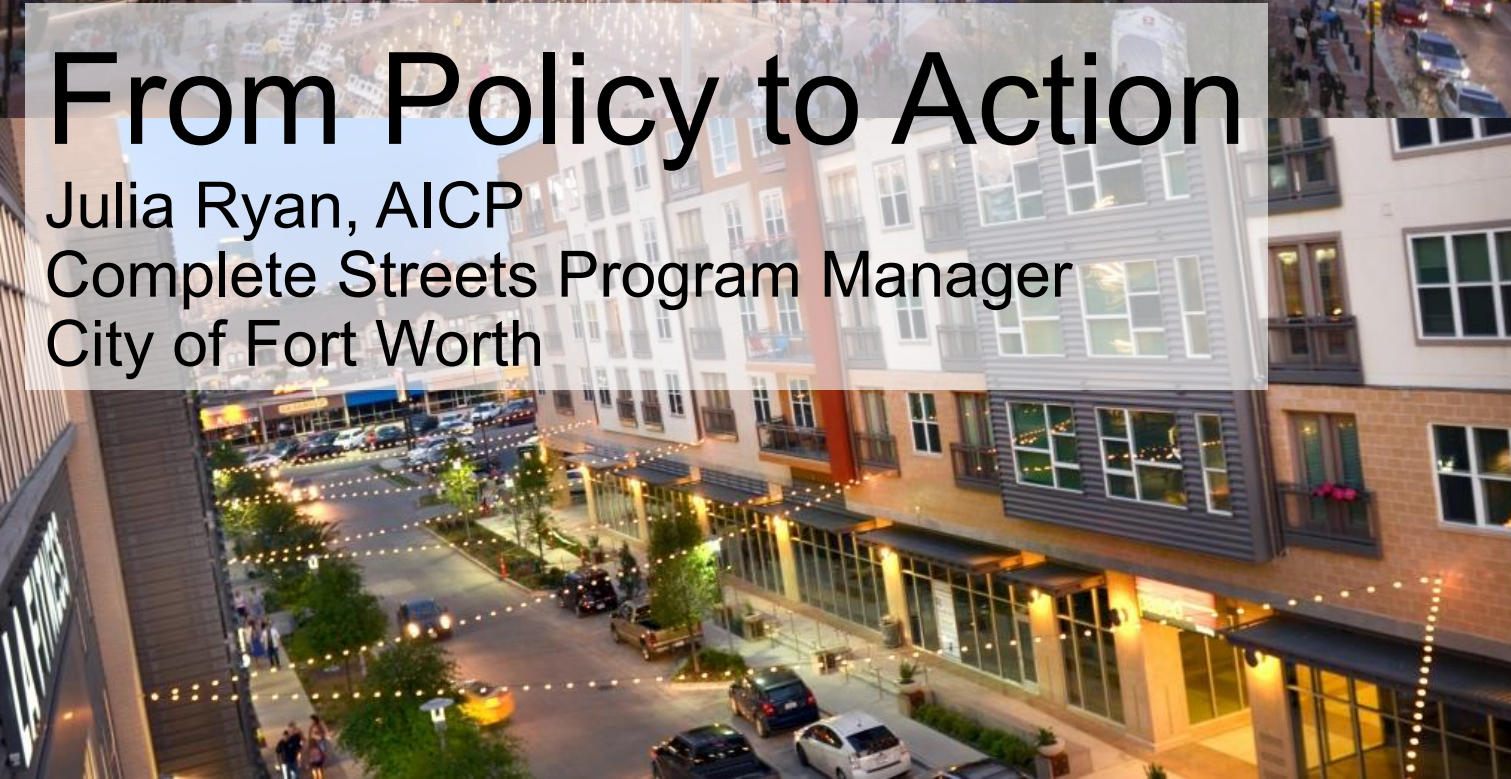




From Policy to Action

Julia Ryan, AICP
Complete Streets Program Manager
City of Fort Worth



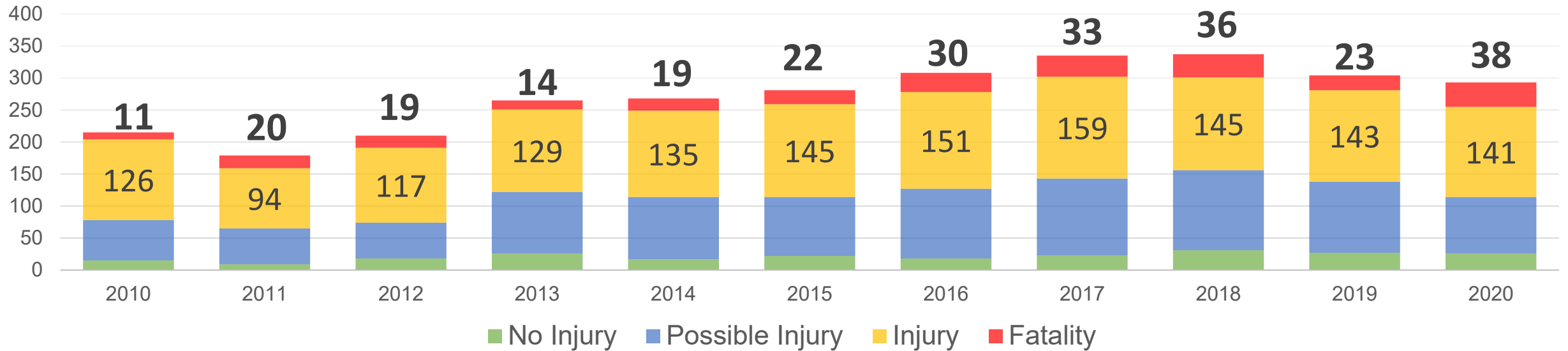


Impetus for Planning Efforts

- **Racial equity disparities** in transportation funding and fatal and incapacitating pedestrian and bicycle crashes
- Roadways were **not compatible** with land use and favored unsafe driving behaviors
- Planned roadway **capacity exceeded traffic need**
- **No traffic fatalities** are acceptable
- Multimodal plans were **not integrated** into planning process



FORT WORTH PEDESTRIAN CRASH COUNTS AND SEVERITY 2010-2020



Bike Fort Worth (2010) & Safe Passing Ordinance (2011)

Walk Fort Worth Plan (2014)

Pedestrian & Bicycle Advisory Commission (2015)

Complete Streets & Master Thoroughfare Plan (2016)

Race and Culture Task Force (2018)

Active Transportation Plan (2019)

Vision Zero Resolution (2020)

What are Complete Streets?

Provide a safe, accessible, complete, connected, comfortable, efficient, and community oriented **transportation system for all people** that supports mobility options, healthy living and economic benefit.

-Fort Worth Complete Streets Policy



Why are Complete Streets Important in Fort Worth?



Road fatalities: Fort Worth pedestrians make up around 1.3% of all crashes but 25% of road fatalities



Obesity/Inactivity: 2/3 of Texas adults and 1/3 of children will be considered obese by 2030



Equity: Super Majority Minority areas comprise 57% of all households, but 77% of zero car households



Aging in place: 18% Fort Worth residents are 55+

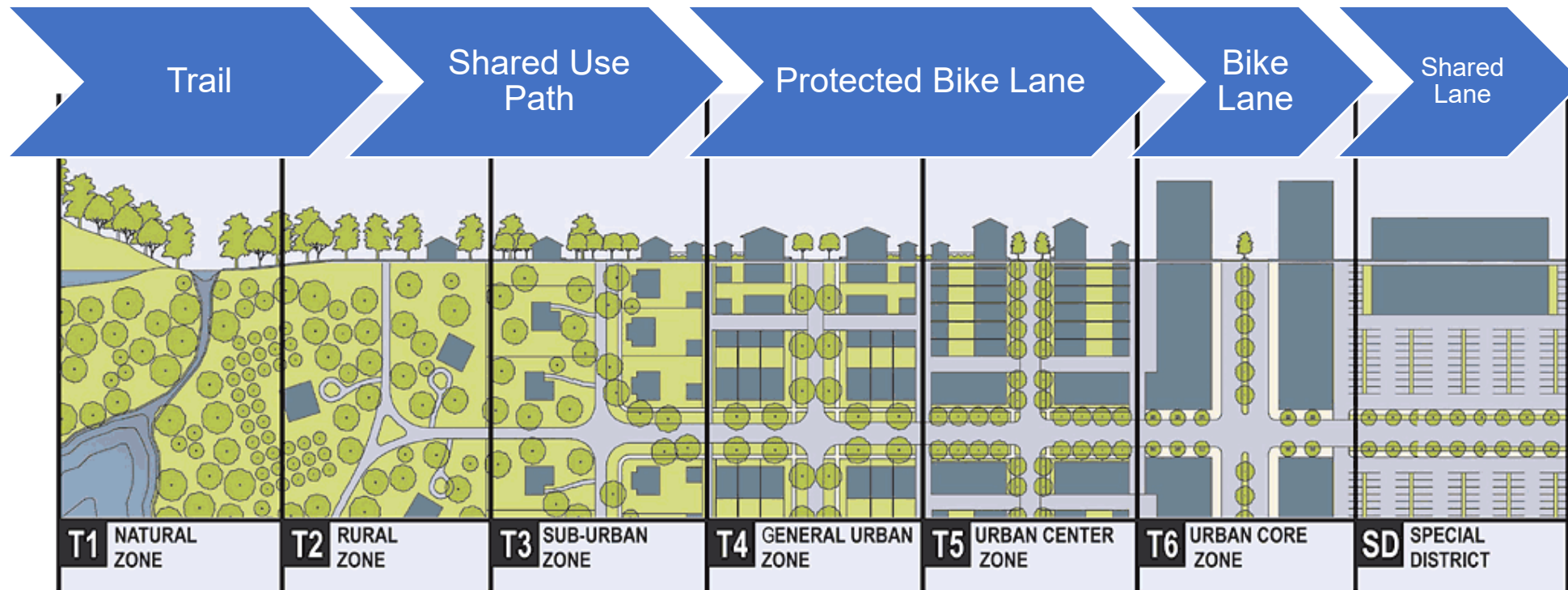


Population growth: 1 million Fort Worth residents expected by 2030 (9 years!)



Economics: We can't build our way out of congestion, but have a billion dollar roadway infrastructure backlog

Complete Streets and Context Sensitivity



Complete Street (**Policy**): Provide transportation options for all users

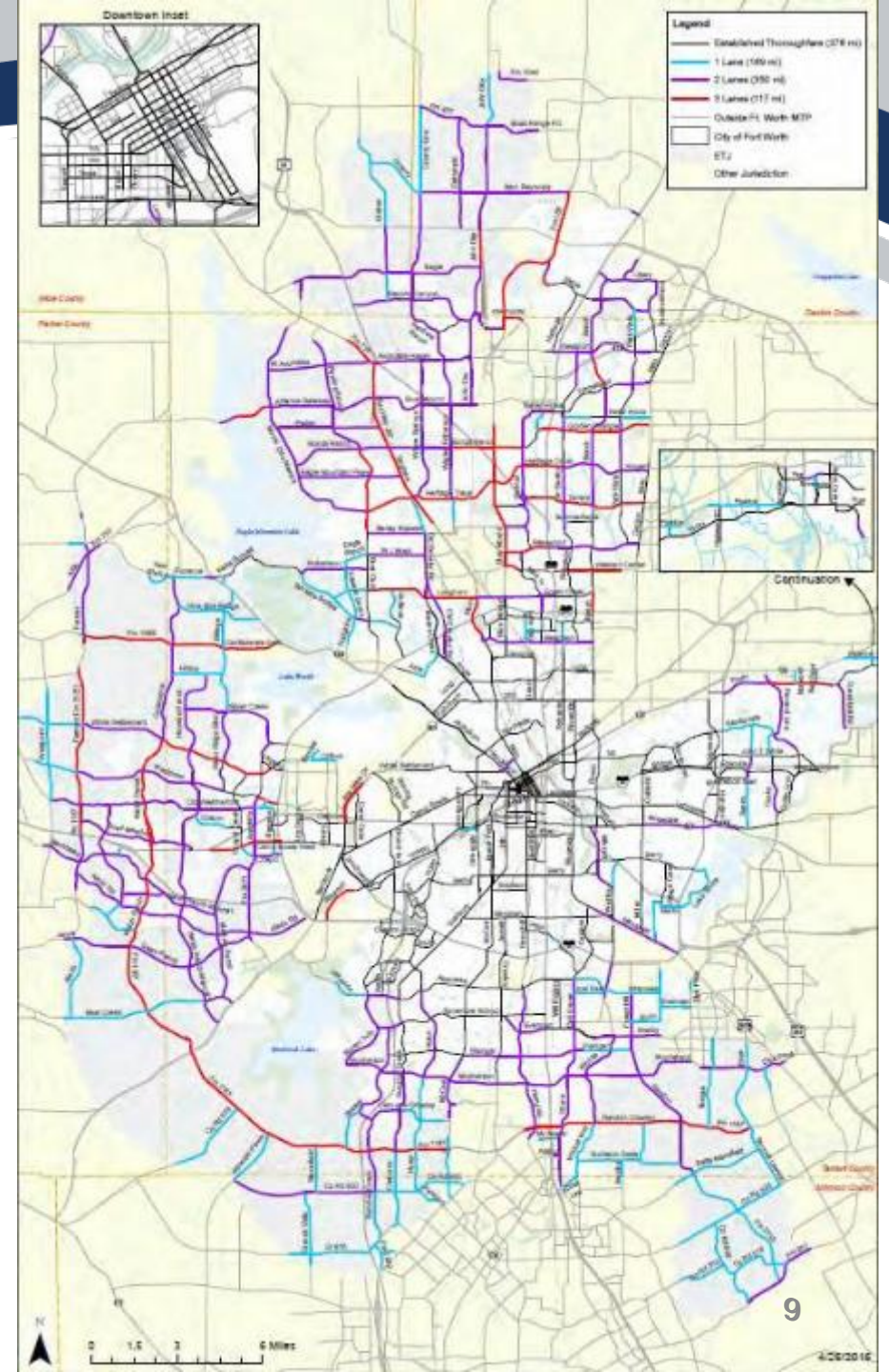
Context Sensitive (**Implementation**): As the land use context changes, so does the infrastructure application

Sidewalks + Bike Lanes \neq Complete Street?



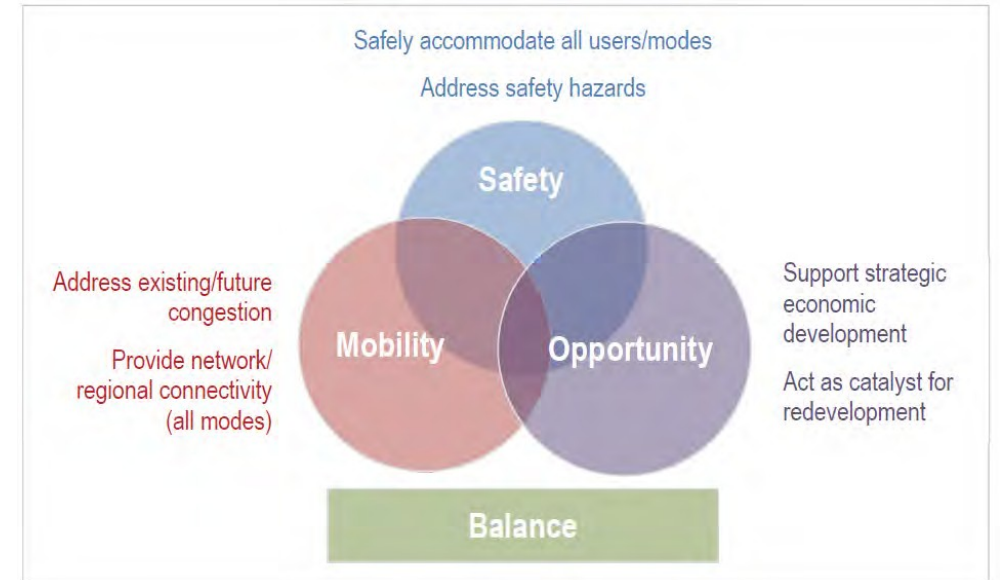
Master Thoroughfare Planning

The Master Thoroughfare Plan (MTP) is a **long-range plan** for major roadways and **right-of-way preservation** document, allowing the orderly development of a network necessary to **support growth** plans and **ultimate buildout** of the thoroughfare network.



Master Thoroughfare Plan Goals

- **Context Sensitivity** – Street design that supports surrounding land use
- **Complete Streets** – Safe for all road users, and integration related planning documents
- **Fiscal Stewardship** – Right sizing of streets and efficient travel routes

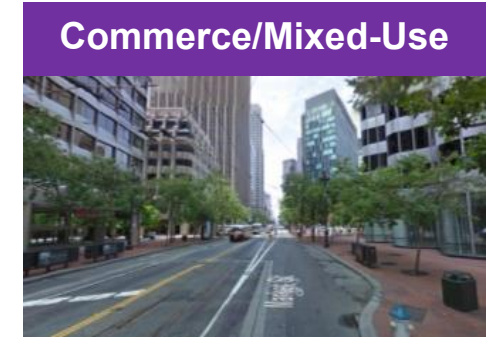
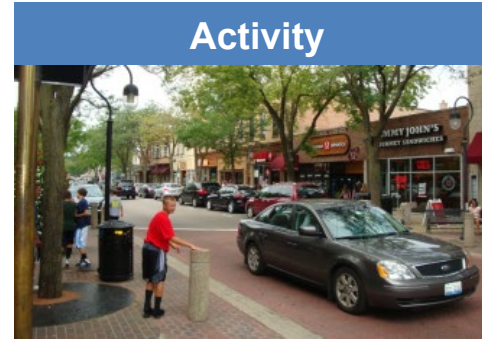


Context Sensitive Thoroughfares

- Traditional functional classification replaced with Street Types
- Street Types established to reflect and **support surrounding land use**
- Right-of-way/capacity changes within each street type **based on future demand**
- Complete Streets **elements change based on context** and traffic characteristics

Street Types

Streets



Connectors

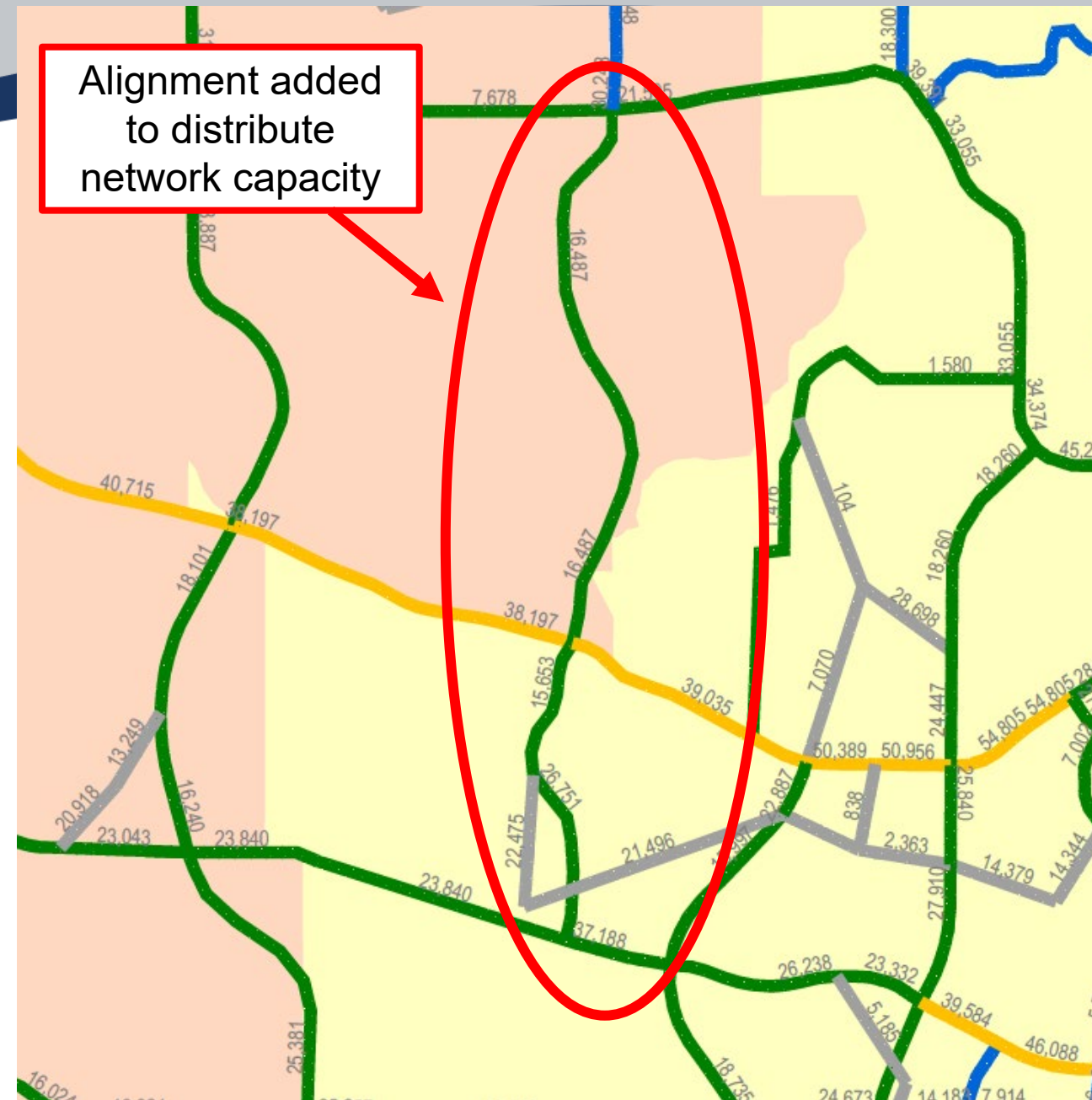


Regional



Buildout Model

- Tailored version of COG 2035 model, utilizing **build-out projections** in high-growth areas of the City and ETJ.
- Forecasts used to **establish capacity** (number of lanes).
- Tested **alignment alternatives** to gauge their traffic demand and effects on congestion.



What is Active Transportation?

People who **walk (including persons with disabilities)**, use **transit**, and **bicycle** creating a citywide seamless network of on- and off-street bicycle and pedestrian ways suitable for people of **all ages and abilities**.



Introduction to comfort

- **Comfort** (or being comfortable) is a sense of physical or psychological ease, **often characterized as a lack of hardship**
- **Defining comfort is often intangible** – using data as a quantitative measure can bridge the gap between technical analysis and user experience
- Pedestrian Experience Index and Bicycle Level of Traffic Stress are **data analysis tools to define and apply comfort** for practitioners



Sidewalks: Not a New Concept








**Raised
Crosswalk?!**

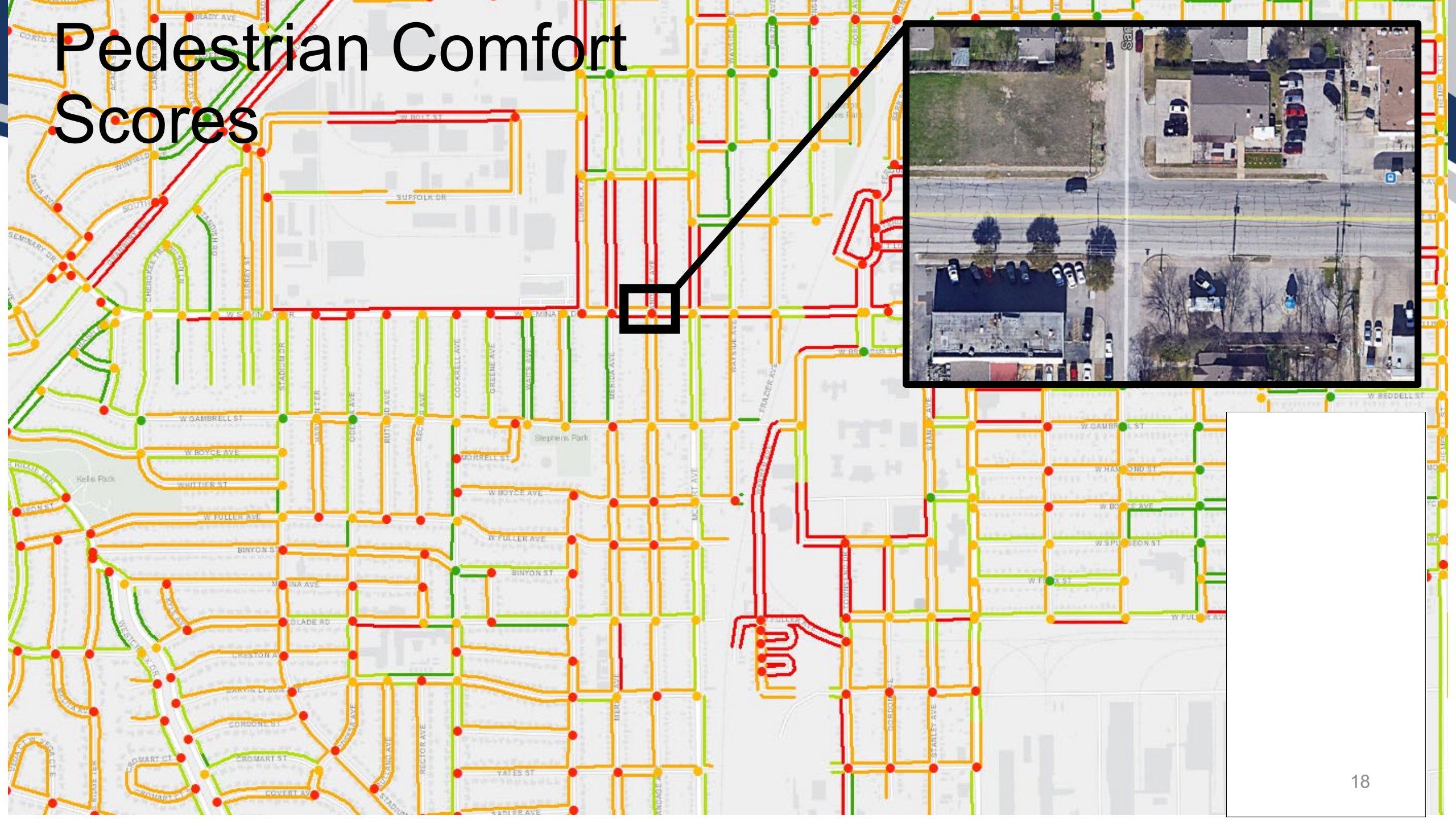
Sidewalk

Tourists Cross the Street at Pompeii. Giorgio Cosulich / Getty Images News / Getty Images

Pedestrian Experience Factors

					
Infrastructure	Sidewalk Presence & Condition	Posted Speed Limit	Number of Lanes	Bike Lane Presence	Car Parking Presence
Effect	Existing and in good condition = more comfortable	Lower = more comfortable	Fewer = more comfortable	Present = more comfortable	Present = more comfortable

Pedestrian Comfort Scores



Designing for Bicyclist Comfort



photo credit unknown

Level of Comfort - Designing Facilities for All

Percent of Population Willing to Use Facility*

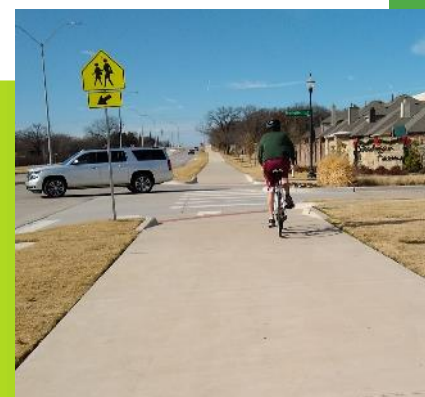
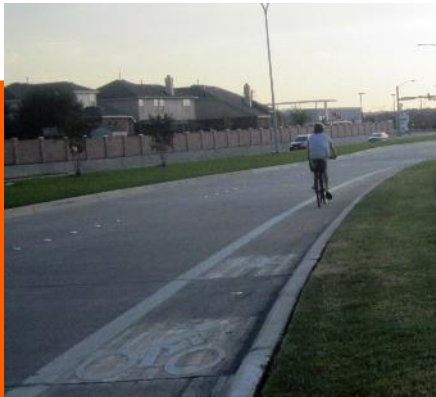
2%

13%

36%



Less Comfortable

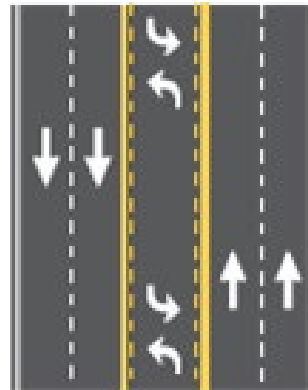


More Comfortable

Roadway Segment Traffic Stress



Speed of traffic



High number of travel lanes



High traffic volume



Presence of comfortable bike facility

Effect on Stress



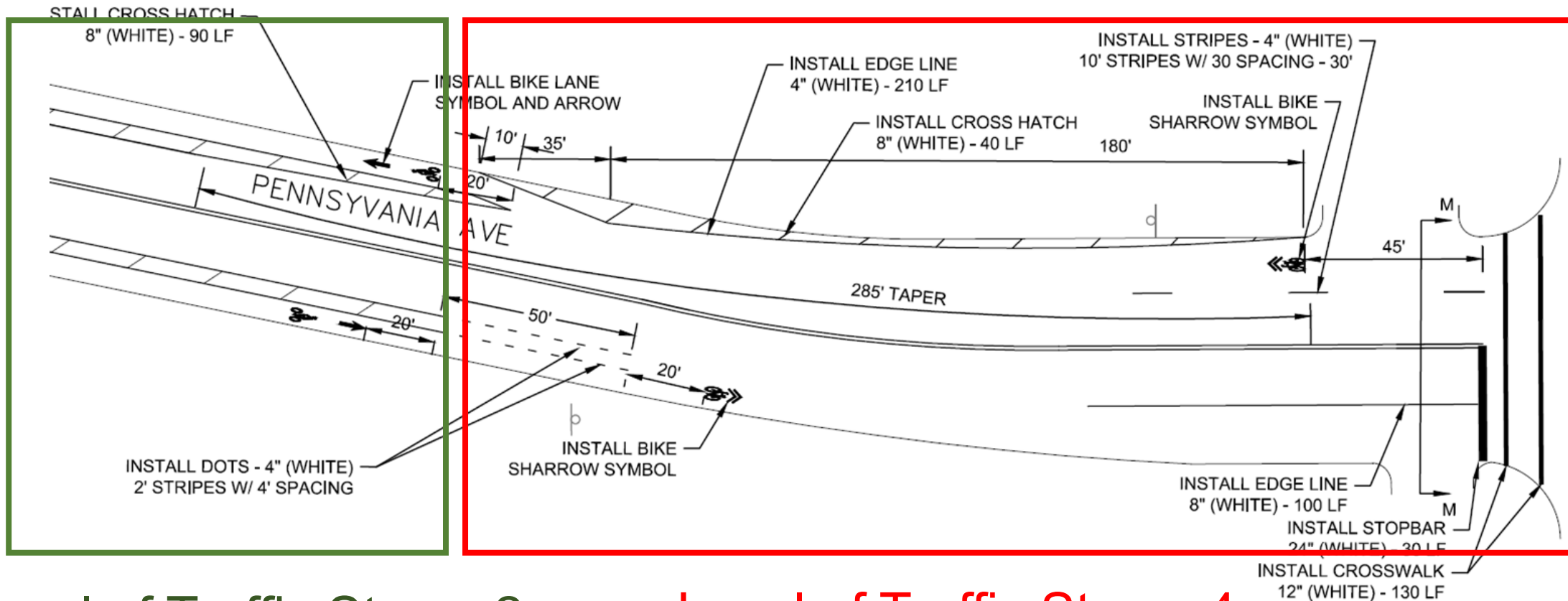
Data Driven Comfort

- Applies to roadways not assigned a cross-section in the Master Thoroughfare Plan
- Assists in planning **appropriate bicycle facility** based on roadway and land use context
- **Eliminates improper facility selection** (e.g., bike lane on high speed roadway)

Facility Selection Table

Roadway Type/ Characteristics	Posted Speed	Lanes Per Direction	Presence of Parking	Traffic Volume (ADT)	Trails	Sideways; Separated Bike Lanes	Buffered Bike Lanes (8'+); Botts Dots	Conventional Bike Lanes (5'-6')	Signs and Shared Lane Markings (no roadways with no treatment)	Bicycle Boulevards with Traffic Calming
Independent Right of Way	n/a	n/a	n/a	n/a	1	n/a	n/a	n/a	n/a	n/a
Thoroughfares										
System Link	45	3	No	All Volumes	n/a	1	4	4	4	n/a
System Link	45	2	No	All Volumes	n/a	1	3	4	4	n/a
Commercial or Neighborhood Connector	35	3	No	All Volumes	n/a	1	3	4	4	n/a
Commercial or Neighborhood Connector	35	2	No	20,001+	n/a	1	3	4	4	n/a
Commercial or Neighborhood Connector	35	2	No	8,001 - 20,000	n/a	1	3	3	4	n/a
Commercial or Neighborhood Connector	35	2	No	<8,000	n/a	1	2	3	3	n/a
Commercial or Neighborhood Connector	35	1	No	1501+	n/a	1	2	2/3*	4	n/a
Commercial or Neighborhood Connector	35	1	No	751-1500	n/a	1	2	2	3	n/a
Commercial or Neighborhood Connector	35	1	No	<750	n/a	1	2	2	2	n/a
Commerce/Mixed Use or Activity Street	35	2	Yes	>8,000	n/a	1	3	3	4	n/a
Commerce/Mixed Use or Activity Street	35	2	Yes	<8,000	n/a	1	2	3	3	n/a

Common Bicycle Intersection Design



Level of Traffic Stress 2

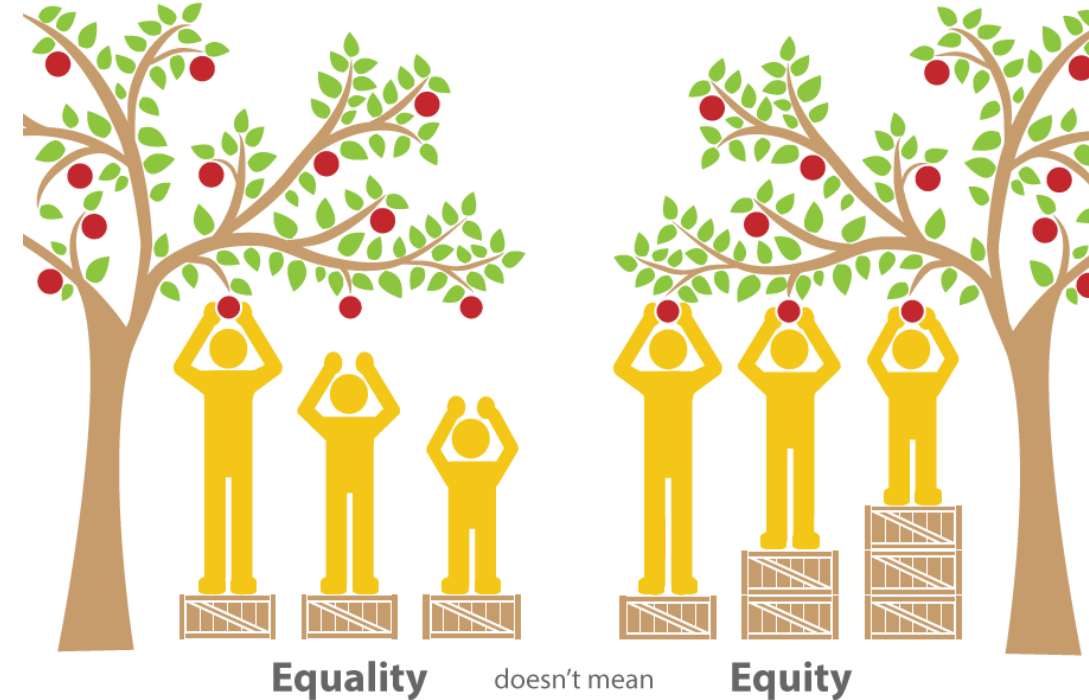
Level of Traffic Stress 4

Racial Equity



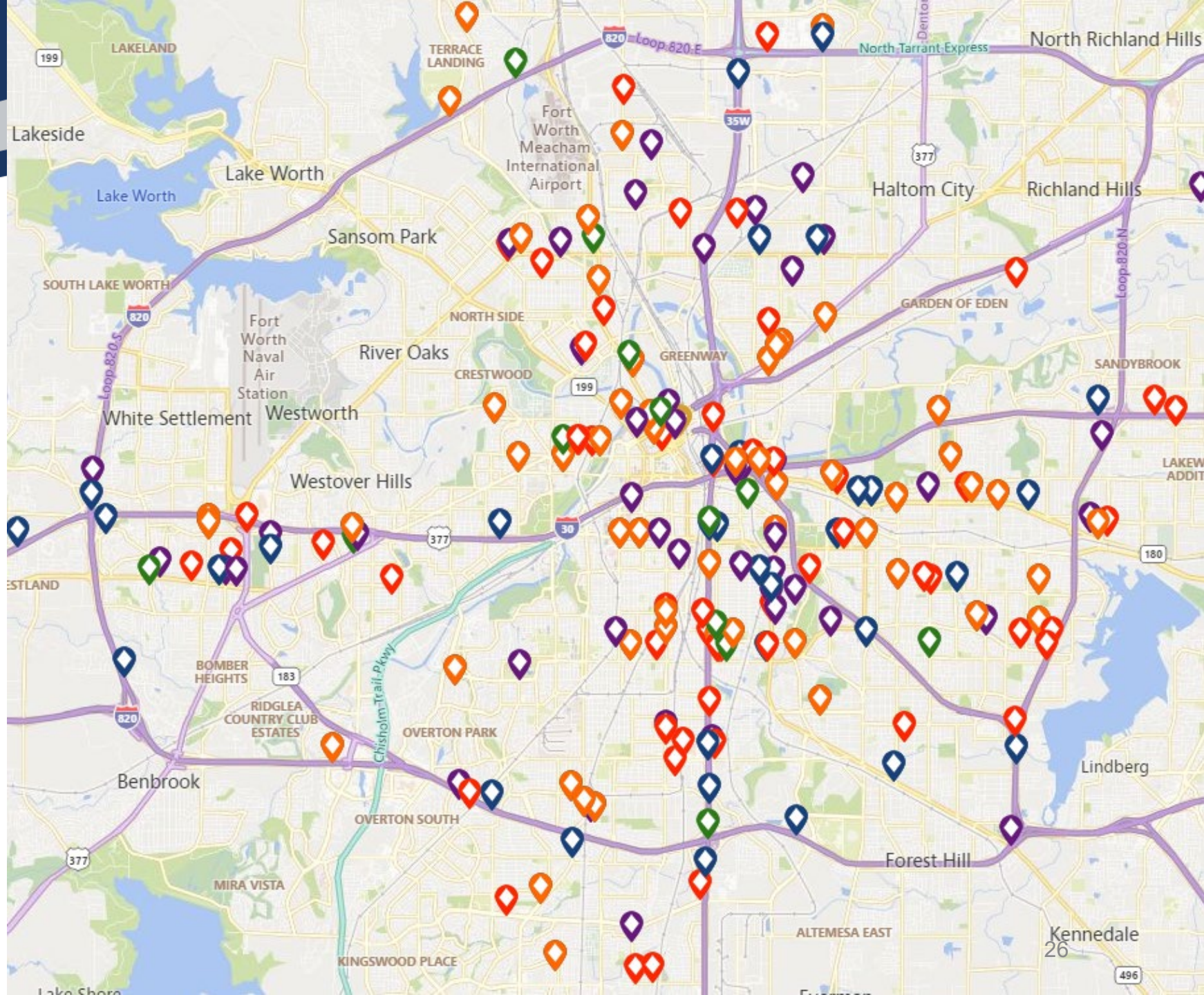
Transportation Equity

- **Transportation equity is the fairness with which transportation costs and benefits are distributed.**
- Access to transportation serves as a key component in addressing poverty, unemployment, and equal access to opportunities.
- Transportation and zoning decisions have limited the mobility and opportunities of people of color.
- Roadways in newly developing areas can receive more investment than transit and other multimodal transportation





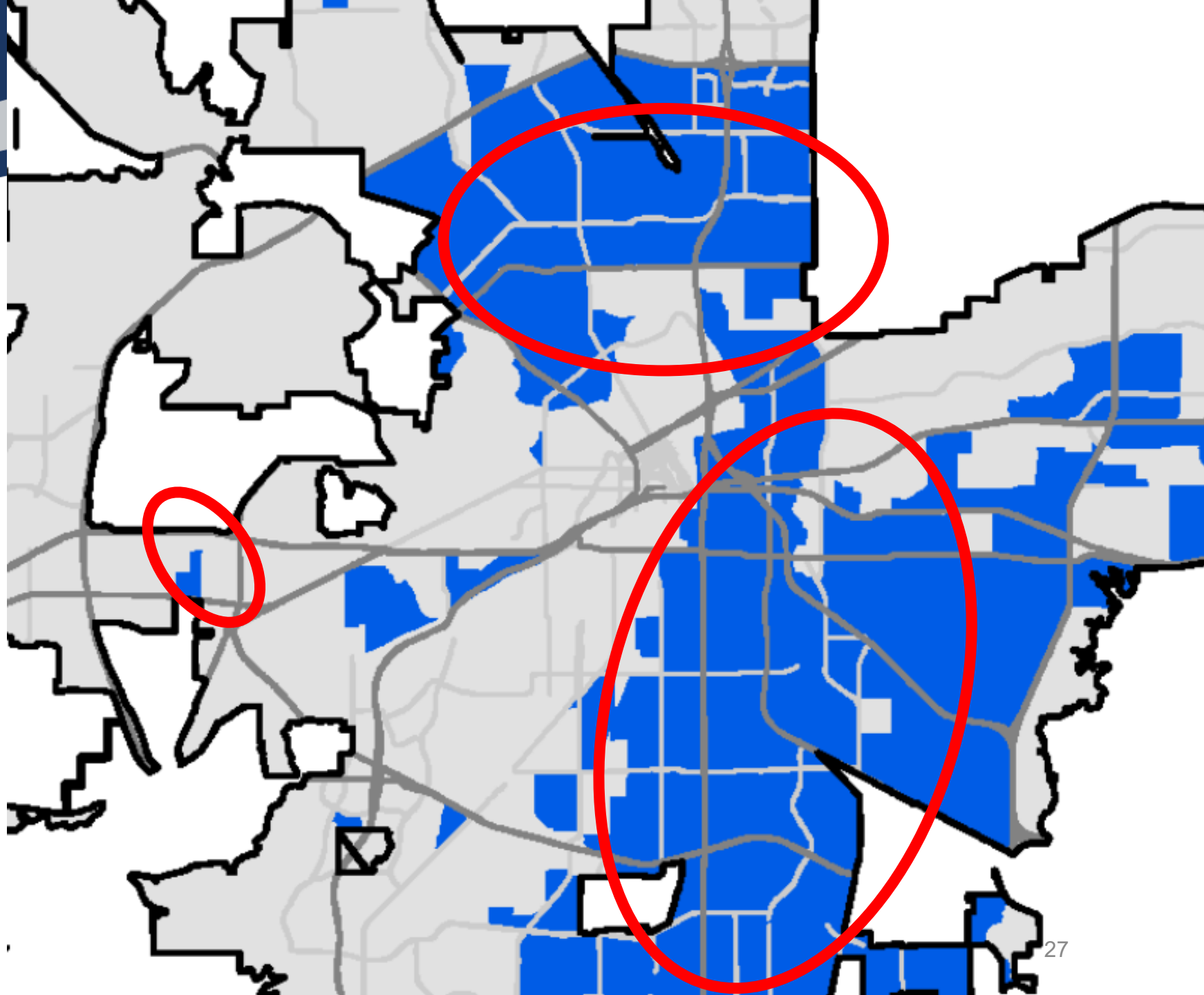
2020 Central City Pedestrian Crash Locations



2020 Central City Pedestrian Crash Locations

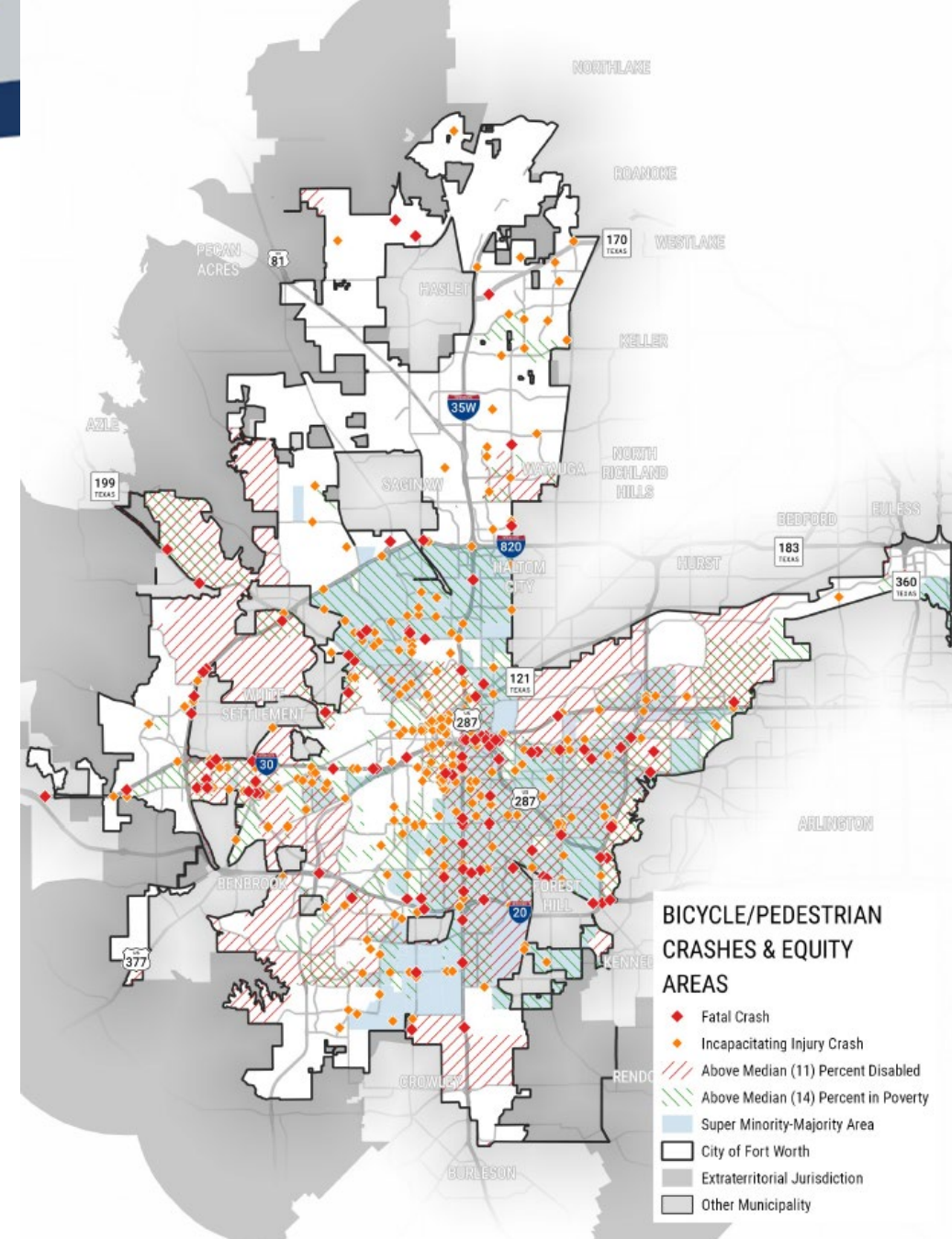
Sidewalk Conditions - S-MMAs of Fort Worth have a **disproportionate share of poor condition and missing sidewalks.**

Crash Incidence – S-MMAs of Fort Worth are **disproportionately affected by pedestrian and bike crashes**, including fatal crashes of both types.



Prioritization Criteria

Prioritization Factor	Weight		
	Sidewalks	Bikeways	Trails
Equity	40%	30%	30%
Veloweb/Spine			30%
Connectivity		25%	30%
Demand	30%	20%	
Crash History	20%	10%	
Comfort	5%	10%	
Stakeholder Input	5%	5%	10%
Funding			10% bonus
Feasibility			10% bonus



Making the Case



Flipping the Script

- Understand root causes of the concern
 - Congestion
 - Vehicular speed/noise
 - Lack of bicycle users
 - Removal of parking
- Tailor benefits and be explicit about project goals to audience

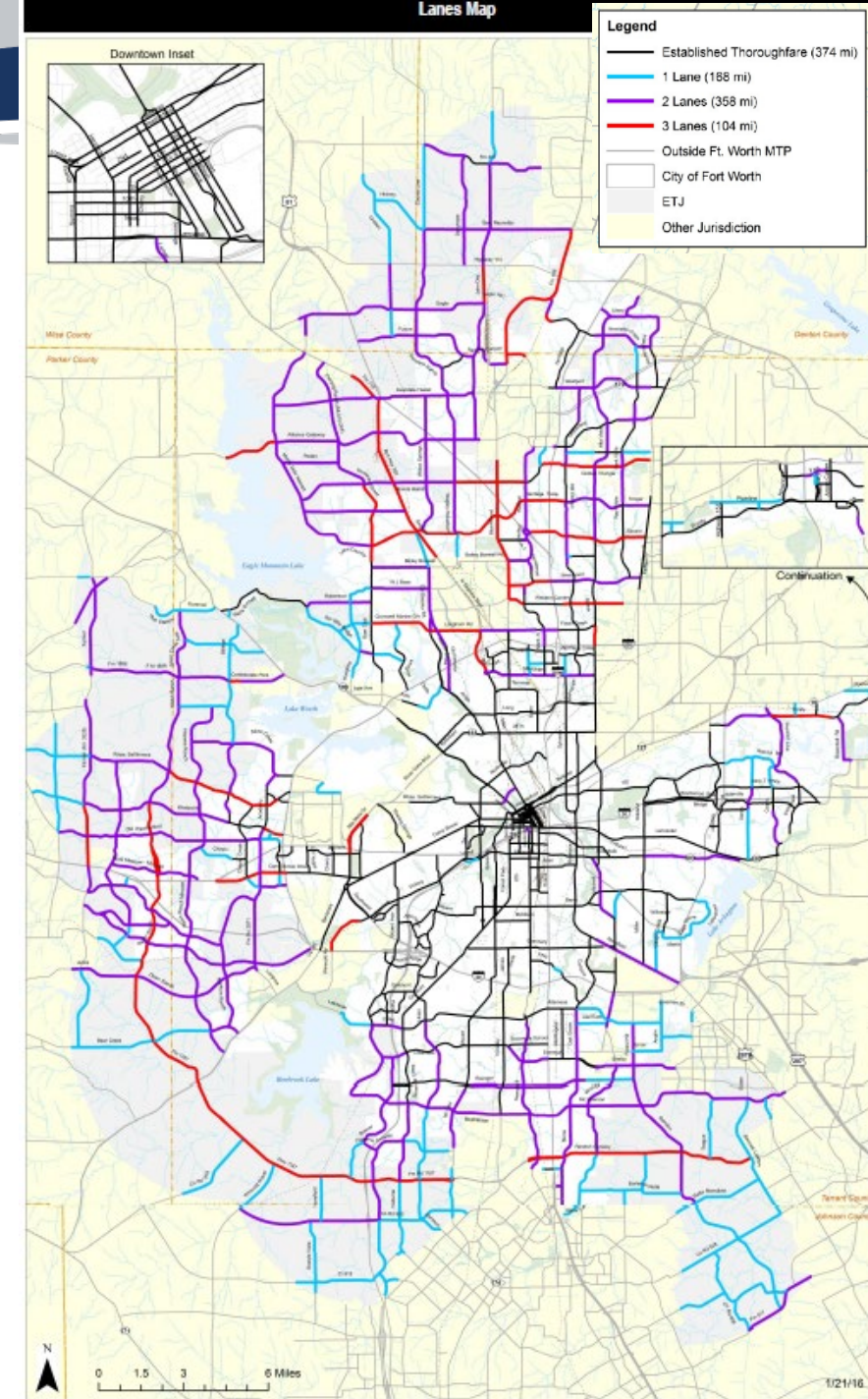
Project Goals

- Improve **traffic safety** for all road users
- **Retain vehicle capacity** on arterials and at intersections
- **Separate** bicycle and pedestrian and bicycle and vehicle **traffic** where appropriate
- **Restripe existing crosswalks** where bike lanes installed where possible
- **Increase comfort for people walking** by increasing space between cars and sidewalk
- **Reduce pedestrian crossing distance**



Fiscal Stewardship

- The City is faced with a roughly **\$1.5B funding gap** for arterial needs.
- Right sizing streets and analyzing the efficiency of the network, we ensure that **limited resources are wisely allocated**.
- Modeling assigned the number of lanes needed for future traffic **demand rather than spacing or function**.
- Established Thoroughfares provide additional **flexibility and opportunities** for complete streets applications.



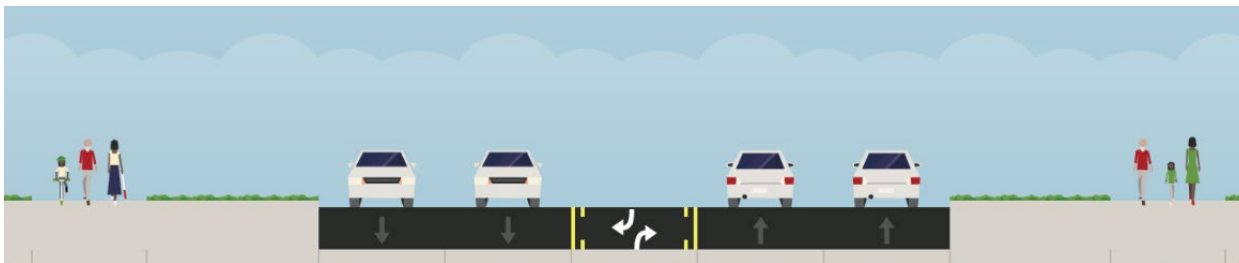
🧠 Cross-Section Modification

- *City* previously planned as 4-lane median divided thoroughfare (**110'** cross-section)
- *City* travel modeling showed need for only 1-lane per direction (**80'** cross-section)
- *Developer* constructed nearly 2,000 feet of full width and saved **1.3 acres of right-of-way dedication** and construction

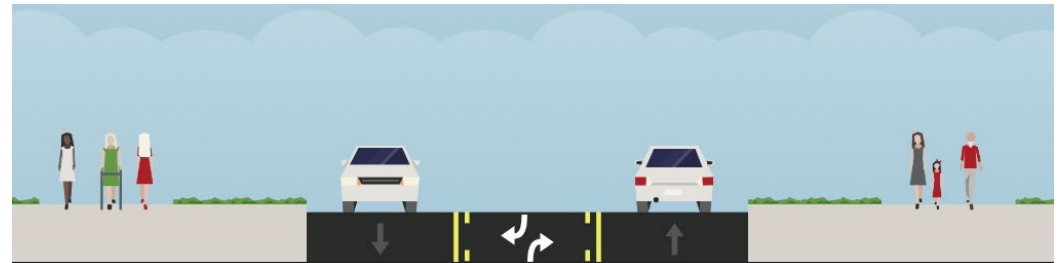
💰 City Benefits

- Reduced future **concrete maintenance** need by 30%
- Reduced annual **median maintenance** (mowing) needs by 1 acre
- Collect more than **\$3 million of taxable value** over 30 years.

Previous Plan



Data Driven Plan





Using data
for
decisions



Honoring
land use
context



Putting
vulnerable
road users
first



Looking at
the big
picture

Lessons Learned

- Equity!
- Policies and plans aren't effective if there isn't a plan to change process.
- Know your audience - tailor your message.
- Change is hard. Changing policy and process takes a long time and results will be slow.



Thank You

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