trenches
 - Planter boxes
 - Enhanced swales
 - Landscaped medians
 - Underground detention
- Pavement
 - Permeable pavement
 - Permeable asphalt/concrete
 - Permeable pavers



Complete Street Projects Examples

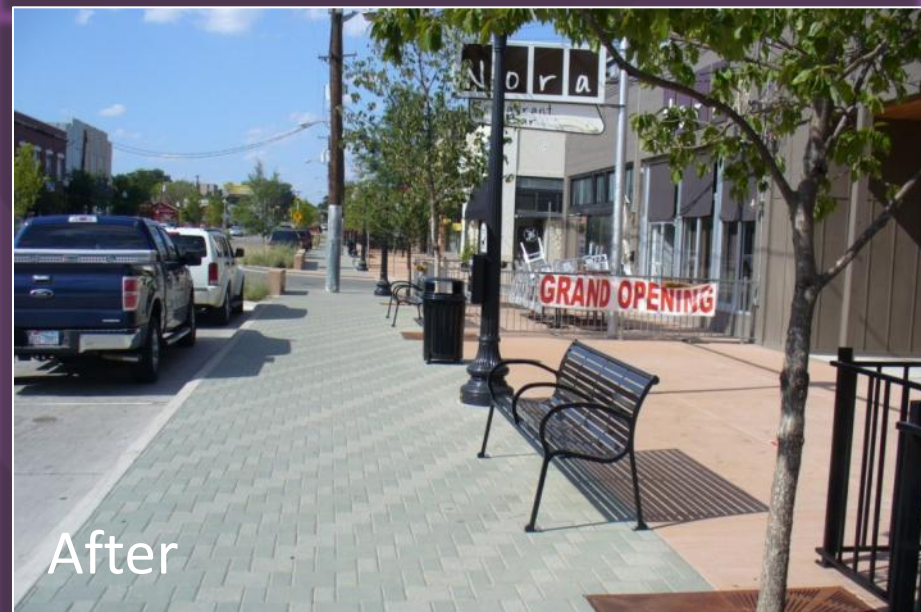
Complete Streets Funded in 2012 Bond Program

- Greenville Avenue
- Bishop Street
- Herbert Street
- Congo Street
- Knox Street
- Henderson Street
- Elm Street
- Bexar Street
- Houston Street



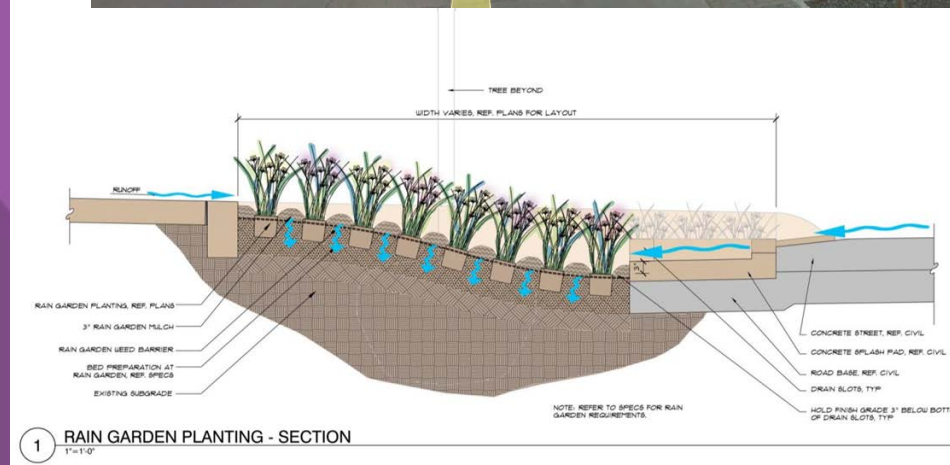
Greenville Avenue

- Indented parallel parking replaced angled parking to allow more space for outdoor patios
- Reduced traffic lanes enabled wider sidewalks and street furniture
- Neighborhood input on making the tradeoff decisions



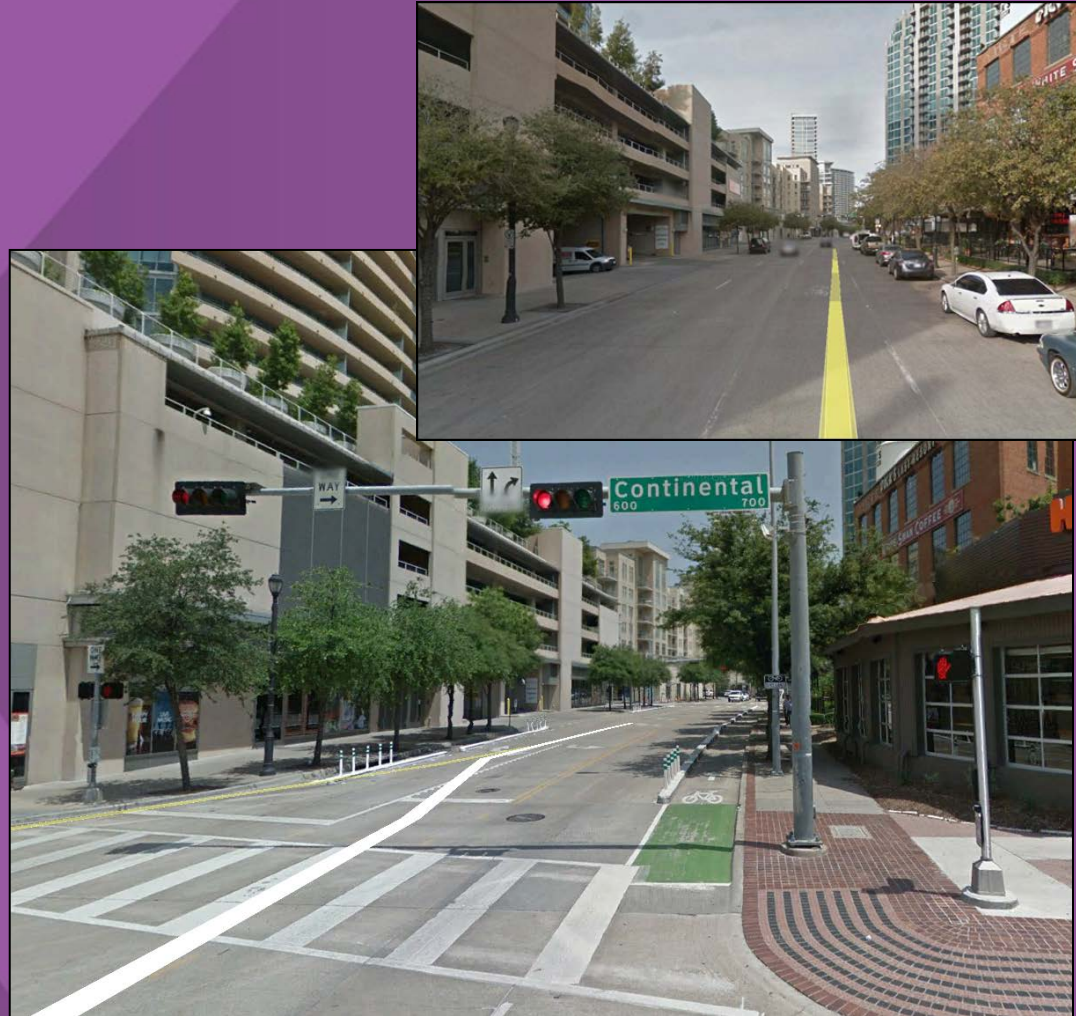
Elm Street in Deep Ellum

- Travel lanes reduced from four to two
- Reduced traffic lanes enabled wider sidewalks, patios, and street furniture
- Trees and landscaping added to improve aesthetics, provide shade, and filter stormwater runoff



Houston Street

- Street converted from one-way to two-way operation
- Reduced traffic lanes enabled the addition of bike lanes
- Enhanced sidewalks and intersection treatments added



Complete Streets Policy Influencing Highway Projects

- Southern Gateway Highway Project, IH-35E
- Includes an enhancement, Southern Gateway Public Green
- Construct a deck above the highway between Marsalis Avenue and Ewing Streets to support public open space
- Dallas City Council passed a Resolution to TxDOT
- All bridges crossing the highways will be enhanced to accommodate multi-modal connectivity and designed to be consistent with the City's Complete Streets Design Manual;

Ewing at IH-35E Bridge

Existing Ewing Avenue Bridge



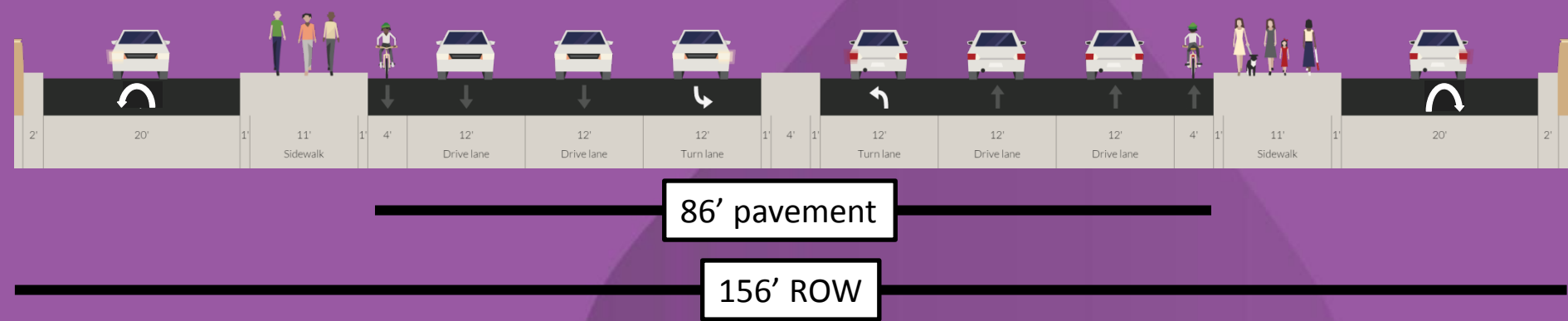
TxDOT Proposed Ewing Avenue 117.5'



COD Proposed Ewing Avenue 117.5'



TxDOT Proposed Marsalis Avenue



COD Proposed Marsalis Avenue



Retail ->



Questions and Discussion



Thank You

Tanya Brooks, Assistant Director
City of Dallas
Department of Transportation
Mobility Planning