

Design Manual

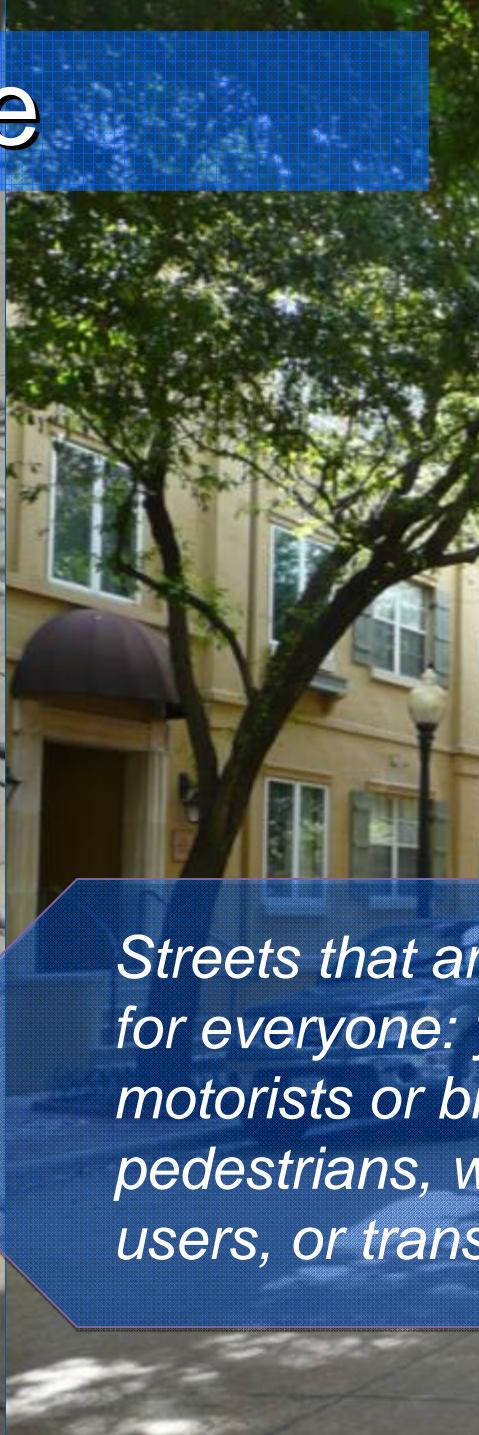
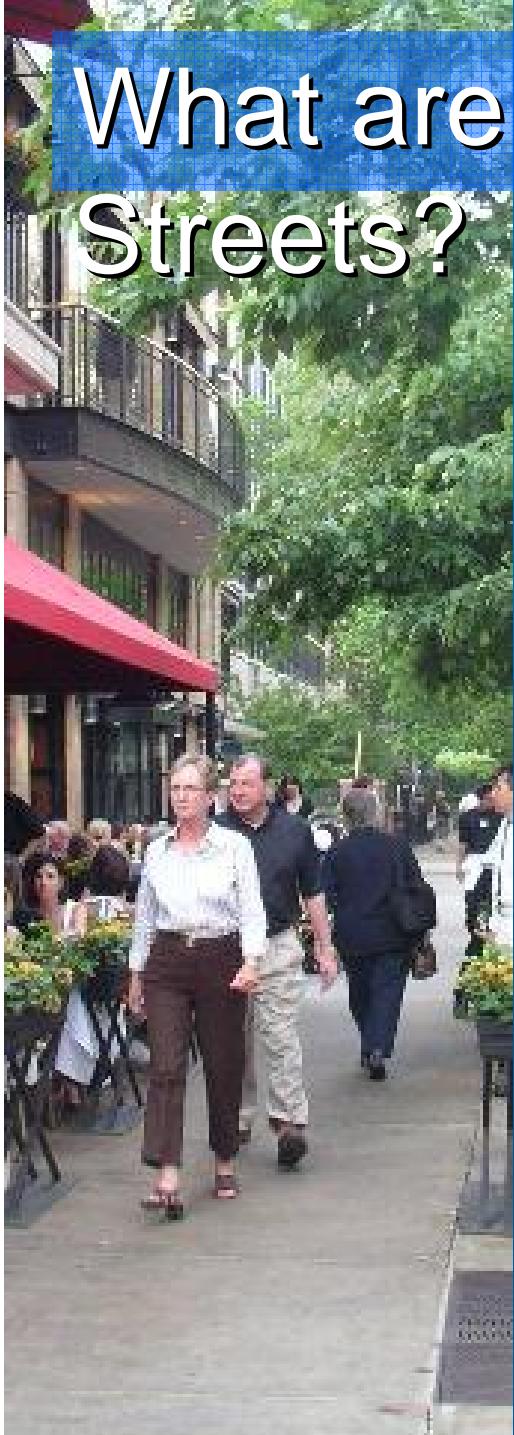
Dallas Complete Streets Design Manual

Council Transportation and Trinity River
Project Committee

24 September, 2013



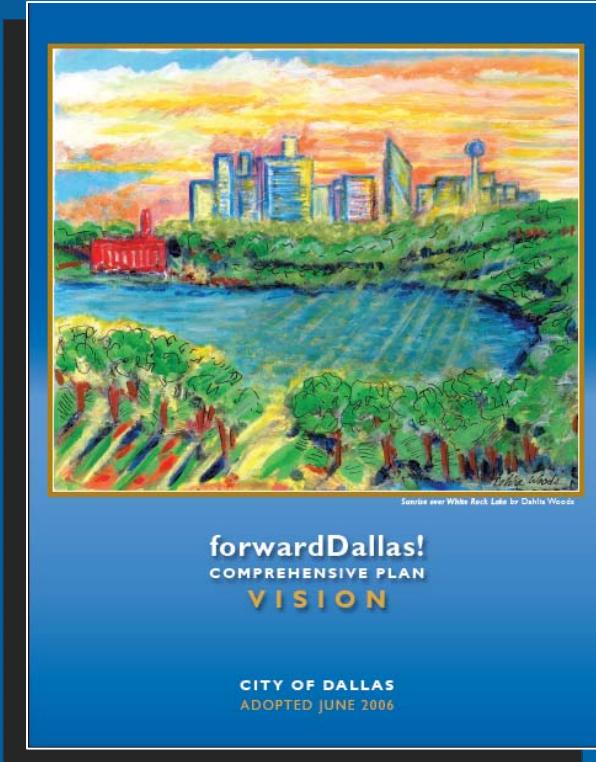
What are Complete Streets?



Streets that are comfortable for everyone: young and old, motorists or bicyclists, pedestrians, wheel chair users, or transit riders alike.

Background

- ▶ 2006 - ForwardDallas!
recommendation: Develop a “context sensitive street design manual”
- ▶ 2011-2012 - Council Strategic Action Plan objective: “Bring a citywide complete street vision to reality”
- ▶ 2011 - Transportation and Community and System Preservation (TCSP) grant awarded to Dallas
- ▶ 2011 -2013 – Community engagement, pilot and demonstration projects, and drafting of design manual



Community Workshops

- ▶ *Eight interactive workshops held July through December, 2011*
- ▶ *Over 600 participants citywide*



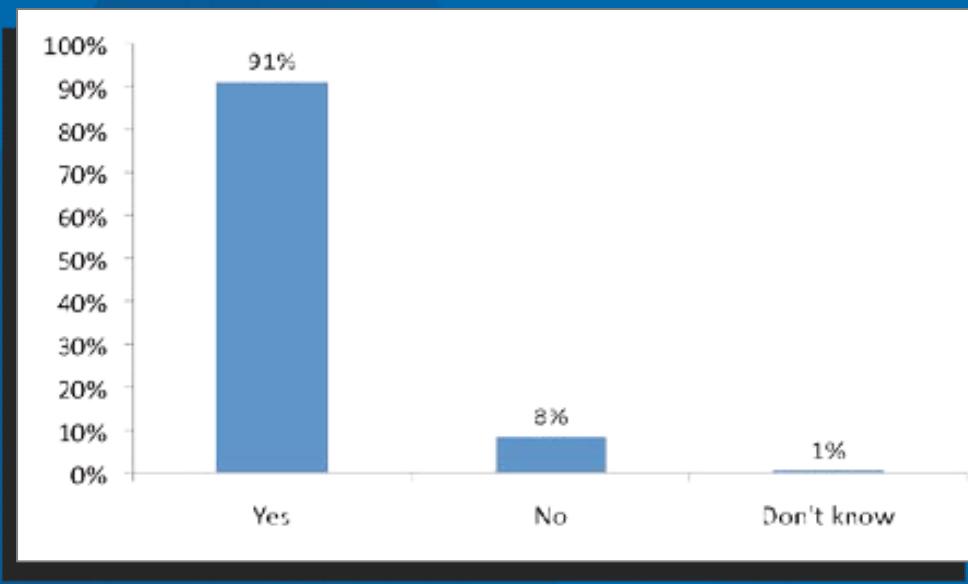
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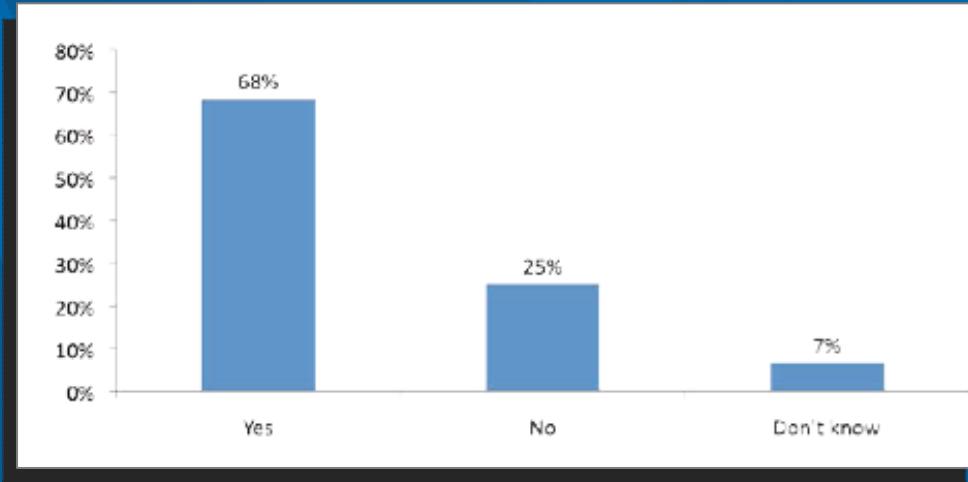
- *Students, amateurs and professionals were engaged in proposing creative ideas for better streets*

Public Opinion Sample Survey

Do you want your elected officials to work towards more sustainable communities?



Do you feel that kids walking or biking to school, and adults walking or biking to shop and eat would be better for the Dallas economy?



Knox Street Demonstration



Pilot Projects

The City has been
gaining experience from
implementing pilot
complete street projects



Greenville Avenue



Bishop
Avenue



City of
Dallas
COMPLETE STREETS DESIGN MANUAL

Design Manual

**COMPLETE STREETS
ARE NOT ALL THE SAME**

Mixed-Use Street Example



Bishop Avenue ¹¹

Residential Street Example

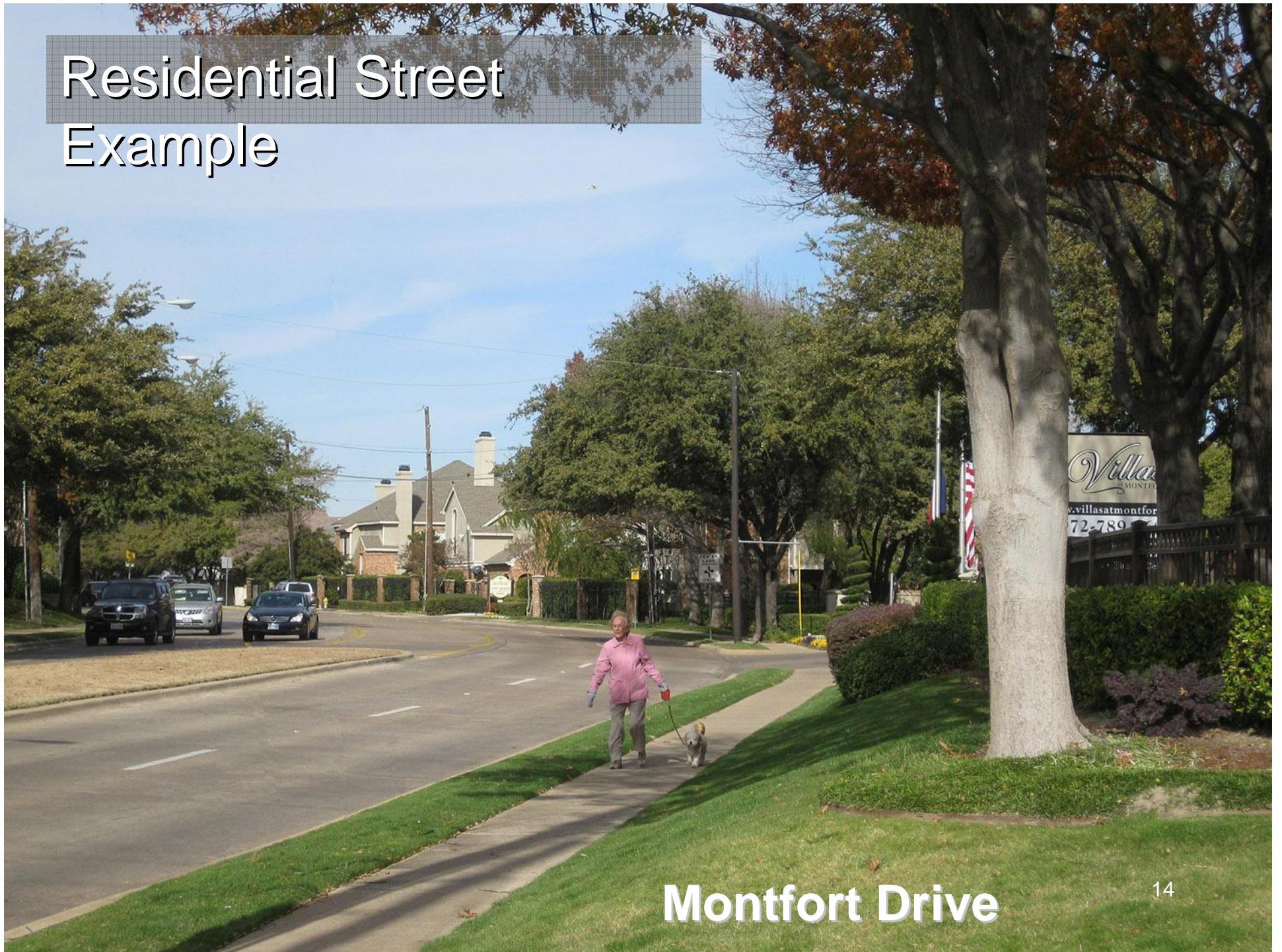


Bishop Avenue

Commercial Street Example



Residential Street Example



Montfort Drive

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Design Manual

**MAKING COMPLETE
STREETS A REALITY**



A New Way of Designing Streets

- Start with a vision
 - Planning Vision
 - Organizational Vision
- Policies to guide change
 - Implementation procedures: working with established processes
 - Design guidance
 - Process and guidelines for addressing trade-offs

1. How To Use The Manual
2. The Dallas Complete Streets Vision
3. Complete Streets Policy Framework
4. Pedestrian Zone Design Elements
5. Street Zone Design Elements
6. Intersection Design Elements
7. Green Streets

Manual Chapters

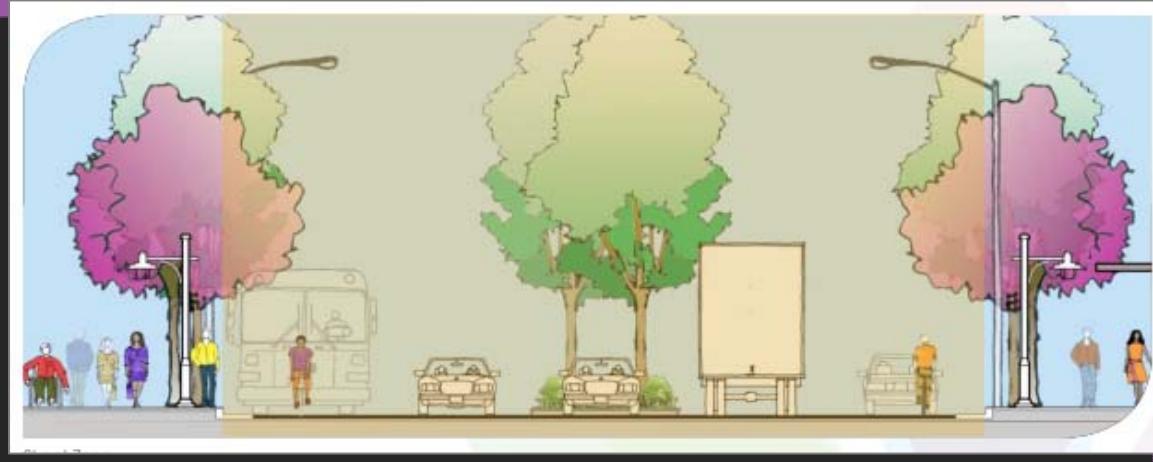
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AUGUST 2013 DALLAS COMPLETE STREETS DESIGN MANUAL | 17



Design Guidance



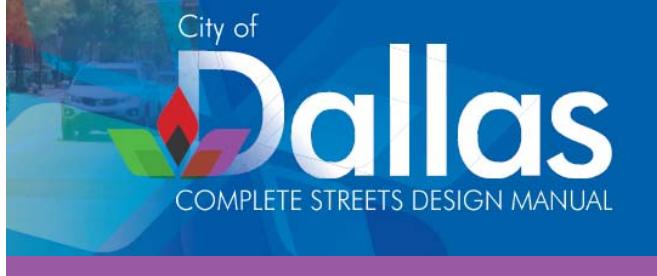
Pedestrian zone and street zone design elements



Intersection design elements



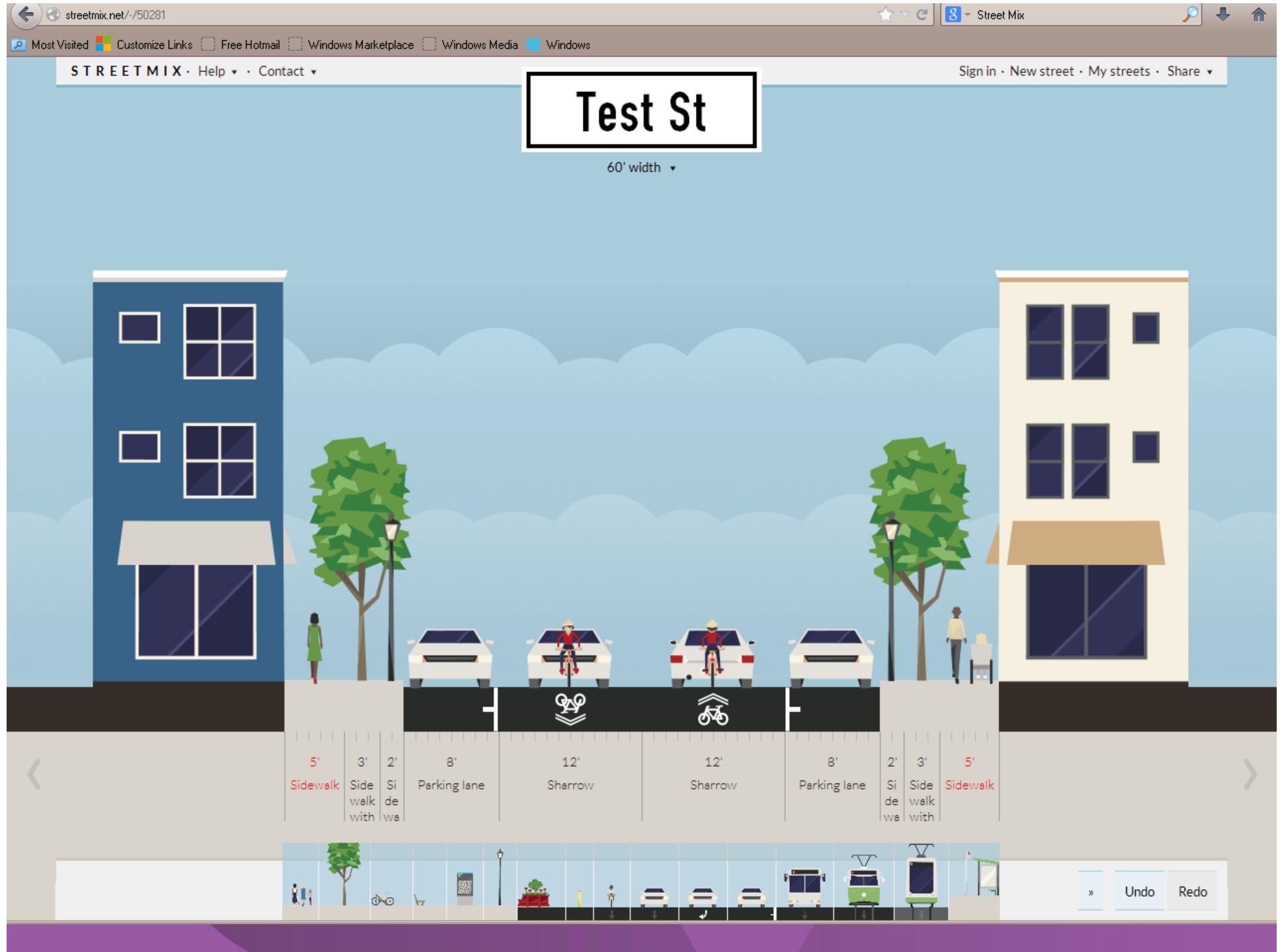
Green street
design
elements



Assessing Trade-Offs

DESIGN ELEMENT PRIORITIES CHART

Pedestrian Zone			Street Zone			Intersection Zone		
Street Furniture			Wayfinding					
Wide Sidewalks	Shared Use Paths	Trees and Greenscape (Buffer Zone)						
Seating	Bicycle Parking Facilities	Bollards	Newspaper Racks	Recycling/Garbage Cans	Transit Stops	Limited Curb Cuts and Driveways	Plazas/Pocket Parks/Parklets	Sidewalk Cafes
Pedestrian Lighting	Information Kiosks	Pedestrian Signage	Bicycle Signage	Slip Streets	Couplets	Shared Streets (Woonerfs) ^a	Trees and Greenscape (Median)	On-street Parking
Road/Lane Diet ^b	Chicanes	Midblock Pedestrian Crossings	Special Pavement Treatment/Speed Tables ^c	Street Lighting	Multimodal Intersection Design	Curb Extensions/Bulbouts	Modern Roundabouts	Traffic Circles
Crossing Islands ^d	Special Pavement Treatment/Speed Tables	Special Pedestrian Signals	Special Bicycle Treatments ^e					
Contextual Street Type Overlays								
Mixed-Use Streets								
Commercial Streets	Gold	White	Gold	Gold	White	Red	Red	Gold
Residential Streets	Gold	White	Gold	Gold	White	Gold	White	Gold
Industrial Streets	Gold	White	Gold	Gold	White	Red	Red	Gold
Parkways	Gold	White	Gold	Gold	White	Red	Red	Gold
Bike and Transit Network Overlays								
Bike Network Overlay	White	White	White	NR	White	White	White	NR
Transit Network Overlay ^f	NR	White	White	White	NR	Red	Red	NR



The Grand Boulevard

Case Study in Assessing Trade-offs

- Six (6) travel lanes
- Bus Rapid Transit [BRT] in mixed flow lanes
- On-street parking



Existing Street Configuration

- BRT in dedicated lanes
- Four (4) travel lanes
- On-street parking
- Shared bicycle lanes



Option 1: Dedicated BRT / Shared Bike Lane

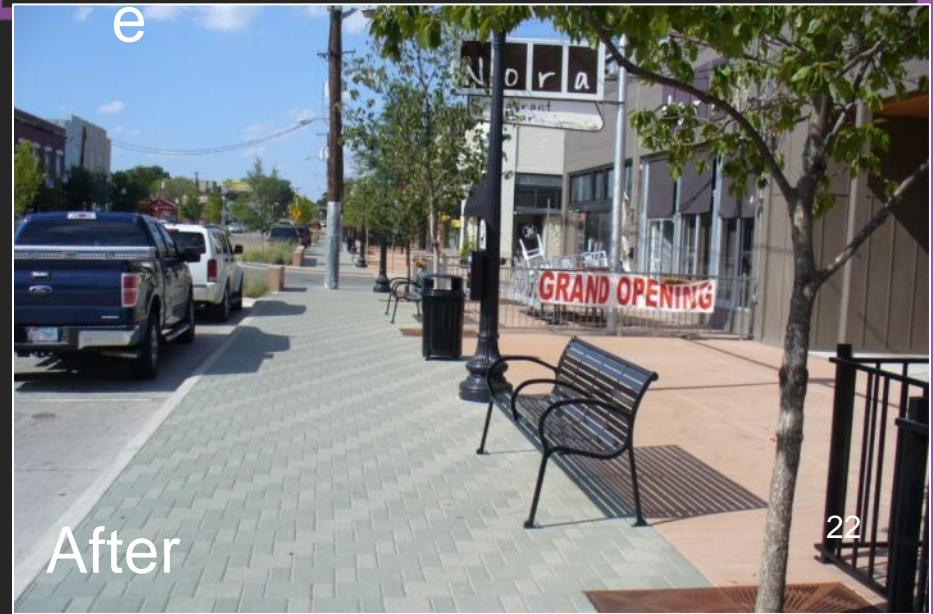
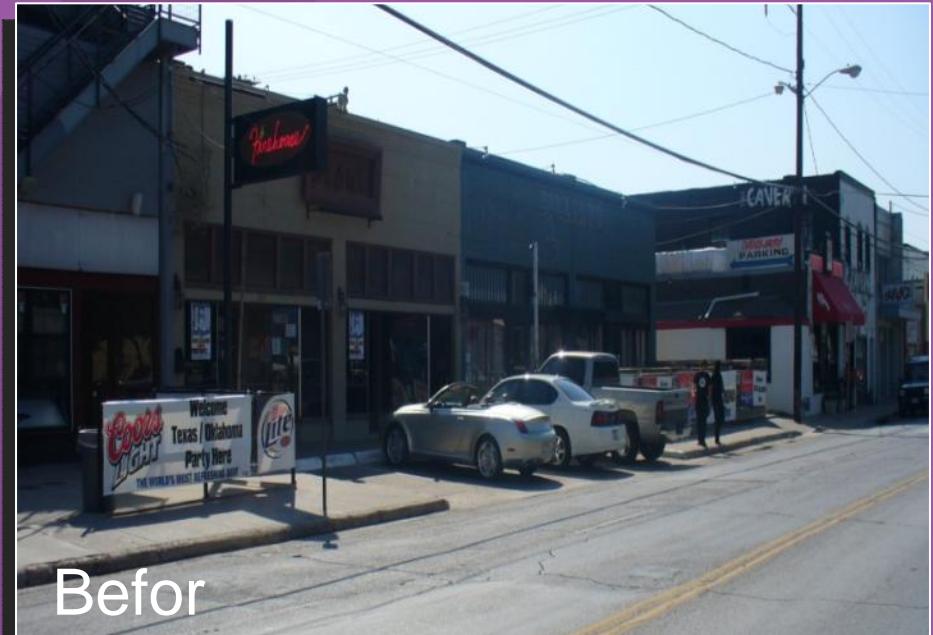
- BRT in dedicated lanes
- Four (4) travel lanes
- No on-street



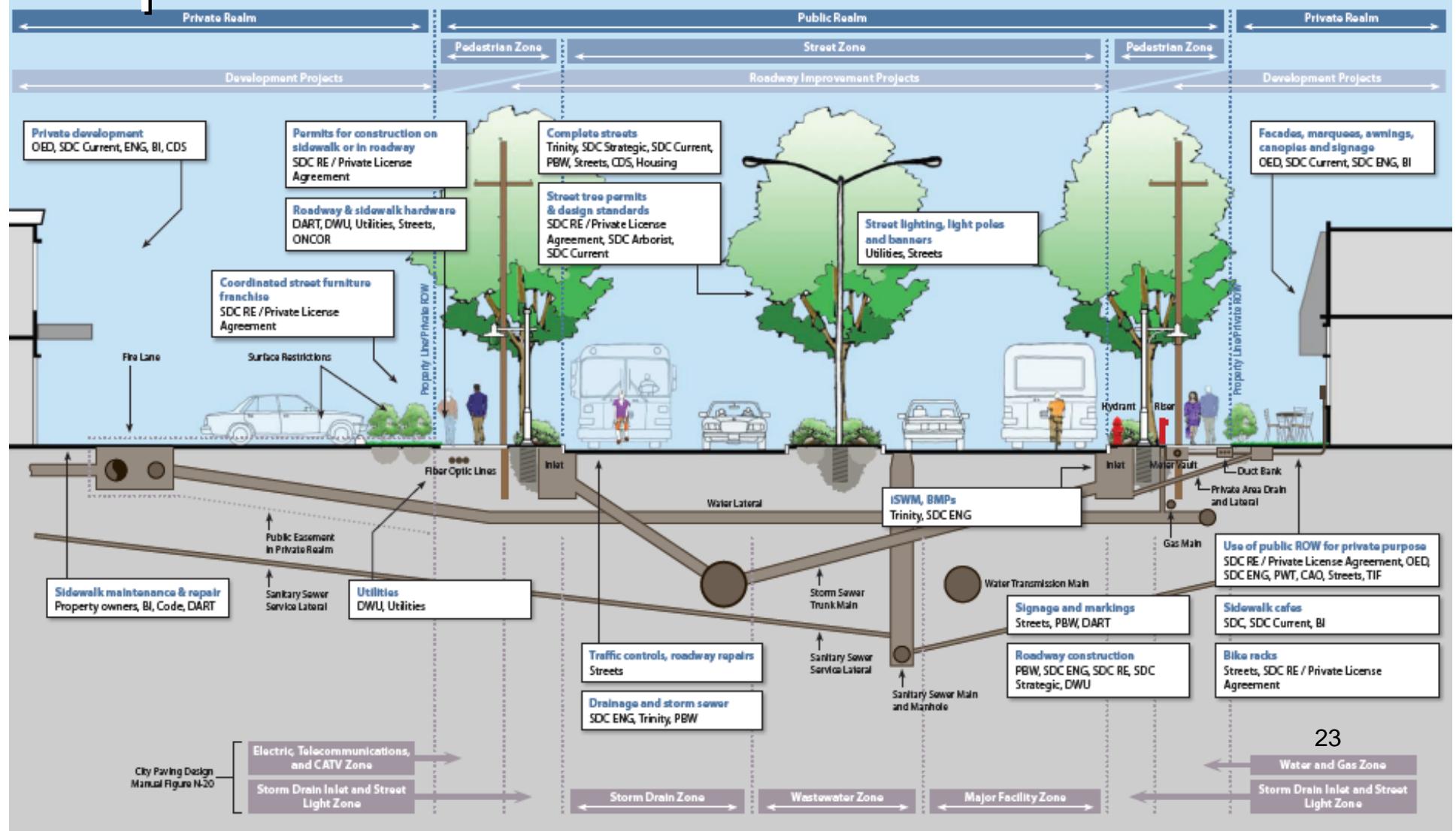
Option 2: Dedicated BRT / Bike Lane / No Parking

Greenville Avenue Example ~~Tradeoffs~~

- Indented parallel parking replaced angled parking to allow more space for outdoor patios
- Reduced traffic lanes enabled wider sidewalks and street furniture



Complete Street Implementation



Implementation Opportunities

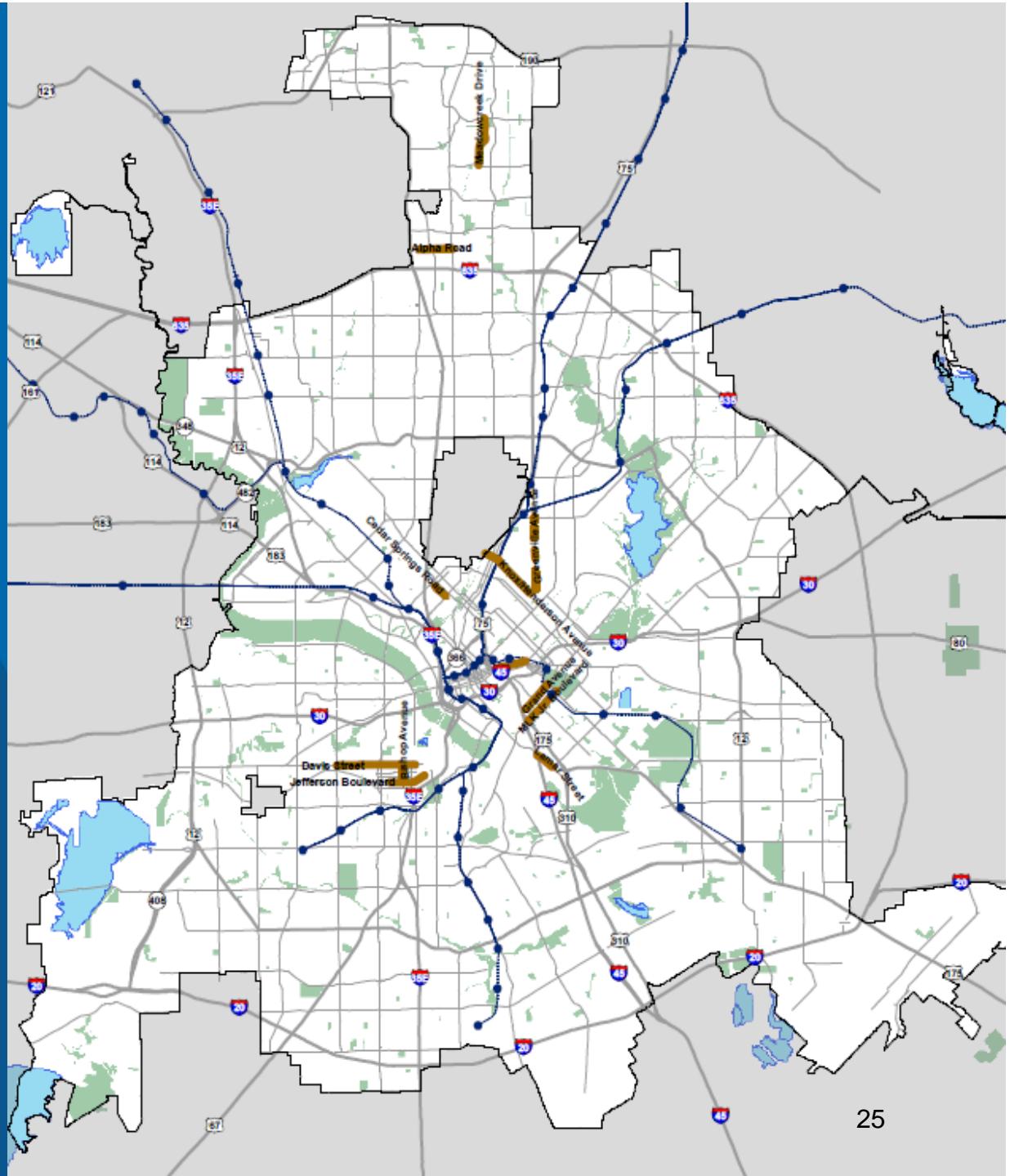
Public Projects

- *Different types of public projects present different opportunities and challenges :*
 - *Street Reconstruction or New Construction Projects*
 - *Street Resurfacing or Restriping Projects*

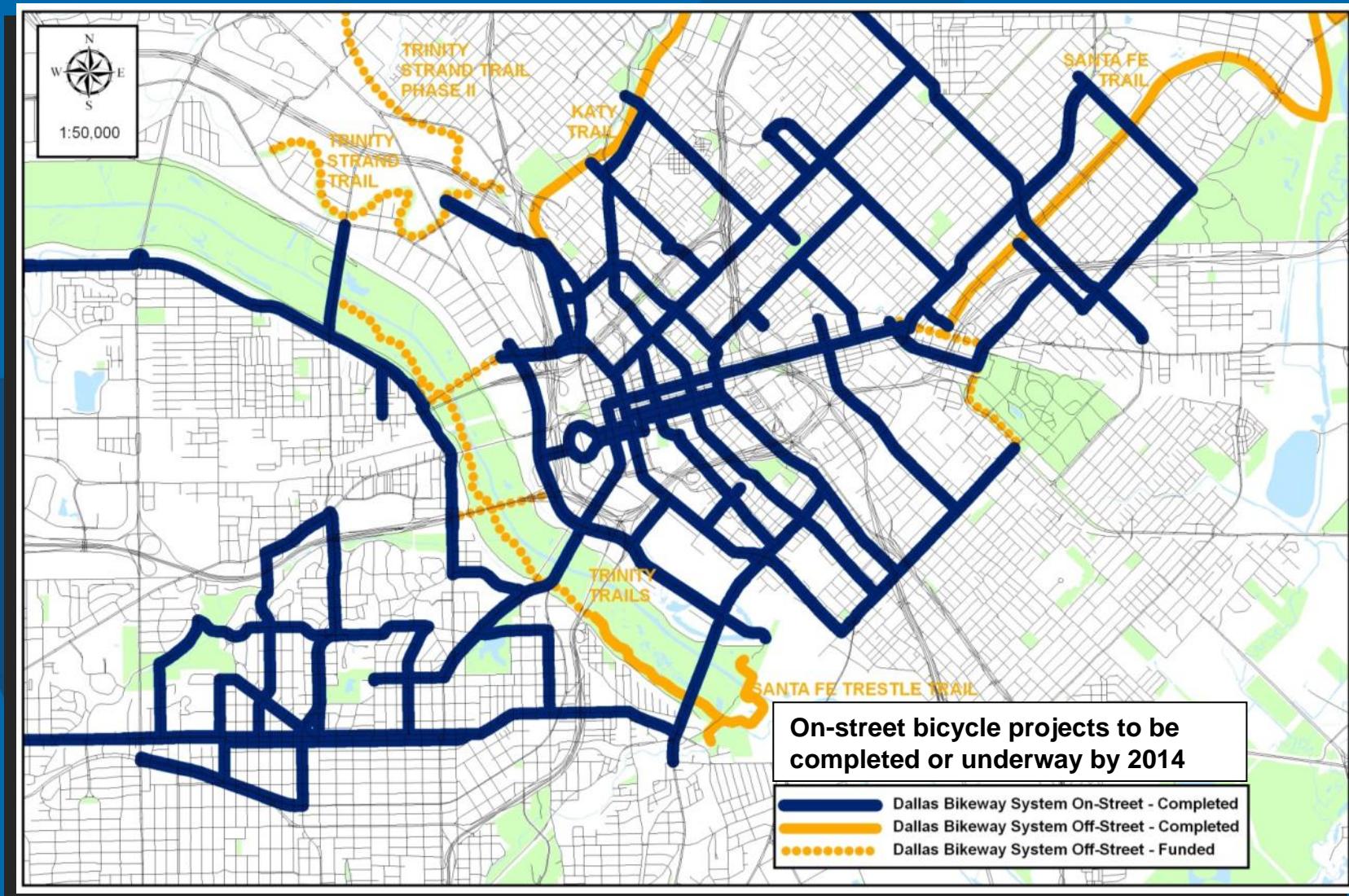
Bond Program Complete Street Projects

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



On-Street Bikeway Implementation



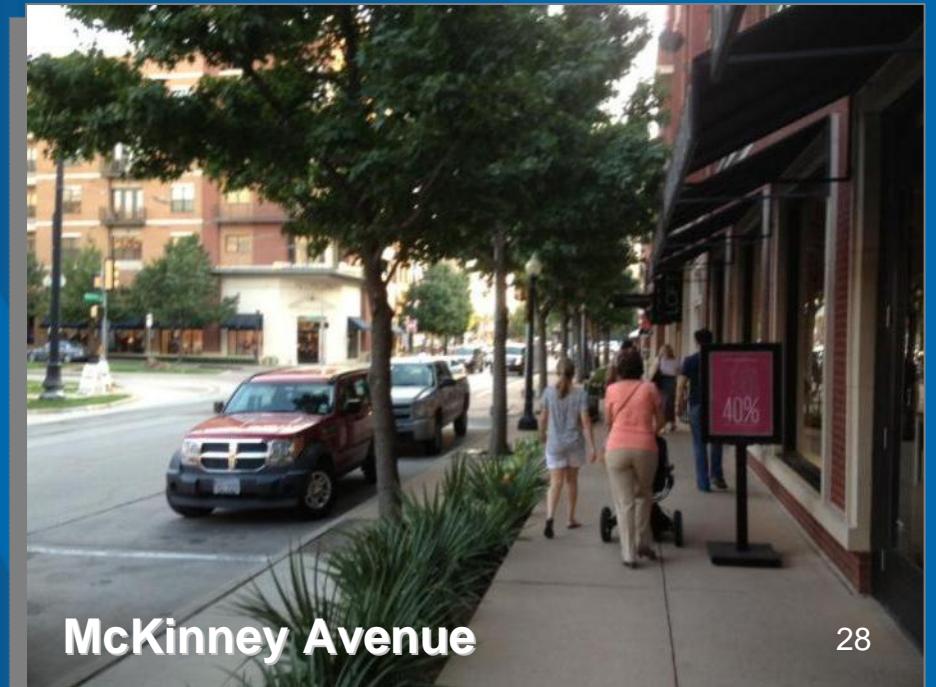
Operation And Maintenance

- *Complete Streets will introduce new operation and maintenance considerations:*
- *Need for maintenance of enhanced pedestrian, bicycle facilities and landscaping*
- *Need for creative solutions through public-private partnerships*
- *Need for testing, monitoring and evaluation through ongoing pilot projects*

Implementation Opportunities

Private Development Projects

- *Opportunity for incremental improvements along street frontages*
- *Code amendments will be necessary to facilitate more widespread implementation through private development*
- *Zoning and subdivision regulations*
- *Regulations for use of City right-of-way*



Implementation Strategies

- ***Adopt the Complete Streets Design Manual by Council resolution***
- *Task a staff team with leadership, resources and responsibility for Complete Street policy implementation across departments*
- *Enhance inter-departmental coordination on street improvement projects*
- *Implement Thoroughfare Plan amendments*
- *Amend related policies and regulations for consistency and linkage to the Complete Streets manual*
- *Explore alternative funding mechanisms for Complete Streets capital, operation and maintenance costs*
- *Expand Dallas' current offering of neighborhood-initiated street improvement programs to incorporate new design options and considerations*
- *Initiate a monitoring & evaluation program to assess effectiveness of complete street improvements*

Design Manual Discussion

Council Transportation and Trinity River
Project Committee

24 September, 2013



Design Manual

APPENDIX

Design Manual

**FIVE REASONS WHY THE CITY OF
DALLAS SHOULD ADOPT A COMPLETE
STREETS POLICY**

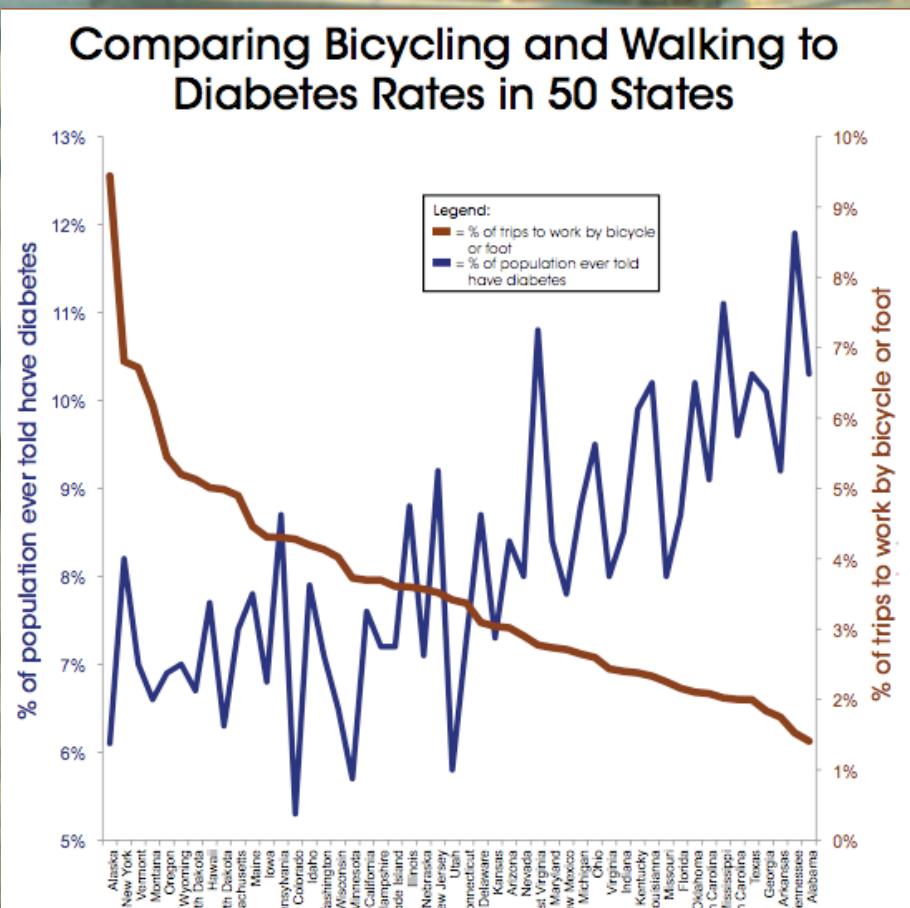
Benefits the Elderly, Disabled and Child



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.³³

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.

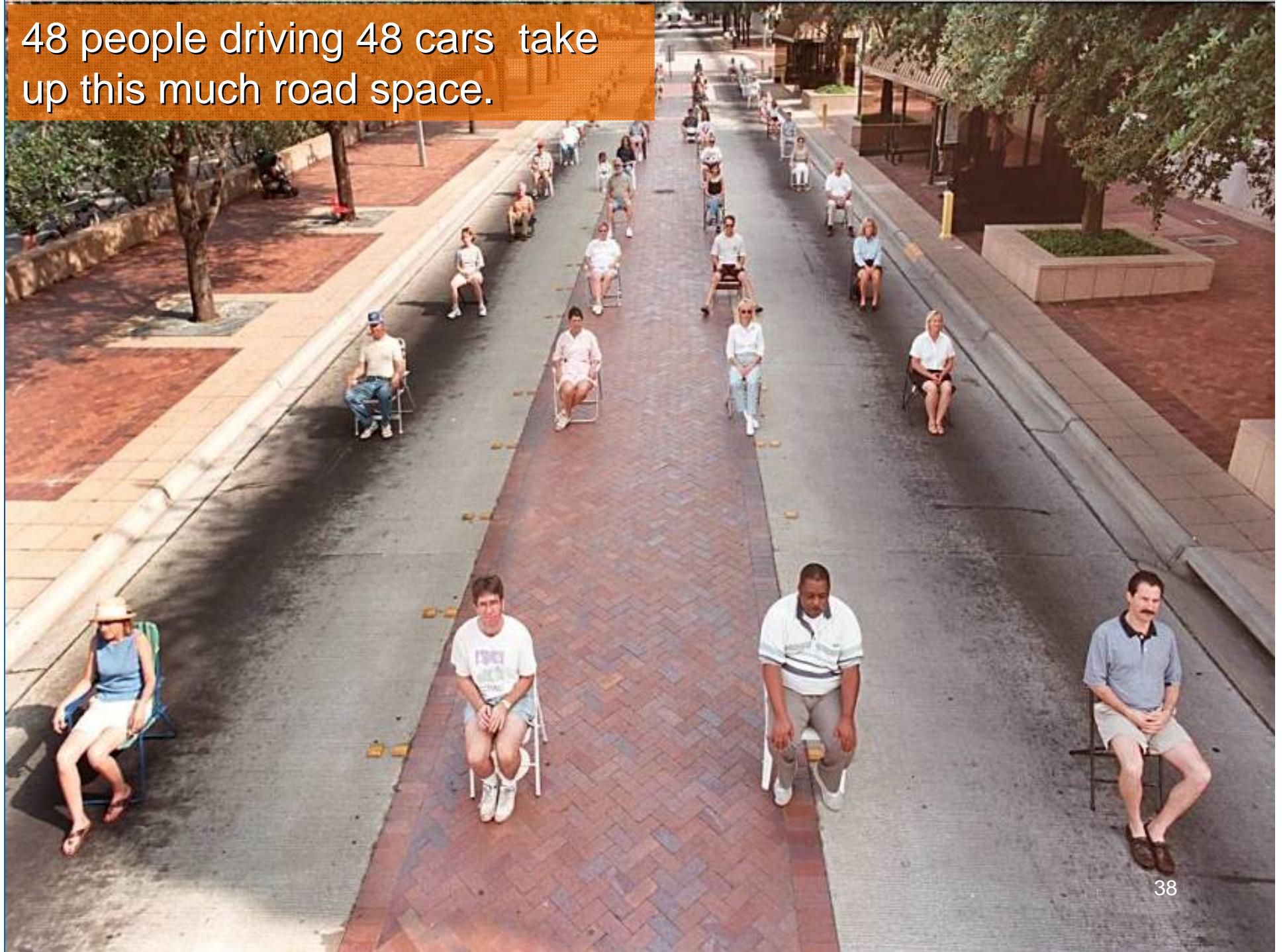
Benefits Street Capacity

5.

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



48 people driving 48 cars take up this much road space.





48 people in a bus or trolley take up this much road space.



Finally, 48 people walking and bicycling take up this much road

The Other Reason....

A traditional economic development tool

- Serves as a catalyst for private development
- Helps create places where people want to be
- Adds value to neighborhoods
- Promotes community support for projects

Public Investment in a Complete Street and a Catalyst Mixed Use Development



San Leandro
Boulevard (San
Francisco Bay Area)

Credit: Steve Price, Urban Advantage

Public Investment in a Complete Street and a Catalyst Mixed Use Development



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Boulevard (San
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Boulevard (San
Francisco Bay Area)

Credit: Steve Price, Urban Advantage

Complete Streets as an Economic Development Catalyst

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



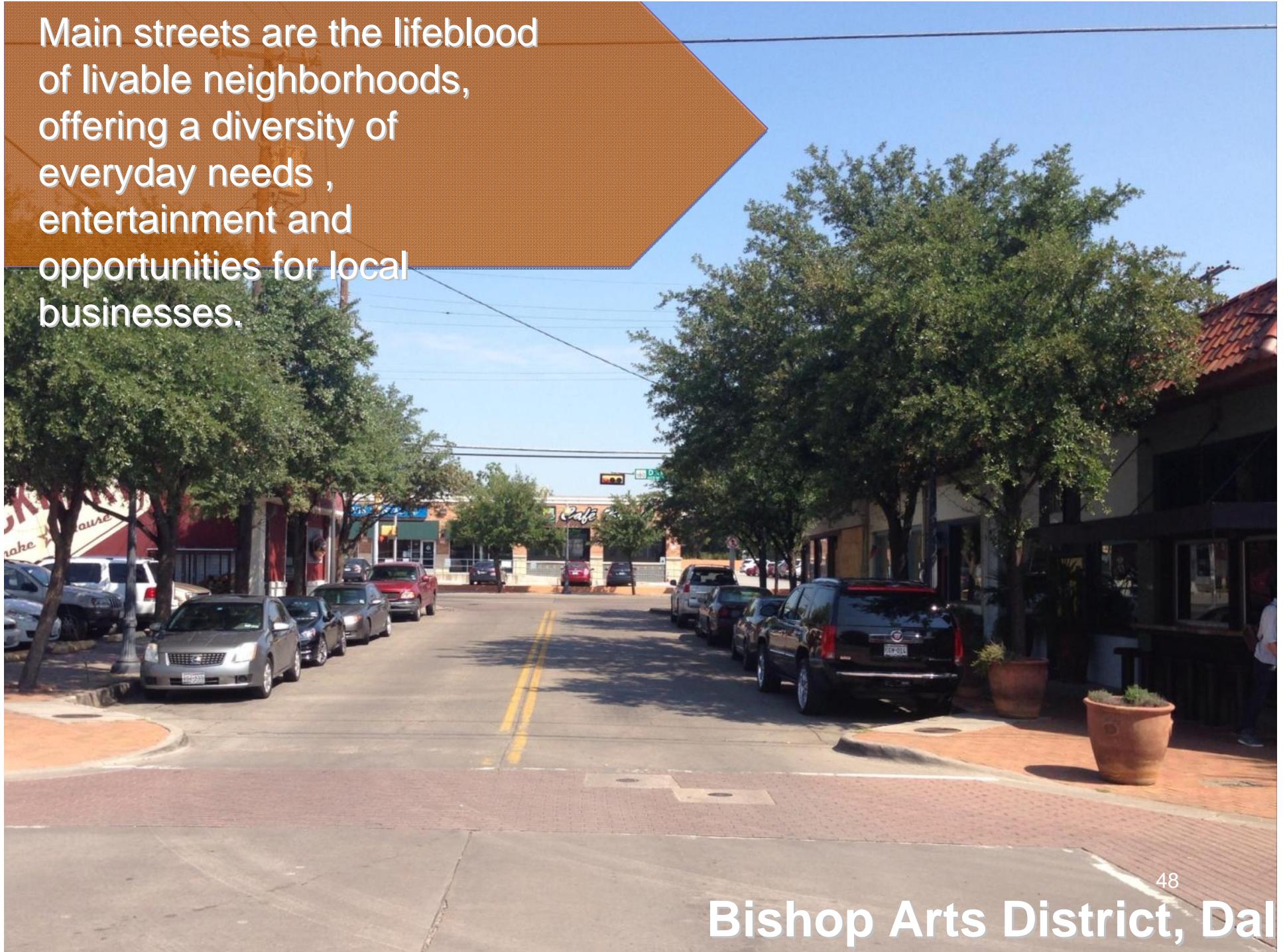
Revitalizing Corridors with Complete Streets



North Shattuck Avenue, Berkeley

Photo: Kimley-Horn and Associates, Inc.

Main streets are the lifeblood of livable neighborhoods, offering a diversity of everyday needs , entertainment and opportunities for local businesses.



48

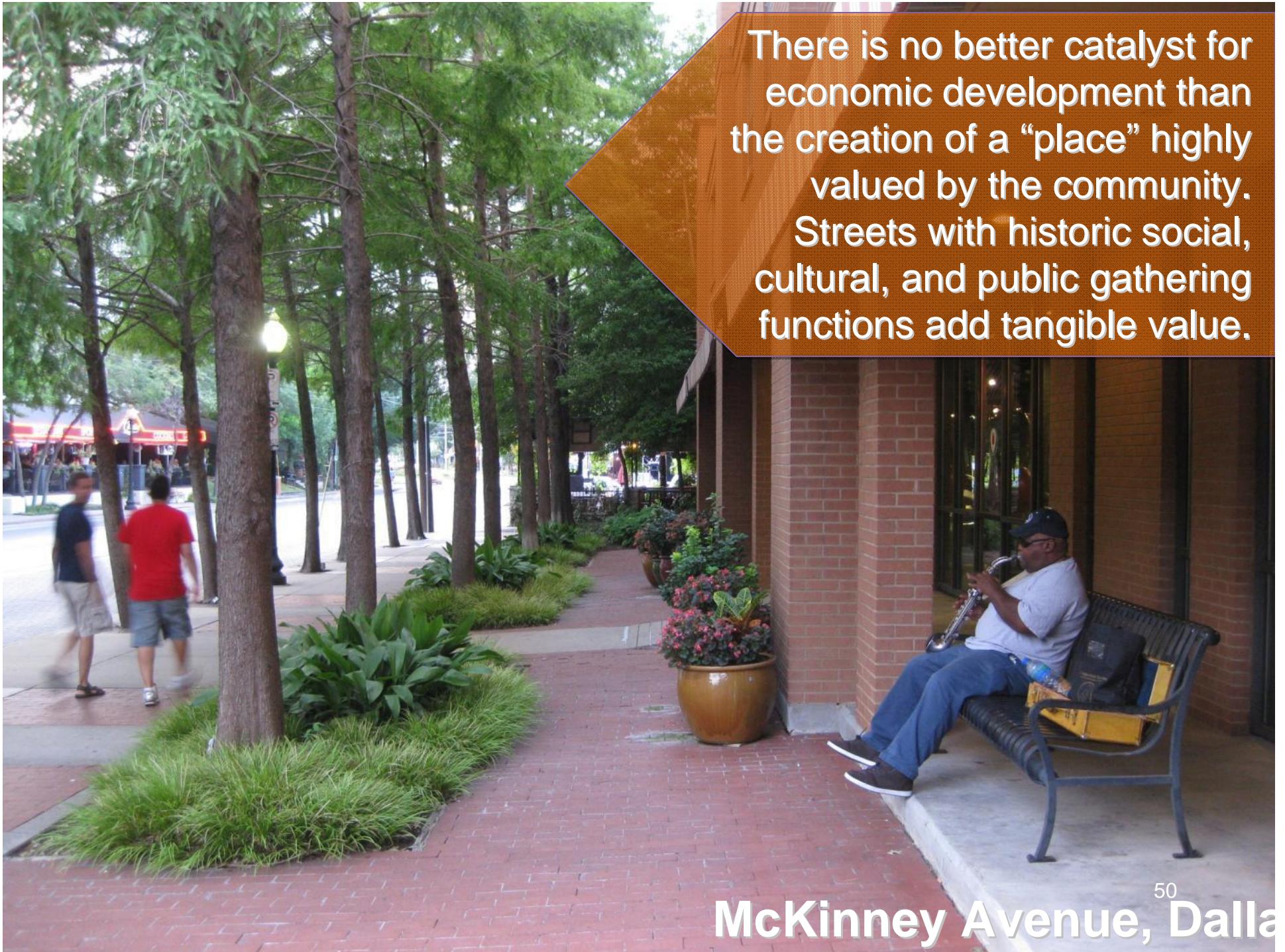
Bishop Arts District, Dal

Attracting residents to the City Center requires “Downtown Lifestyle” streets where people can live, work, and play without using cars.



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Knox Street, Dallas





In most metropolitan areas, every one-point increase in the 100-point Walk Score scale is associated with an increase in home value of \$500 - \$3,000



**COMPLETE STREETS ARE NOT
ALL THE SAME**

Mixed-Use Street
(minor)



Bishop Avenue ⁵³

Mixed-Use Street (minor)



Bexar
Street

Mixed-Use Street (arterial)



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McKinney Avenue

Commercial Street (arterial)



Residential Street
(minor)



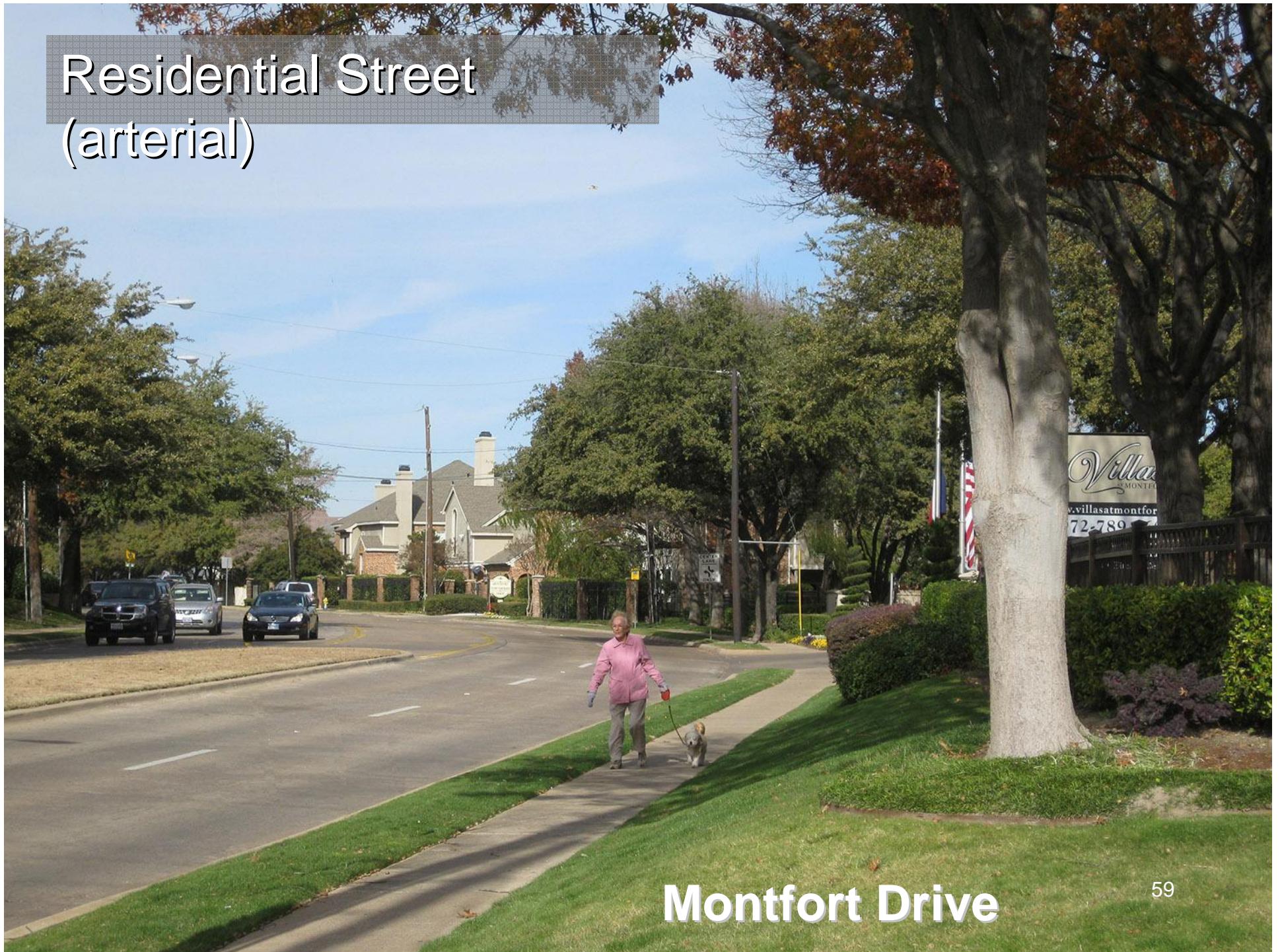
Winnetka Avenue

Residential Street
(minor)



Clay Academy Boulevard, Capella Park

Residential Street (arterial)



Montfort Drive

59

Parkway (arterial)



Turtle Creek Blvd

60

Parkway (minor)



Blaylock Street, Oak Cliff

Design Manual

**MULTIPURPOSE STREETS:
BLENDING THE HISTORIC AND
THE MODERN**



- Mobility
- Commerce
- Culture
- **Communication**
- Recreation
- **Public space**

M I G

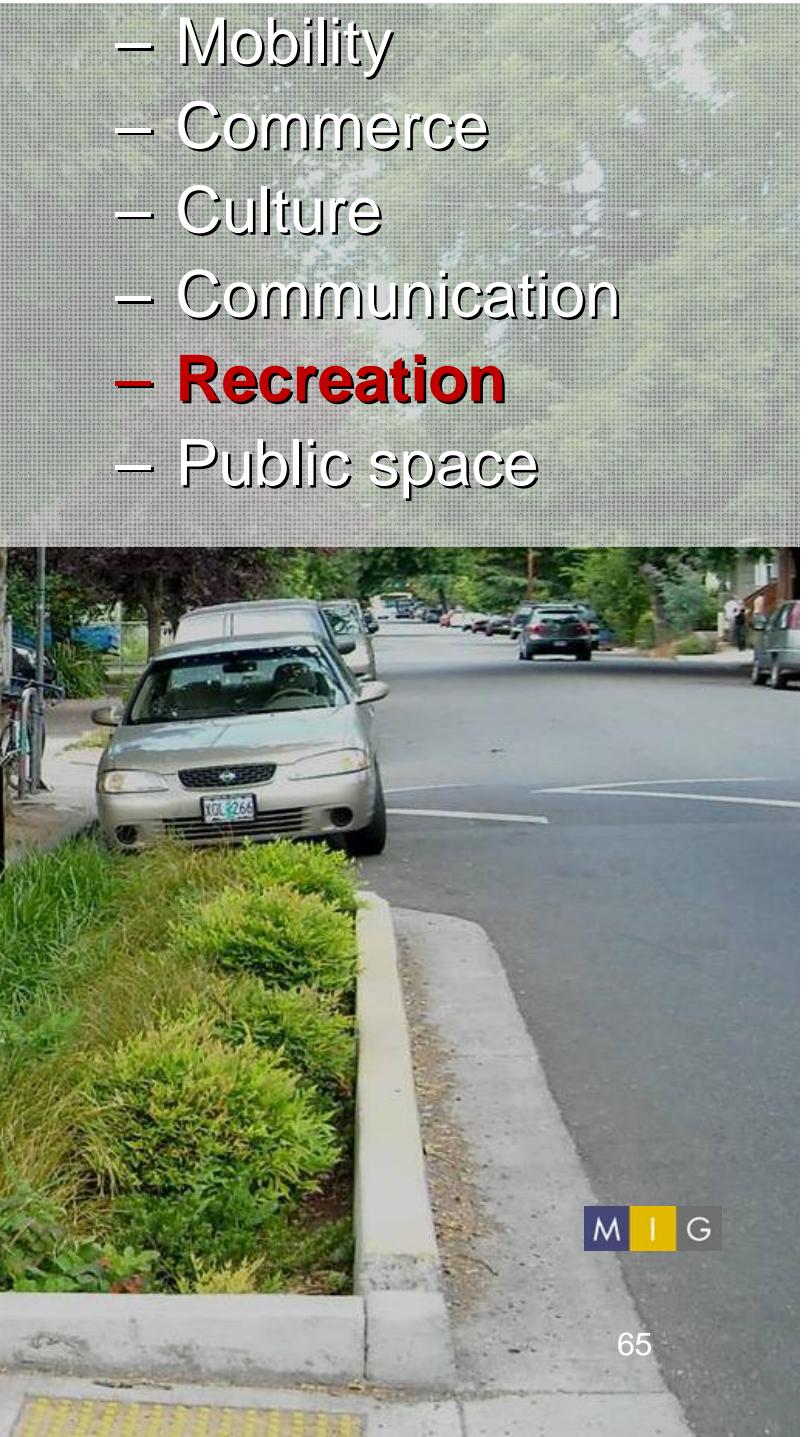


- Mobility
- Commerce
- **Culture**
- Communication
- Recreation
- Public space

M I G



- Mobility
- Commerce
- Culture
- Communication
- **Recreation**
- Public space





GOODS MOVEMENT





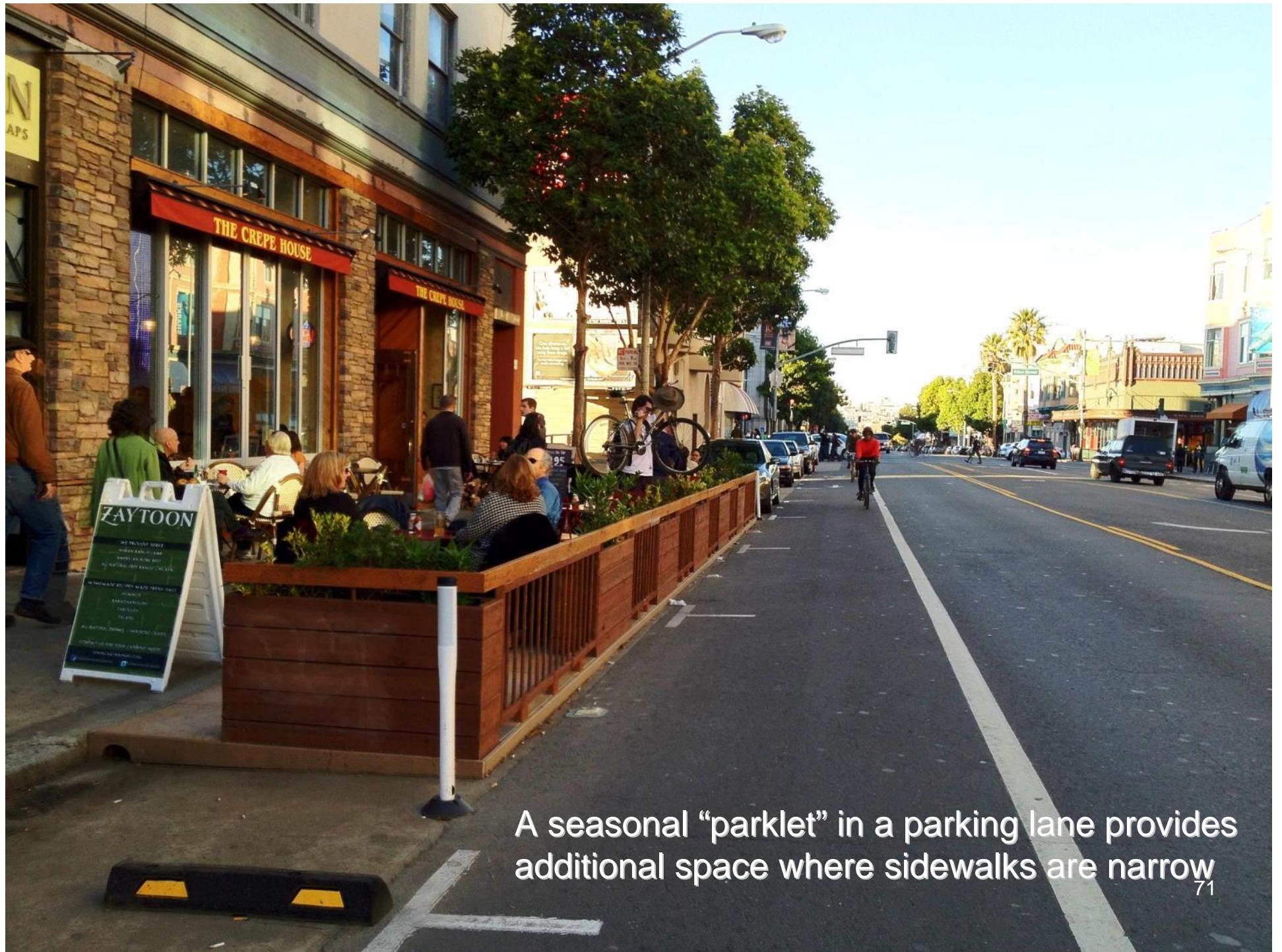
UTILITIES

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WHAT ARE THE TOP THREE UNDervalued STREET ASSETS?

- On-street parking
- Sidewalk buffer zone
- Alleys





A seasonal “parklet” in a parking lane provides additional space where sidewalks are narrow



Tree-lined planting strip in residential neighborhood creates an effective pedestrian buffer



Dual function: the furnishing zone accommodates many types of street furniture and utilities on urban streets, and buffers



Deteriorating asphalt alley in Vancouver, Canada, converted to a “green alley”. Concrete strips can take the load of garbage trucks and fire apparatus. All other surfaces are permeable.

Photo: Ben Nelms for the National Post



Alley transformed into pedestrian walkway and urban plaza



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Alley converted to restaurant seating