



City of Dallas Complete Streets

SPROW Education Forum October 30,
2014



Introduction

- Complete Street Evolution
- City of Dallas Presenters
 - Peer Chacko, Assistant Director, Planning & Neighborhood Vitality Dept..
 - Mark Brown, Sr. Planner, Planning & Neighborhood Vitality Dept..
 - Evan Sheets, Sr. Planner, Dallas Design Studio

City of Dallas recent Bond Programs

- Recent Bond Programs
 - 2003 Bond Program
 - 2006 Bond Program
 - 2012 Bond Program

Bond Programs

- A General Obligation Bond (GO) is a voter approved bond
- Conducted every 3-6 years depending on the needs, economy and urgency
- Bond Programs are used to fund capital projects with useful lives of at least 20 years or the life of the bonds. Examples include:
 - Street & thoroughfare improvements
 - Flood protection & storm drainage improvements
 - Infrastructure to support economic development
 - Public health and safety facilities
 - Park & recreation facilities
 - Library facilities & Cultural Arts facilities

2003 Bond Program

- Pre complete street era
- Basically built the standard cross sections





2006 Bond Program

- No complete street project category
- Some project scopes evolved to complete streets with City Planners, Design Studio and Stakeholder input



2006 Bond Program

- 2006 BP Complete Street **Convert** Projects
 - Greenville Avenue
 - Bishop Street
 - Herbert Street
 - Congo Street
 - Locust Street
 - Elm Street
 - Bexar Street
 - Beckley-Commerce Intersection

Complete Street - Lower Greenville Project, Post-construction



Complete Street - Lower Greenville Project, Post-construction



Complete Street - Bishop Avenue, Post-construction



Complete Street – Congo Street Project, Post-construction



Bioswale and landscaping



Permeable pavement in recessed parking areas

Complete Street- Herbert Street Project, Post-construction



Reduced pavement width to 18', added indented parking, landscaping, increased green space, improved walks

2012 Bond Program

What are we doing different with in the 2012 BP?

- When forming the Bond Program an effort was made to determine what streets are truly candidates for the Urban-Complete Street conversion
- Staff is tasked to work with stakeholder groups and pursue a context and environmental sensitive design
 - Team
 - City Planners
 - Design Studio
 - Transportation planners
 - Stakeholders
 - Public works

Complete Streets funded in 2012 Bond Program

| | |
|-------------------------------------------------------------------------------------|-------------|
| Bishop from Jefferson to 8th | \$3,061,300 |
| Cedar Springs Ave from Douglas to Oak Lawn | \$1,304,100 |
| Davis Street from Beckley to Hampton | \$979,600 |
| Grand from R.B. Cullum to Good Latimer | \$2,449,000 |
| Greenville Ave Retail Areas | \$820,400 |
| Greenville from Belmont to Bell and from Alta to Ross | \$3,673,500 |
| Henderson St from US 75 to Ross Ave | \$1,312,100 |
| Jefferson Blvd from Crawford to Van Buren | \$1,469,400 |
| Knox from Katy Trail to US 75 | \$734,700 |
| Lamar (S) from IH 45 to Hatcher | \$4,898,000 |
| Main St from Good Latimer to Exposition | \$734,700 |
| Meadowcreek Drive Arapaho to Campbell - pedestrian and traffic calming improvements | \$271,800 |
| MLK from R.B. Cullum to S.M. Wright | \$468,900 |



2012 Bond Program

What are we doing different with in the 2012 BP?

- For the Complete Street projects where there is not a settled project vision, we have the City Planners and Design Studio manage the project thru the conceptual planning phase and then remain on the oversight team thru Design and Construction

Dallas Complete Streets

Dallas Complete Streets



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What Drives Change in Trip Choices?

Technological
Innovation

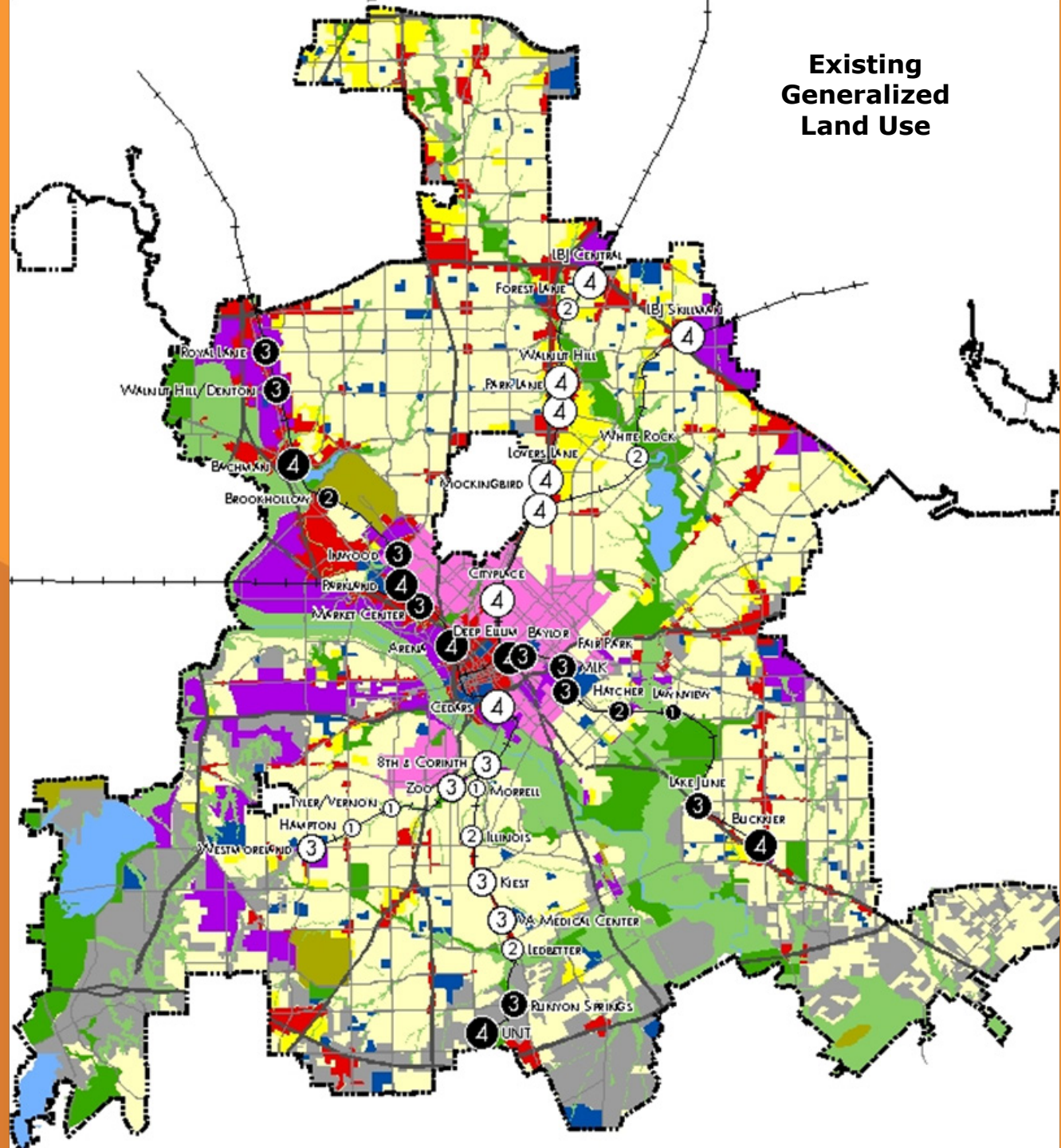
Land Use
Patterns

Public
Infrastructure

- Pace of change is limited by the least nimble factor

Dallas Land Use

- 1.2 million people sprawled over 380 square miles
- 1 million jobs concentrated at key nodes and corridors



Dominant Land Use Pattern



Historic Land Use Pattern



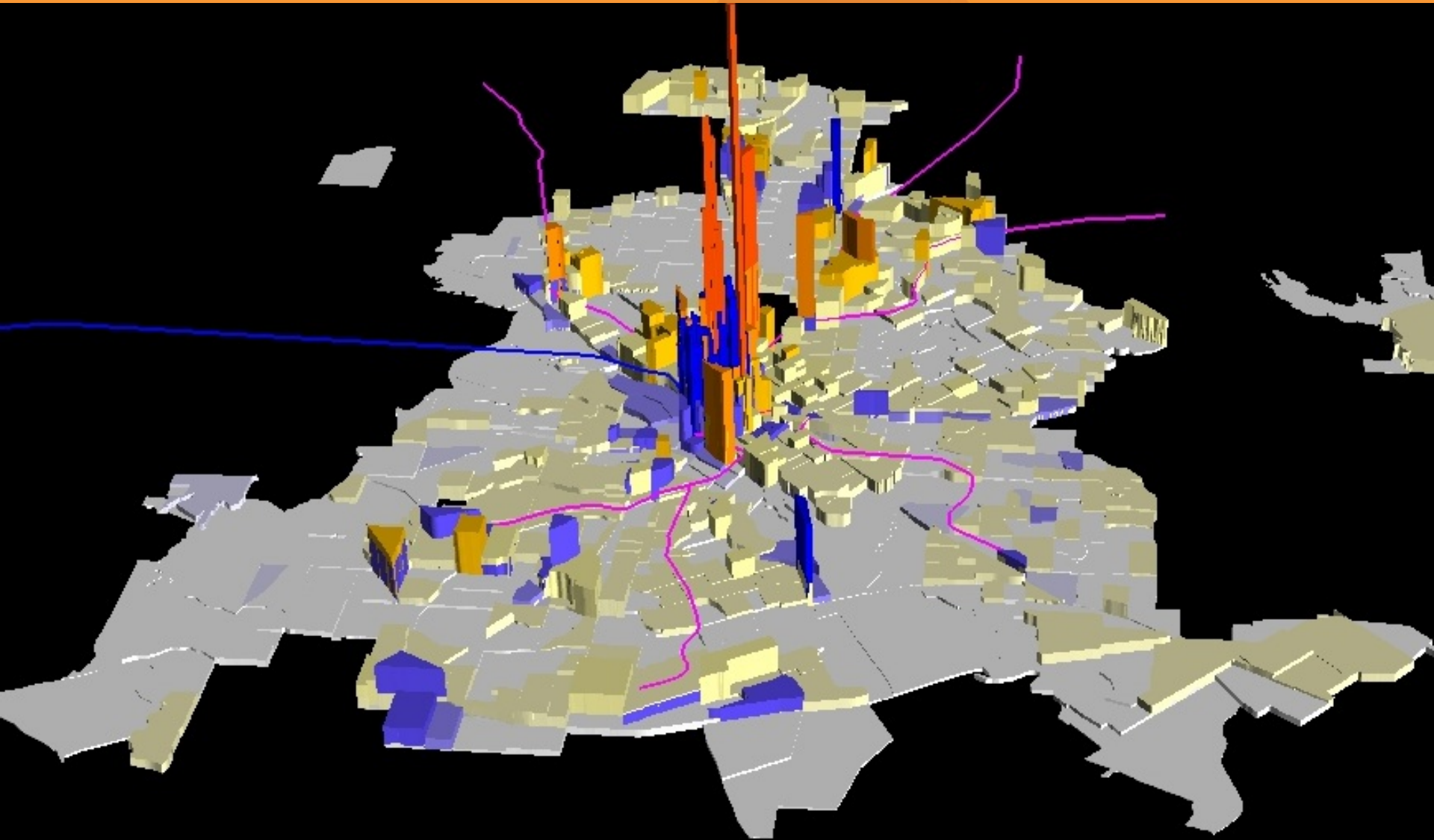
Bishop Avenue

Emerging Land Use Pattern



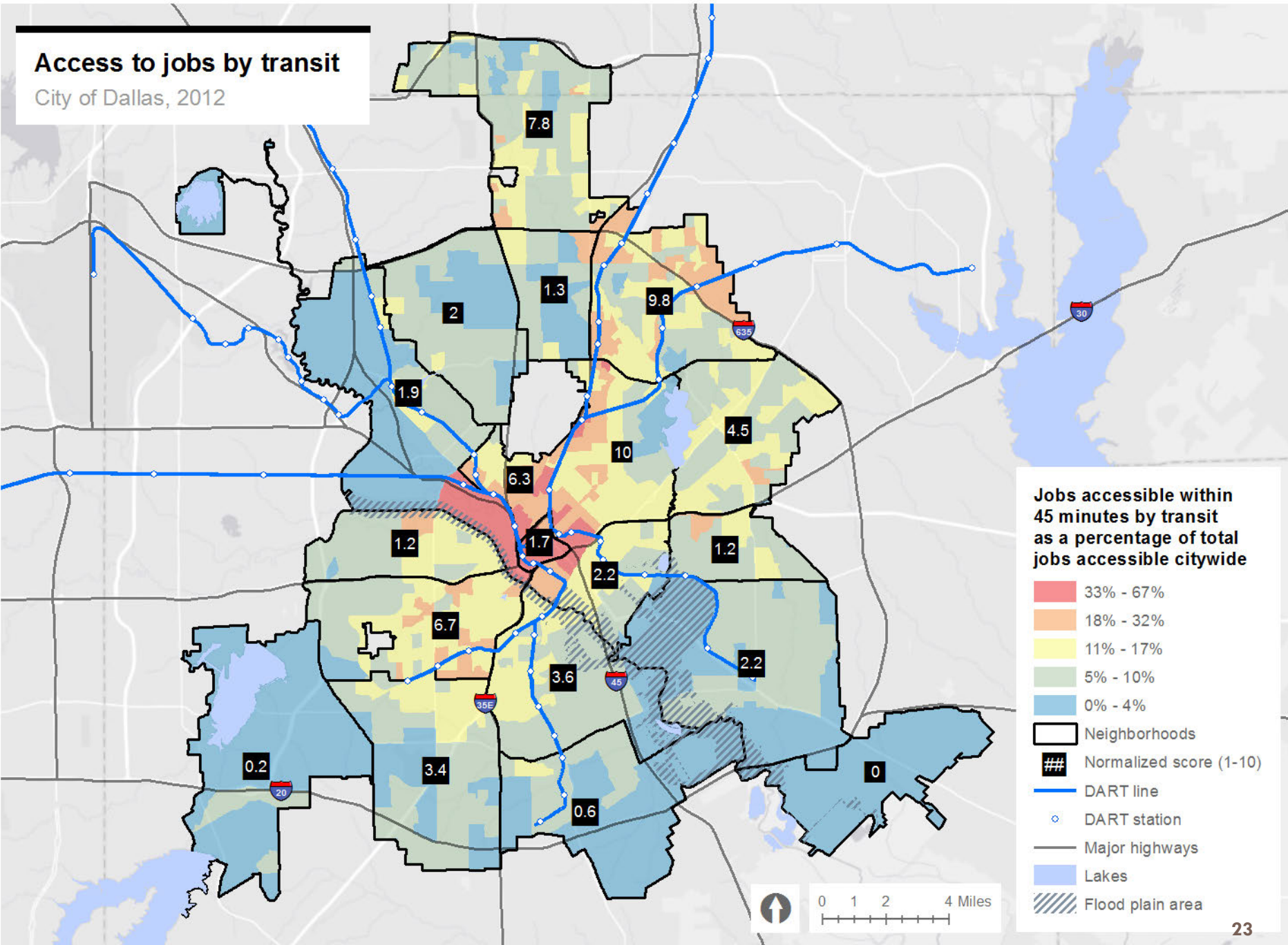
West Village

Transit Accessibility Varies



Access to jobs by transit

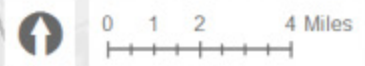
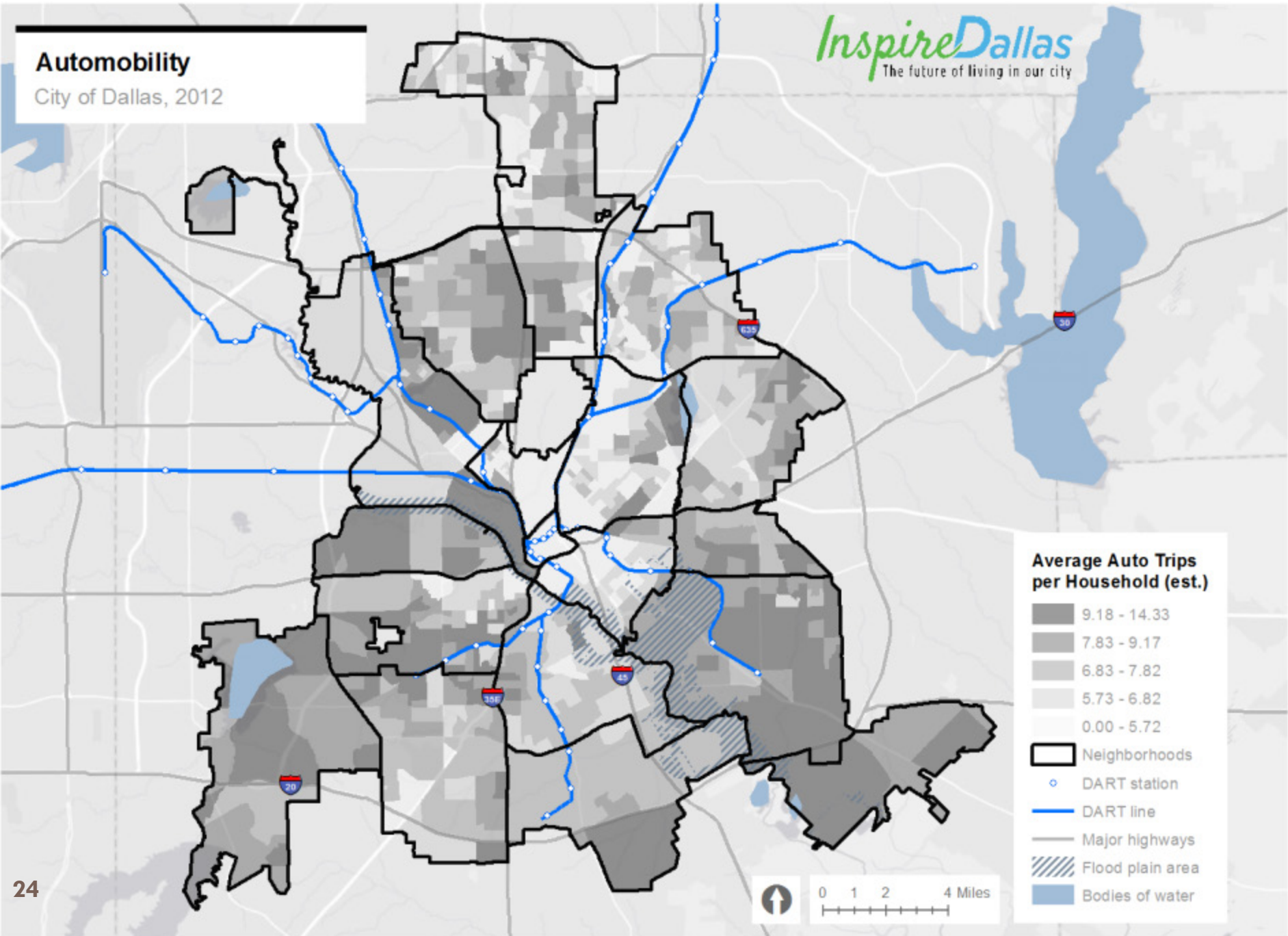
City of Dallas, 2012



Source: U.S. Environmental Protection Agency, Smart Growth Program, Smart Locations Database, uses U.S. Census Local Employment and Household Dynamics data.

Automobility

City of Dallas, 2012

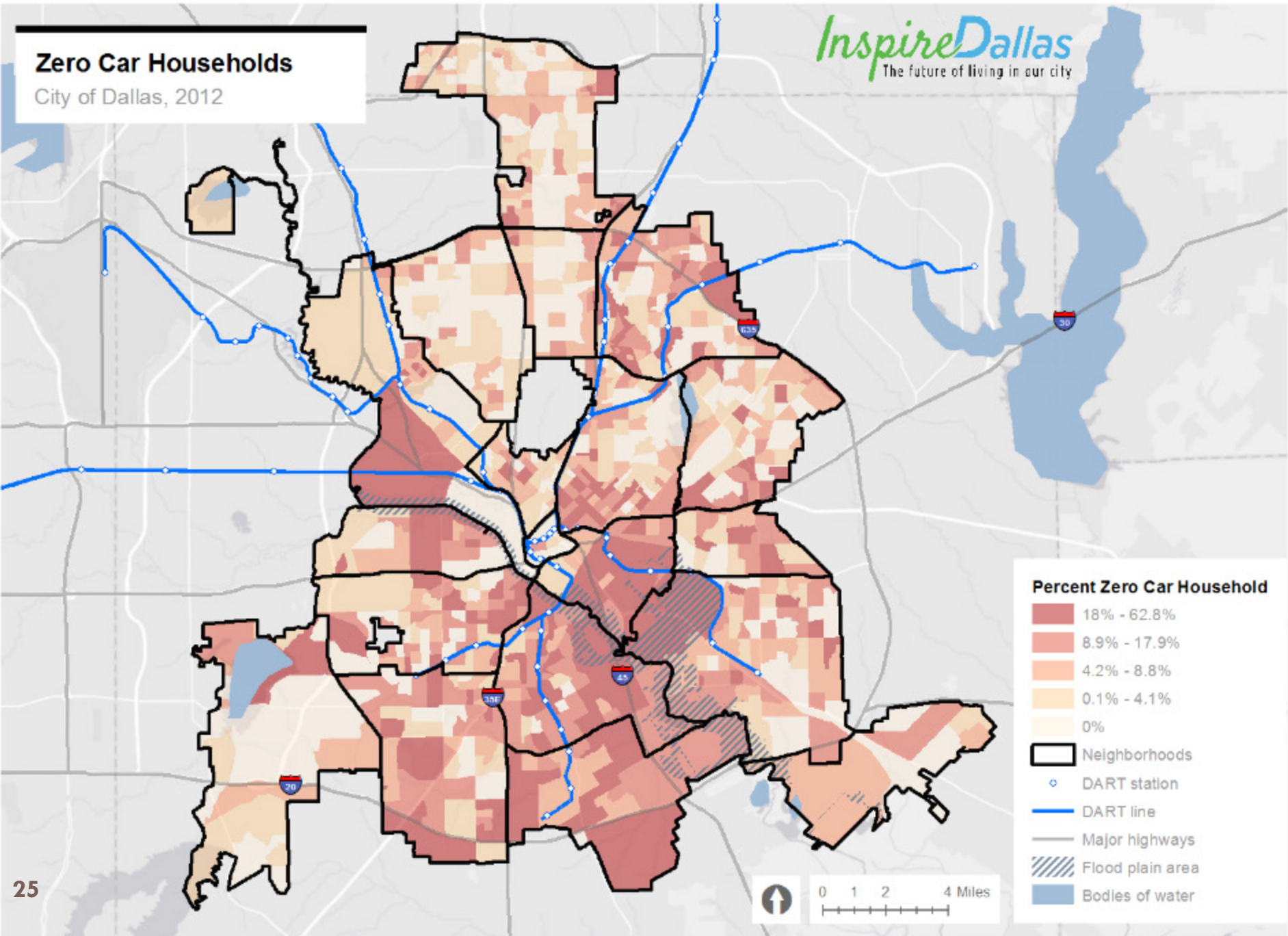


Source: U.S. Census Bureau, American Community Survey 2012 1-Year Estimates, retrieved via NHGIS.org

Zero Car Households

City of Dallas, 2012

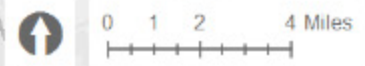
InspireDallas
The future of living in our city



Percent Zero Car Household

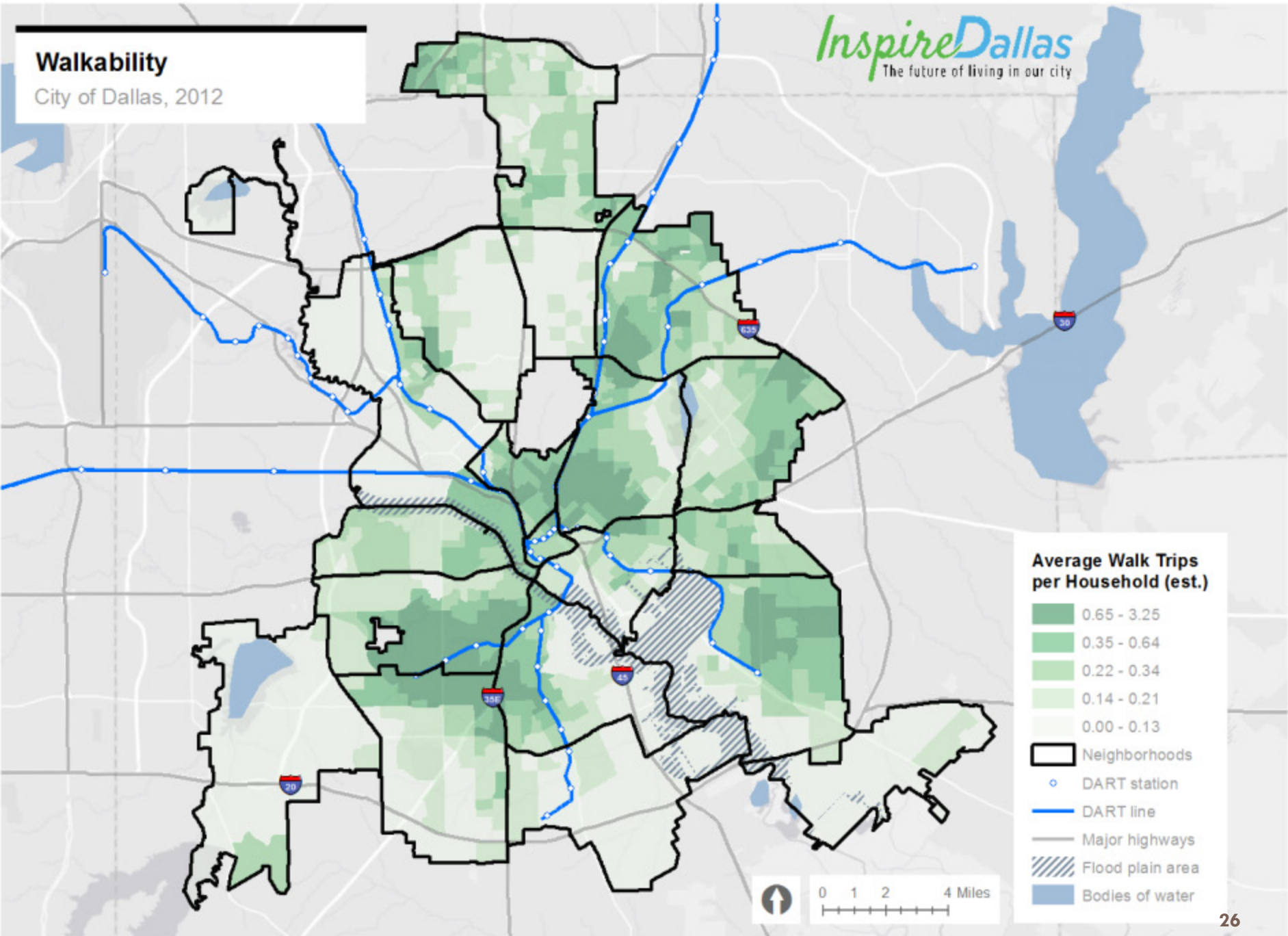
- 18% - 62.8%
- 8.9% - 17.9%
- 4.2% - 8.8%
- 0.1% - 4.1%
- 0%

- Neighborhoods
- DART station
- DART line
- Major highways
- Flood plain area
- Bodies of water



Walkability

City of Dallas, 2012



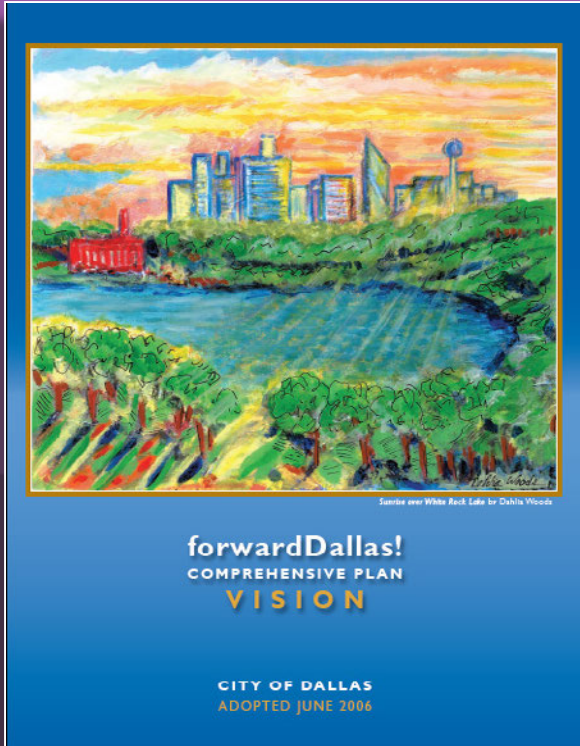
Average Walk Trips per Household (est.)

- 0.65 - 3.25
- 0.35 - 0.64
- 0.22 - 0.34
- 0.14 - 0.21
- 0.00 - 0.13
- Neighborhoods
- DART station
- DART line
- Major highways
- Flood plain area
- Bodies of water

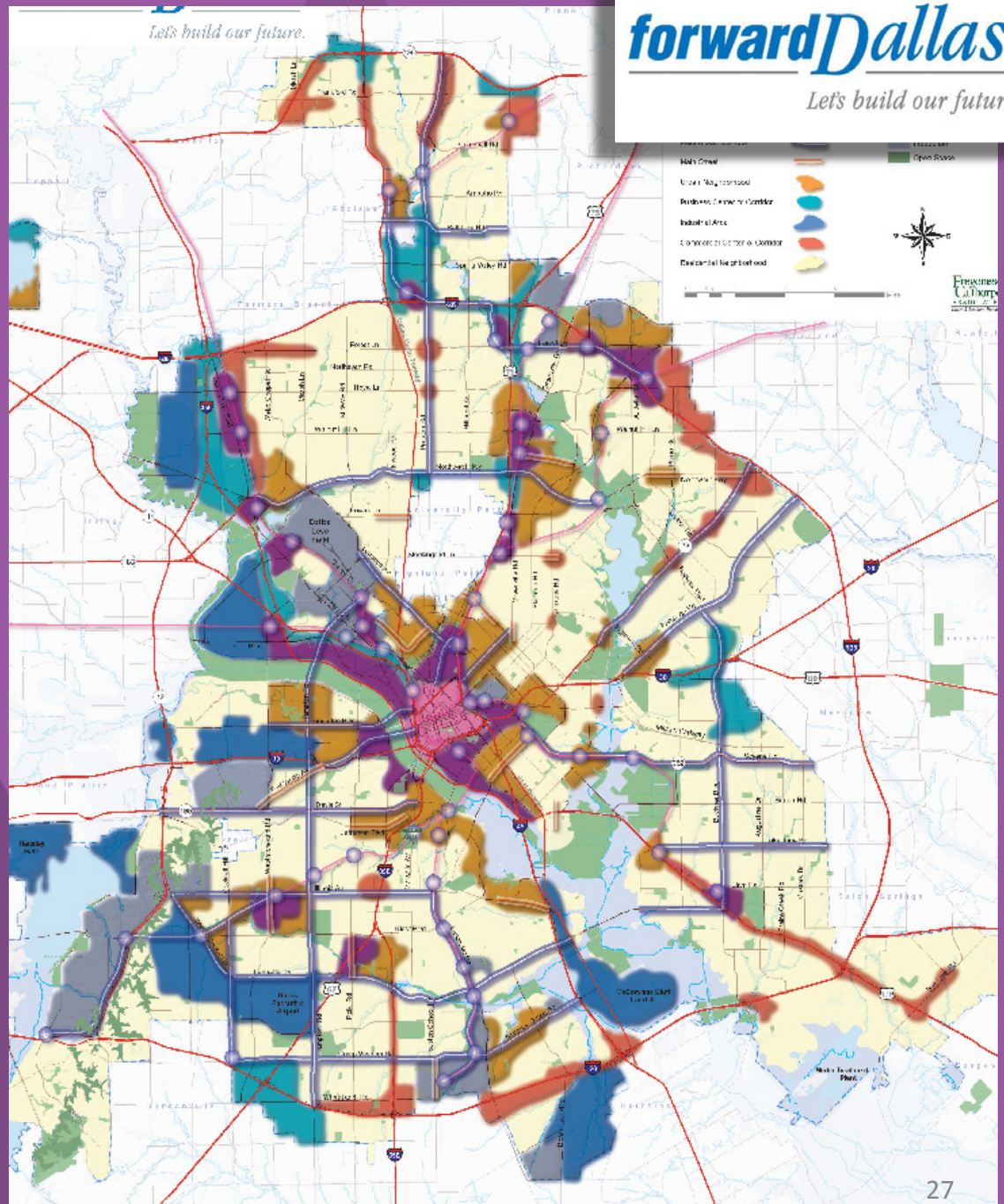


Source: U.S. Census Bureau, American Community Survey 2012 1-Year Estimates, retrieved via NHGIS.org

Policy Shift - 2006



- Policy foundation for walkable mixed use development patterns and complete streets





- *Pending adoption*
- *To be incorporated into forwardDallas! Transportation Element*
- *To be incorporated into the Thoroughfare Plan*

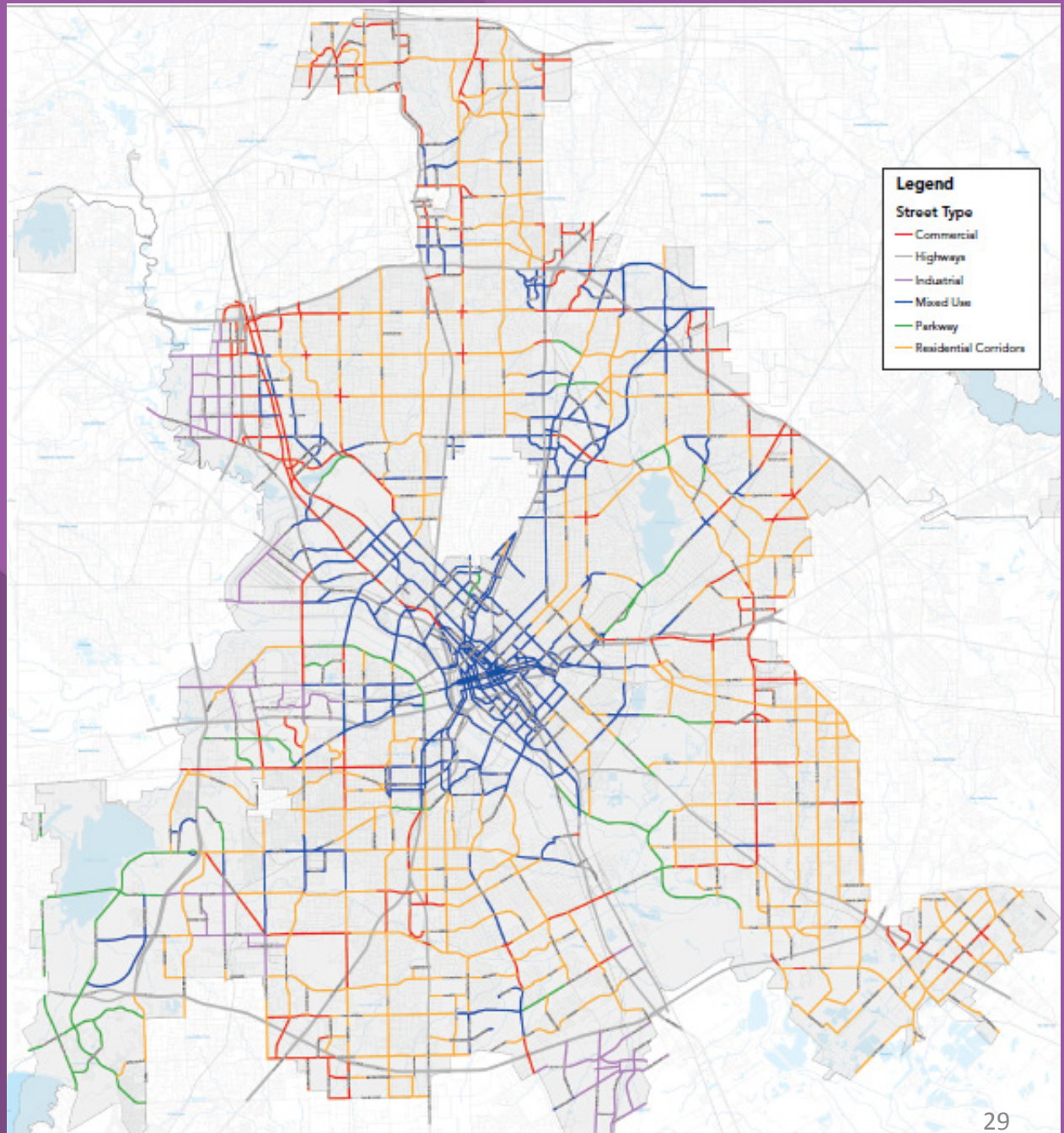
City of

Dallas

COMPLETE STREETS DESIGN MANUAL

DRAFT

- *Complete Street Typology overlaid on thoroughfare functional class system*



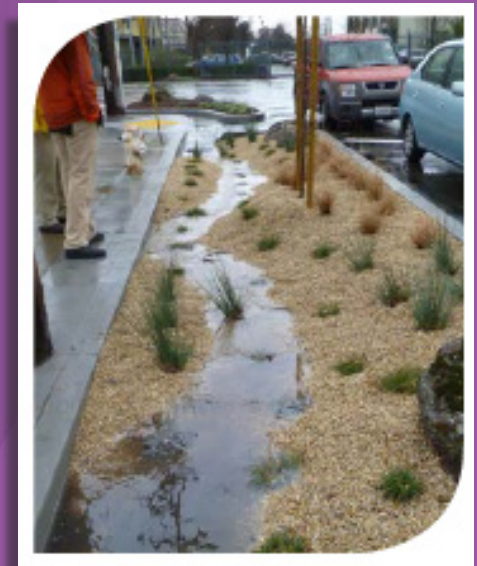
Design Policy Guide



Pedestrian Zone and Street Zone



Intersection Zone



Green street
Elements

Guide for Assessing Trade-Offs

DESIGN ELEMENT PRIORITIES CHART

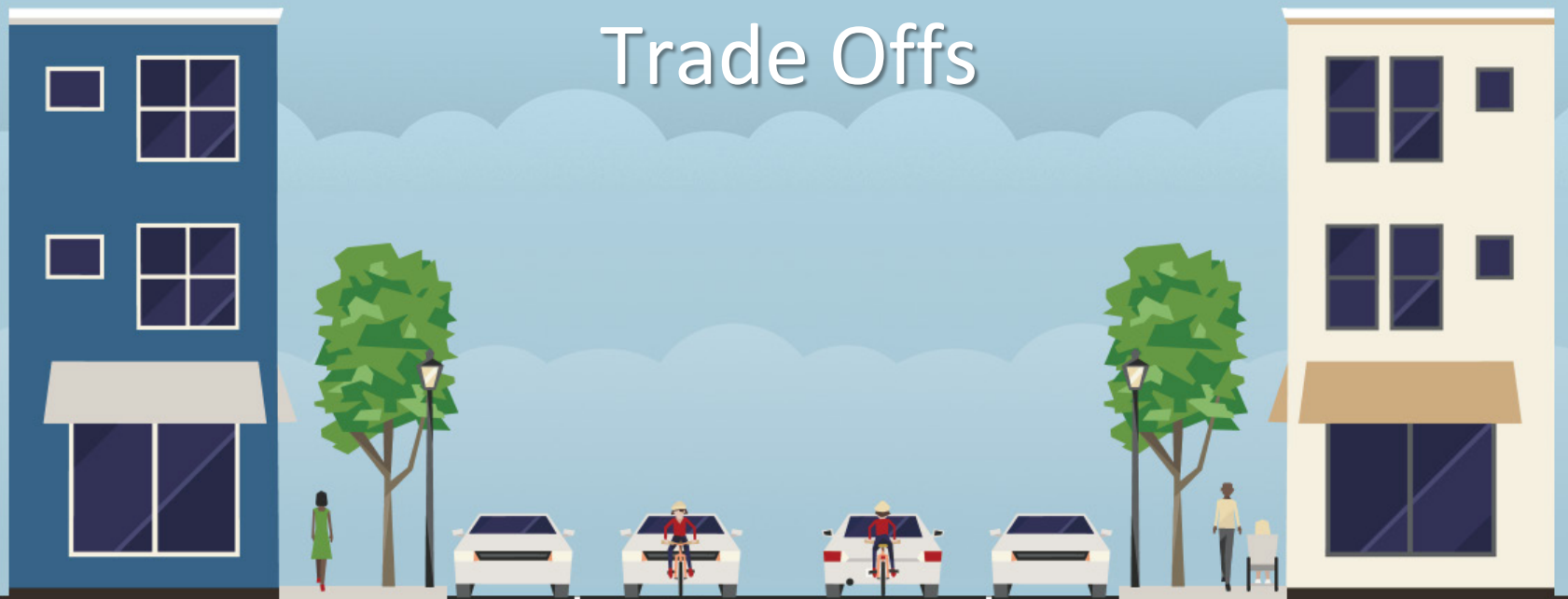
| |
|-------------------------|
| Primary Consideration |
| Secondary Consideration |
| Optional Consideration |
| Not Desirable |
| NR: Not Relevant |

| | Pedestrian Zone | | | | | | | | | | | | | Street Zone | | | | | | | | | | Intersection Zone | | | | | | | | |
|------------------------------------------|-----------------|------------------|------------------------------------|------------------|---------|---------|------------|---------|---------|---------|---------|---------|---------|--------------|----------|----------------------------------------|-------------------------------|-------------------|-----------------------------|----------|-------------------------------|------------------------------------------------------|-----------------|--------------------------------|--------------------------|--------------------|-----------------|-------------------------------|-----------------------------------------|----------------------------|-----------------------------------------|----------------------------|
| | Wide Sidewalks | Shared Use Paths | Trees and Greenscape (Buffer Zone) | Street Furniture | | | Wayfinding | | | | | | | Slip Streets | Couplets | Shared Streets (Woonerfs) ⁴ | Trees and Greenscape (Median) | On-street Parking | Road/Lane Dief ⁵ | Chicanes | Midblock Pedestrian Crossings | Special Pavement Treatment/Speed Tables ⁴ | Street Lighting | Multimodal Intersection Design | Curb Extensions/Bulbouts | Modern Roundabouts | Traffic Circles | Crossing Islands ² | Special Pavement Treatment/Speed Tables | Special Pedestrian Signals | Special Bicycle Treatments ³ | Special Transit Treatments |
| Contextual Street Type Overlays | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mixed-Use Streets | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary |
| Commercial Streets | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary |
| Residential Streets | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary |
| Industrial Streets | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary |
| Parkways | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary | Primary |
| Bike and Transit Network Overlays | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bike Network Overlay | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| Transit Network Overlay ¹ | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |

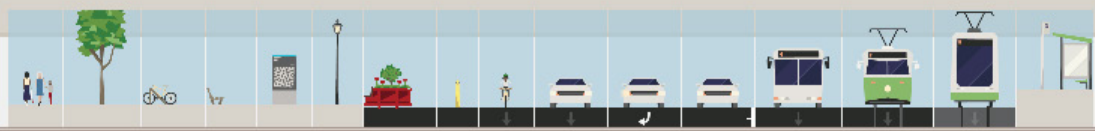
Test St

60' width ▾

Assessing Trade Offs

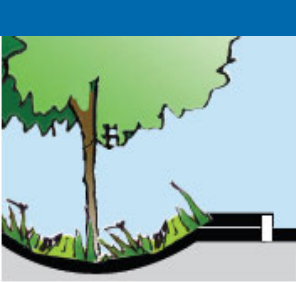


| | | | | | | | | | |
|----------|---------------|----------|--------------|---------|---------|--------------|----------|---------------|----------|
| 5' | 3' | 2' | 8' | 12' | 12' | 8' | 2' | 3' | 5' |
| Sidewalk | Sidewalk with | Sidewalk | Parking lane | Sharrow | Sharrow | Parking lane | Sidewalk | Sidewalk with | Sidewalk |

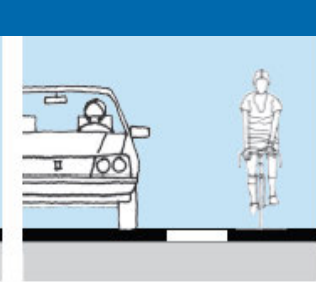


» Undo Redo

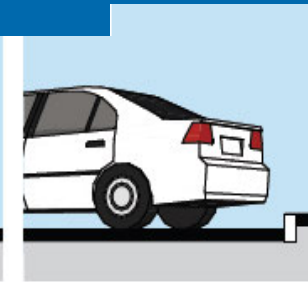
Dallas Complete Streets



The Median Zone



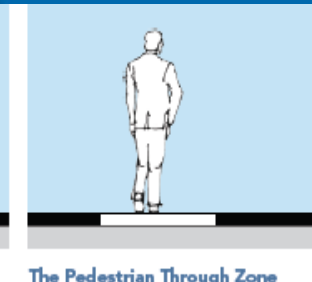
The Travelway Zone



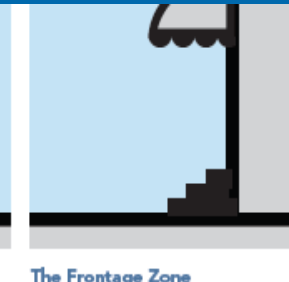
The Parking Zone



The Buffer/Furnishing Zone



The Pedestrian Through Zone



The Frontage Zone

- *Public Projects*

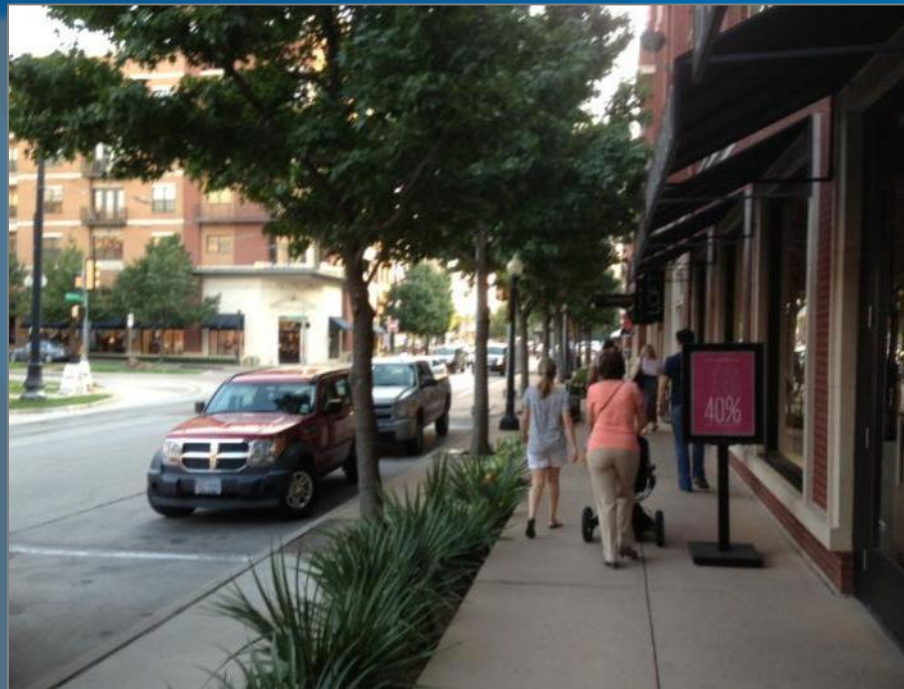
- *Private Projects*

MAKING COMPLETE STREETS A REALITY

Private Development Projects

- *Opportunity for incremental improvement of street frontages*
- *Code amendments necessary to facilitate implementation through private development*

- *Regulations for City ROW use*
- *Zoning and subdivision regulations*



Public Projects

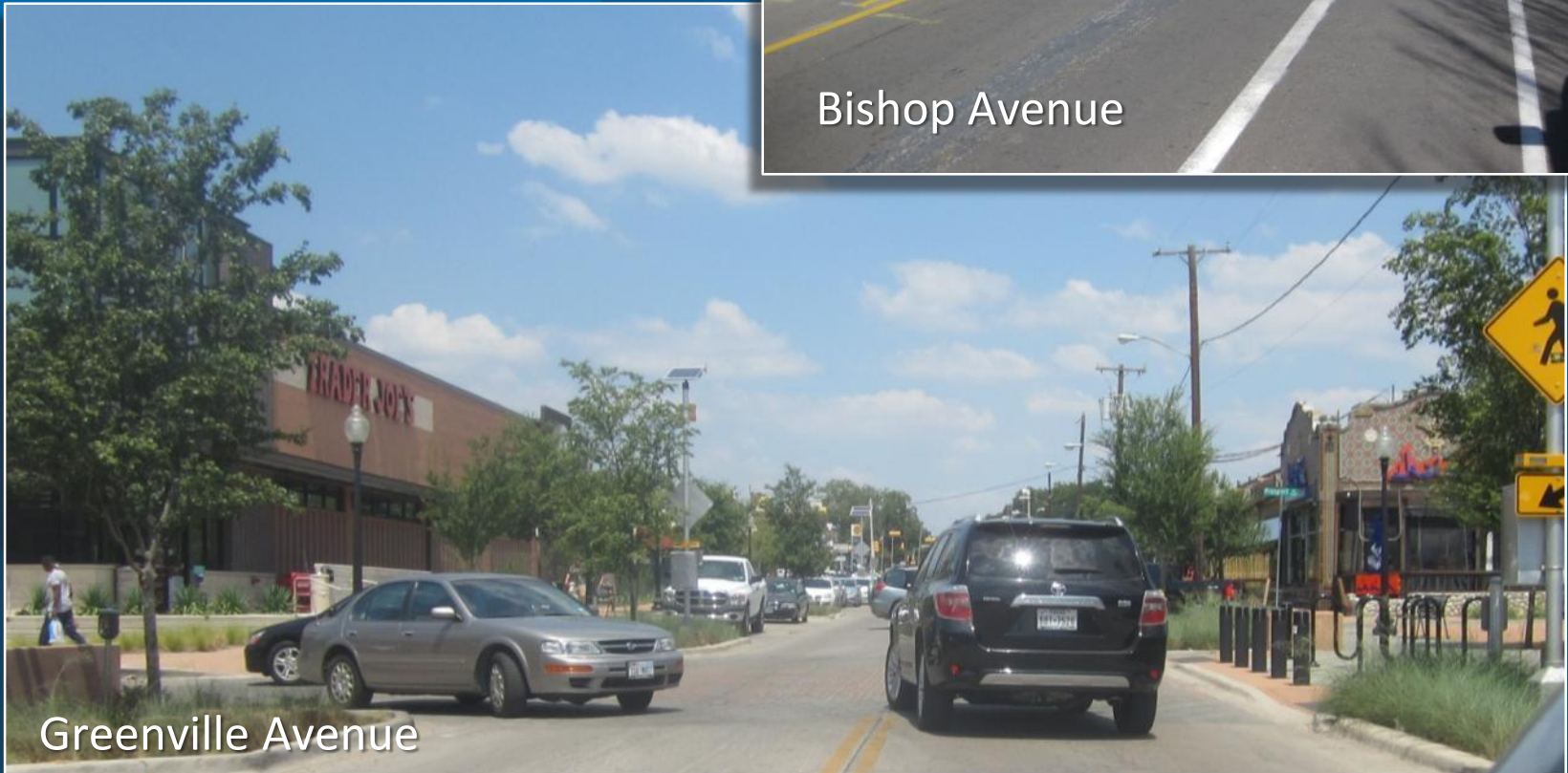
- *Two key types of street projects with different opportunities and challenges:*
 - *Street Reconstruction or New Construction Projects*
 - *Street Resurfacing or Restriping Projects*

Pilot Projects

Dallas has been gaining experience from implementing pilot complete street projects



Bishop Avenue



Greenville Avenue

Knox Street Demonstration



Four-day installation from Katy Trail to McKinney Ave

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

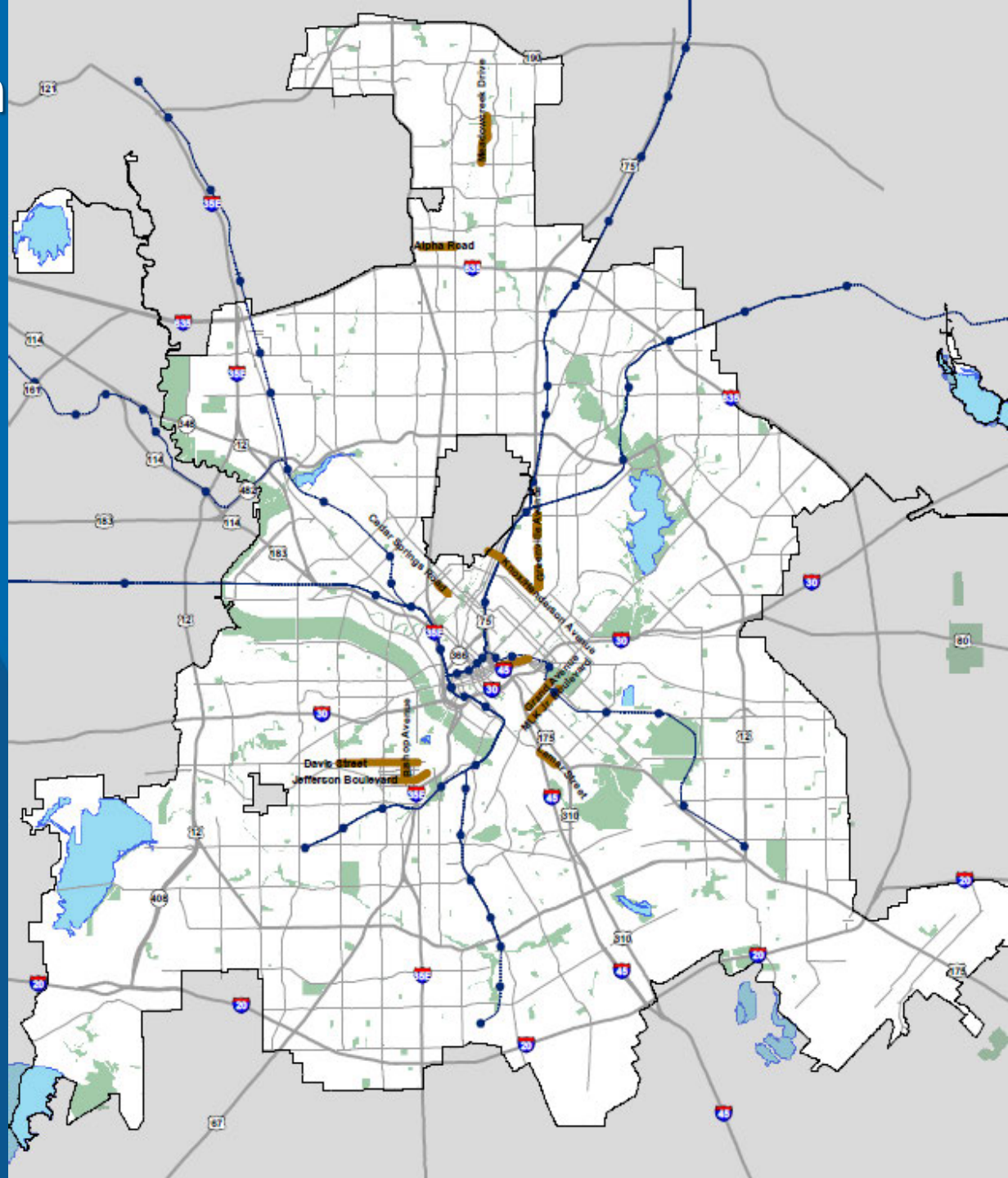
2012 Bond Program

Complete Street Projects

Project

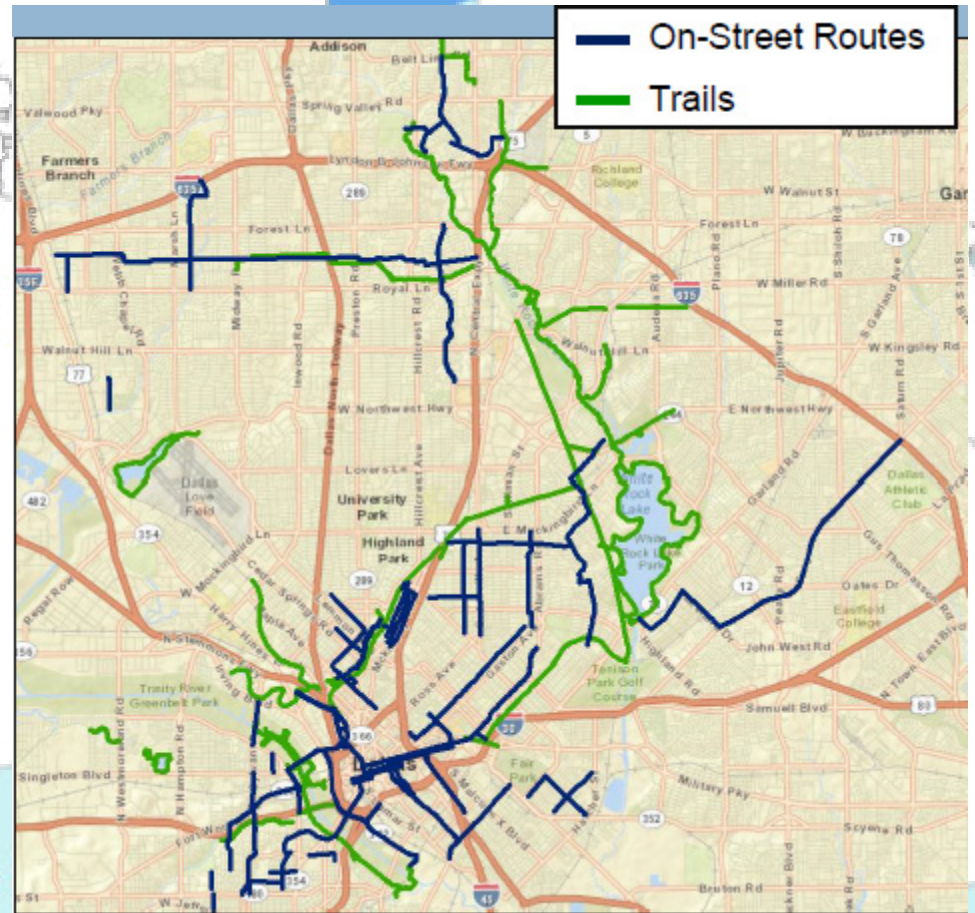
District

- Bishop Avenue 1
- Cedar Springs 14
- Davis Street 1
- Grand Avenue 7
- Greenville 14
- Henderson Avenue 2
- Jefferson 1
- Knox Street 14
- Lamar Street 7
- Main Street 2
- Meadowcreek Drive 12
- MLK Boulevard 7
- Alpha Road 11



Bike Plan Implementation

- *Bike Plan established priority areas for implementation*
- *Streets Department operating budget includes \$500,000 per year for on-street bike facilities*



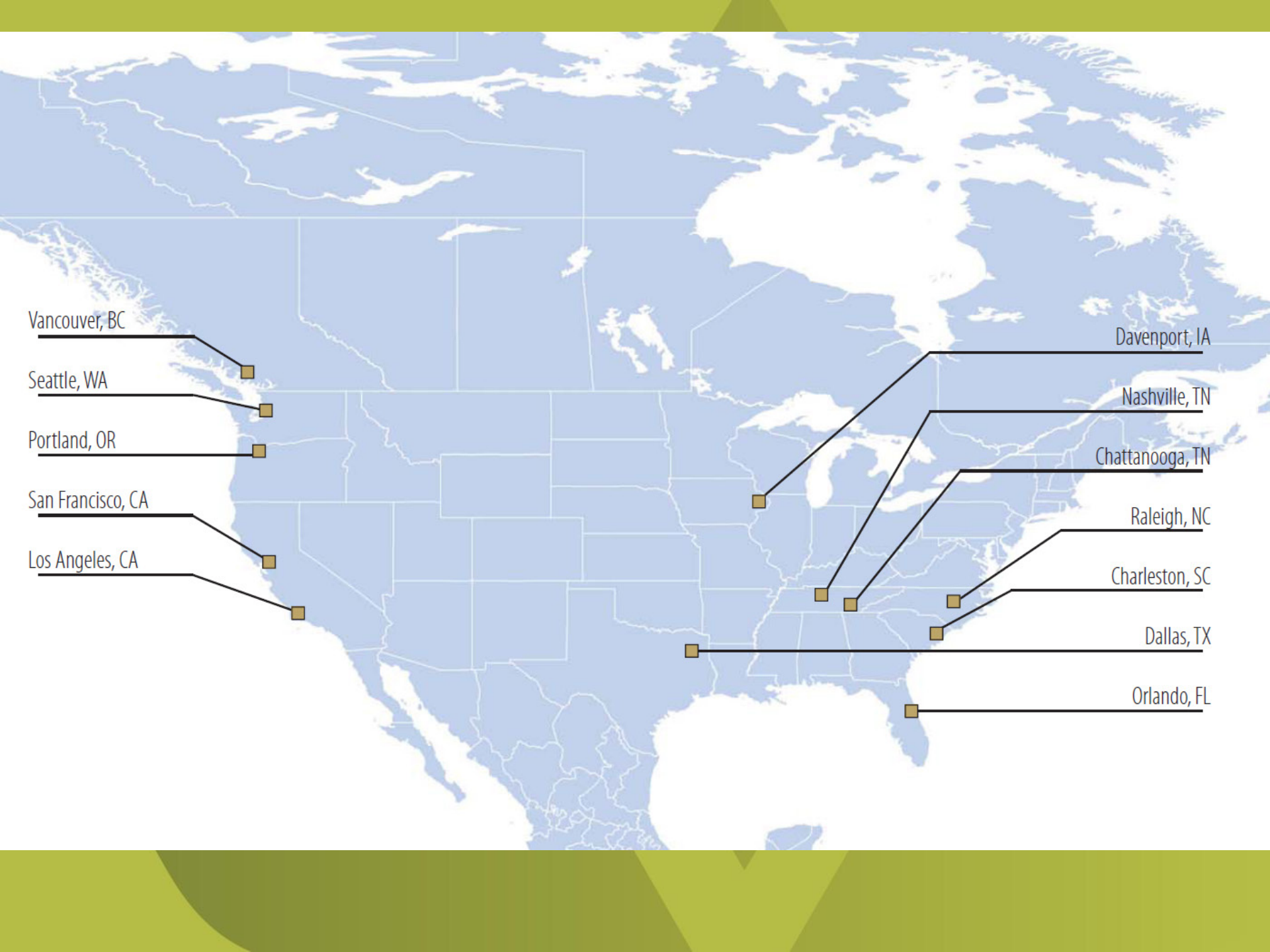
Dallas Complete Streets

**THE NEW DESIGN
APPROACH**





- **Founded: October 2009 with a \$2 million grant through the Trinity Trust Foundation from Deedie and Rusty Rose**
- **Funding: Five-year Public Private Partnership until 2014; annual operations of \$500K**
- **Structure: Begun as part of the City Manager's Office**



Vancouver, BC

Seattle, WA

Portland, OR

San Francisco, CA

Los Angeles, CA

Davenport, IA

Nashville, TN

Chattanooga, TN

Raleigh, NC

Charleston, SC

Dallas, TX

Orlando, FL



**HOW DO
WE
DESIGN A
BETTER
DALLAS?**





WHAT IS URBAN DESIGN?



Scottrade FINANCIAL SERVICES

8 NE 15TH AVE

252
Expo Center

www.orgsolutions.org
One style doesn't fit all

Main

streets



buildings





4TH STREET
BAR & GRILL

PICKWICK

Frolie

BODEN & PAUL

WANDY BAR

SUNSHINE



the ideal dallas



What does Dallas want to be?



self-assessment



2b

Dallas
CityDesign
Studio



listen, draw, repeat

good latimer expy.

july alley



crowdus st.

malcolm x blvd.



articulate the neighborhood's vision



City of

Dallas

COMPLETE STREETS DESIGN MANUAL
~DRAFT

PRIORITIES CHART FOR TRADE OFFS IN LIMITED RIGHT-OF-WAY

| Contextual Street Types and Functional Classifications | Pedestrian Zone | | | Street Zone | | |
|--------------------------------------------------------|-------------------------|---------------------|-----------------------------|--------------|----------------|-------------|
| | Frontage Zone (private) | Sidewalk Clear Zone | Buffer/Furnishing/Curb Zone | Parking Zone | Travelway Zone | Median Zone |
| Mixed Use Streets | | | | | | |
| Principal Arterial | | 1 | 2 | 5 | 4 | 3 |
| Minor Arterial | | 1 | 2 | 3 | 4 | 5 |
| Collector | | 1 | 2 | 3 | 4 | 5 |
| Minor/Local | | 1 | 2 | 3 | 4 | 5 |
| Commercial Streets | | | | | | |
| Principal Arterial | | 1 | 3 | 5 | 1 | 4 |
| Minor Arterial | | 1 | 4 | 5 | 2 | 3 |
| Collector | | 1 | 3 | 4 | 2 | 5 |
| Minor/Local | | 1 | 4 | 3 | 2 | 5 |
| Residential Streets | | | | | | |
| Principal Arterial | | 1 | 2 | 5 | 3 | 4 |
| Minor Arterial | | 1 | 4 | 2 | 5 | 3 |
| Collector | | 1 | 4 | 2 | 3 | 5 |
| Minor/Local | | 1 | 4 | 2 | 3 | 5 |
| Industrial Streets | | | | | | |
| Principal Arterial | | 2 | 3 | 4 | 1 | 5 |
| Minor Arterial | | 2 | 3 | 4 | 1 | 5 |
| Collector | | 2 | 3 | 4 | 1 | 5 |
| Minor/Local | | 2 | 3 | 4 | 1 | 5 |
| Parkways | | | | | | |
| Principal Arterial | | 2 | 4 | 5 | 3 | 1 |
| Minor Arterial | | 2 | 4 | 5 | 3 | 1 |
| Collector | | 2 | 4 | 5 | 3 | 1 |
| Minor/Local | | 5 | 1 | 4 | 3 | 2 |

High Priority
Medium Priority
Low Priority

General Notes:

1. The numbers rank various zones between 1 and 5, with one being the highest priority and 5 being the lowest. The priority level is intended to guide width choices (low priority means minimum width, high priority means desired width).
2. Refer to the On-Street Bike and Transit Facility Priorities Chart later in this chapter for additional guidance on the travelway zone.
3. The Parking and Median Zones are not essential on all streets. A low priority ranking for these zones implies that they may be eliminated. A high priority implies that it is desirable to include them even if minimum dimensions are used.
4. The Frontage Zone priorities shown in this chart reflect the importance of using the public right-of-way for this zone. A low priority implies that the Frontage Zone should be incorporated on private property. A high priority implies that allowing this zone to expand into the right-of-way is an important consideration.
5. For streets within a 1/4 mile radius of train stations as shown on the Vision Maps, the Sidewalk Clear Zone and the Buffer/Furnishing Zone should be given a High Priority.
6. This chart is intended to be used as a starting point for engaging the community in setting design priorities during the corridor planning stage of the Complete Streets process.





CHEVROLET

3970

E 10th St





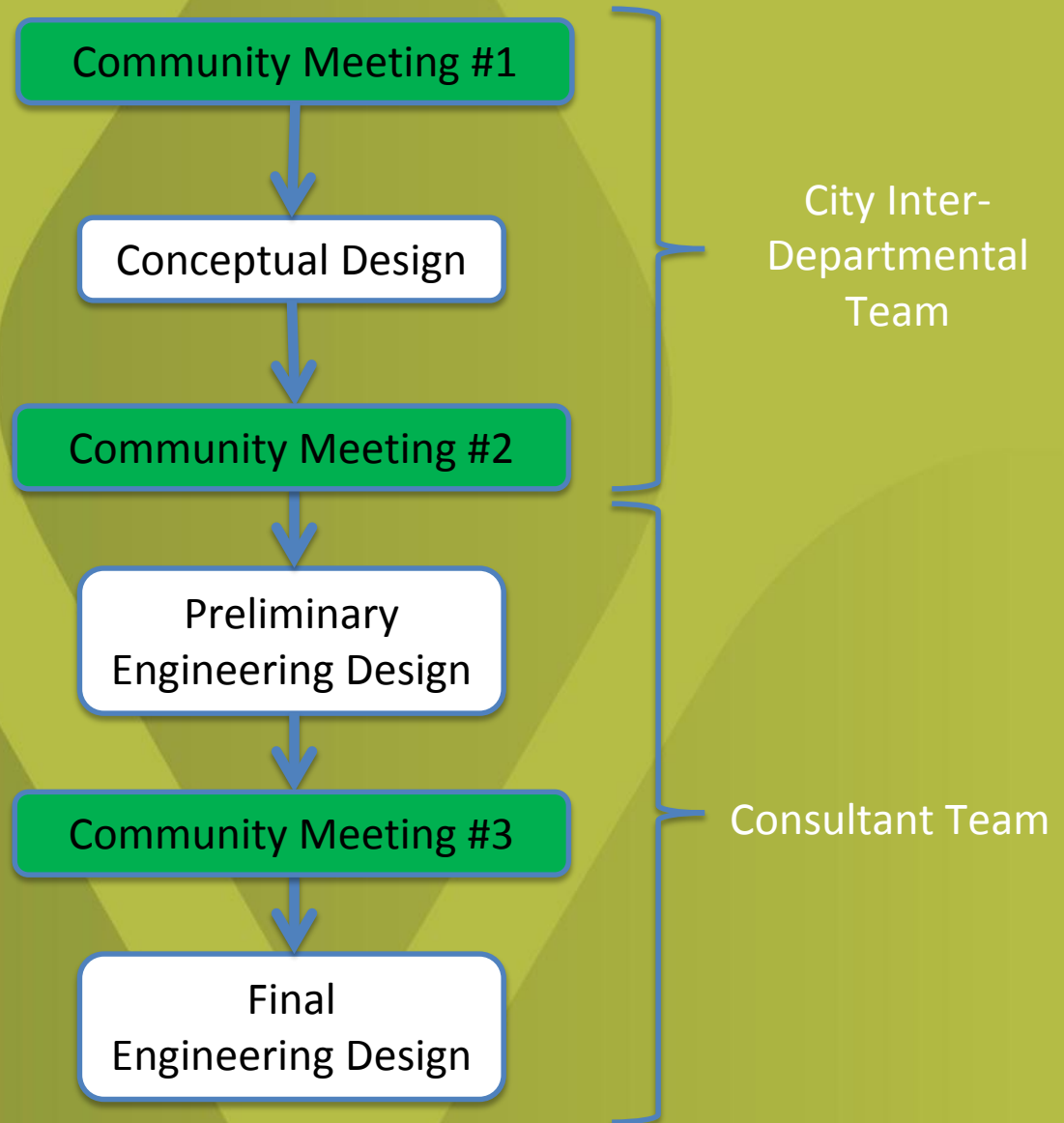


Dallas Complete Streets

THE NEW DESIGN PROCESS

New Design Process

- Engage the community from the outset and be responsive to feedback
- Establish design priorities and scope internally before handing off to consultants



Community Workshops

- Community Workshop #1
 - Introduce project goal and context
 - Identify corridor issues and priorities
- Community Workshop #2
 - Review at least two design alternatives with cost considerations
 - Identify preferences
- Community Workshop #3
 - Note any design modifications due to engineering considerations
 - Obtain buy-off on final design

Community Engagement



- Workshops with interactive break-out groups to encourage conversation, creative thinking and consensus building
- Project blogs to encourage continuous feedback through the process

Dallas Complete Streets Projects~
Updates on Dallas' Latest Complete Streets Projects

Search...
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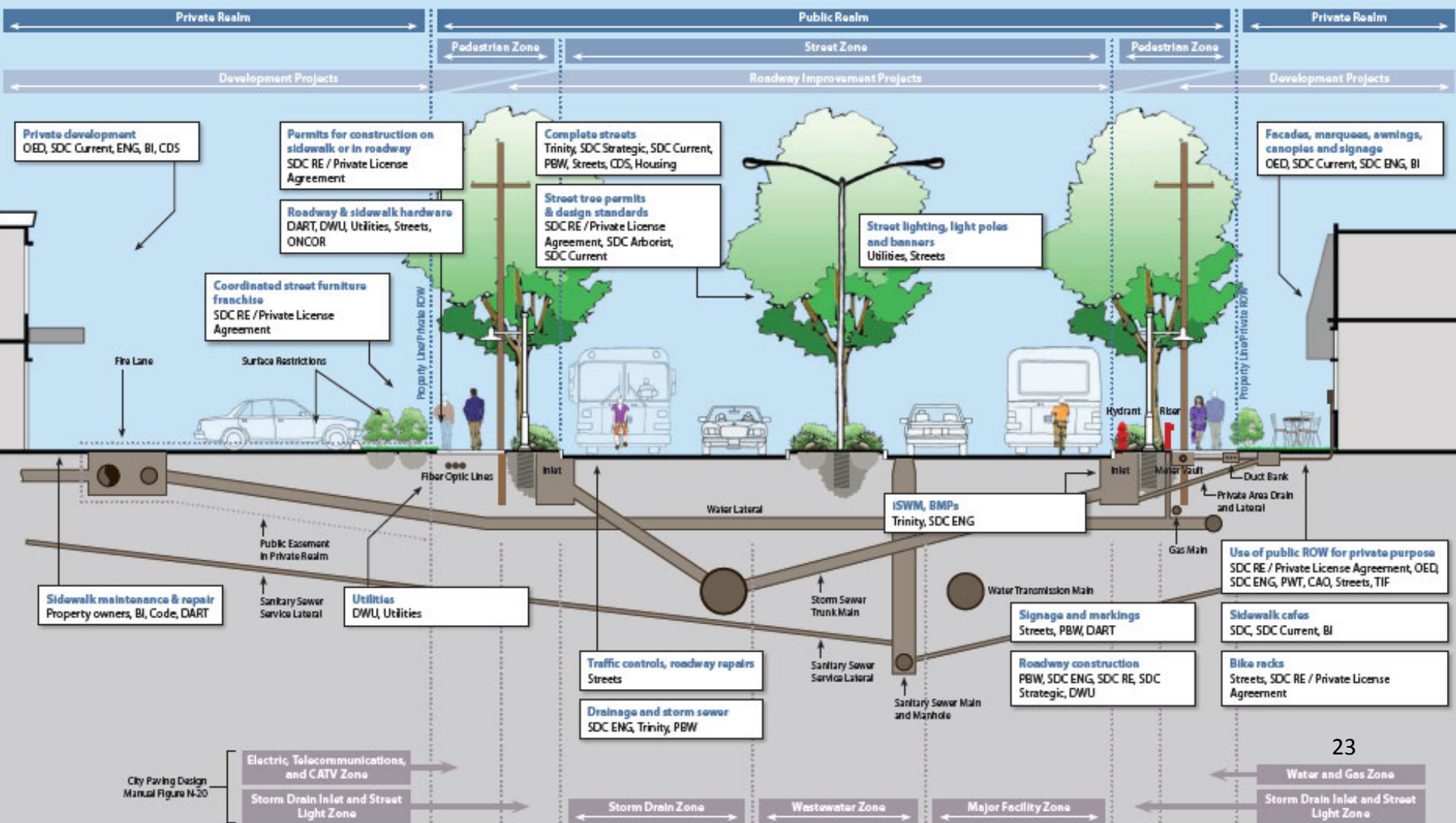


CATEGORY ARCHIVES: **KNOX STREET COMPLETE STREETS PROJECT**

16 Friday May 2014 *Knox Complete Streets Meeting – Public Meeting presentation*

Follow

Inter-Agency Coordination



Inter-Departmental City Team

- Land Use and N'hood Vitality
- City Design Studio
- Transportation Planning
- Economic Development
- Traffic Operations
- Trinity Watershed Management
- Public Works

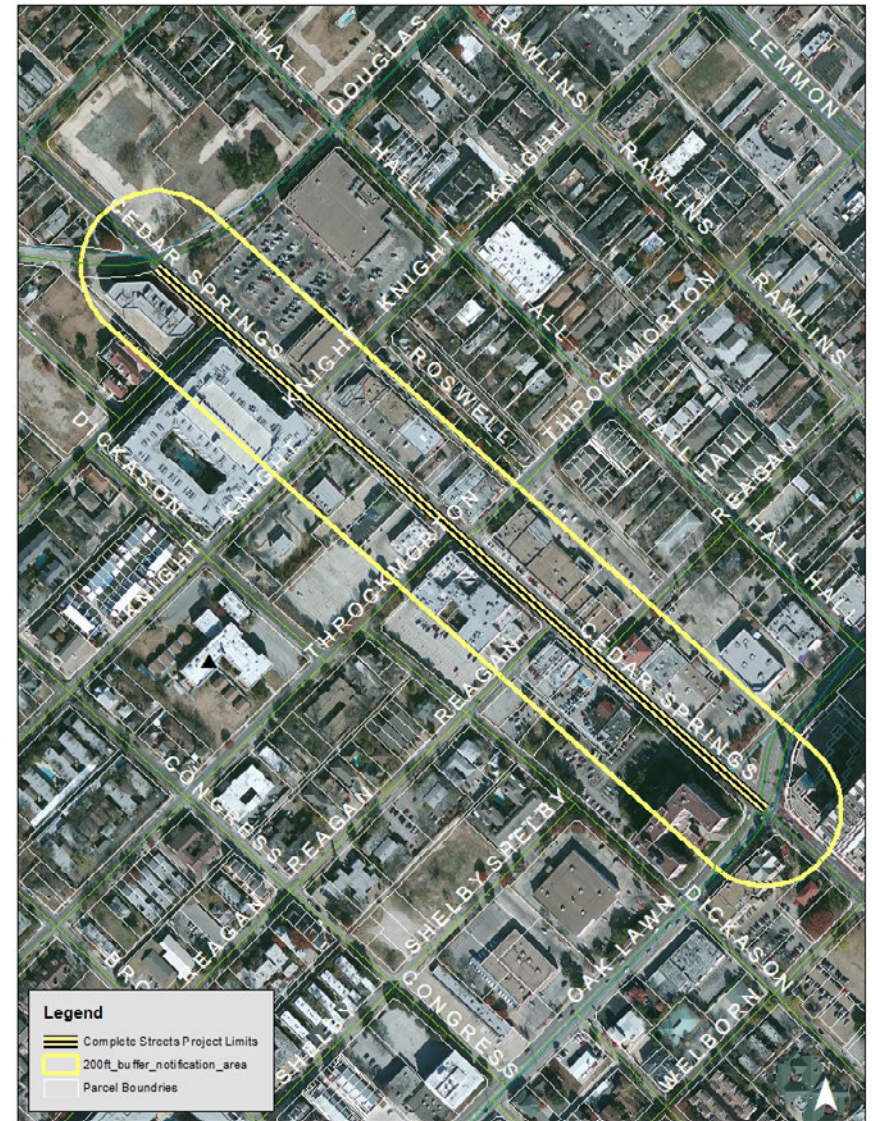
Now integrated
into Planning and
N'hood Vitality
Department

Inter-Departmental Coordination

- Future corridor vision
- Ongoing zoning and development projects
- Thoroughfare Plan amendments
- TIF or PID Boards
- Traffic operational issues
- Storm water management

Cedar Springs Example

- Budget: ~\$1.3 million
- 4 block (2000 ft) commercial / entertainment corridor with new multi-family apartments
- 4 traffic lanes, high traffic speeds
- Narrow sidewalks, little to encourage pedestrian activity/street life
- Pedestrian safety issues



4 Lane Option

- Gateway Treatment at Oak Lawn and Douglas
- Restriped Crosswalks
- Limited Pedestrian Lighting
- ADA compliant crosswalks
- Decorative pavement and bump-outs at Throckmorton, Knight, Reagan
- Closure of redundant curb cut
- Strategic Landscaping, seating installations
- Oak Lawn Median Widening/Ped Refuge Islands (Optional)
- HAWK Pedestrian Signal (Optional)

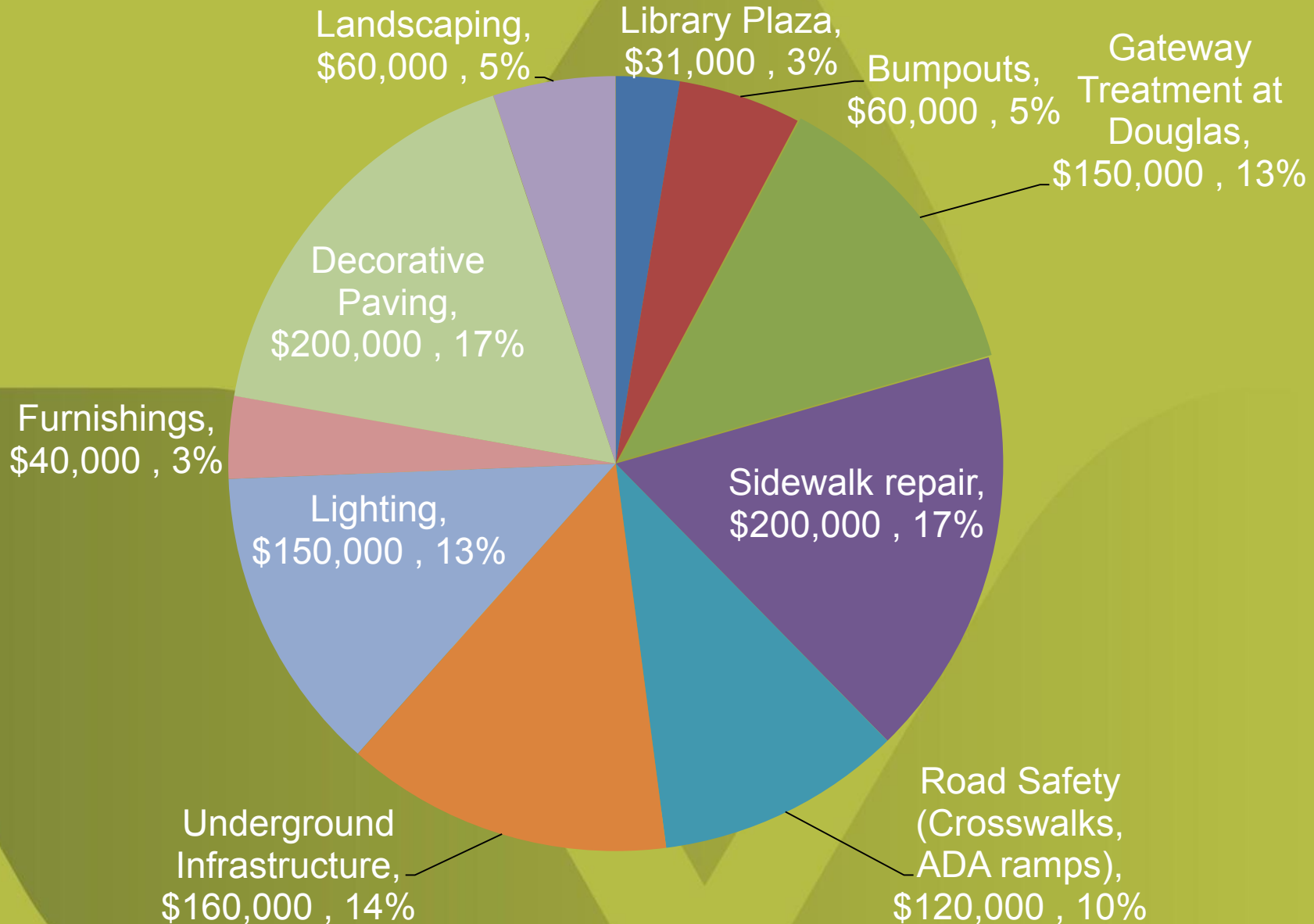
3 Lane Road Diet Option

- 4 to 3 lane conversion with full curb, sidewalk rebuild between Knight and Reagan
- Widened Sidewalks (within Road Diet Area)
- Continuous Landscaping (within Road Diet Area)
- Small Public Plazas (within Road Diet Area)
- Pedestrian Lighting (within Road Diet Area)
- HAWK Pedestrian Signal (Optional)

Cedar Springs Road Diet Option

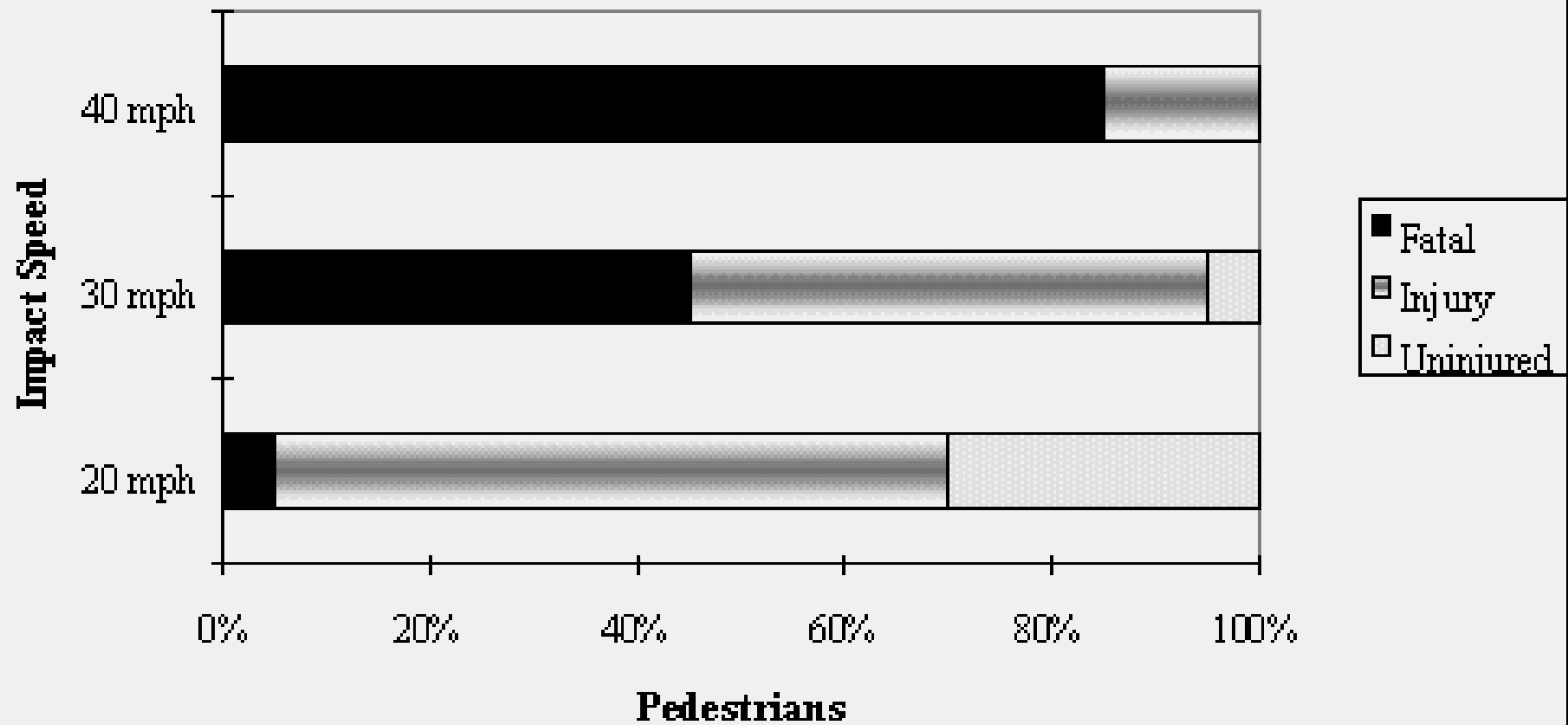


Conceptual Design



Not Just Aesthetics

**Figure 1. Vehicle Impact Speed and Pedestrian Injury Severity
(from DETR)**



Dallas Complete Streets

Q & A



SPROW Education Forum
October 30, 2014