

North Central Texas  
Council of Governments

## BICYCLE AND PEDESTRIAN ADVISORY COMMITTEE

North Central Texas Council of Governments  
Transportation Council Room  
February 19, 2020  
2:00 p.m. – 4:00 p.m.

### Association of Pedestrian and Bicycle Professionals (APBP) Webinar: “Active Transportation Planning Through Health in All Policies” - Hosted from 1:00-2:00 PM

<p><b>2:00 – 2:25</b> <b>(25 min)</b></p>	<p><b>1. Welcome – Introductions</b> Introduction of Committee and leadership. Discussion of the November 20, 2019 BPAC Meeting Summary as necessary.</p>	<p>Jessica Shutt, City of Richardson</p>
<p><b>2:25 – 3:05</b> <b>(40 min)</b></p>	<p><b>2. Local Community Updates</b> a. Fort Worth Vision Zero – Chelsea St. Louis b. <a href="#">E-Assist Bikes &amp; Bike Share Ridership</a> – Jennifer Grissom, Fort Worth Bike Sharing c. <a href="#">City Plan &amp; Bicycle Boulevards</a> – Joe Pack, North Richland Hills d. DART Bike Lids Update – Patricio Gallo, DART e. <a href="#">Upcoming Events and Training</a> – Kathy Nelson, Co-Chair</p>	<p>Various BPAC Members and Guests</p>
<p><b>3:05 – 3:20</b> <b>(15 min)</b></p>	<p><b>3. <a href="#">Better Block Pilot Intersection Improvements in Dallas</a></b> A “pop-up” retrofit of the Park Lane five-points intersection in the Vickery Meadow area of Dallas. How potential infrastructure improvements impact the surrounding community and the safety of pedestrians in the area.</p>	<p>Jason Roberts, Better Block</p>
<p><b>3:20 – 3:35</b> <b>(15 min)</b></p>	<p><b>4. <a href="#">Greenville Avenue Road Diet</a></b> A City of Richardson pilot project that brings together land use planning and transportation engineering to demonstrate what the future could look like for the Greenville Ave corridor.</p>	<p>Jessica Shutt, Doug McDonald, City of Richardson</p>
<p><b>3:25 – 3:55</b> <b>(20 min)</b></p>	<p><b>5. NCTCOG Updates</b> a. <a href="#">Transportation Alternatives 2020 Call for Projects</a> – Daniel Snyder b. <a href="#">MTP Policy Bundle Round 4</a> – Kevin Kokes c. State Bicycle Advisory Committee Meeting Update – Kevin Kokes d. TTI / TxDOT Bike/Pedestrian Count Workshop – Kevin Kokes e. <a href="#">Selection of 2020 Committee Meeting Topics</a> – Matt Fall</p>	<p>NCTCOG Staff</p>
<p><b>3:55 – 4:00</b> <b>(5 min)</b></p>	<p><b>6. Other Business/Open Discussion</b> This item provides an opportunity to bring items of interest before the Committee or propose future agenda items.</p>	<p>Jessica Shutt, City of Richardson</p>

#### Next BPAC Meeting

The next meeting of the Bicycle and Pedestrian Advisory Committee is scheduled for **May 20, 2020**, at 2:00 p.m. in the Transportation Council Room of the North Central Texas Council of Governments. Preceding the BPAC meeting, a pre-recorded webinar by the Association of Pedestrian and Bicycle Professionals (APBP) will be presented beginning at 1:00 p.m. The topic is to be determined.

## Bicycle and Pedestrian Advisory Committee – 2020 Roster

<b>Agency Representing</b>	<b>Name</b>
Town of Addison	Janna Tidwell
City of Allen	Krishan Patel
City of Arlington	Anthony Cisneros
City of Bedford	Michele Wilson
City of Burleson	Heather Houseman
City of Carrollton	Marcos Fernandez
City of Cedar Hill	Shawn Ray
City of Cleburne	Aaron Dobson
City of Colleyville	Lisa Escobedo
City of Coppell	John Elias
City of Dallas	G. "Gus" Khankarli
City of Denton	Marc Oliphant
City of DeSoto	Tony Irvin
City of Duncanville	Athena Seaton
City of Euless	Alexander Harvey
City of Farmers Branch	Mitzi Davis
Town of Flower Mound	Kari Biddix
City of Fort Worth	Jeremy Williams
City of Frisco	Robert Caskey
City of Garland	Josue De la Vega
City of Grand Prairie	Brett Huntsman
City of Grapevine	Kathy Nelson
City of Greenville	Letora Anderson
City of Haltom City	Melissa Eckert
City of Irving	Cody Owen
City of Keller	Cody Maberry
City of Lancaster	Emma Chetuya
City of Lewisville	Stacie Anaya
City of Mansfield	Chris Ray
City of McKinney	Robyn Root
City of Mesquite	Wes McClure
City of Midlothian	Heather Dowell
City of North Richland Hills	Joe Pack
City of Plano	Christina Sebastian
City of Richardson	Jessica Shutt
City of Southlake	Stephanie Taylor
City of The Colony	Eve Morgan
City of Waxahachie	Colby Collins
City of Weatherford	Chad Marbut
City of Wylie	Robert Diaz
Dallas County	Minesha Reese
Ellis County	Joseph Jackson
Hood County	Scott Sopchak
Hunt County	Kevin St. Jacques
Rockwall County	Lee Gilbert
Tarrant County	Kristen Camareno
Wise County	Chad Davis
Dallas Area Rapid Transit	Patricio Gallo
Denton County Transportation Authority	Tim Palermo
North Texas Tollway Authority	Lori Shelton
Trinity Metro	Sandip Sen
TXDOT Dallas District	Melissa Meyer
TXDOT Fort Worth District	Phillip Hays



# Updates for BPAC

Jennifer Grissom  
Executive Director FWBS

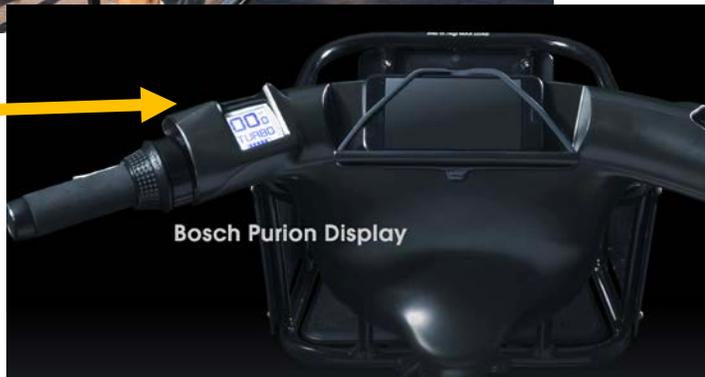


## A bit about our Electric Assist Bikes:



- Pedal assist – no throttle, only assists when the rider is pedaling
- Assists up to 17mph – after that you're on your own!
- BOSCH active mid-drive motor
- Swappable battery; Shimano Nexus brakes and gearing
- Battery life is approx. 30 miles

Power ON/OFF  
switch and display





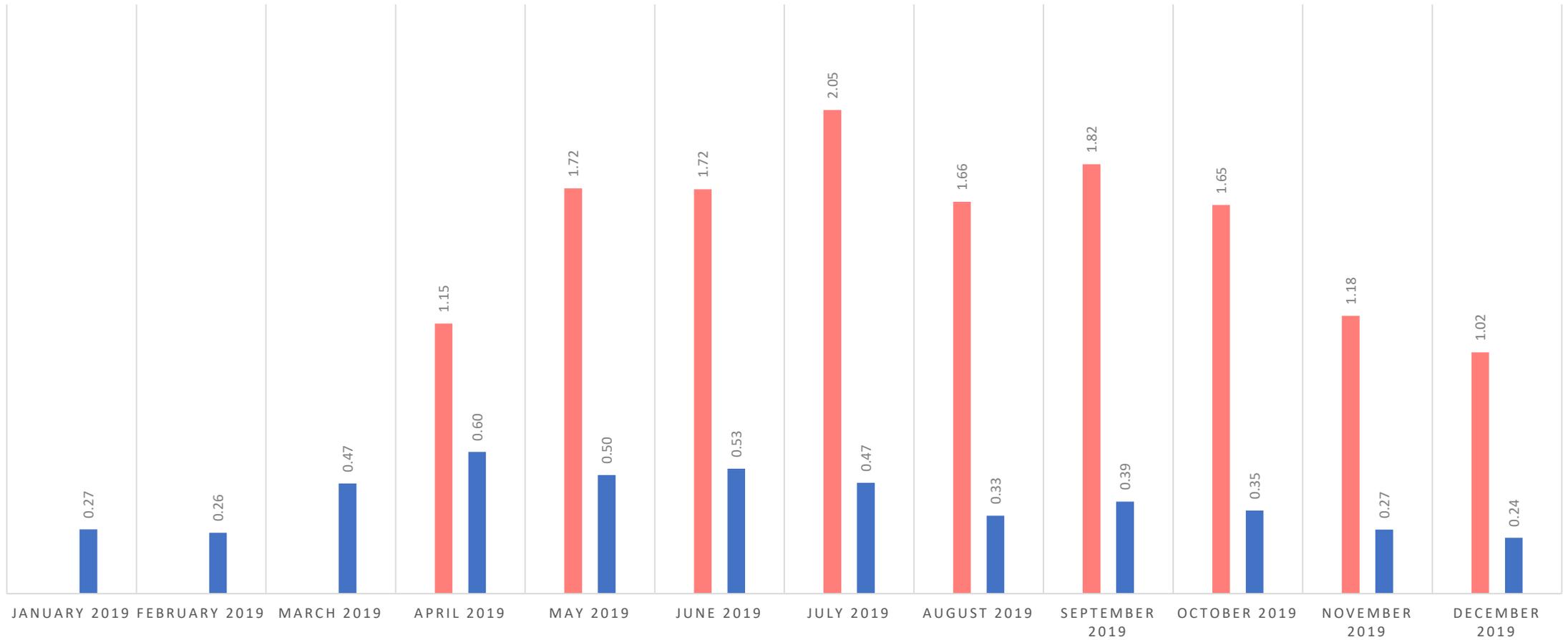
- In April 2019 we added 50 Electric Assist Bikes to our fleet and dramatically increased ridership.
- On average the 50 EBikes are ridden 1.55 times each day.
- When comparing month to month metrics of each bike model rides **in total**, the 50 EBikes take as many, if not more, trips than the all of the 300 regular bike model counterparts.
- We are working on a plan to increase the number of Electric Assist Bikes in our fleet.





## RIDES PER BIKE MODEL PER DAY

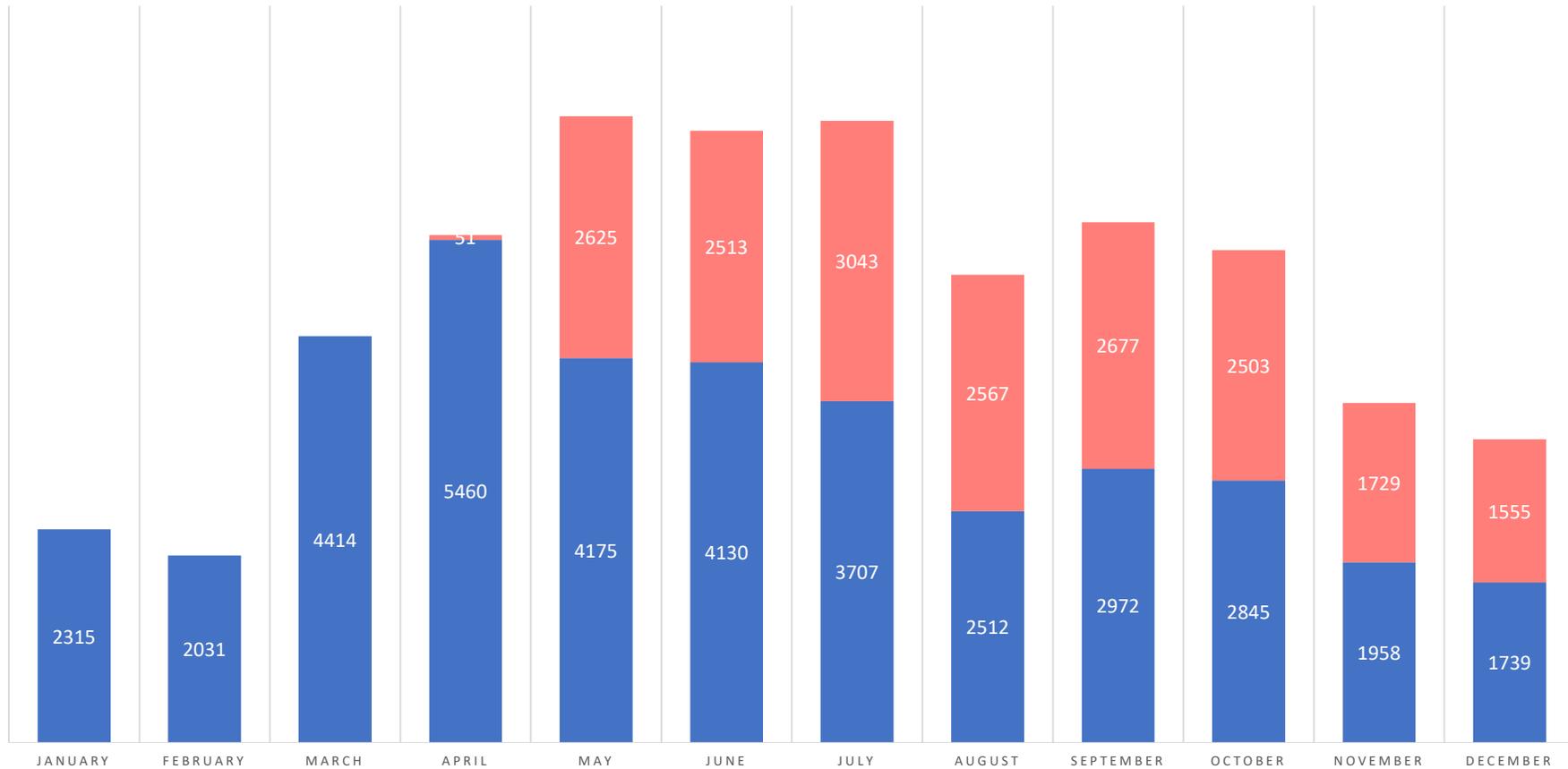
Electric Classic





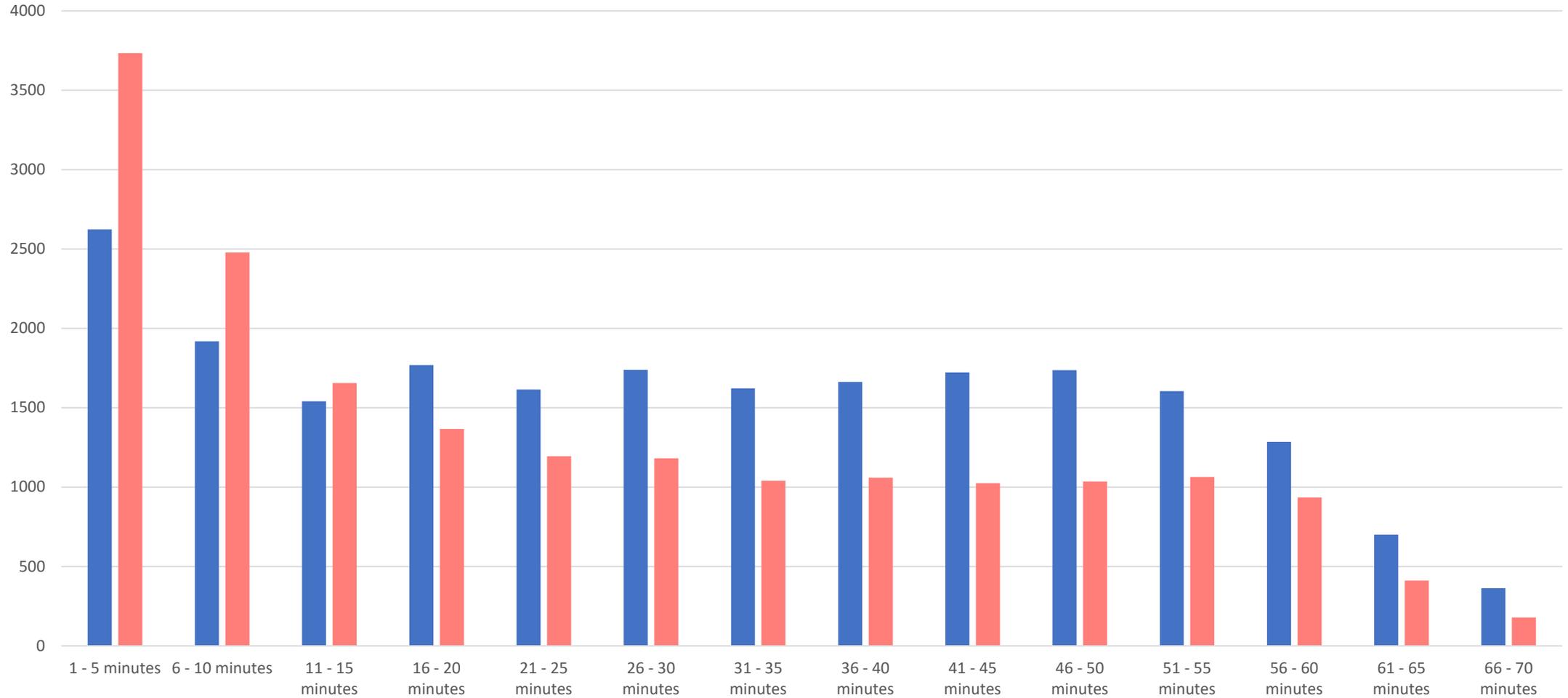
## RIDES PER BIKE MODEL BY MONTH

■ Classic ■ Electric





## Trip Duration by Bike Model - May - December 2019





# NRH Active Transportation Projects for Trails and On-Road Systems

## Bicycle Boulevards

Presented to the Bicycle and Pedestrian Advisory Committee  
February, 2020

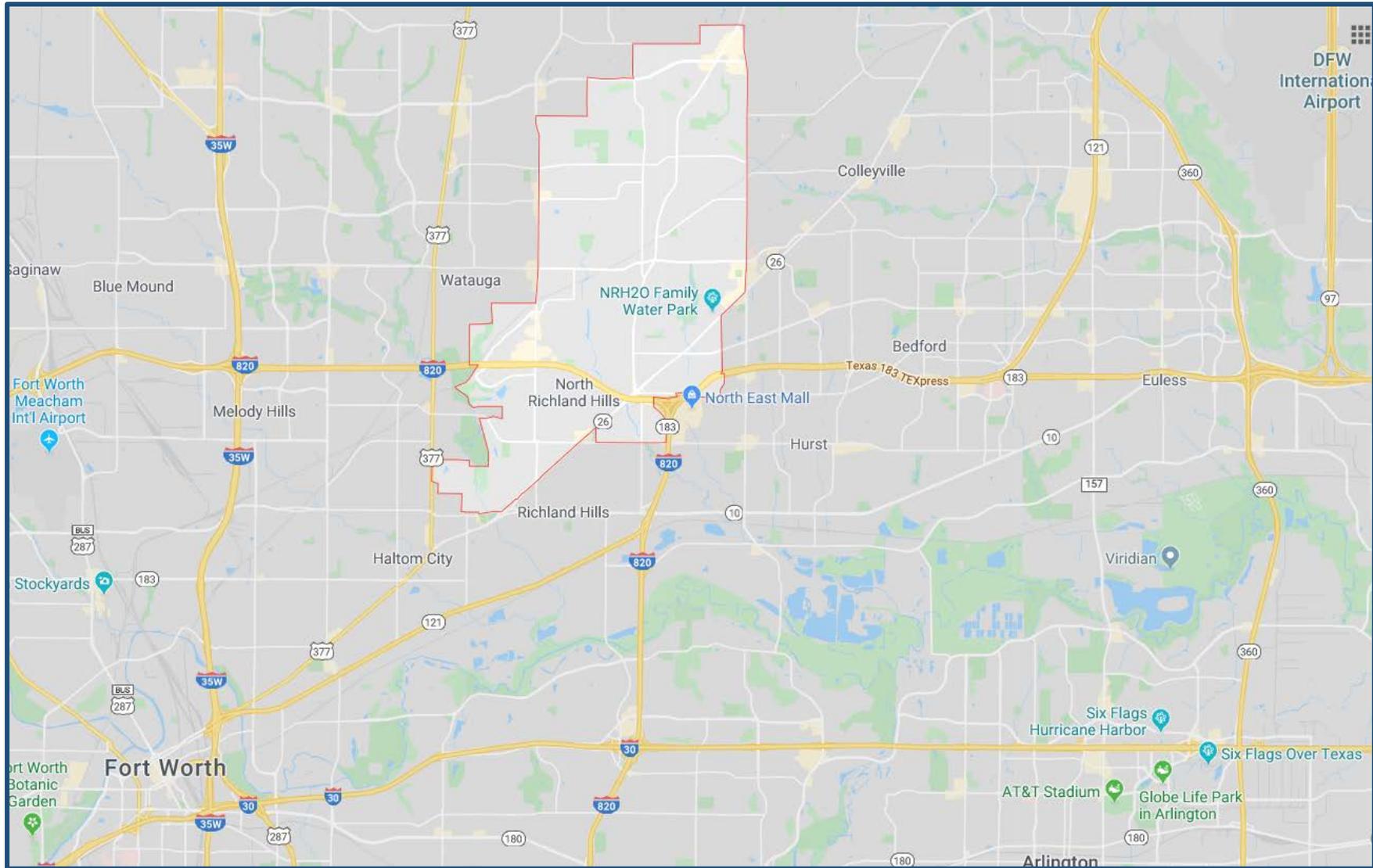
Joe Pack, PLA, Senior Park Planner

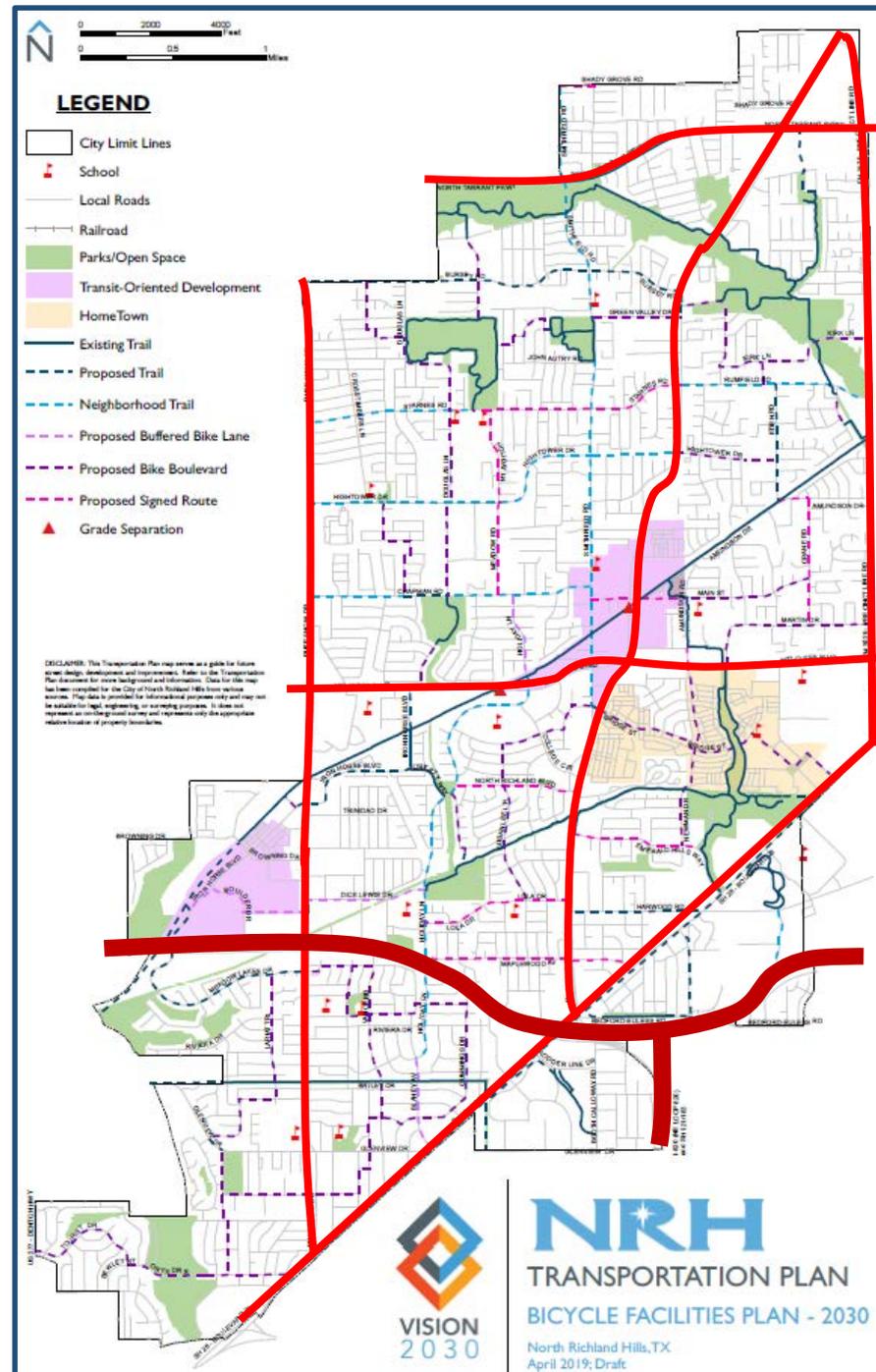
North Richland Hills Parks and Recreation Department



# NRH TRAILS

Hike | Bike | Connect





## NRH QUICK FACTS

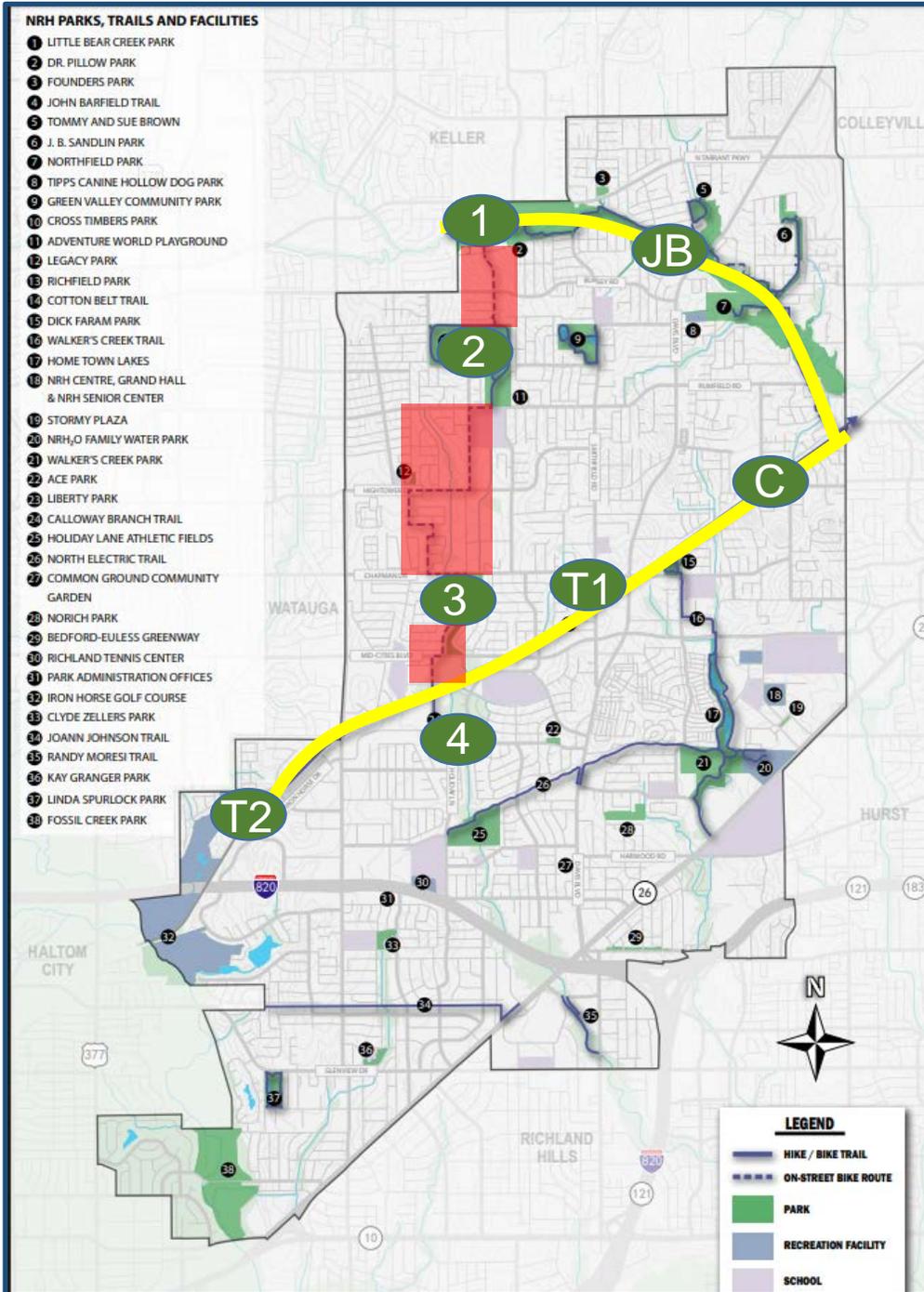
- 18.2 Square Miles
- 7 miles from north to south
- 3 miles from east to west
- Population 71,270
- Land locked with 6 cities touching our borders
- 30 miles of trails (AASHTO)
- 30 parks and green spaces



# NRH Active Transportation Projects for Trails and On-Road Systems

## Project Purpose

- To improve pedestrian/bicycle safety with comfort and suitability for all ages/abilities, and to provide local and regional connectivity from existing Veloweb (Cotton Belt Trail) to Future Veloweb (John Barfield Trail) and to major commuter transportation facilities



# PROJECT PURPOSE

- C** Cotton Belt Trail
- T1** Smithfield Station
- T2** Iron Horse Station
- JB** John Barfield Trail
- 1** LBC Park
- 2** Cross Timbers Park
- 3** Richfield Park
- 4** Liberty Park



City of North Richland Hills, Texas

# Trail and Route System Plan

October 2016



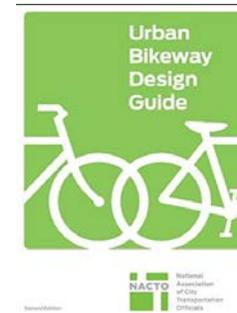
# NORTH RICHLAND HILLS TRANSPORTATION PLAN

**DRAFT**





National Association of  
City Transportation Officials



## BICYCLE BOULEVARDS

- Streets with low motorized traffic volumes and speeds
- Streets that discourage through trips by motor vehicles
- Designed to give bicycle travel priority
- Signs, pavement markings and speed and volume measures
- Creates convenient bicycle crossing of busy streets

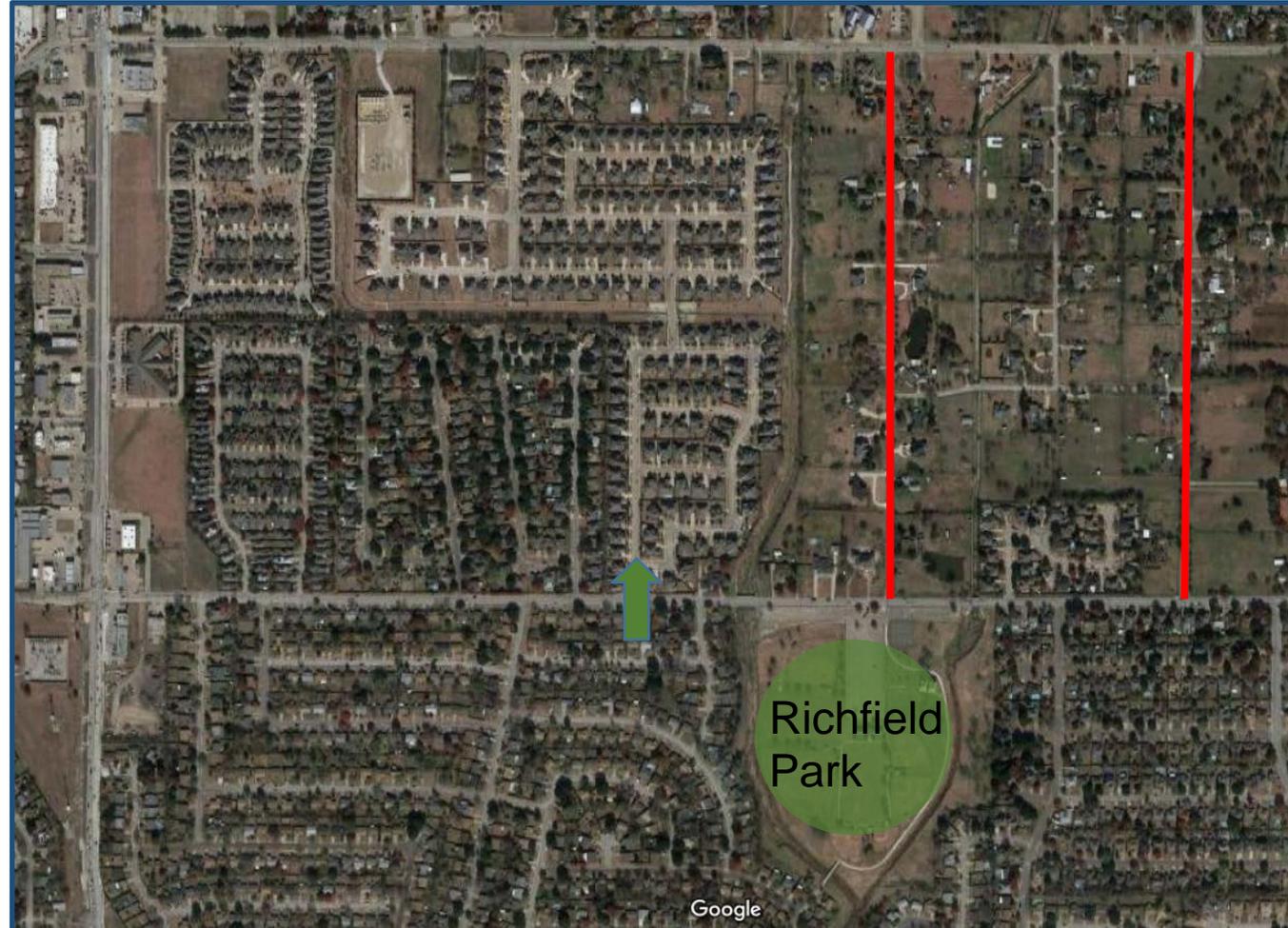


National Association of  
City Transportation Officials





Cotton Belt Trail to Richfield Park (Buckingham Road) Bicycle Boulevard



Richfield Park to Cross Timbers Park (Graham Ranch) Bicycle Boulevard



Richfield Park to Cross Timbers Park (Graham Ranch) Bicycle Boulevard



Cross Timbers Park to Bursey Road (Londonderry) Bicycle Boulevard



Londonderry BB, Bursey Rd. and Valley BB High Visibility Intersection



Bursey to Calloway Brach Trail (Valley Drive) Bicycle Boulevard

Joe Pack, PLA  
Senior Park Planner  
North Richland Hills  
817-427-6622  
jpack@nrhtx.com

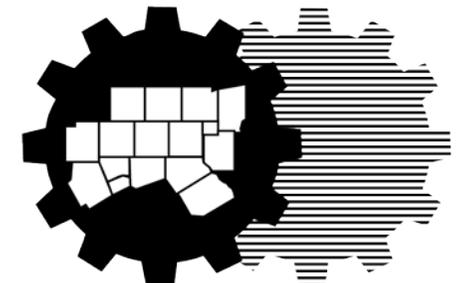


# UPCOMING EVENTS AND TRAINING

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**Bicycle and Pedestrian Advisory Committee**

**February 19, 2020**



**North Central Texas  
Council of Governments**

# One-Day Designing for Pedestrian Safety 201 Workshop



North Central Texas  
Council of Governments



## FORT WORTH

**Date:** Wednesday, April 29, 2020  
**Time:** 8:30 am to 4:30 pm  
**Location:** Regional Training Center

## DALLAS / MESQUITE

**Date:** Thursday, April 30, 2020  
**Time:** 8:30 am to 4:30 pm  
**Location:** Dal-Trans Building

Register @

[nctcog.org/pedsafety](https://nctcog.org/pedsafety)



# City of Irving 8<sup>th</sup> Annual Bicycle Fest



Register at

[www.cityofirving.org/begreen](http://www.cityofirving.org/begreen)

Saturday, April 18<sup>th</sup>  
10:00AM – 2:00PM



National  
Conference on  
Highway Safety  
Priorities



**March 15-17, 2020**  
**Tampa, Florida**

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**[lifesaversconference.org](https://lifesaversconference.org)**



**Texas Trails & Active Transportation Conference**

**March 25-27, 2020**  
**San Antonio, Texas**

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[texastrailsandactivetransportation.org](http://texastrailsandactivetransportation.org)

April 25 - April 28, 2020 | Houston  
2020 National Planning Conference

**April 25-28, 2020**  
**Houston, Texas**

**[planning.org/conference/](https://planning.org/conference/)**





**June 10-13, 2020**  
**Twin Cities, Minnesota**

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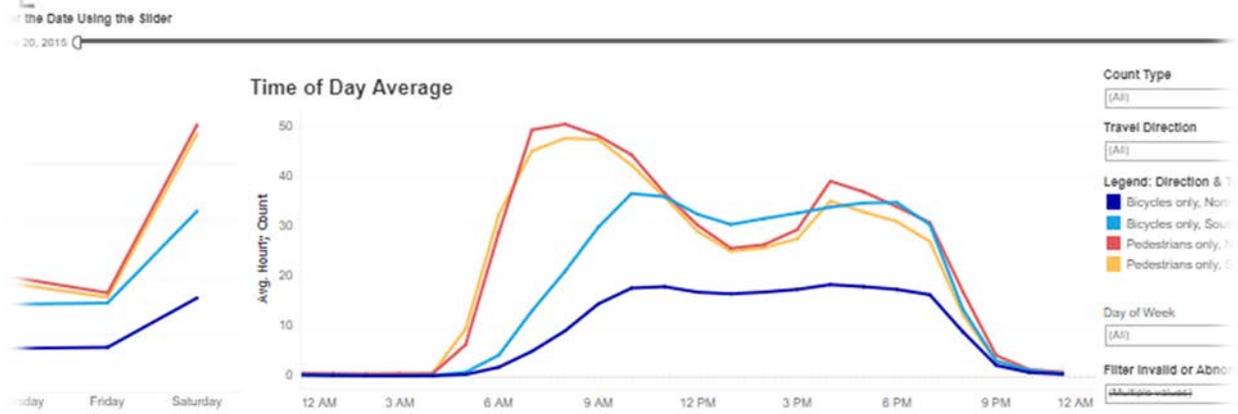
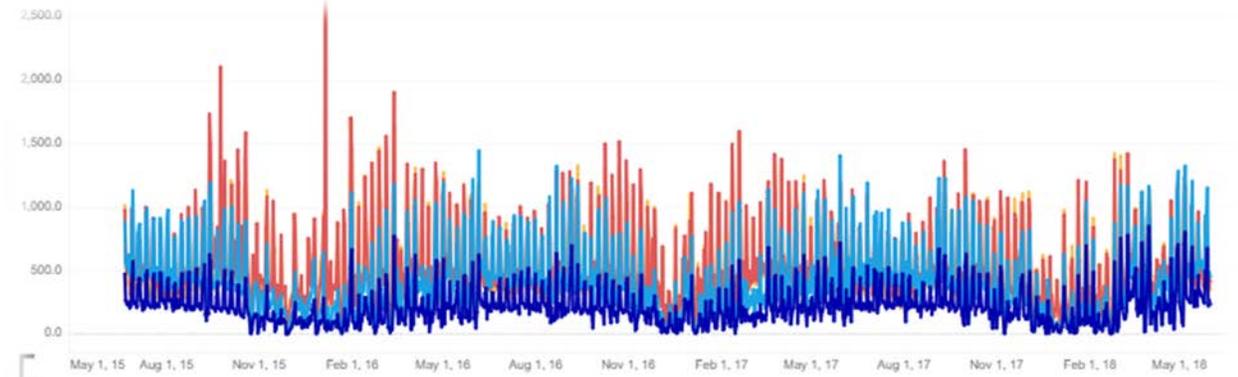
**[www.cnu.org/cnu28](http://www.cnu.org/cnu28)**



*America's largest active transportation and placemaking conference*



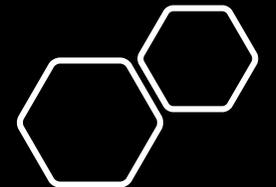
For information and registration:  
**walkbikeplaces.org**



# DFW Bicycle and Pedestrian Count Workshop

April 2, 2020  
at NCTCOG Offices

- Collecting count data and basic monitoring principles
- Summarizing/reporting count data and using TxDOT Count Exchange
- Using bike/ped count data to make your case



LAW ENFORCEMENT TRAINING ON  
**PEDESTRIAN AND  
BICYCLE LAWS**  
**TCOLE Certified**

**CONTACT:**

**neal-johnson@tti.tamu.edu**

**graber@tti.tamu.edu**

*Know someone who  
might be interested?  
Please forward along!*

**Training Workshops**  
**tentatively scheduled**  
**June 3rd or 4th, 2020**

## **Course includes:**

- Detailed look at Texas Transportation Code
- Review of right-of-way laws
- Different bicycle and pedestrian crash scenarios
- Importance of enforcement

## **Additional Resources:**

- Roll-call video
- Educational handout to use during enforcement (coming this spring)
- City-level training including local ordinances not covered by state law (available by request)

**For more information please visit:**

<https://groups.tti.tamu.edu/cts/lepedbike/>



LAW ENFORCEMENT TRAINING ON  
**PEDESTRIAN AND  
BICYCLE LAWS**



**Could also be  
Hosted by an Area  
Law Enforcement  
Agency**

CONTACT  
by **March 15**  
to coordinate for the  
week of June 1st:

neal-johnson@tti.tamu.edu  
graber@tti.tamu.edu



# Any events or training opportunities to add?

Any suggestions/topics for future training opportunities that NCTCOG could coordinate?

Contact:

Kevin Kokes, AICP  
kkokes@nctcog.org  
(817) 695-9275

OR

Matt Fall  
mfall@nctcog.org  
(817) 695-9207

# Plans and Projects Underway

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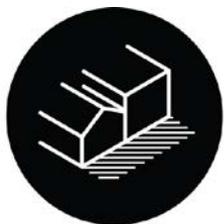
- Keller Parks and Trails Master Plan
- Flower Mound Parks and Trails Master Plan
- Grand Prairie Parks and Trails Master Plan Update
- Dallas County Mobility Plan
- Northlake Comprehensive Plan
- McKinney Parks and Trails Master Plan
- Plano Parks and Recreation Master Plan
- Weatherford Bicycle Master Plan
- Weatherford Thoroughfare Plan
- Rowlett Hike and Bike Trail Plan
- Rowlett Trails and Open Space Master Plan Update
- Lancaster Trails Master Plan Update
- Cedar Hill Trails Master Plan Update
- DeSoto Trails Master Plan Citywide Master Plan
- Wylie Citywide Master Plan
- Carrollton Trails Master Plan (early 2020)

# Plans and Projects Underway cont....

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## Regional Projects

- **Regional Trail Connection:** Midlothian to Waxahachie Regional Veloweb (Preliminary Eng.)
- **Regional Trail Connections to Transit:** Lewisville to Irving (Lewisville, Carrollton, Coppell, Dallas County, Denton County, DCTA, DART, and NCTCOG)



**BETTER BLOCK**  
FOUNDATION



## **SIDEWALK FLOWERS**

### **Dallas Development Code. SEC. 43-115. ANNUAL FEE FOR USE OF PUBLIC RIGHT-OF-WAY.**

(a) Except as provided in Section 43-115.1, the annual fee for a license to use a public right-of-way for the following uses is:

(3) Fee for landscaping and appurtenant irrigation systems:  
\$1,000.

## **AWNINGS & ARCADES**

### **Dallas Development Code. SEC. 43-115. ANNUAL FEE FOR USE OF PUBLIC RIGHT-OF-WAY.**

(a) Except as provided in Section 43-115.1, the annual fee for a license to use a public right-of-way for the following uses is:

(4) Fee for awnings and canopies:  
\$1,000 per awning or canopy.

## **STREET CAFÉS**

### **Dallas Development Code. SEC. 43-115. ANNUAL FEE FOR USE OF PUBLIC RIGHT-OF-WAY.**

(b) Except as provided in Section 43-115.1, the annual fee for a license to use a public right-of-way for uses other than those listed in

Subsection (a) is \$1,000 or is calculated in accordance with one of the following formulas, whichever is greater:

(1) Fee for use of public right-of-way, including but not limited to sidewalk cafes:  $\text{area} \times \text{market value} \times 85\% \times 12\%$ .

### **Dallas Development Code. SEC. 43-133. USE OF SIDEWALK FOR DISPLAY OF MERCHANDISE.**

**No** merchant or owner of a building, fronting on any street, shall be allowed the use of any portion of any sidewalk for the **display of goods, wares or merchandise**. (Code 1941, Art. 143-12; Ord. 3707)

## **CROWDS**

### **Dallas Development Code. SEC. 43-129. CAUSING CROWD TO CONGREGATE ON SIDEWALK.**

No person shall occupy any space on the sidewalk or any space near the sidewalk where the same attracts any crowd or causes any crowd to congregate on the sidewalk or where the patrons or customers must remain on the sidewalk, for the purpose of carrying on any kind of business whether for amusement or profit. (Code 1941, Art. 143-8)











413

4 LOVE

413

413

214-942-0633

NO PARKING









**THINK**



**small**



Fasten

# DUCT TAPE

White (5.8 mils) 2" x 50 Yards

- Outdoor & indoor repair use
- High bonding strength
- Sticks to most surfaces
- Multi-purpose tape
- Moisture resistant
- High durability



MADE IN CHINA



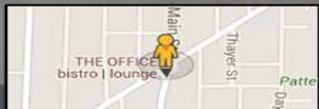




148 E Cuyahoga Falls Ave

Akron, Ohio

Street View - Aug 2014





# Better Block Concept

Team Better Block plans to narrow the roadway to one lane of traffic in each direction. The extra space freed up from the narrowing will be dedicated to cycle lanes and extended sidewalks. The narrowing of the street will slow traffic speeds and make the area safer for all users. Several techniques will be employed to bring increased safety and vibrancy to Temple Square.



Street Alignment



Landscaping



Pop-up Shops



Plazas



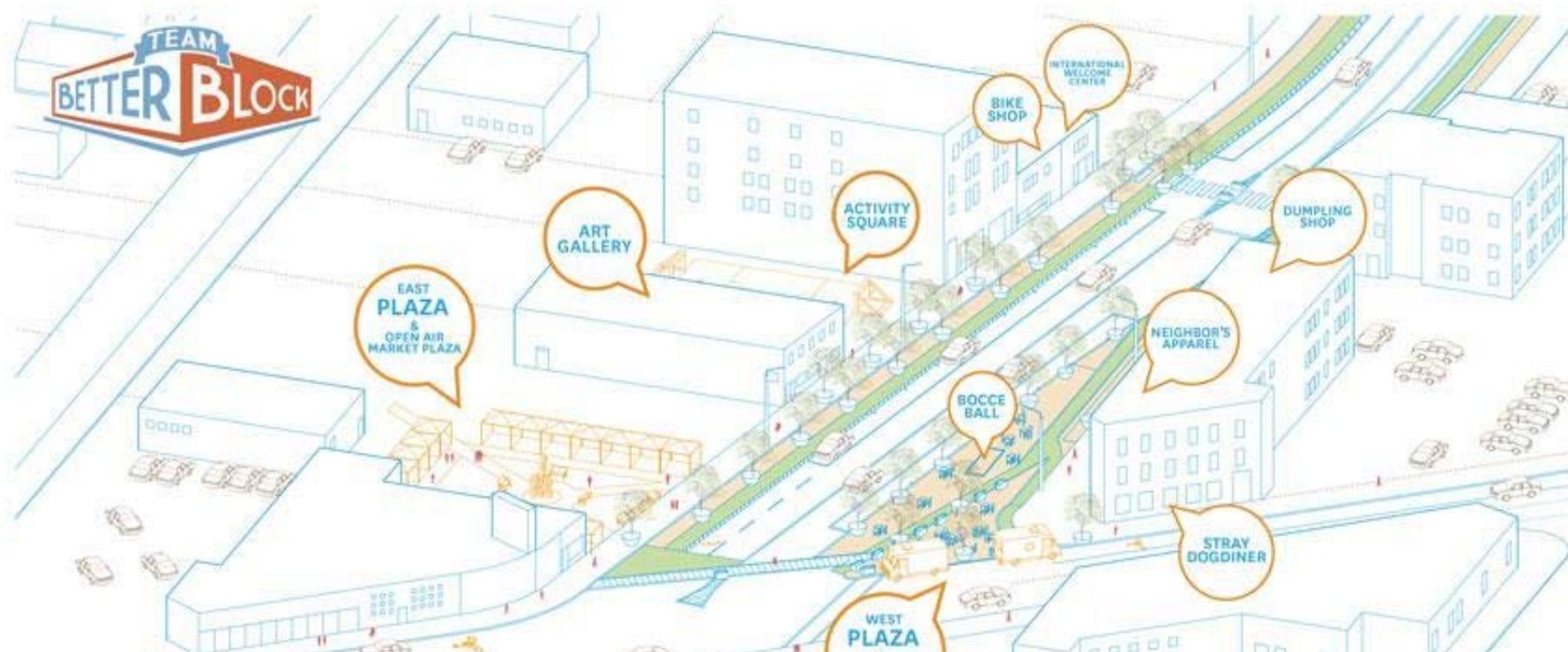
Programming



Workshops



Art

























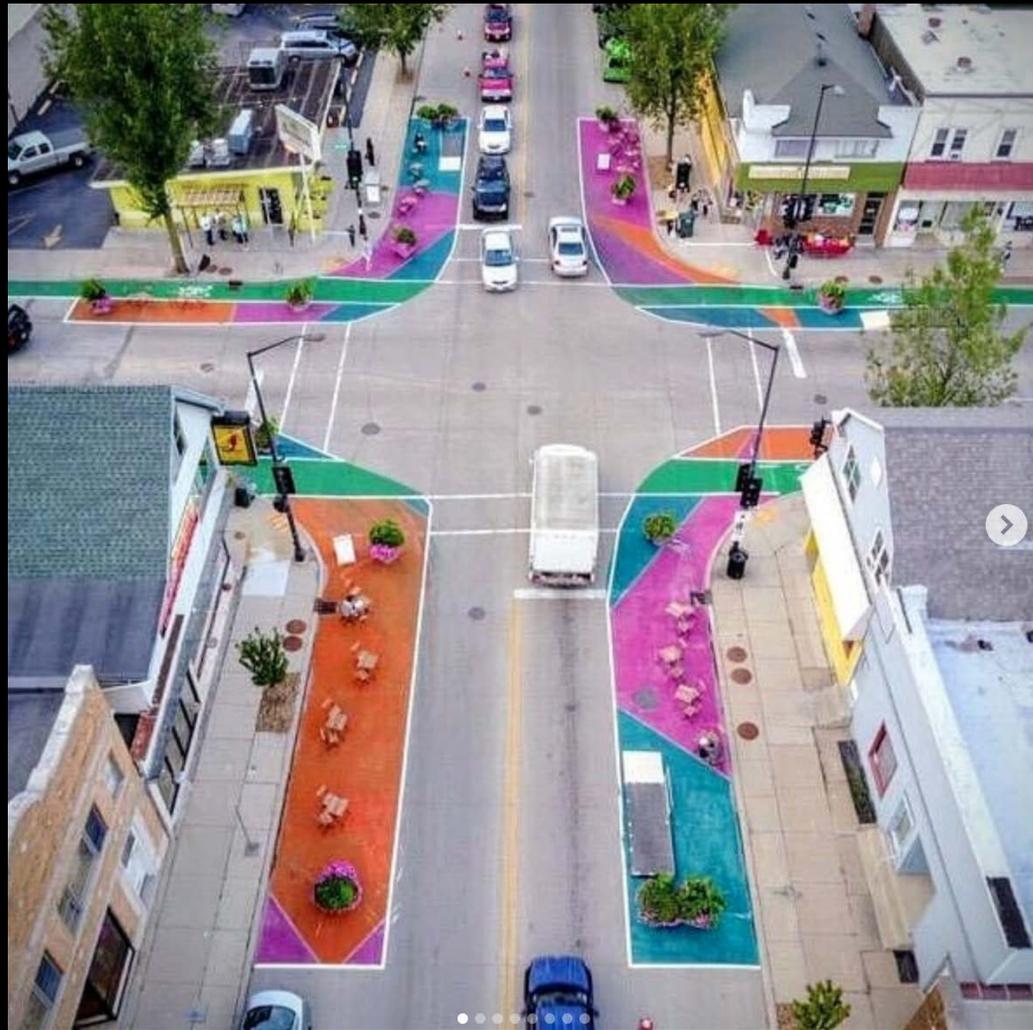














# GREEN BIKE LANE



## 1

### MEASUREMENT OBSERVATION

- Obtain ROW Widths
- Review traffic accident history
- Assess existing bike facilities



**Tempera Paint**  
Sargent Art 22-7166 1-Pound Art Time Powder Tempera, Green. 1 unit produces 1 gallon. 1 gallon covers approximately 300sf applied through sprayer.

## 2

### DESIGN

- Street mix cross-section
- Sketchup model
- Traffic control plan

## 3

### IMPLEMENTATION

- Traffic Control: Rental

#### Materials per 180'

- (3) Tempera Paint: \$10 /unit
- (1) White Spray Paint: \$5/can
- (4) Tape: \$15 / Roll
- (1) Stencil



**Tape**  
ProTapes Pro Duct 110 PE-Coated Cloth General Purpose Duct Tape, 60 yds Length x 4" Width, White

## 4 INSTALL

Item	Number of People	Instructions
<b>CLEAN SURFACE</b>	2 people	Use push brooms, collect & dispose of debris
<b>MEASURE &amp; GUIDE MARKS</b>	3 people	Use marking spray, measuring tape & pull string. Measure dimensions off the existing road center line
<b>PAINT SPRAYER</b>	3 people	Apply spray with a brisk walk, 1 person pushes machine, one person guides path, one person tapers edges w cardboard
<b>APPLY TAPE STRIPPING</b>	At least 2 people	Person 1 holds end on ground, second person walks ~ 6' in advance ensuring tape is pulled straight. Person 1 walks along tape securing it to the road
<b>BIKE STENCIL</b>	2 people	Person 1 holds stencil in place. Person 2 sprays white paint using hand sprayer or spray cans

Total Price for 180' (5' painted bike lane including striping & 2' buffer) - **95\$**, labor and traffic control not included





An Open-Source Design Library for Building Better Blocks



# wikiblock

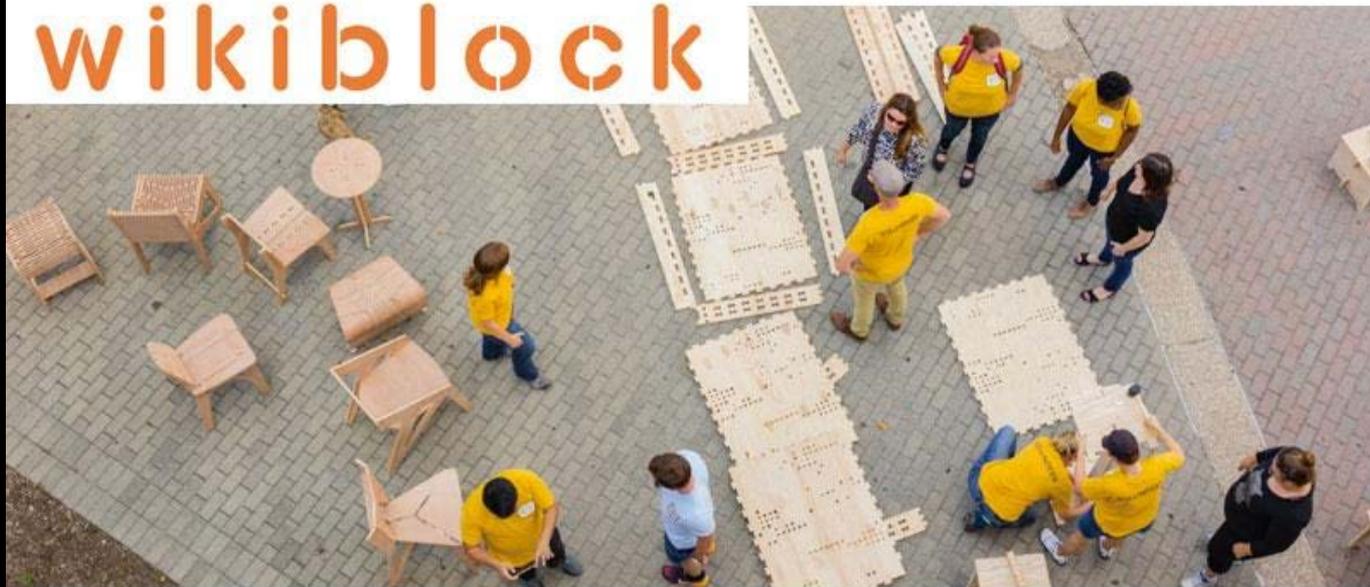


Table (Alfonso)



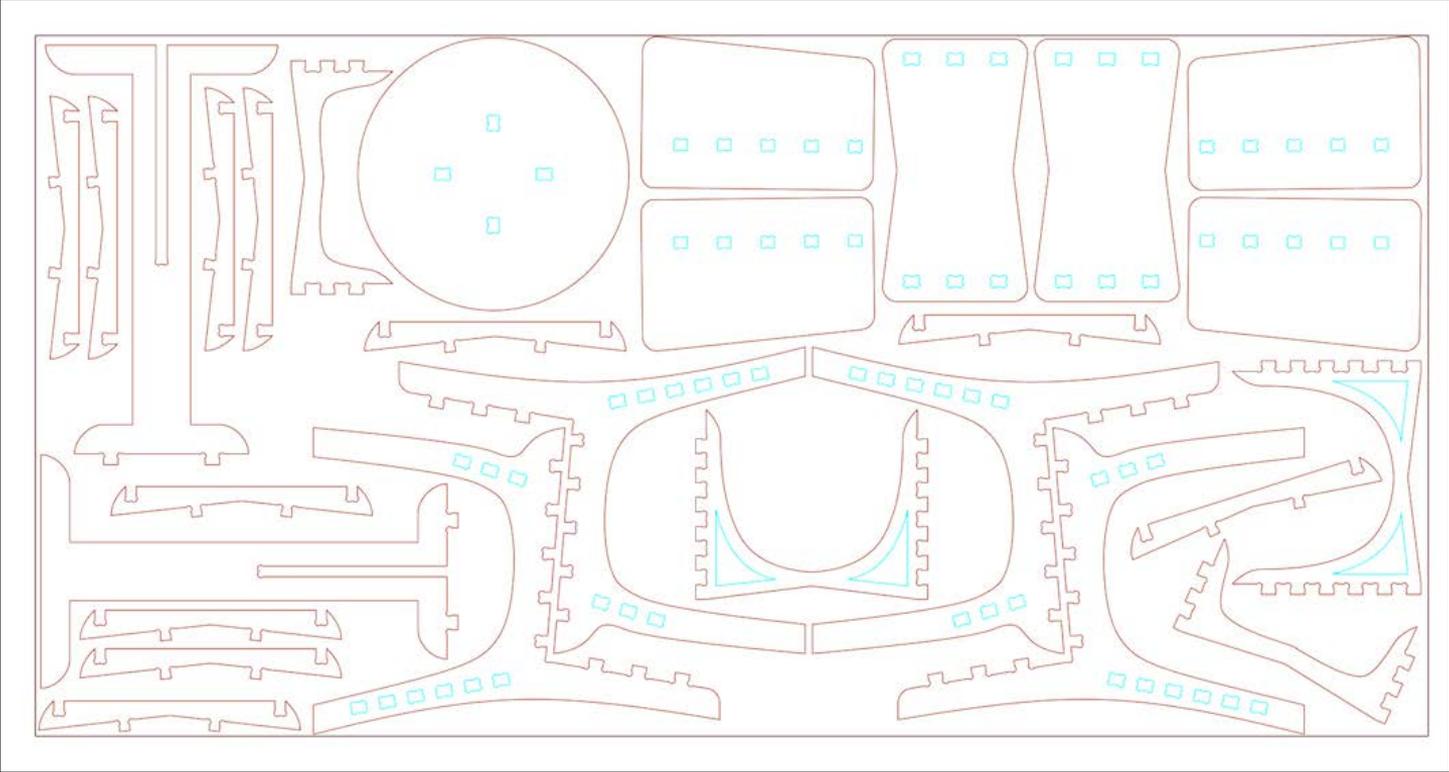
Chair (Alfonso)



Chair (Alfonso)





















...less than friends!







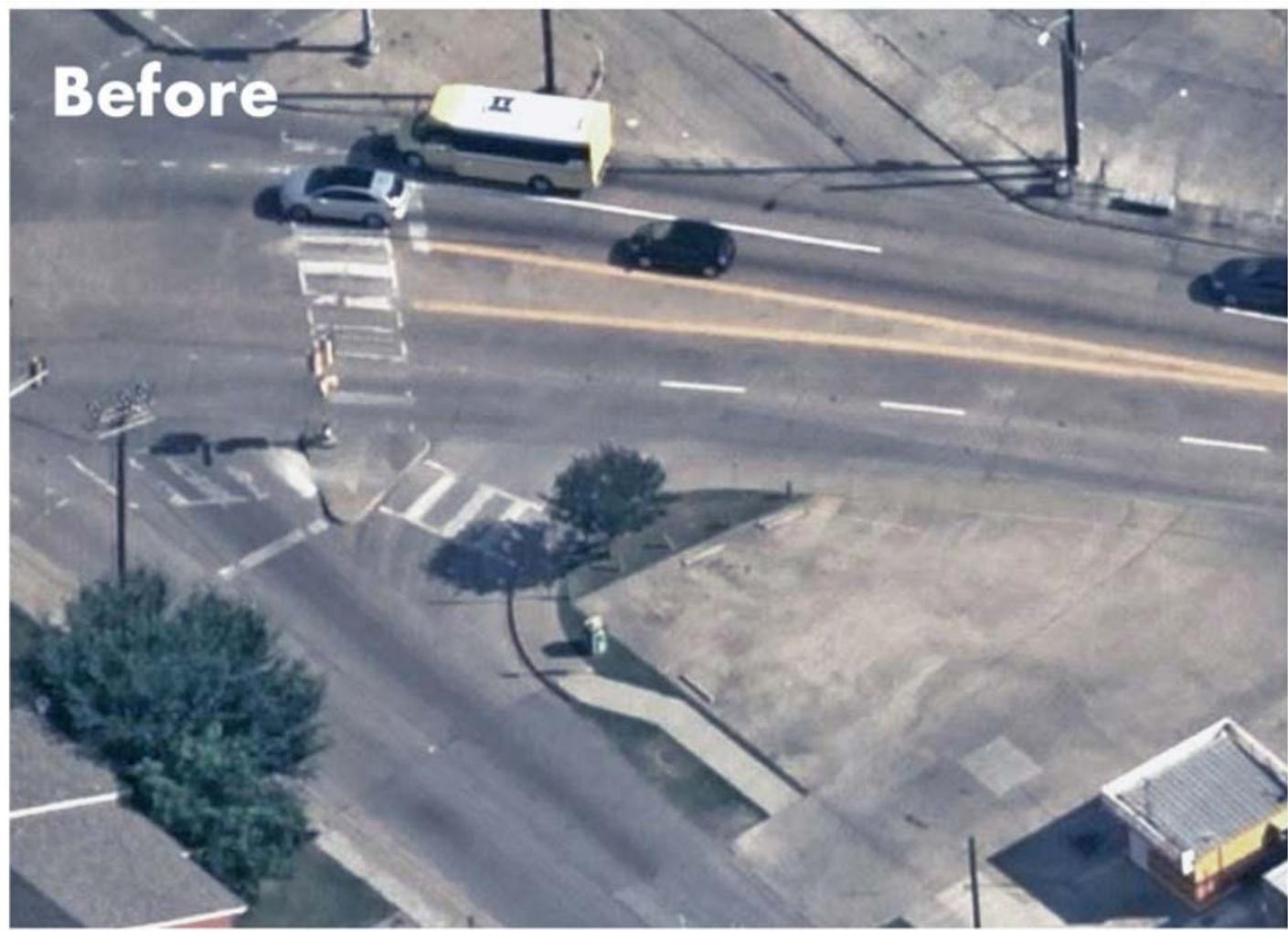








**Before**



After







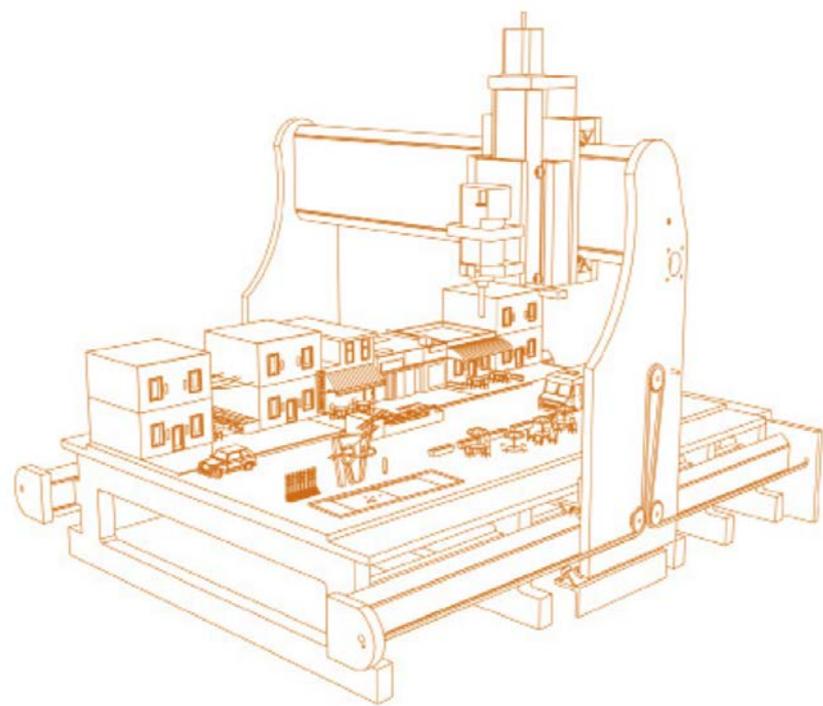
# BIKE HARWOOD



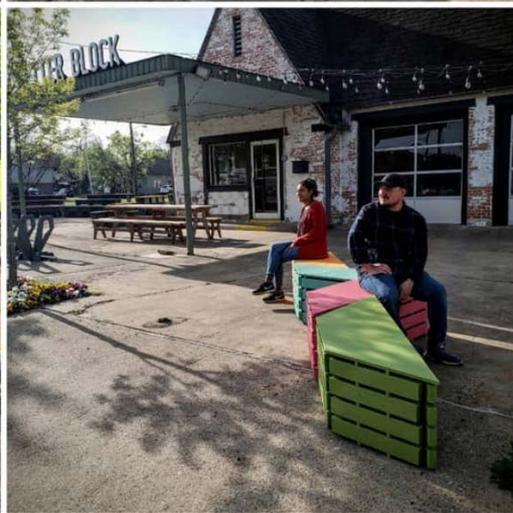


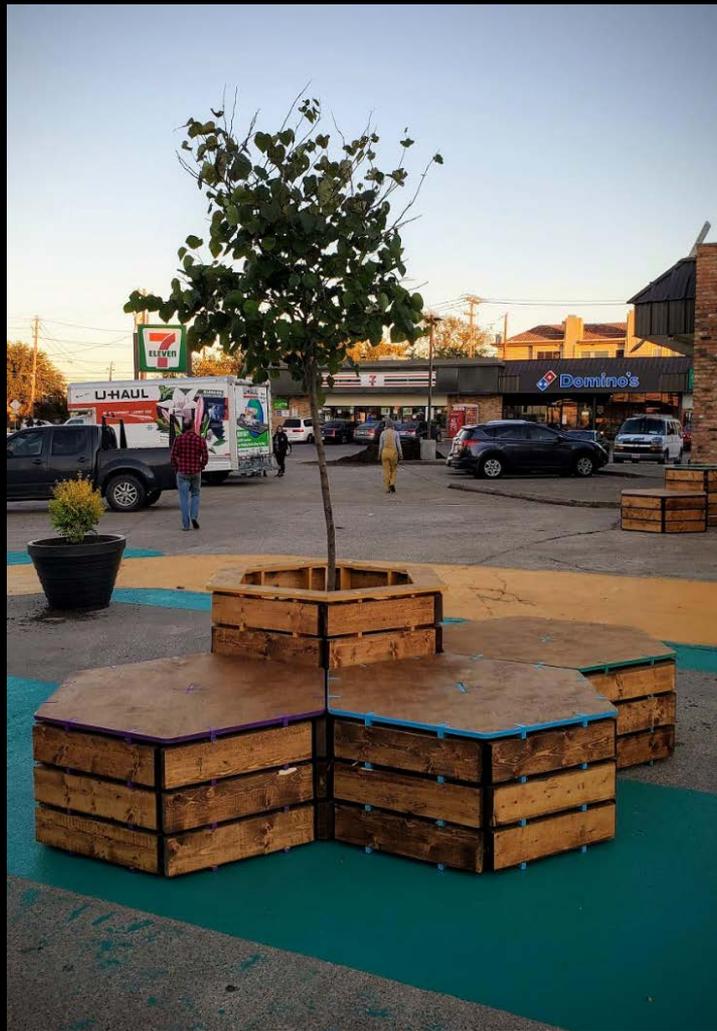






place fab







**BETTER BLOCK**  
FOUNDATION

[www.betterblock.org](http://www.betterblock.org)

[jason@betterblock.org](mailto:jason@betterblock.org)

CITY OF RICHARDSON, TX

FEBRUARY 2020



# Greenville Avenue Road Diet

# Presenters

**Doug McDonald, AICP**

Planning Projects Manager  
City of Richardson

**Jessica Shutt, PE**

Mobility and Special Projects Manager  
City of Richardson



# District Map



# District

Characteristics

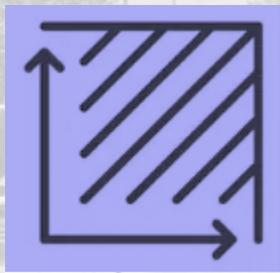


>75% are

50% Richardson's  
Businesses

30+ YRS

20% All Jobs



1,200

ACRES Previously Zoned Industrial



92%



1,024

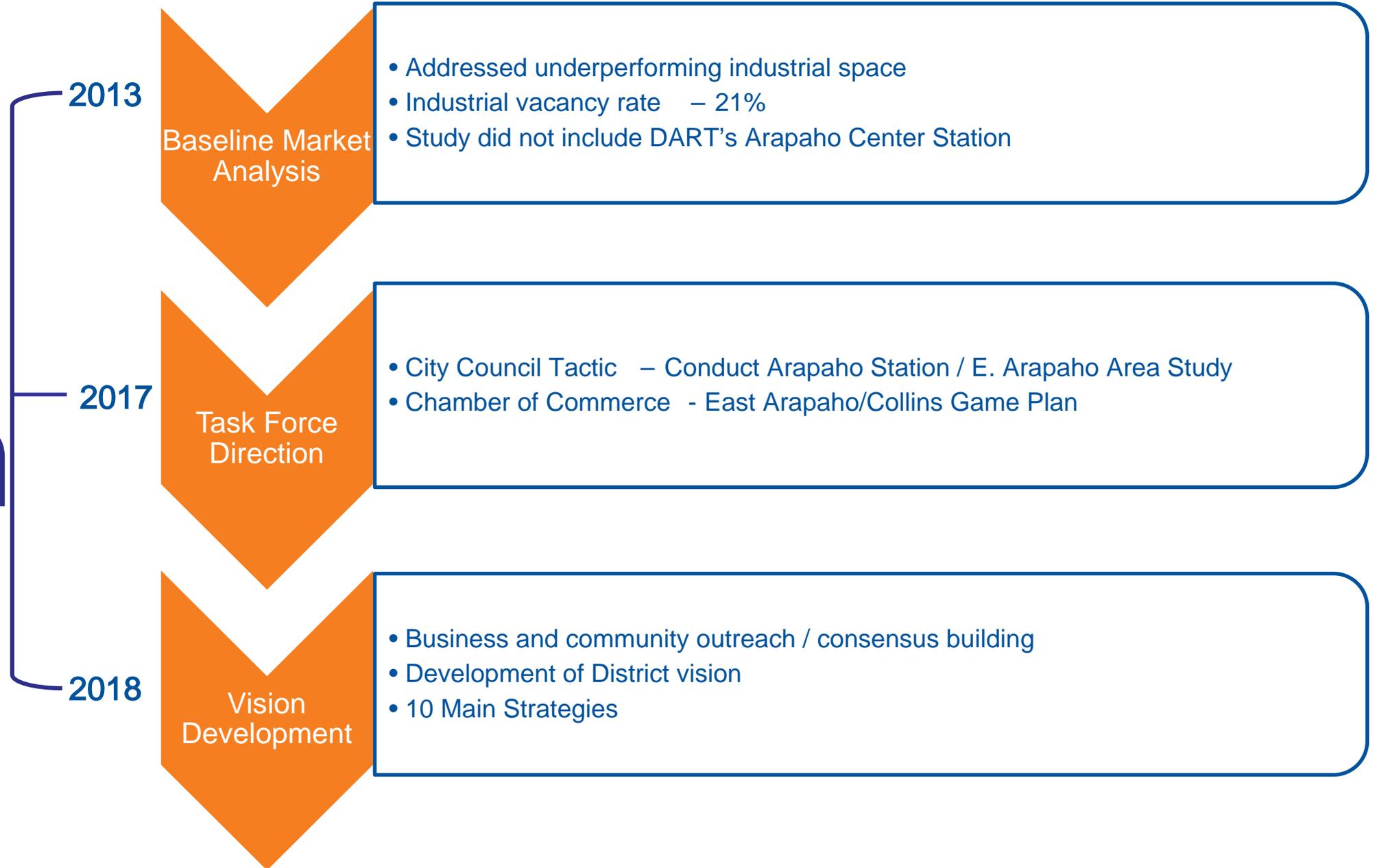
Businesses



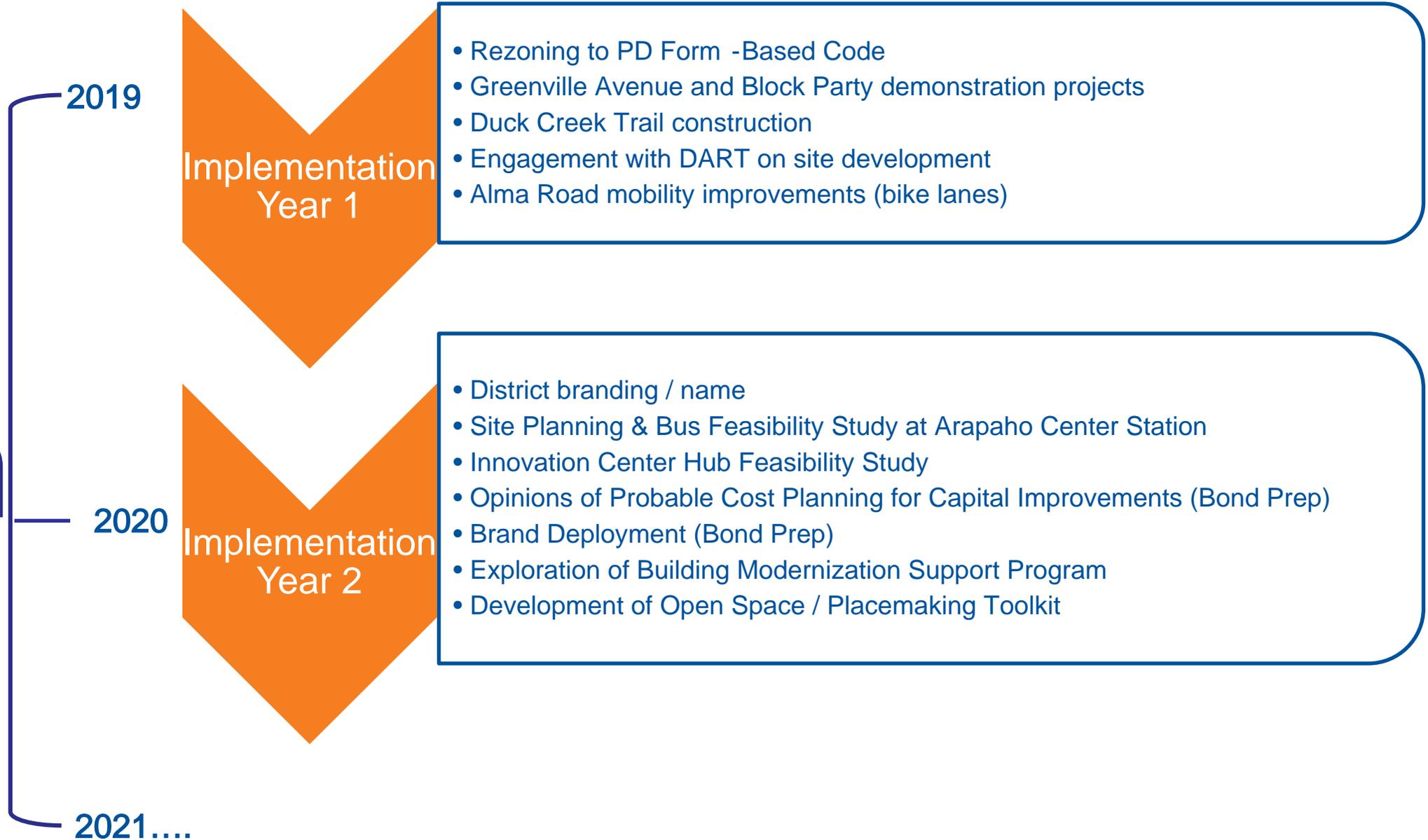
18,825

Daytime Pop.

# The Path



# The Path



# Public & Stakeholder Input



- > Built on the successful Vision Study public outreach from last year
  - > 29 Public Events/Presentations
  - > 588 Participants (interviews, open houses, popups)
  - > 914 Online Surveys Completed



- > Two sets of stakeholder interviews with major property owners (12 sessions)
- > Interviews with Mayor and City Council
- > Presentations to Stakeholder Groups (5 presentations)
- > Innovation District Block Party (373 Participants)



- > Online Survey (383 Surveys Completed)
- > Community Open House (80 Participants)
- > In addition, workshops and briefings for City Plan Commission & City Council

**STARTech** is city-owned and an opportunity for early action. What should we do with it?  
Share your thoughts here below!

WE SHOULD...

1. TRANSFORM DICK CREEK INTO AN AMENITY  
LANDSCAPE (SOUTH SIDE, PARKING SPACE, GREENWAY, PERFORMANCE SPACE)  
2. SPACE W/ FOOD SERVICE / WINE / RESTAURANT / EVENTS  
3. LEASE / SELL TO PRIVATE OWNER  
4. COMMERCIAL / BUSINESS DEVELOPMENT CENTER  
5. MAINT. TRUSTEES  
6. PER. BUILDINGS  
7. WORK W/ DICK CREEK AS AN AMENITY  
8. MIXED USE  
9. RECREATION / WALKWAY COURSE



**Brainstorming**

The Arapaho Center Station is ripe for transit-oriented development, but what is the mix?  
Use your sticker to weigh in on the development mix.



# Open House Events





DART Pop

# Residential Pop

**Challenges**

Based on your individual preferences, identify the **top 10** challenges that should be prioritized in the Station.

Challenge	Priority
PROVIDE ATTRACTIVE PUBLIC SPACE TO THE STATION WITH SEATING	10
IMPROVE SECURITY FOR STATION AND SURROUNDING AREAS	9
GET TRAFFIC CALMERS AND OTHER STREET IMPROVEMENTS	8
REPAIR AND MAINTAIN THE STATION AND SURROUNDING AREAS	7
IMPROVE STATION AND SURROUNDING AREAS WITH LANDSCAPING AND PLANTINGS	6
REPAIR AND MAINTAIN THE STATION AND SURROUNDING AREAS	5
REPAIR AND MAINTAIN THE STATION AND SURROUNDING AREAS	4
REPAIR AND MAINTAIN THE STATION AND SURROUNDING AREAS	3
REPAIR AND MAINTAIN THE STATION AND SURROUNDING AREAS	2
REPAIR AND MAINTAIN THE STATION AND SURROUNDING AREAS	1

**1 STATION AREA**

**2 GREENVILLE**

**3 CITY PROPER**

**DUCK CREEK**

**3 DUCK CREEK AREA** Create an open space amenity along Duck Creek and allow for...

**This could be so much more!**



# Online Surveys



# Neighborhood Leadership

# District Vision

The District will be walkable & bikeable.....



# District Vision

With the Station area serving as the primary gateway to the District.



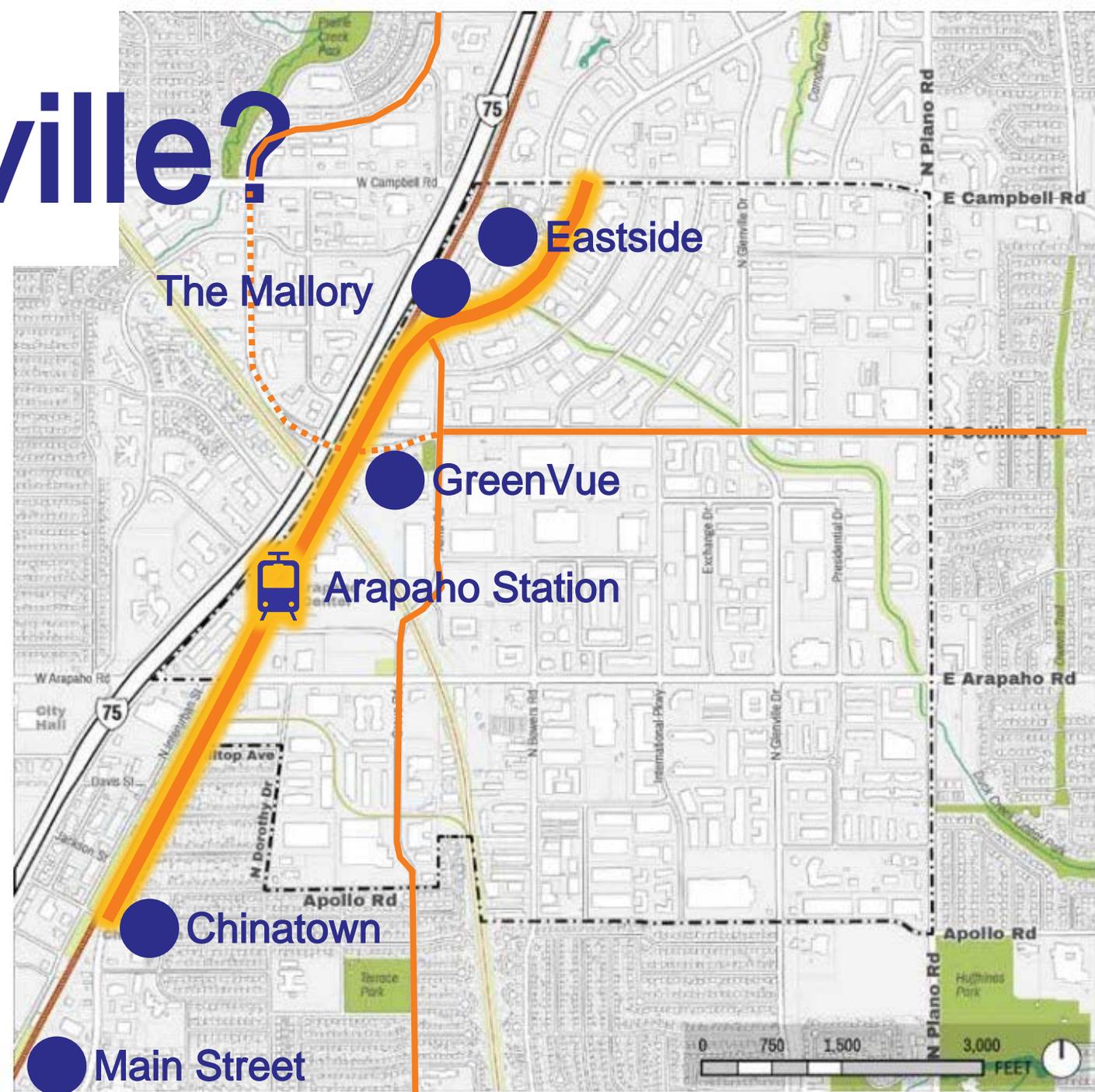
# Vision Study Overview

## 10 Main Strategies to Achieve the District Vision

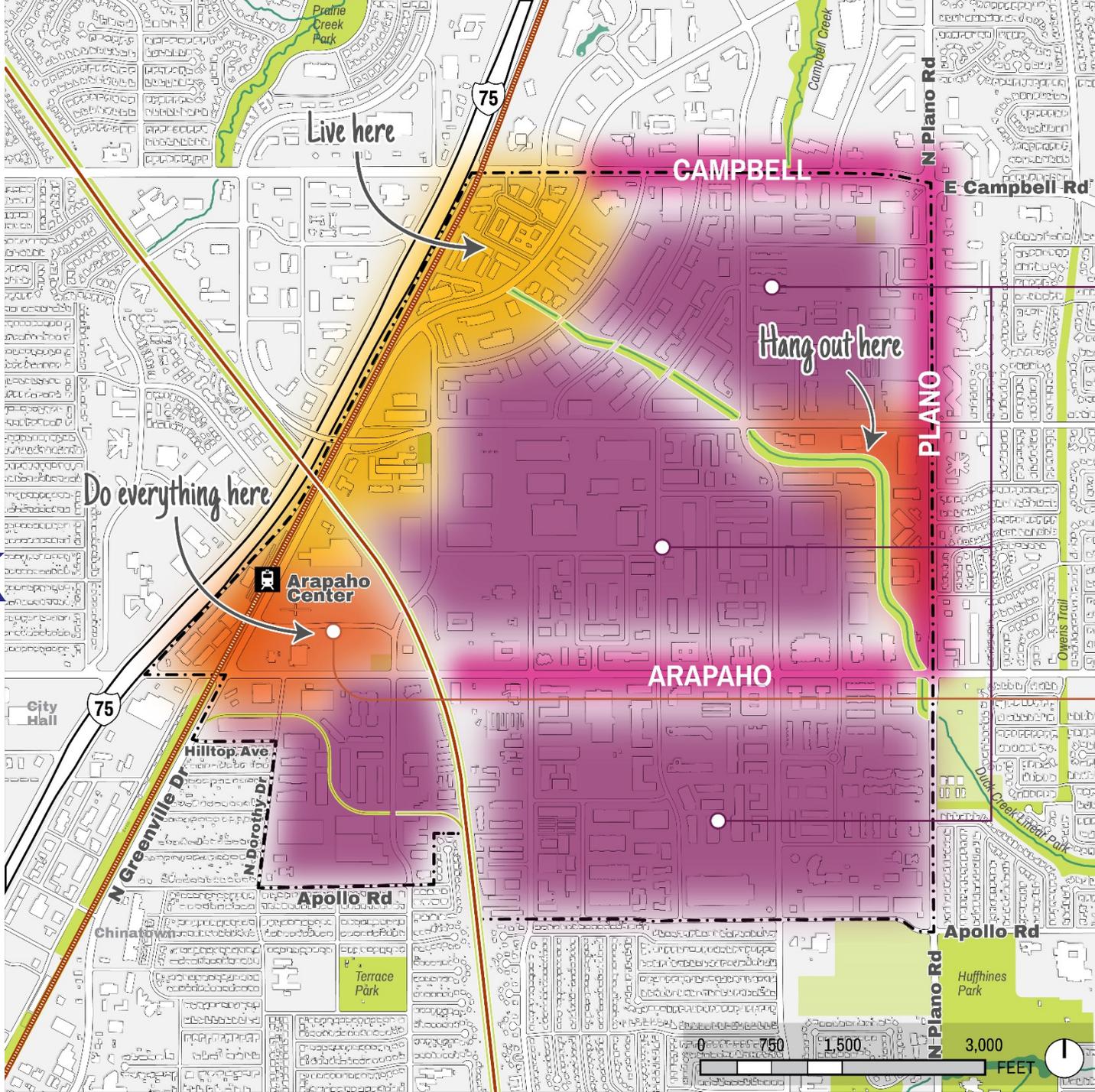
- > Manage the experience and marketing of the District
- > Support building upgrades and modernization throughout the District
- > Allow zoning flexibility in industrial zones
- > Encourage vibrancy through placemaking activities in places with a high concentration of workers
- > Improve the District's edges and gateways
- > **Redesign key streets for better mobility**
- > Create a shared "innovation space" for new businesses
- > Strengthen partnerships with universities and colleges for programming and marketing
- > Create new open space amenities to attract and retain new and existing businesses
- > Redevelop key opportunity sites to bring new uses and activities to the District

# Why Greenville?

- > Public Commitment to District's Success
- > Catalyst for (Re)Development
  - Urban Villages
  - Arapaho Transit-Oriented Development (TOD)
- > Underutilized Corridor
- > Opportunity for Multimodal Connections



# Land Use Framework



## Land Use Framework

STUDY AREA

### WORK AREAS

- New, modern flex space
- Affordable space for existing businesses
- Scalable affordable space for growing businesses
- Specialized space for emerging industries
- Amenities & a range of things to do

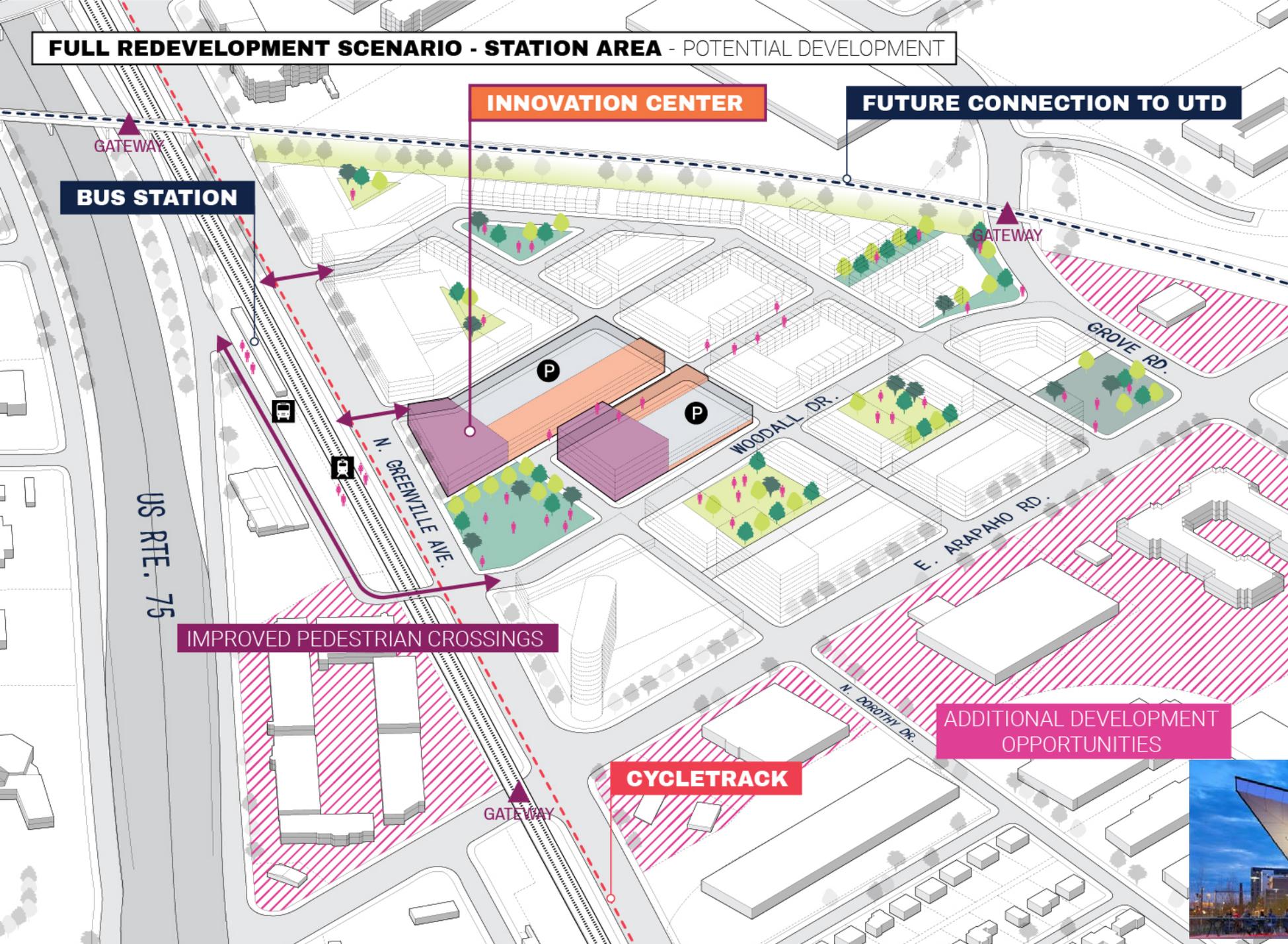
### ARAPAHO CENTER STATION

- "Signature" space
- Specialized space for emerging industries
- Places to gather & exchange ideas
- Amenities & a range of things to do
- Coworking spaces

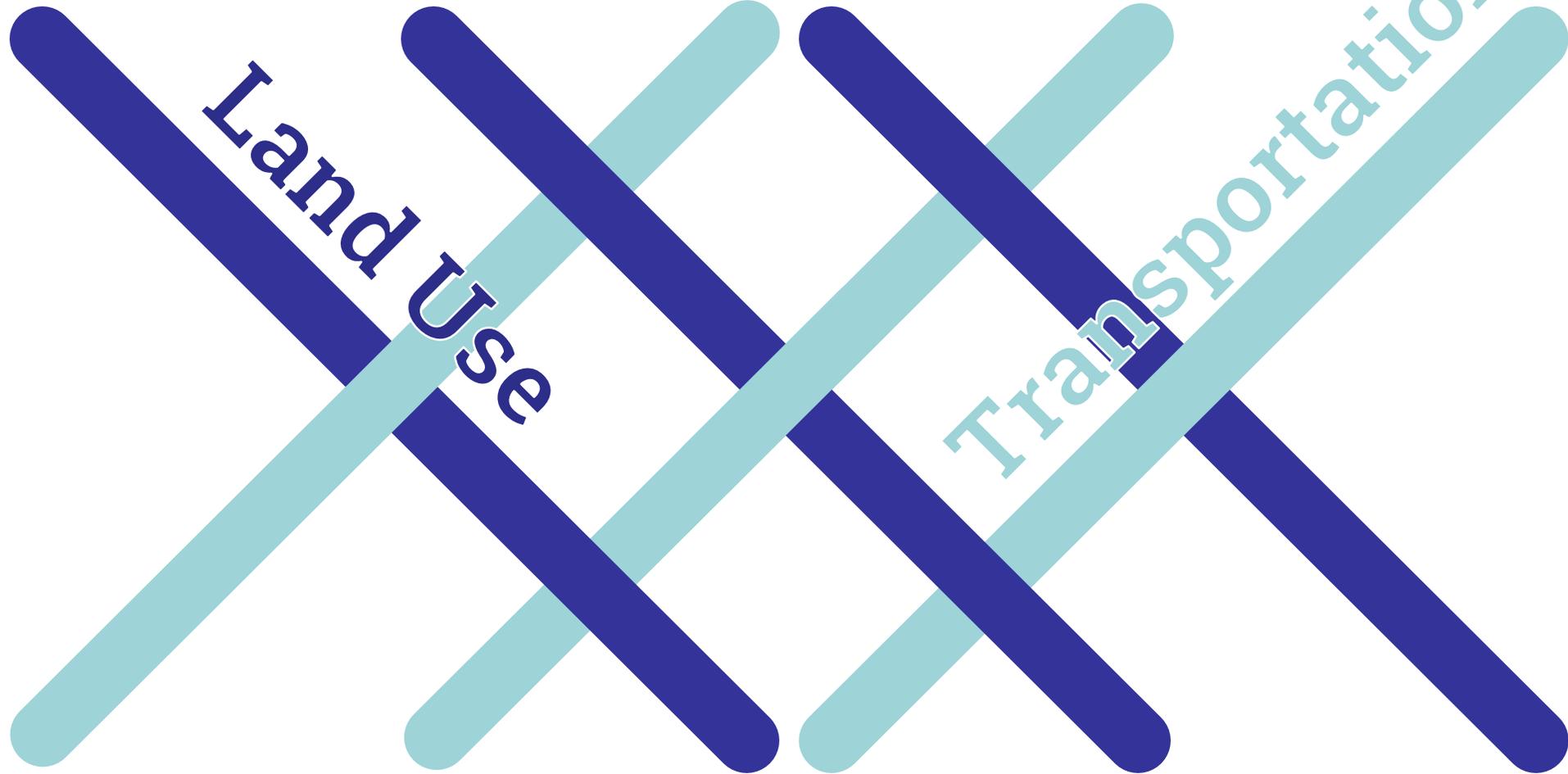


Redevelop Arapaho  
Center Station area as  
a walkable mixed use  
front door to the  
District

**FULL REDEVELOPMENT SCENARIO - STATION AREA - POTENTIAL DEVELOPMENT**

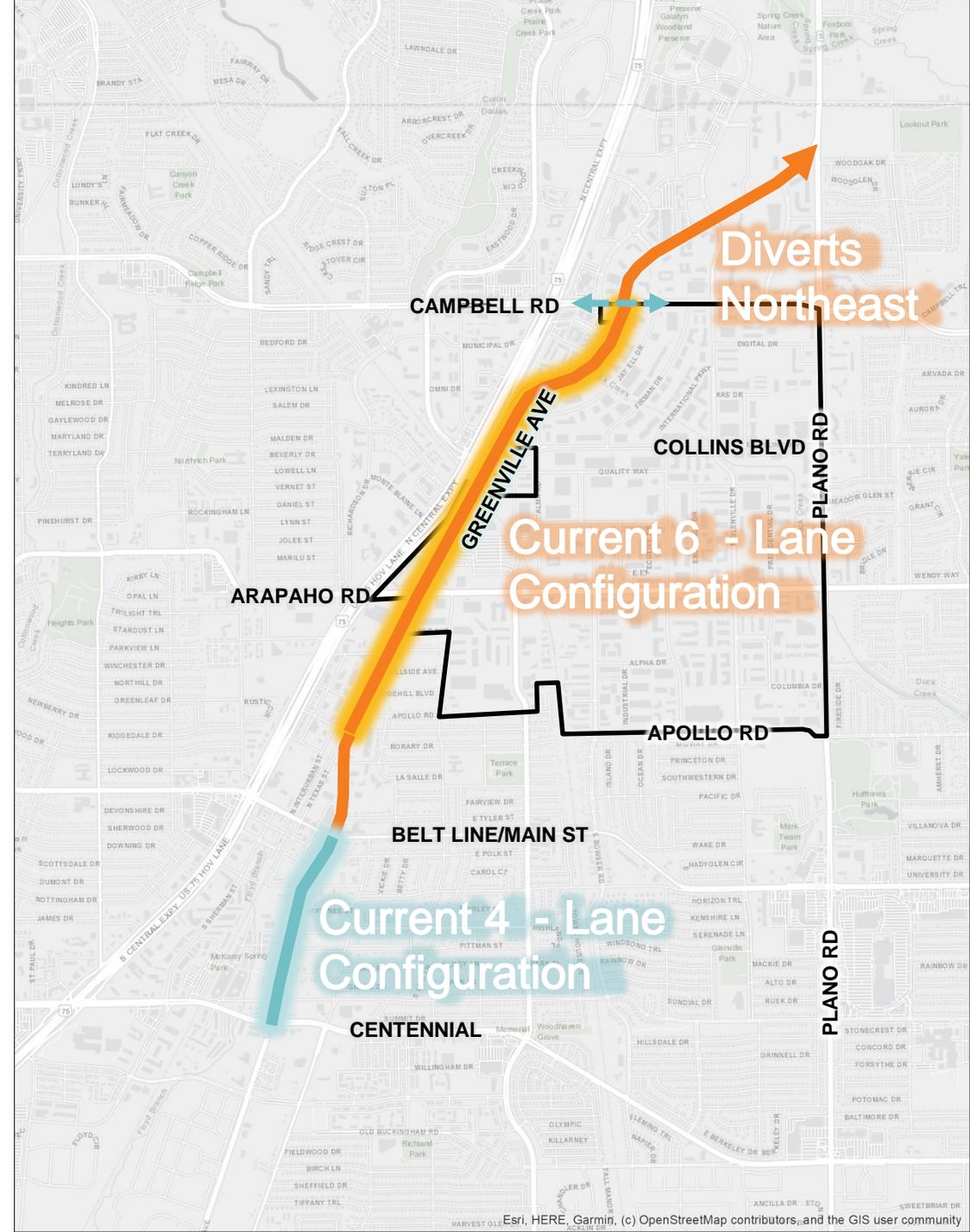
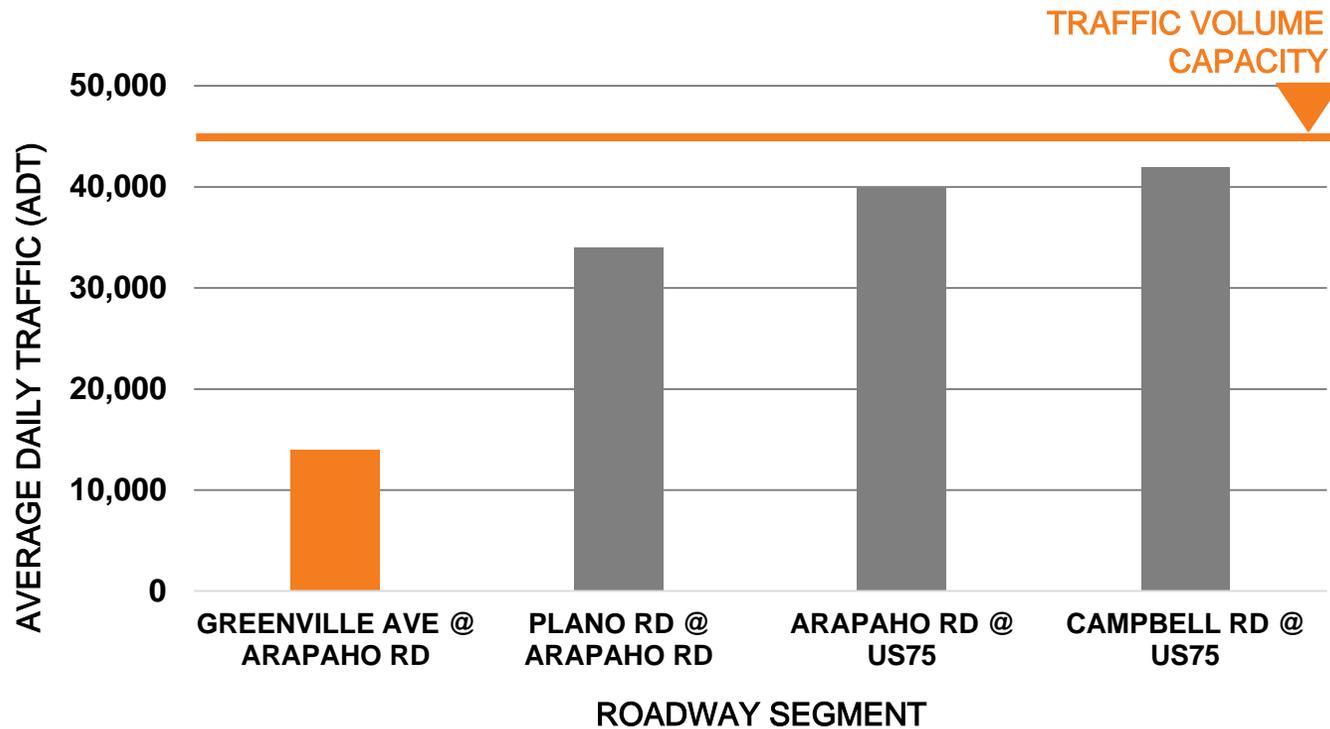


# Integrating



# Context

- > 6-lane Divided Arterial; 40 mph
- > 1.8-mile Corridor
- > DART Impact



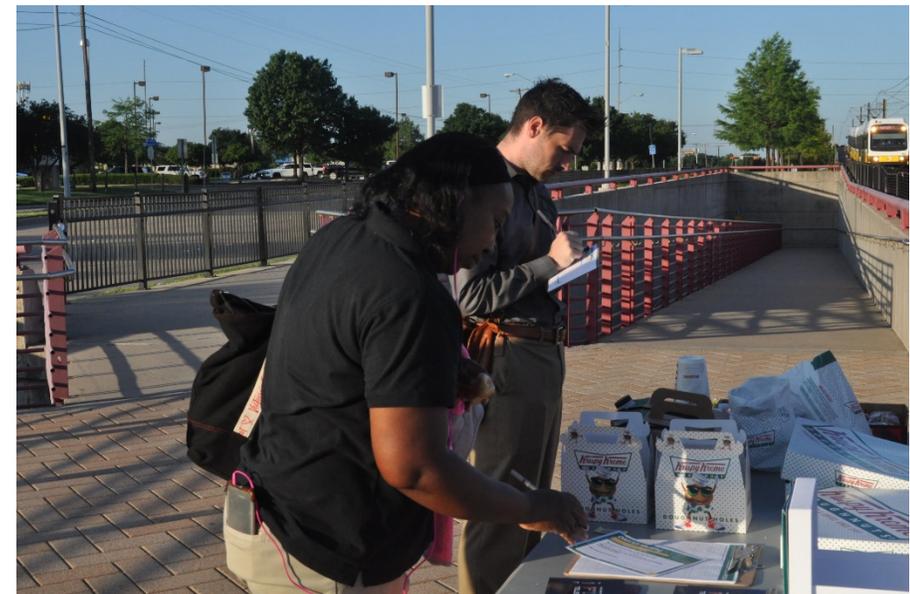
# User Experiences

*Based on public input*

## > Tunnel Issues

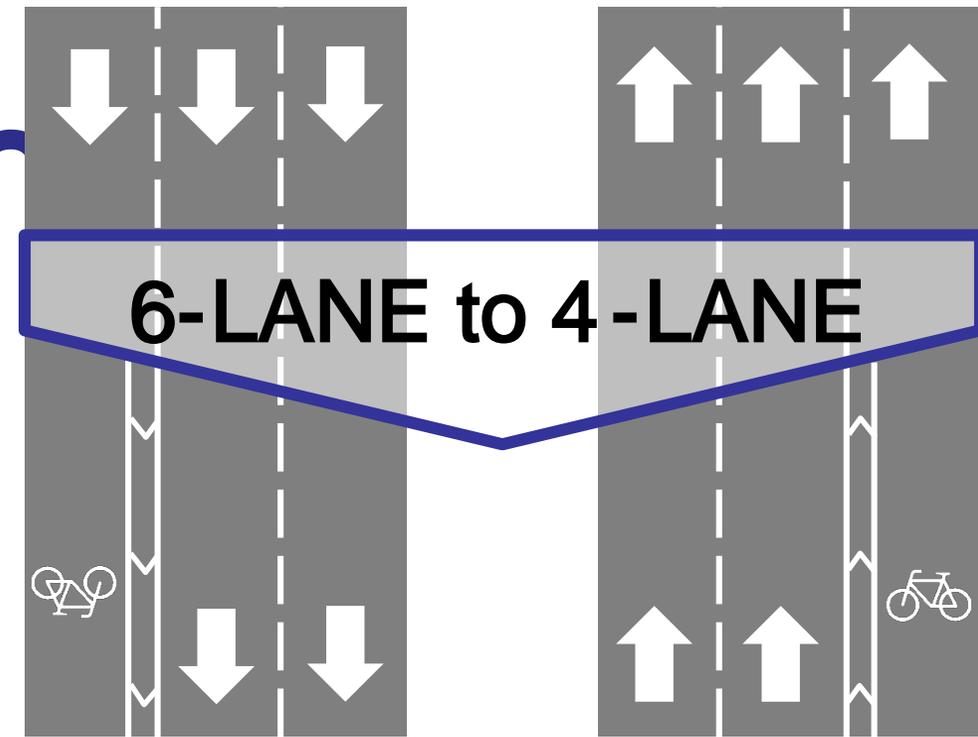
- Safety
- Heavy rain flooding
- Physical strain on stairs
- Route distance for transfers

“The worst part of my commute is the path from the transit center, under Greenville Ave, and up the stairs to the train platform. It is a lengthy and cumbersome process. I have missed many trains due to poorly timing this transition.” — Faith Adamson



# Project Approach

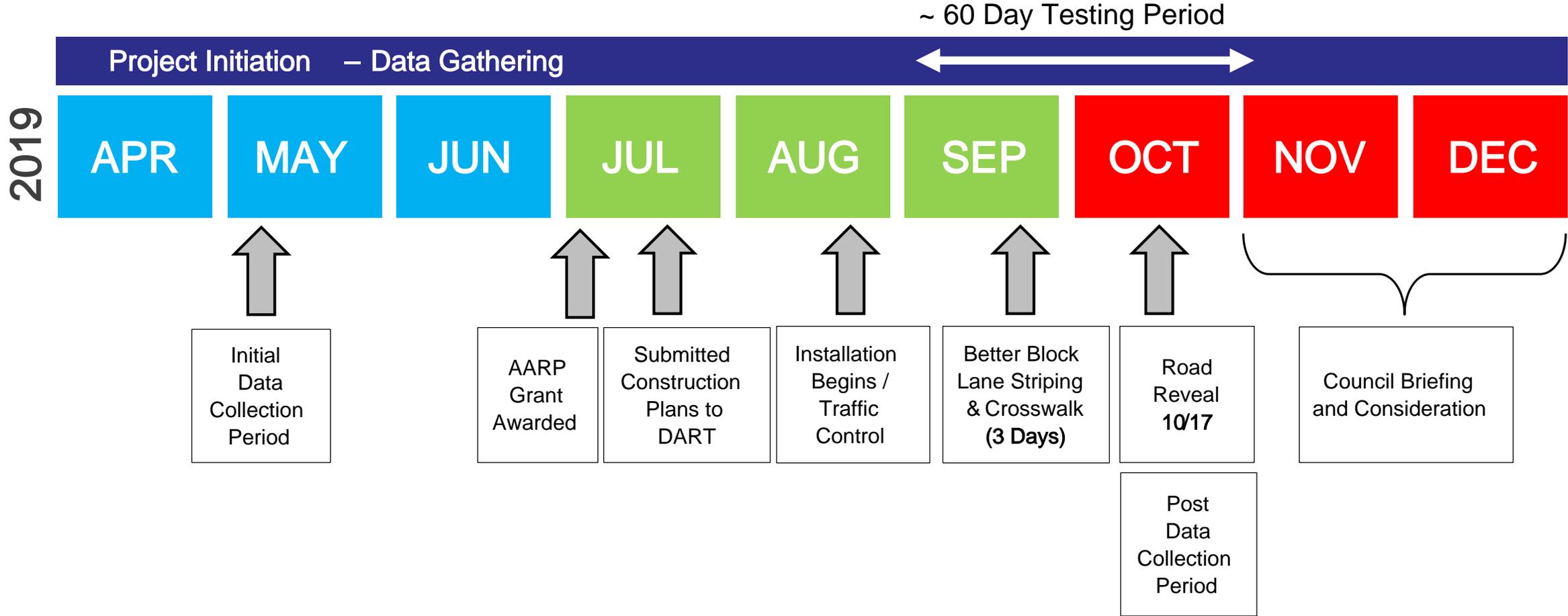
- > Demonstration Project
  - Road Diet with Bike Lanes
  - At-Grade Pedestrian Crossing at Arapaho Station
- > Test New Materials and Best Practices
- > Feedback during Demonstration Phase
  - Road Reveal Community Event
  - Online Survey
- > Brief Council on Approval for Next Steps



# Project Funding

- > Construction - \$50,000 (COR Funded)
  - Barricades, Construction, Irrigation, Delineator Posts, Landscaping, Hardscape
  - At-Grade Pedestrian Crossing at Arapaho Station
- > AARP Grant - \$15,200
  - Temporary Paint/Planning
- > Blue Zones / Degree Made to Move Grant - \$100,000
  - Permanent Improvements
  - Education

# Demonstration Project



# Existing

STATION AREA  
EXISTING VIEW OF GREENVILLE AVENUE LOOKING SOUTH



# Ultimate Concept

STATION AREA  
POTENTIAL STATION AREA DEVELOPMENT AND GREENVILLE AVENUE REDESIGN

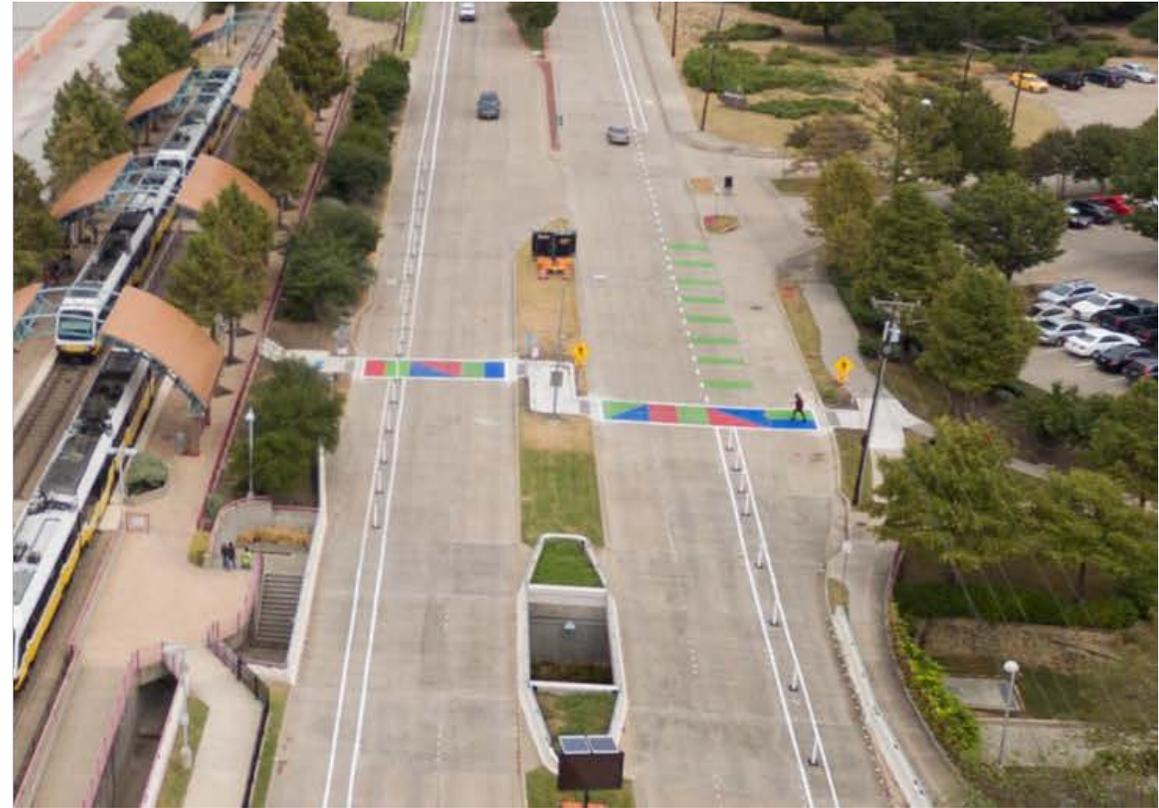


# Demonstration

STATION AREA  
DEMONSTRATION PROJECT CROSSWALK AND BIKE LANES



# Arapaho Station Crossing



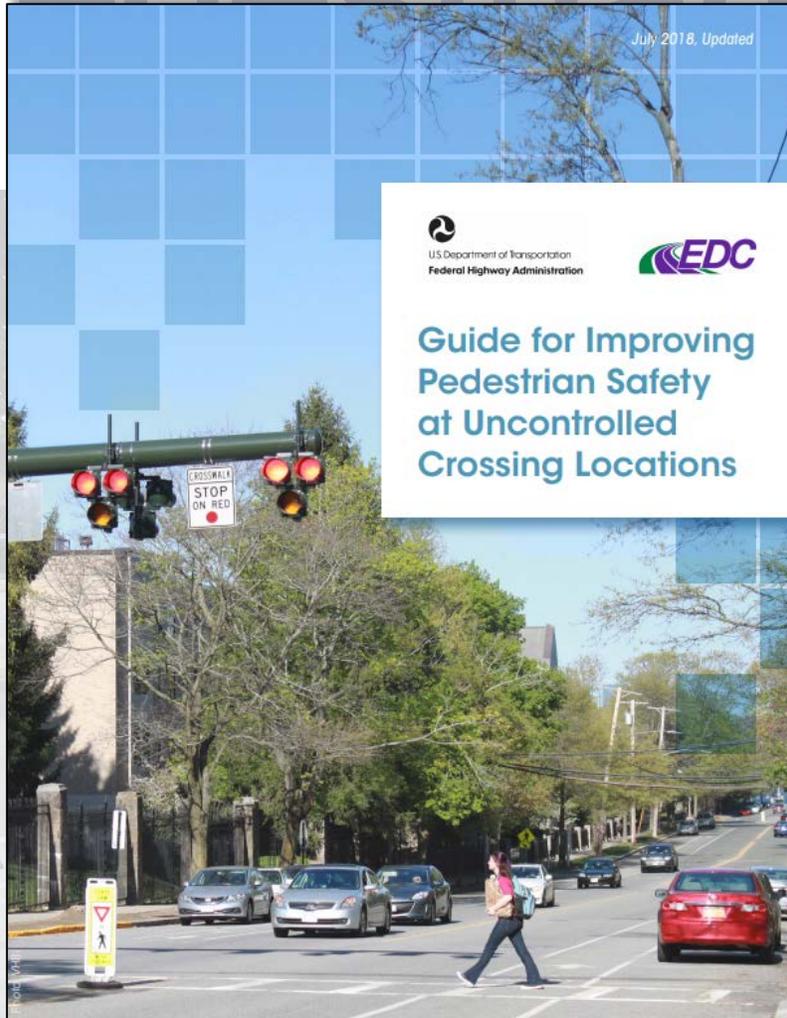
# Arapaho Station Crossing



# Pedestrian Crossing



# Pedestrian Crossing



## FHWA Guide

- > Crossing enhancements based on context (number of lanes, speed, and traffic volume)



# Road Diet with Bike Lanes



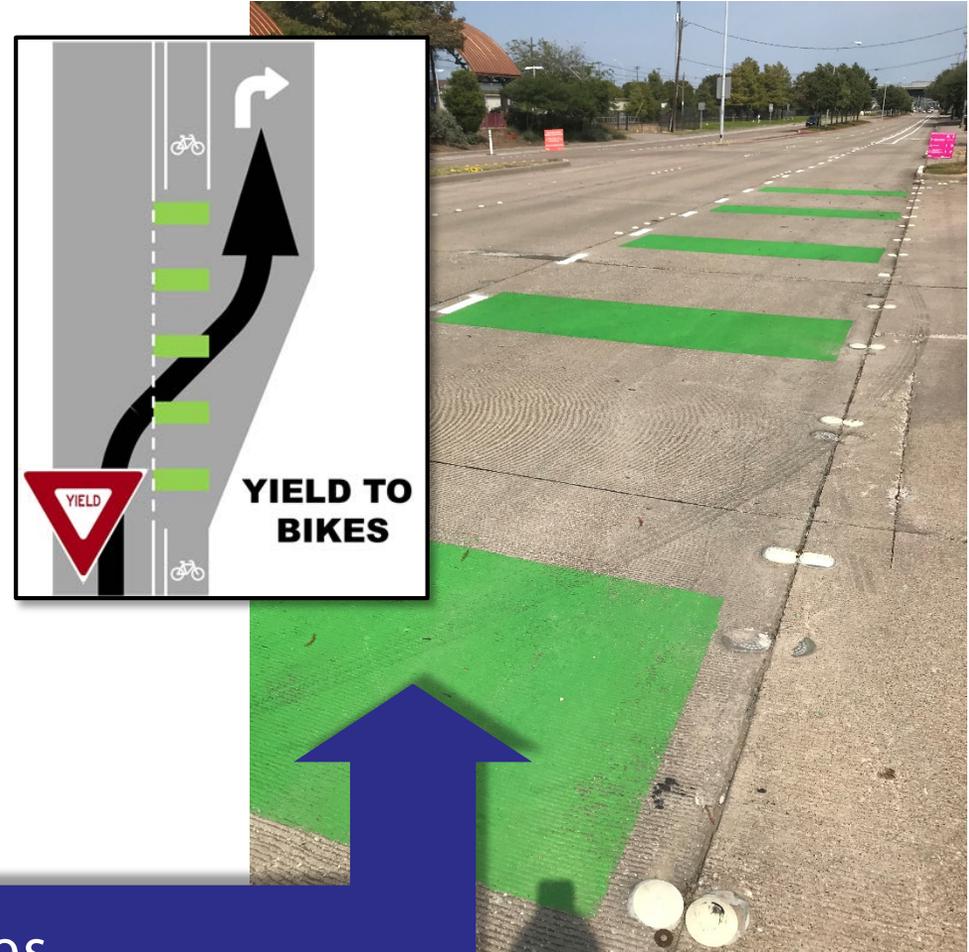
# Road Diet with Bike Lanes



# Road Diet with Bike Lanes



Vertical Separation in Bike Buffer



Green Paint in Conflict Zones

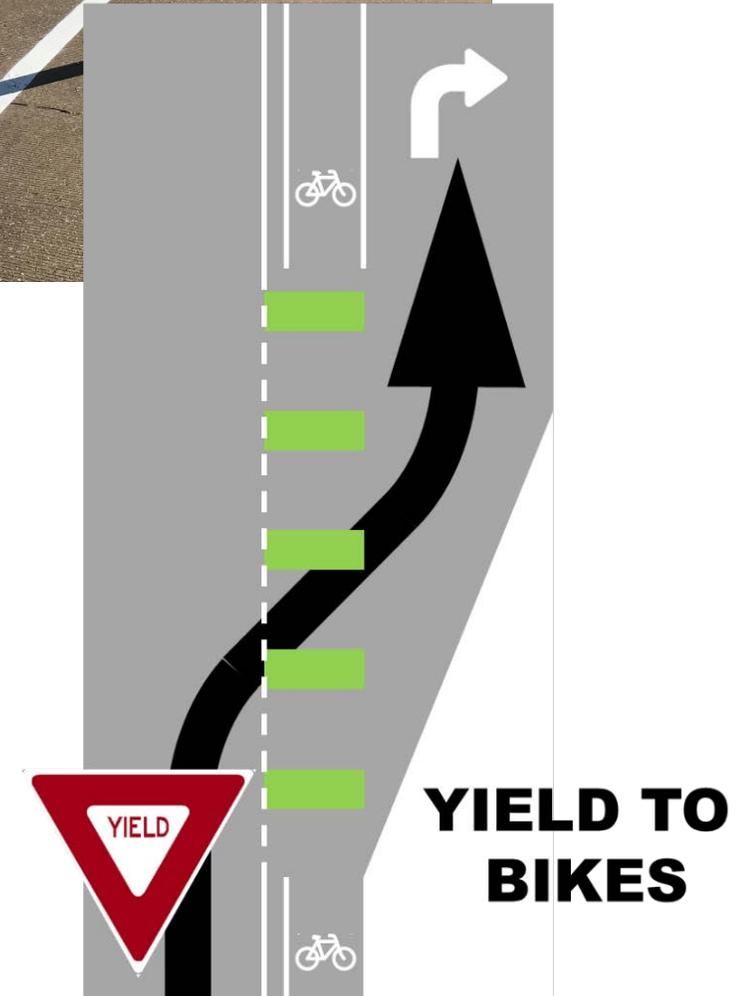
# Testing

## > Green Paint

- Identify conflict areas
- Increase awareness to bike lane

## > Vertical Separation

- Increase comfort and safety for people on bikes
- Delineate roadway space better
- Reduce undesired motorist behavior



# Step 4 Planning

- > Gaining Support of CMO
- > Bike Lane and Traffic Control Plans Prepared by COR Staff
  - 3+ Miles of Bike Lanes (1.75 mile corridor)
- > Crosswalk Mural Design Prepared by Better Block Foundation
- > Recruit Volunteers
- > Crosswalk Construction Plans Prepared by COR Staff
- > DART Approval for Crosswalk Construction Plans
- > **Collect Initial Data**

# Step 2- Barricade Deployment

- > Prepare drivers for lane reduction
- > Pre-test of any conflicts



# Step 3- Crosswalk Construction



# Step 4- Temporary Paint Installa

- > COR Staff, Better Block Foundation, and Volunteers
- > Three Days
- > 100 Degree Heat in September



# Step 5- Collect Data



**Greenville Avenue Testing & Demonstration**  
**TELL US WHAT YOU THINK!**

PEDESTRIAN CROSSWALK	Love it!	Like it	Meh	Dislike it	Comments
	●●●●●	●●●●●	●●●●●	●●●●●	Love it! The colors are great and the paint is very visible. It's a nice change from the standard white crosswalks.
DEDICATED BIKE LANES	Love it!	Like it	Meh	Dislike it	Comments
	●●●●●	●●●●●	●●●●●	●●●●●	Love it! The green paint is very bright and makes the bike lane stand out. It's a great addition to the street.
USE OF GREEN PAINT FOR VEHICLE / BIKE CONFLICT ZONES	Love it!	Like it	Meh	Dislike it	Comments
	●●●●●	●●●●●	●●●●●	●●●●●	Love it! The green paint is very visible and makes the conflict zones stand out. It's a great addition to the street.
VERTICAL PROTECTION BARRIERS FOR BIKE LANES	Love it!	Like it	Meh	Dislike it	Comments
	●●●●●	●●●●●	●●●●●	●●●●●	Love it! The barriers are very visible and make the bike lane feel safer. It's a great addition to the street.



# Data Gathering

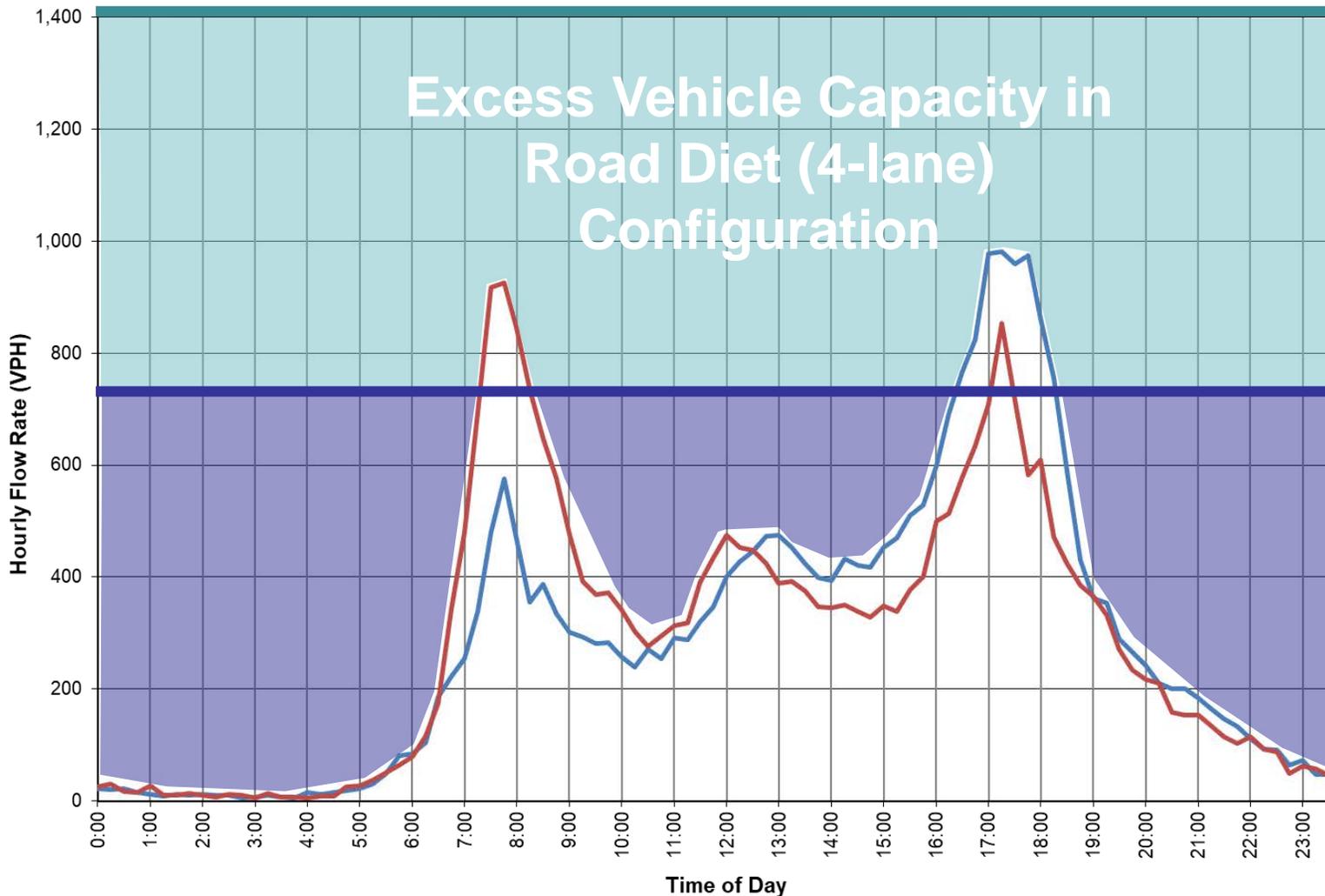
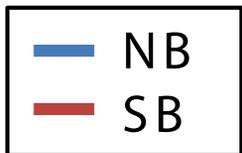
- > Traffic Volumes
- > Travel Times/Congestion (INRIX)
- > US 75 Incident Management
- > Pedestrian Movements
- > Road Reveal Community Event
- > Online Survey



# Greenville Avenue South of Arapaho Road

## Demonstration Road Diet

Weekday Avg  
(Before & After)



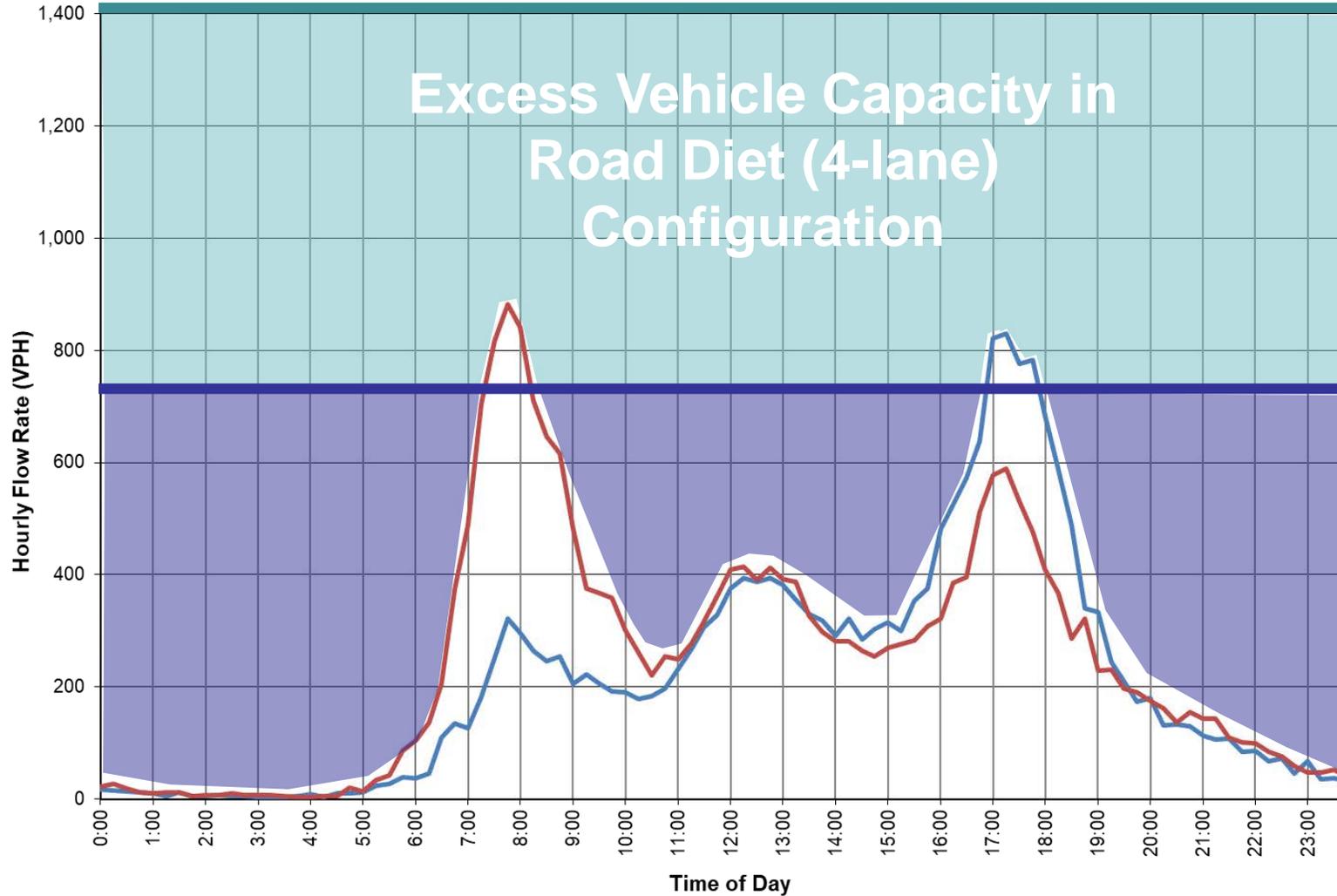
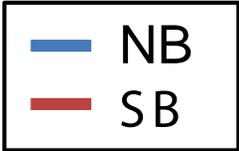
4-lane Roadway w/Median Capacity

2-lane Roadway w/Median Capacity

# Greenville Avenue South of Campbell Road

## Demonstration Road Diet

Weekday Avg  
(Before & After)

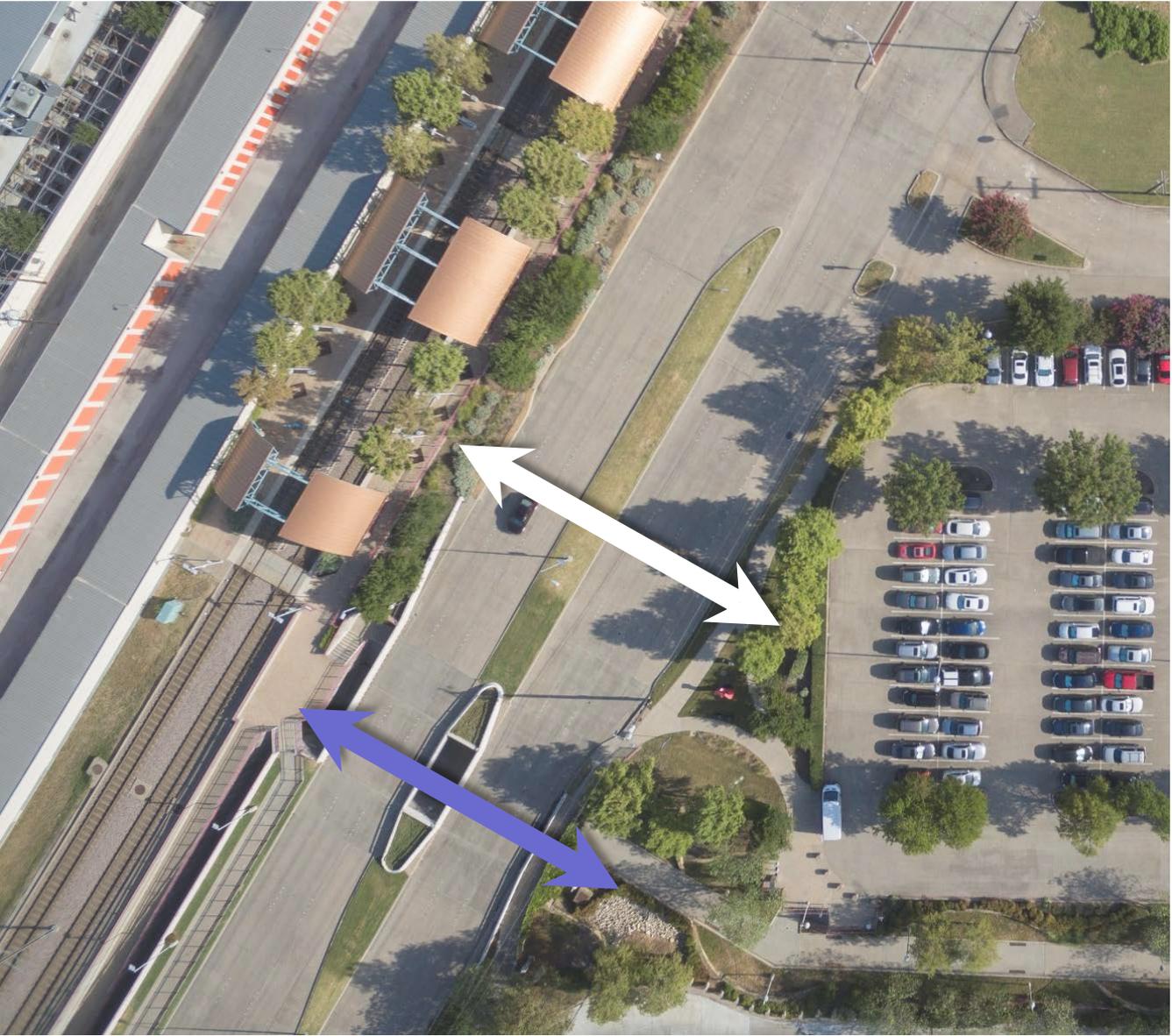


4-lane Roadway  
w/Median  
Capacity

2-lane Roadway  
w/Median  
Capacity

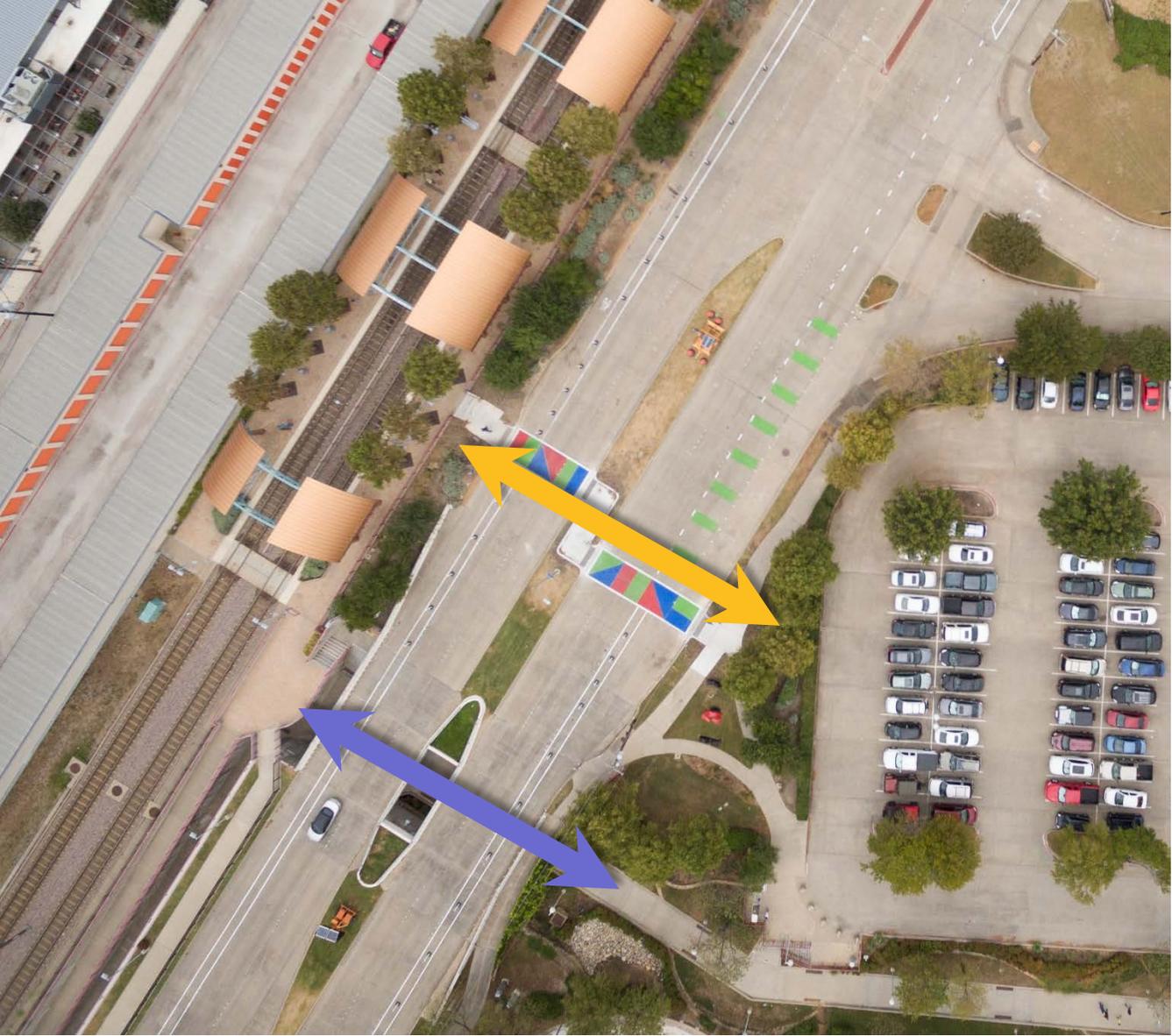
# BeforeAfter Evaluation

- > Level-of-Service (LOS) maintained at LOS A/B
- > Traffic volumes remained consistent utilizing Greenville
  - Less than +/- 5% difference
- > Crowdsourced Travel Data (INRIX)
  - Average travel time: +4% or 11.5 seconds
  - Delay: +10% or 11.5 seconds
  - PM northbound traffic most impacted
    - Signal timing adjustments can improve



# Pedestrians

- > Over 450 crossings to/from Arapaho Station in peak periods
- > In 2018, DART approached COR to construct at -grade crossing to address increase in illegal crossings



# Pedestrians

## > BEFORE Peak Period Avg

- Tunnel: 95% (986)
- Other: 5% (45)

## > AFTER Peak Period Avg

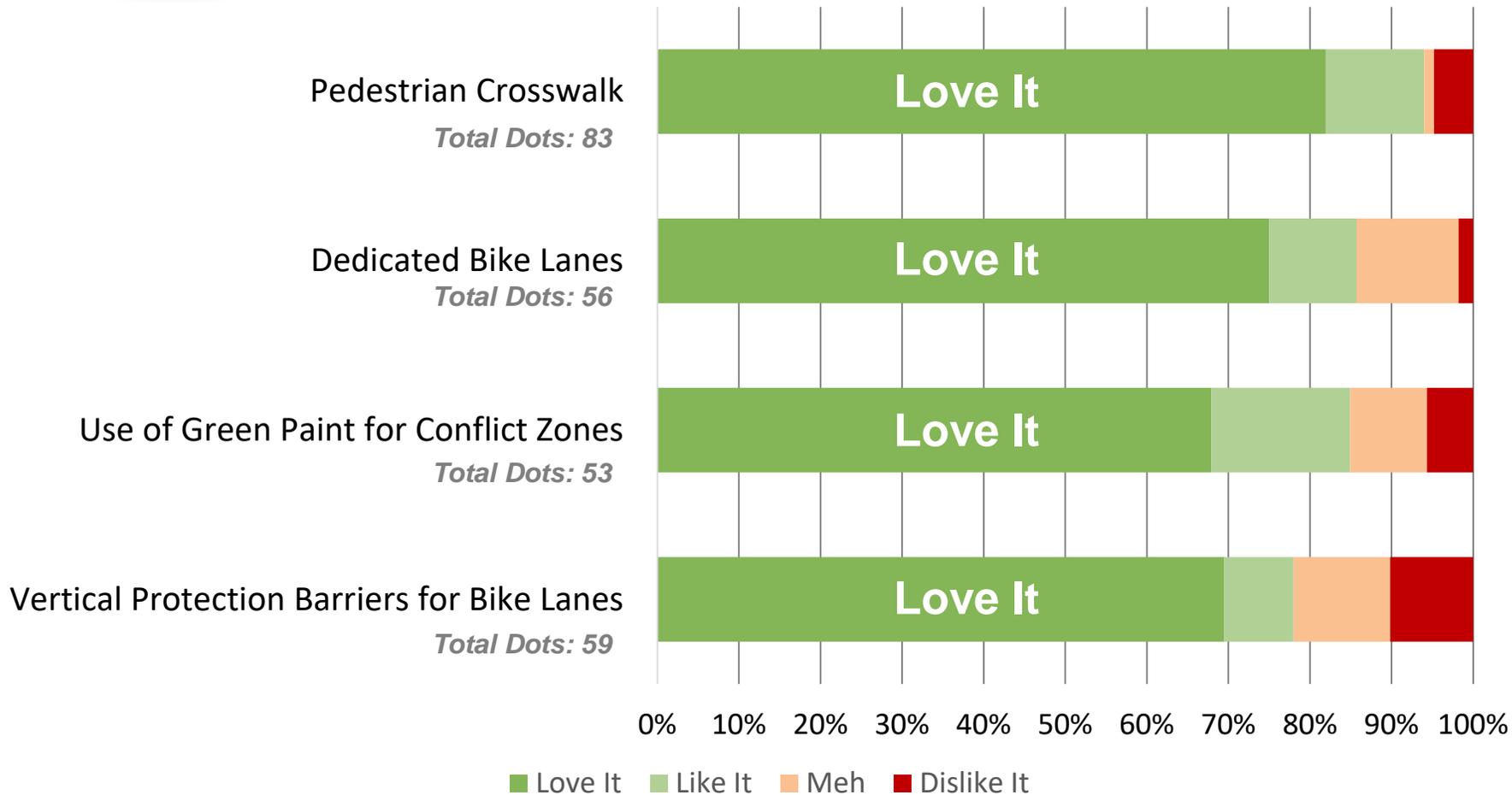
- **New Crossing: 60% (747)**
- Tunnel: 38% (483)
- Other: 2% (24)



# Greenville Avenue Road Reveal Community Event



# Road Reveal Community Input (10/17/19)



## Comments:

- Motion activated flashing lights
- Bright street lights in crosswalk area
- Better signage in the parking lot directing people to the new crosswalk
- Separation curb [bike lane]
- More poles! [vertical barriers]

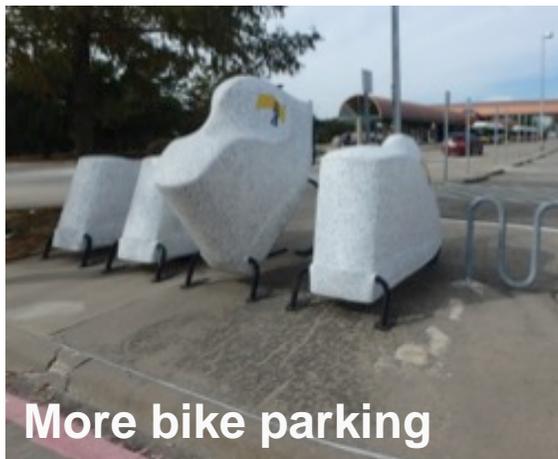
# Bike Audit Recommendation



**More protection from traffic**



**Broader perspectives  
& engagement**



**More bike parking**



**Bike & ped way-finding**



**More complete  
network**

Greenville Ave Mobility  
Demonstration Project  
Survey  
(as of 11/11/19)

## KEY RESULTS

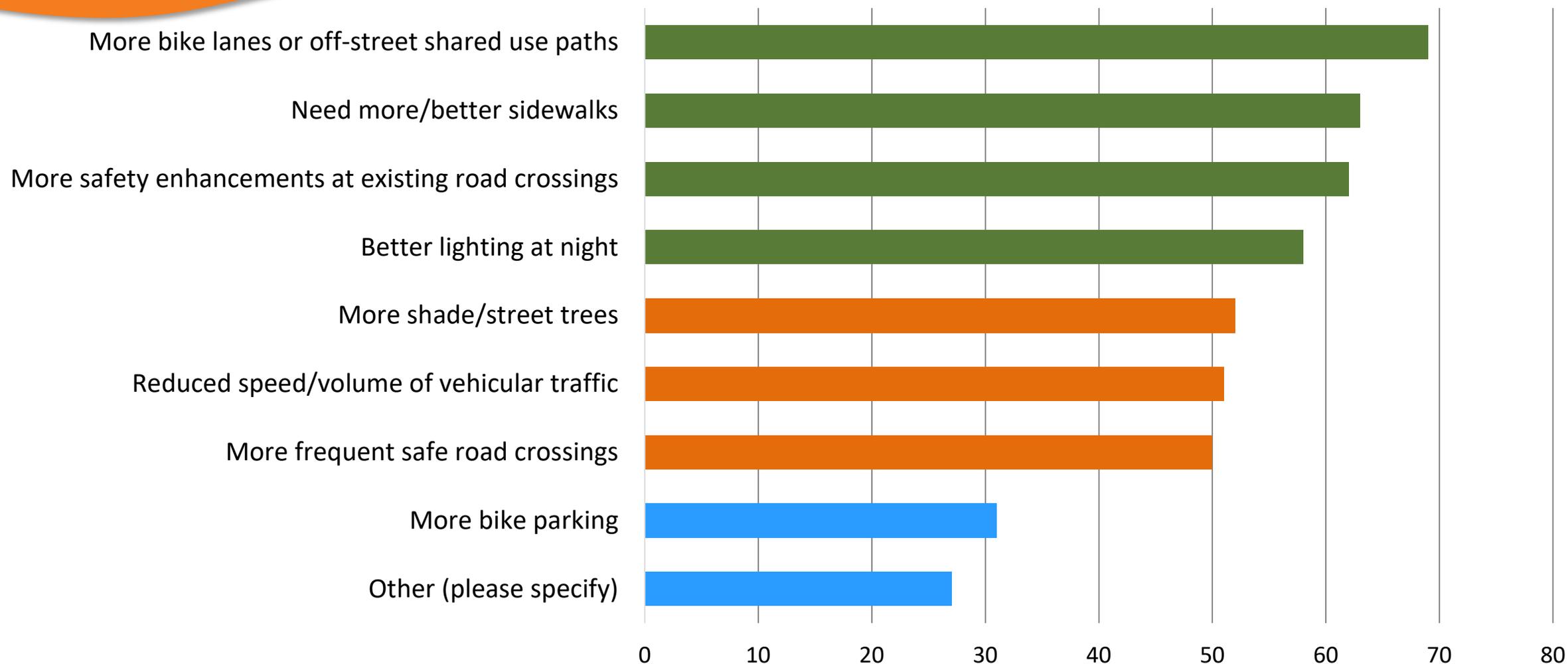
	AGREE	DISAGREE	RESPONDENTS
Greenville should be designed for <u>all modes of transportation</u>	78%	16%	130
DART Station <u>crosswalk</u> should be permanent	73%	15%	128
Temporary <u>bike lanes</u> should be permanent	71%	20%	128

# Greenville Ave Mobility Demonstration Project Survey

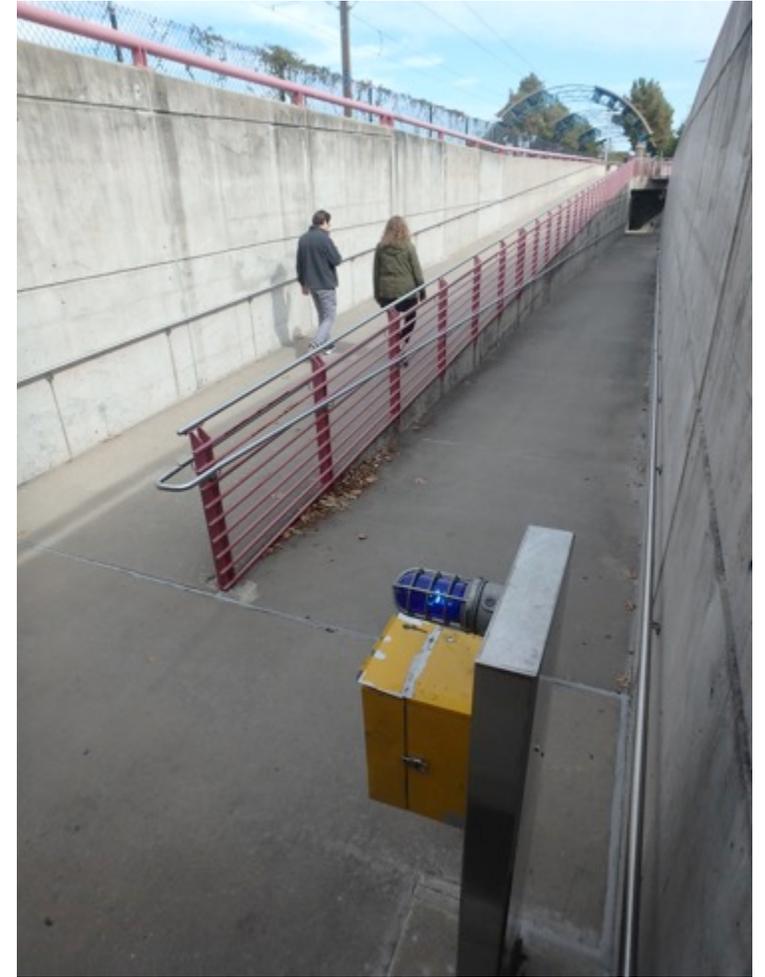
(as of 11/11/19)

What street improvements might better encourage or enable you to walk or bike more along Greenville Avenue?

*Total Respondents: 123*









# Council Approval

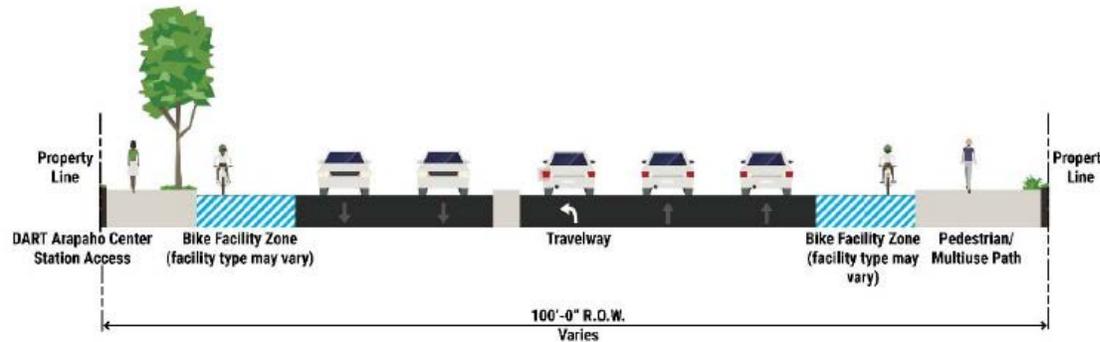
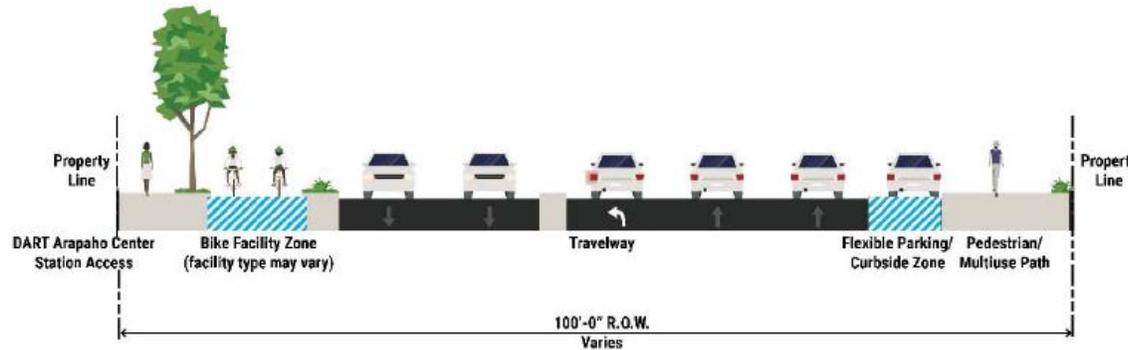
## Parkway (Greenville Ave)

### Typical Characteristics

- Excess travel lane capacity
- Transit-oriented context opportunities

### Design Options

- Repurpose travelway space for bikeway and pedestrian crossing options
- Greater physical separation for bikeway from adjacent travel volume and speed



On December 9, 2019, in conjunction with the approval of the new Form -Based Zoning Code, City Council approved new cross-sections for Greenville Avenue supporting removal of two vehicle lanes

# Council Approval

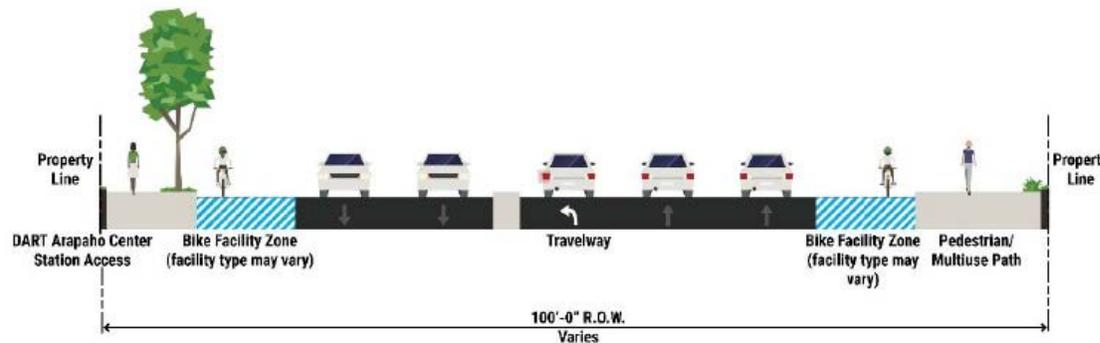
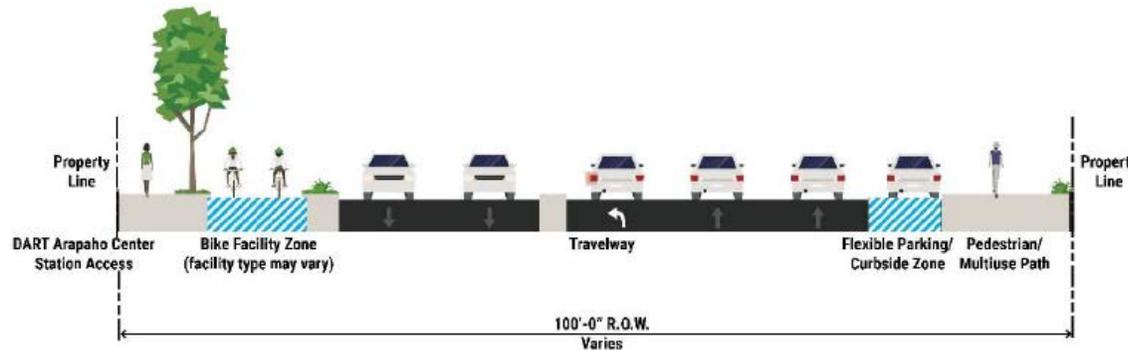
## Parkway (Greenville Ave)

### Typical Characteristics

- Excess travel lane capacity
- Transit-oriented context opportunities

### Design Options

- Repurpose travelway space for bikeway and pedestrian crossing options
- Greater physical separation for bikeway from adjacent travel volume and speed



- Permanent installation of bike lanes will be paid for by the Blue Zones/Degree Made to Move Grant
- Planning removal of temporary paint and installation of permanent lanes this spring
- Capital improvement cost estimates in progress for complete redesign/rebuild
- As for the crosswalk...

# Unforeseen Obstacles

## > Temporary v. Permanent Crosswalk

### > Phase 1 (z-crossing, stairs, railings, markings, signage)

> October, 2019

### > Phase 2 (RRFBs, ADA ramp, lighting)

> November-December, 2019

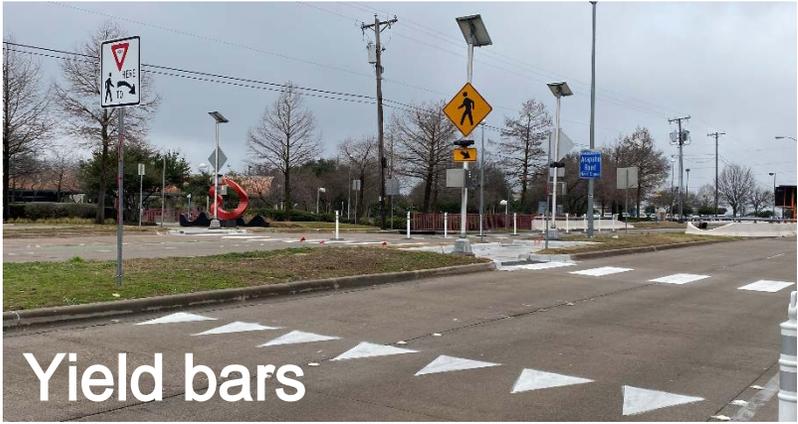
## > Tornado hits Richardson – October 20

- Request for signage and RRFB delayed

## > Delayed Decision = Daylight Savings – November 3

- Oncor lighting request





Yield bars



Speed Boards



Reflective Paint



Electronic Message Boards



RRFBs



Rumble Strips



# RRFB

> Passive detection – thermal cameras

Innovation District

Tech Center



# Lessons Learned

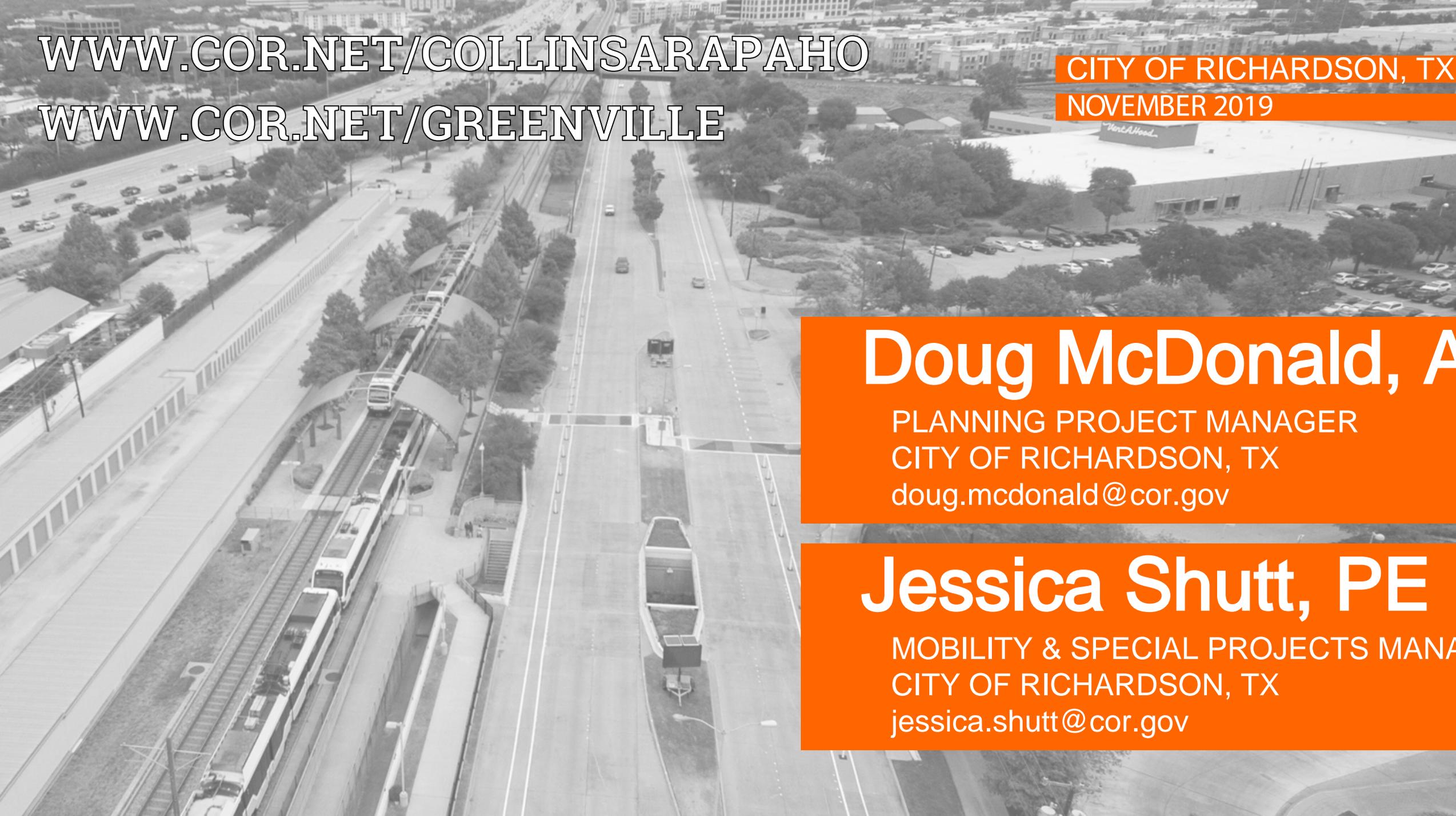


- > Document before/after data
- > Prep CMO, Police, and Fire
- > (Relatively) low cost, high impact
- > Ask and you will receive (public input)
  - Both positive and negative
- > Meet people where they're at
  - People's stories are important
- > Iterative process, be prepared to make changes
  - Try and anticipate how user will respond

# Lessons Learned



- > Everything is “temporary” so new materials can be tested
- > Plan for an extended timeline
  - Daylight savings time impacts
  - How to manage “temporary” for extended term
- > Removal Planning
  - How, When, Cost



[WWW.COR.NET/COLLINSARAPAHO](http://WWW.COR.NET/COLLINSARAPAHO)

[WWW.COR.NET/GREENVILLE](http://WWW.COR.NET/GREENVILLE)

CITY OF RICHARDSON, TX

NOVEMBER 2019

**Doug McDonald, A**

PLANNING PROJECT MANAGER  
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# Transportation Alternatives

## 2020 Call for Projects for the North Central Texas Region

Bicycle and Pedestrian Advisory Committee

February 19, 2020

Daniel Snyder



**North Central Texas  
Council of Governments**

# Funding Overview

Funding Allocation for FY21\*, FY22, and FY23  
 (*conditional* upon receipt of federal funding)

Western Subregion Fort Worth District (34%)	Eastern Subregion Dallas and Paris Districts (66%)	Total Funding Available
\$8,102,880	\$11,761,919	<b>\$19,864,799</b>

\* \$3,967,201 of FY21 Eastern Subregion funds already awarded by RTC on 6/13/19 and reduced proportionally in FY21 funds.

<i>Maximum</i> Federal Funding Award <i>per Project</i>	<i>Minimum</i> Federal Funding Award <i>per Project</i>
\$5,000,000	\$300,000

# Funding Overview

- Construction-implementation focus. Engineering/design and environmental will be **100 percent locally funded**.
- **Minimum 20 percent local match is required for construction.**
- Local match must be cash or TDCs – no in-kind contributions.
- Agencies are eligible to request TDCs in lieu of a local match if qualified through the MTP Policy Bundle process.
- A resolution by the project sponsor's governing body confirming the availability of the local match contribution is required with each application.



# Application Requirements

- **Funding Resolution by Project Sponsor Governing Body:** Confirm the availability of the local match contribution.
- **Environmental Checklist**
- **Right-of-Way/Easement:** Property must be under public ownership. If easement cannot be obtained by deadline, a consent letter from property owner is required.
- **Project Schedule Worksheet**
- **Project Budget Worksheet**
- **GIS Files of Project Elements**
- **Letter of Support from School District Superintendent (SRTS Projects Only)**
- **Railroad Right of Entry Letter/Agreement** (if project is in railroad right-of-way)
- **TxDOT District Engineer Letter of Consent** (if project is in TxDOT right-of-way)
- **Documentation of Support from Supporting Entity** (if project crosses jurisdictions)

# Schedule

Milestone	Date
<del>Bicycle and Pedestrian Advisory Committee (BPAC) – Info on CFP</del>	<del>November 20, 2019</del>
<del>Call for Projects Public Workshop</del>	<del>January 21, 2020</del>
<del>Surface Transportation Technical Committee (STTC) – Info on CFP</del>	<del>January 24, 2020</del>
Regional Transportation Council (RTC) – Action on CFP	February 27, 2020
<b>Call for Projects Opens</b>	<b>March 2, 2020</b>
Deadline for Meetings to Review Applications for Completeness	April 10, 2020
<b>Call for Projects Closes</b>	<b>May 15, 2020, 5 PM</b>
Review of Projects / Scoring by NCTCOG	May–July 2020
Public Meetings	August 2020
STTC – Action on Selected Projects	August 28, 2020
RTC – Action on Selected Projects	September 10, 2020
Individual Meetings with TxDOT District Staff	September - October 2020
Submittal Deadline for TIP Modifications	October 23, 2020
Approval of Statewide Transportation Improvement Program (STIP)	March / April 2021

# Contact Information:

## Daniel Snyder

Transportation Planner

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## Kevin Kokes, AICP

Program Manager

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## Karla Weaver, AICP

Senior Program Manager

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(817) 608-2376



# ***MTP POLICY BUNDLE***

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ROUND 4

---

Kevin Kokes  
Bicycle and Pedestrian Advisory Committee



# Schedule

DATE	DESCRIPTION
January 9	RTC Presentation – Information
January 24	STTC Presentation – Information TIP Mods due for May 2020 Revision
February 3	Round 4 Opens
March 20	Early Submittal Deadline
<b>April 27</b>	<b>Final Deadline</b>
June 26	STTC – Action
July 9	RTC – Action
July 2020	Formal Notice of Awards
July 31	TIP Mods Due for November 2020 Revision

# How do I use TDCs *awarded through the program?*



TDCs awarded in FY2020 may be used in FY2021 and FY2022

Contact the TIP team now to utilize TDCs previously awarded in FY2019



TDCs must be programmed in the TIP or allocated to projects through a Call for Projects of funding initiative prior to the end of the fiscal year, or they will be returned to the regional pool of TDCs.



If you have candidate projects that you would like to have considered for funding, please contact a member of the TIP team.



If you have previously been awarded TDCs through the Policy Bundle, you must reapply and resubmit your application to be eligible to receive new TDCs.

# Contact Us



[nctcog.org/policybundle](https://nctcog.org/policybundle)



[mobilityplan@nctcog.org](mailto:mobilityplan@nctcog.org)



**Amy Johnson**

*Transportation Planner III*

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Application Coordination

**Brian Dell**

*Senior Transportation Planner*

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(817) 704-5694

TDC and TIP Coordination

# Statewide TxDOT Bicycle Advisory Committee Update



**Kevin Kokes, AICP**

---

ADA Transition Plans  
Safe Routes to School  
Connections of Trails & Trail Plans Between Cities  
E-Bike Legislation  
Complete Streets and Road Diet Standards  
Design Standards of Sidewalks, Trails, & On-Street Facilities  
Local Community Updates  
Bikeway Selection Guide  
Walk to School Day  
Bicycle Boulevards  
Rectangular Rapid Flashing Beacons (RRFBs)



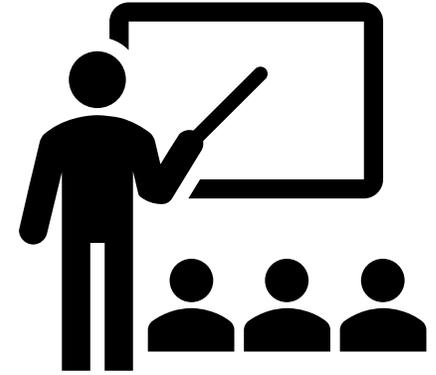
**TOPICS WE  
COVERED IN  
2019**

TOPICS from 2019

BPAC topics throughout the year

---

Safety Education and Safer Design  
Citizen Encouragement to Walk and Bike More  
Dockless Bikeshare Policy Examples  
Sidewalk Designs For All Ages & Abilities  
Suburban Complete Streets  
Transit Design Standards for Pedestrian & Cyclist Connections  
Rural Constructability of Bicycle & Pedestrian Facilities  
Minority Community Engagement Examples



**OTHER TOPICS  
SUGGESTED  
IN 2019**

TOPICS from 2019

BPAC topics throughout the year

---

Public Private Partnerships  
Inter-Agency Communication  
Multi Modal Planning  
Sidewalks



**MORE  
SPECIFIC?**

TOPICS from 2019

BPAC topics throughout the year