Mobility and Bike Plan Overview

Denton City Council

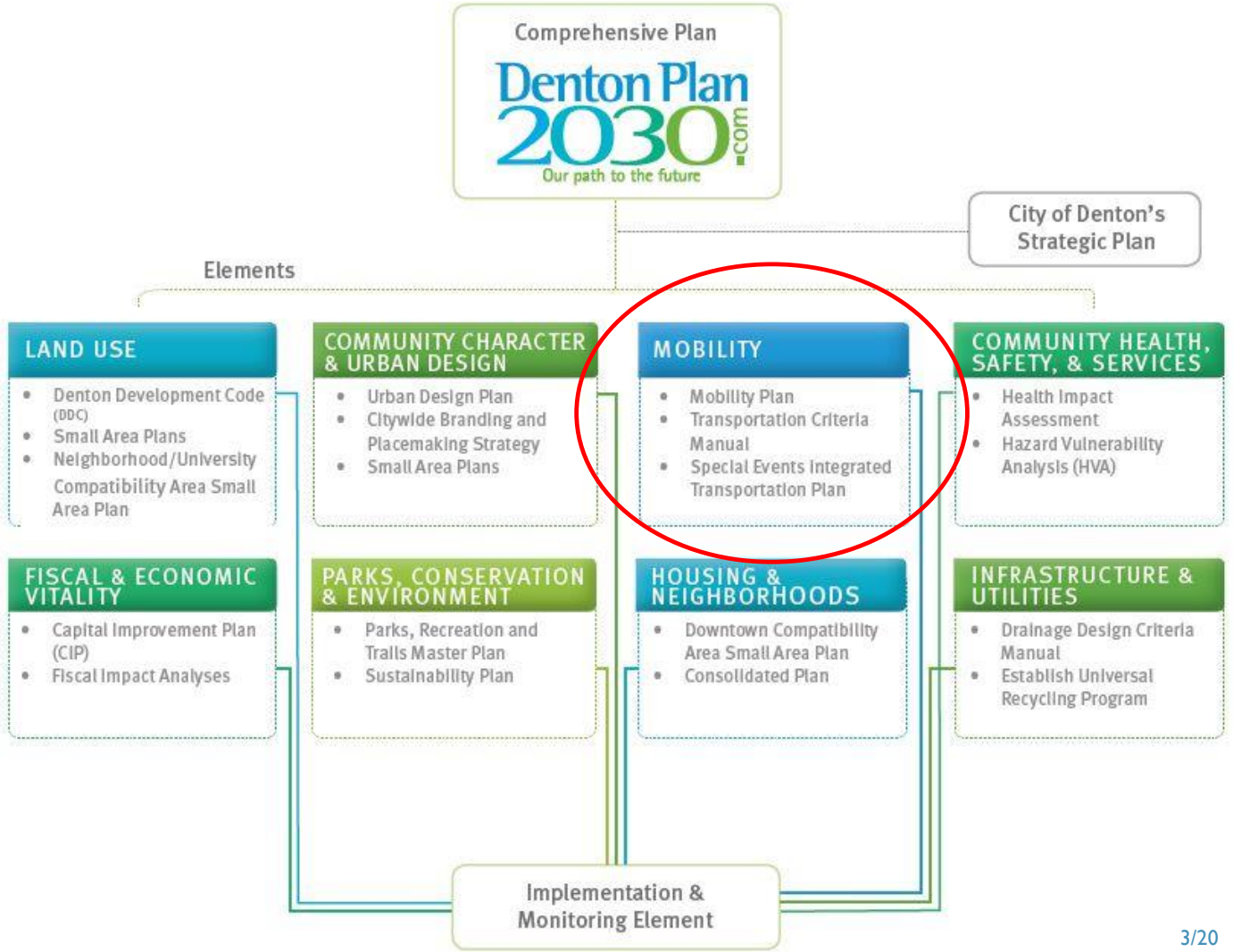
July 25, 2017

BACKGROUND

- Citywide Comprehensive Plan
- Serves as an Overarching Framework and Guide
- Adopted February 2015
- Is Comprised of Eight Distinct Elements

ELEMENTS

- The Mobility Element is one of Eight Elements of the Denton Plan 2030



MOBILITY ELEMENT

Component of the Denton 2030 Plan that focuses on the Circulation System with four primary goals

GOAL M-1: **Provide for the safe, efficient movement of motor vehicles, bicycles, and pedestrians in a sustainable way that complements Denton's planned growth strategy.**

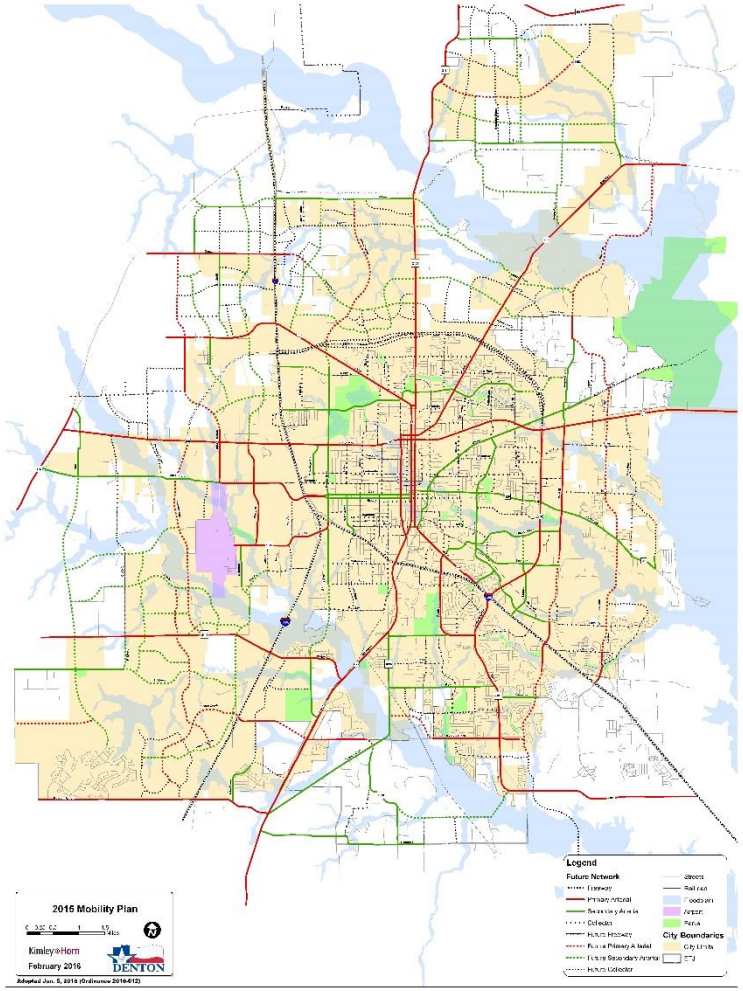
GOAL M-2: **Enhance Denton's economy by supporting the city's freight network.**

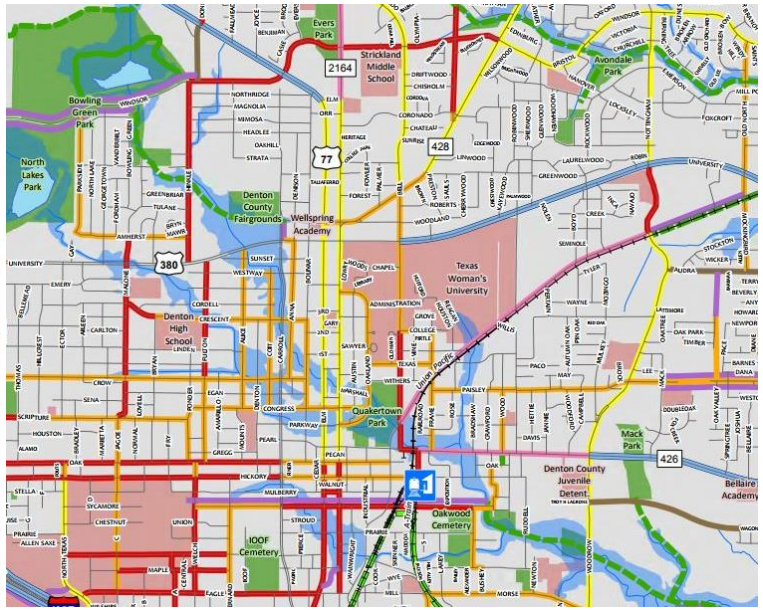
GOAL M-3: **Create a transportation network where residents can walk, bicycle, and use other forms of non-motorized transportation for exercise, recreation, and to get to daily destinations.**

GOAL M-4: **Create an environment where transit is convenient and safe for travel both within Denton and to the rest of the region.**

COMPONENTS OF THE MOBILITY ELEMENT

- Roadway Component – Mobility Plan
- Freight Component
- Bicycle and Pedestrian Linkage Component – Bike Plan
- Transit Component





MOBILITY PLAN – OVERVIEW

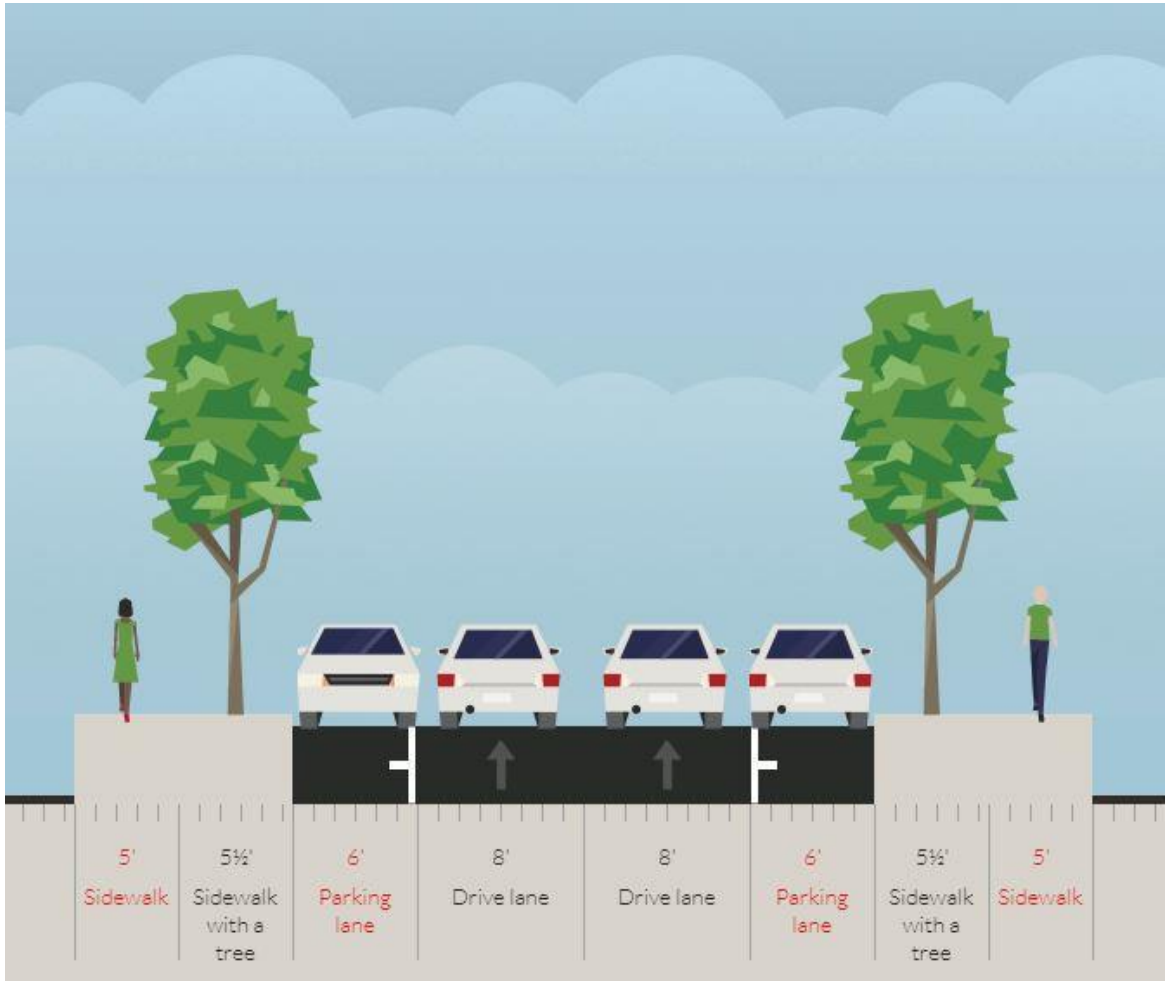
- Roadway network plan
- All Streets are categorized into functional classifications based on
  - Use
  - Roadway Characteristics
  - Average daily traffic volumes (ADT)

- Street are Classified into the following types
  - Neighborhood (Local) Streets
  - Collector Streets
  - Secondary Arterials
  - Primary Arterials

MOBILITY PLAN – CLASSIFICATION

Neighborhood (Local) Streets

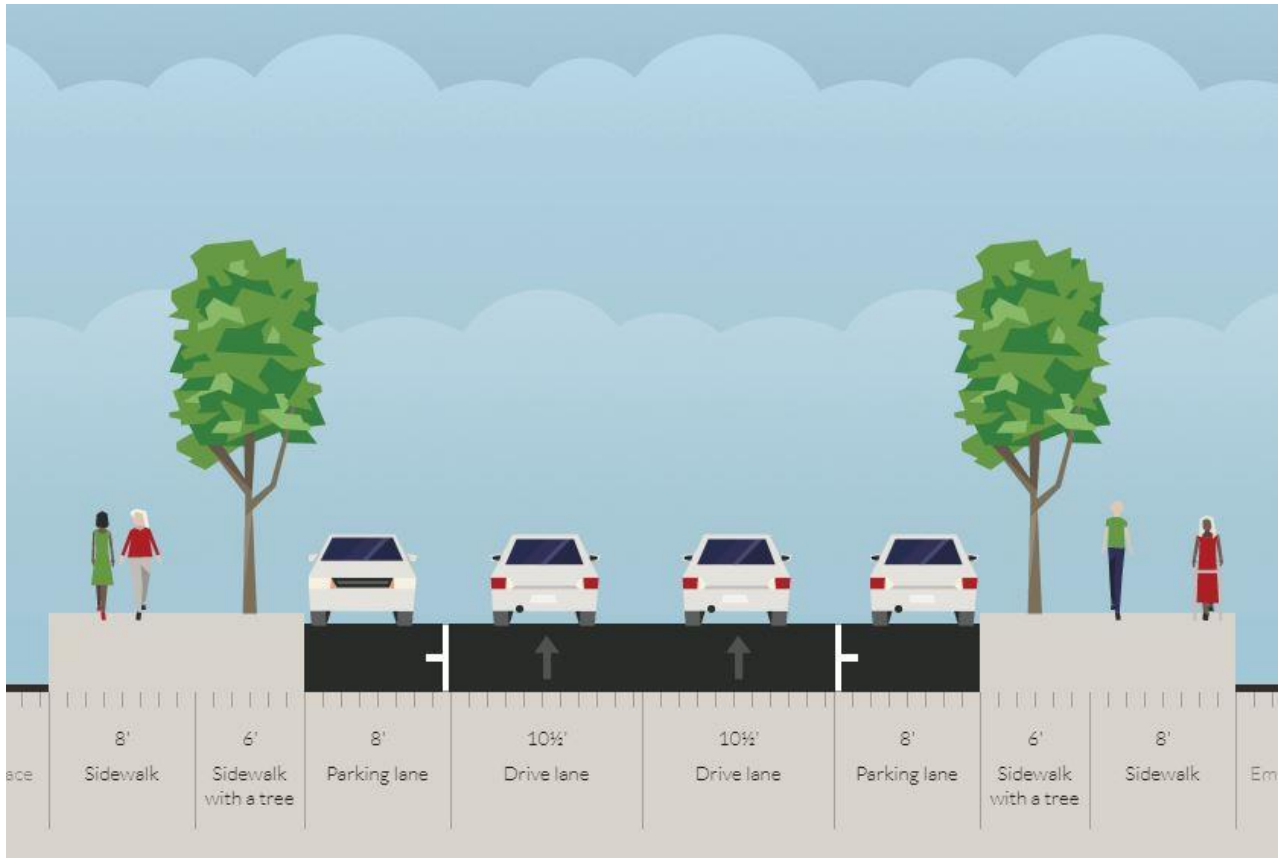
- Primary access between the Development/Subdivision and the Arterial/Collector system
- Design ADT between 400 – 1,500 vehicles per day
- Right of Way – 50 feet
- Two lane (one lane each direction) facility



STREET CLASSIFICATION

Collector Streets

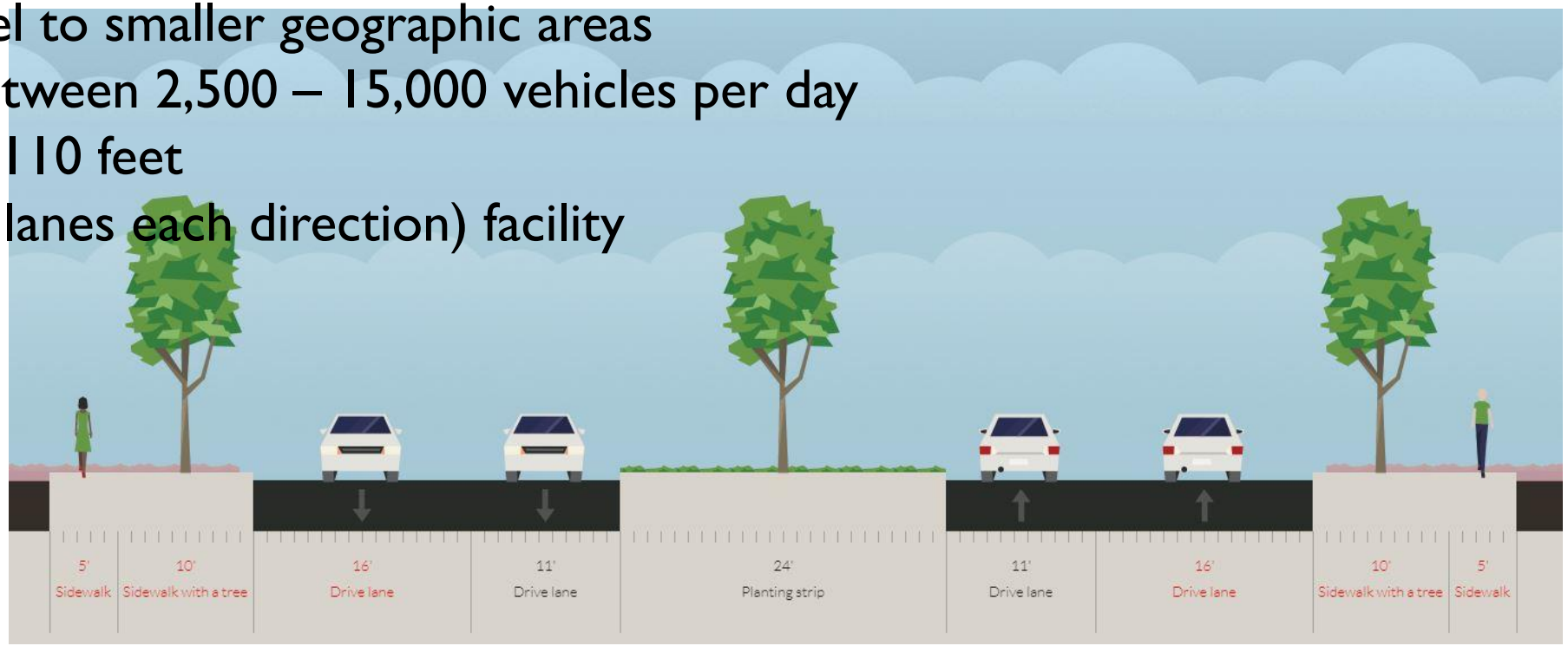
- Channels traffic from neighborhoods or between primary & secondary arterials
- Design ADT between 1,000 – 8,000 vehicles per day
- Right of Way – 65 to 70 feet
- Two lane (one lane each direction) facility



STREET CLASSIFICATION

Secondary Arterials

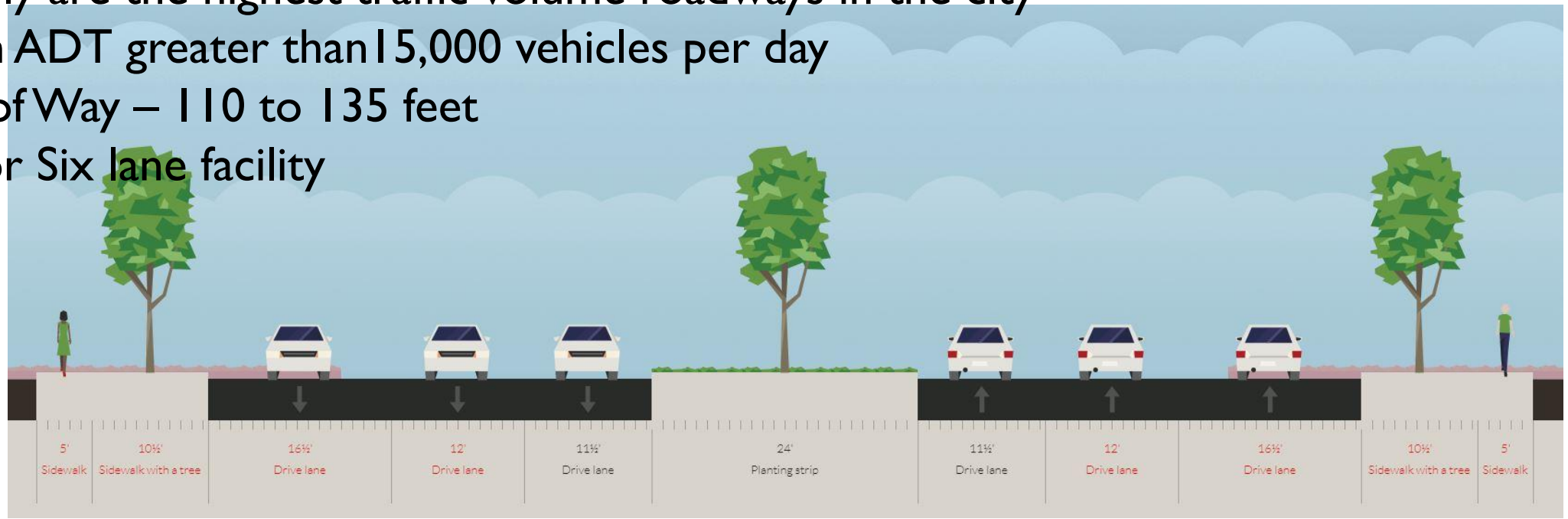
- Connects primary arterials to collector streets and local streets
- Distribute travel to smaller geographic areas
- Design ADT between 2,500 – 15,000 vehicles per day
- Right of Way – 110 feet
- Four lane (two lanes each direction) facility



STREET CLASSIFICATION

Primary Arterials

- Provide major traffic movements within the City
- Typically are the highest traffic volume roadways in the city
- Design ADT greater than15,000 vehicles per day
- Right of Way – 110 to 135 feet
- Four or Six lane facility



MOBILITY PLAN – UPDATE

- Typically Mobility Plans are updated every 5 years

- Last update was completed and adopted in January 2016 as part of the Roadway Impact Fee Program.

- Reasons for updating the plan
  - To upgrade or downgrade streets based on their functionality and projected traffic volumes.
  - To improve feasibility of constructing new street by changing alignment.
  - To add new streets to serve new annexed areas.
  - To add/remove/modify streets and their alignment based on new development.

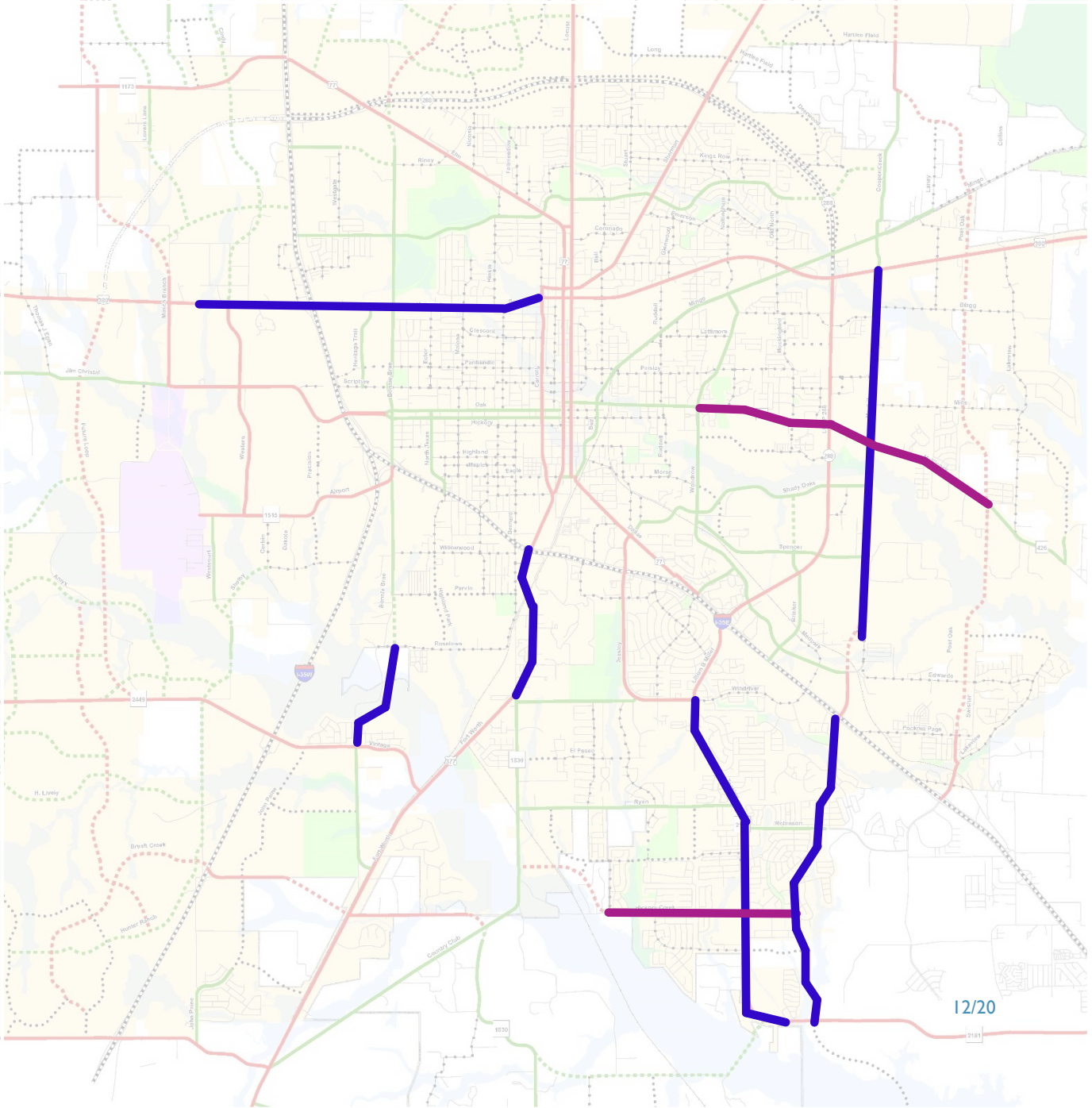
COMPLETED AND NEAR-TERM PROJECTS

Completed/Starting Construction

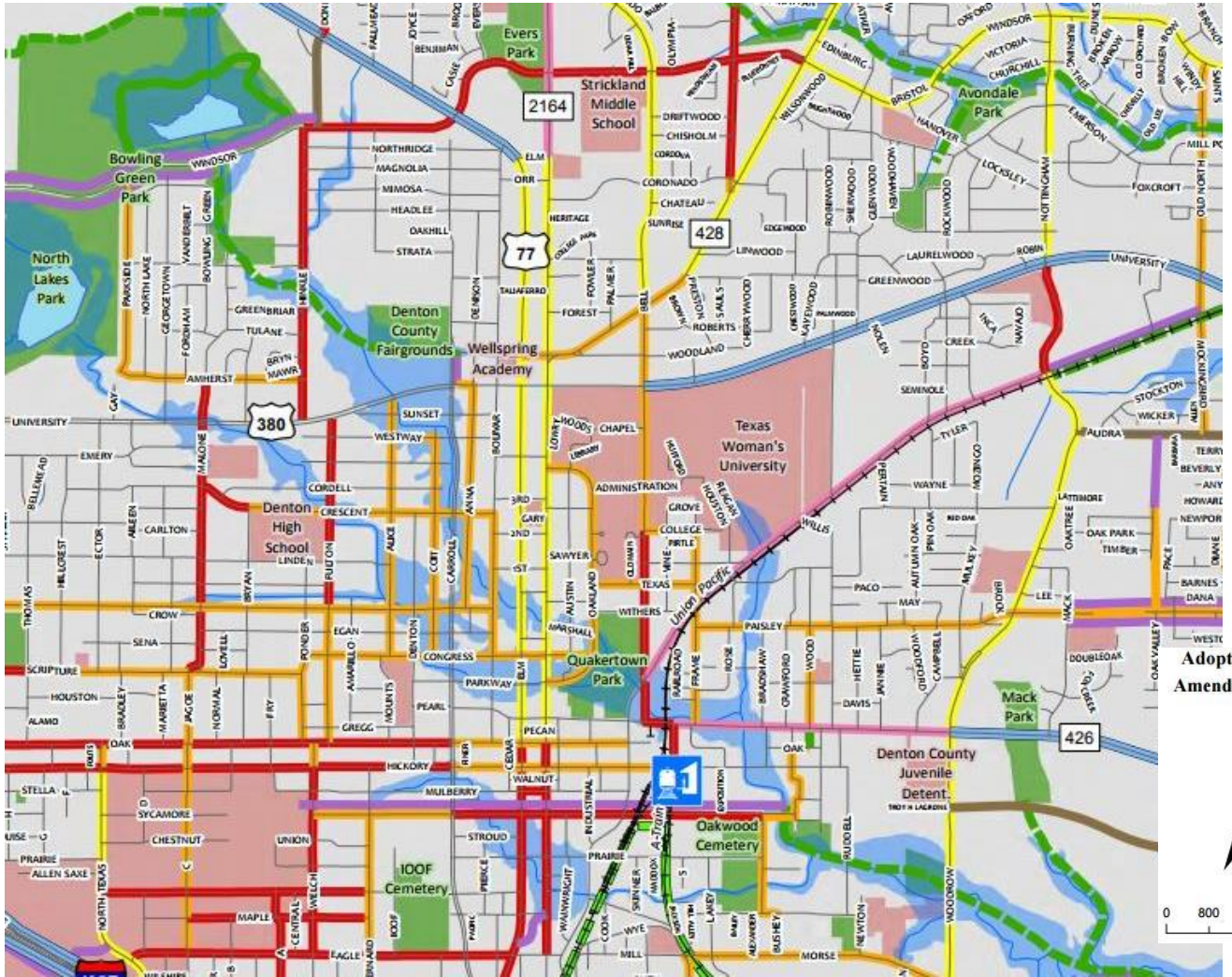
- US 380 (University Drive)
- US 377 (Fort Worth Drive)
- FM 2181 (Teasley Lane)
- FM 2499 (State School Road)
- Mayhill Road
- Bonnie Brae Street

Under Design (Near Term)

- Hickory Creek Road
- McKinney Street

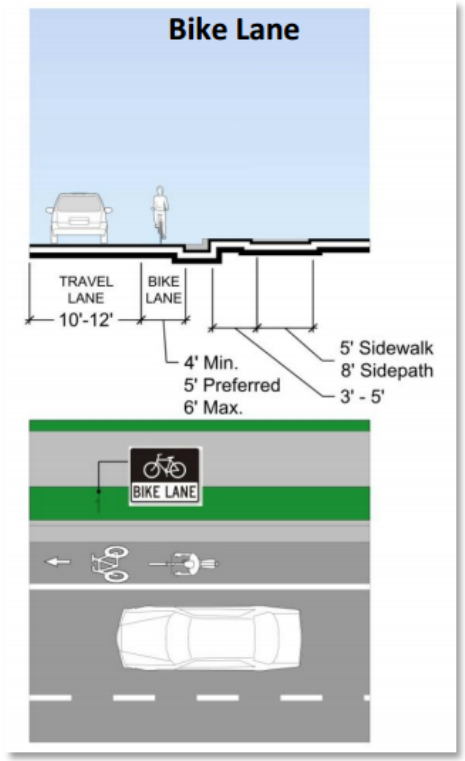


THE BIKE PLAN

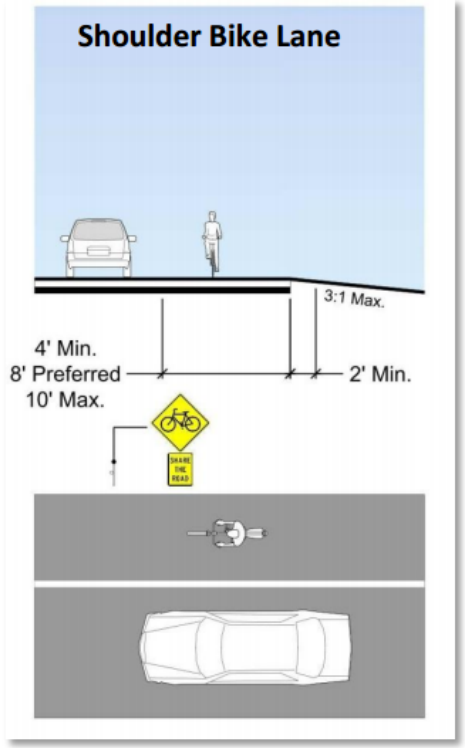


- Goal M-3 of Mobility Element; Focus on Active Transportation
- Guides City in development of bike network
- Designates what type of facility

FACILITY TYPES



- 10’ to 12’ Wide
- Speed Limit 35 MPH or less
- Local or Collector Street
- Bike Lane signs and striping
- Both directions, typical unless one-way



- 4’ to 10’ Wide, increasing with speed limit
- Speed Limit 40 MPH or more
- Rural Arterial section
- Bicycle Warning and Share the Road signs
- Both directions, typical

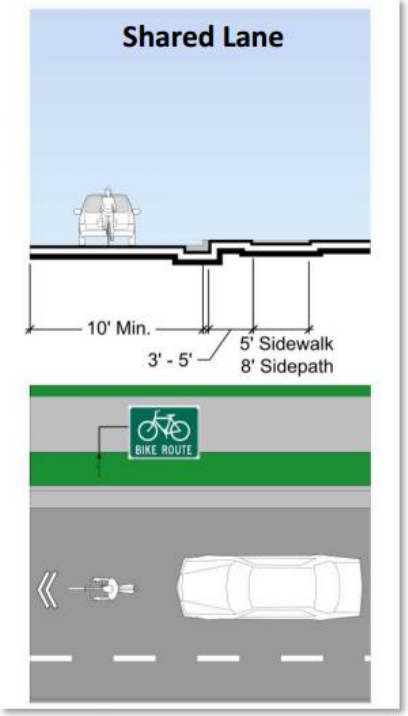
Bike Lane – dedicated travel lane for person on a bike

FACILITY TYPES

Shared lanes – "sharrow" or wide curb lane

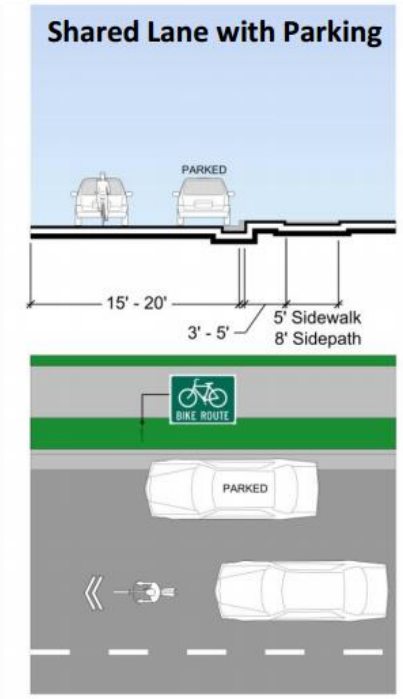
Sharing of travel lane

Shared Lane



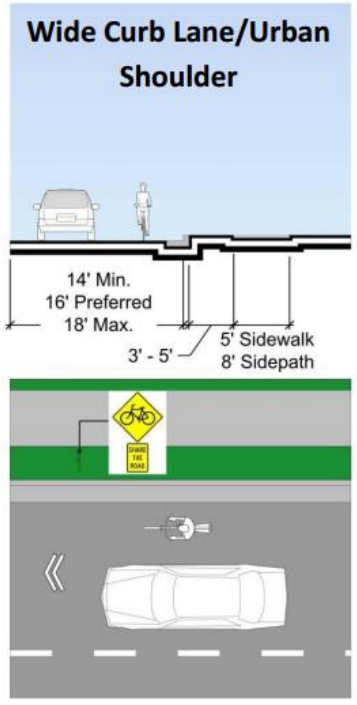
- 10' to 13' Wide
- Speed Limit 35 MPH or less
- Local or Collector Street
- Use "Sharrow" as Needed
- Bike Route signs
- Bikes May Use Full Lane signs, as needed
- Both directions, typical

Shared Lane with Parking



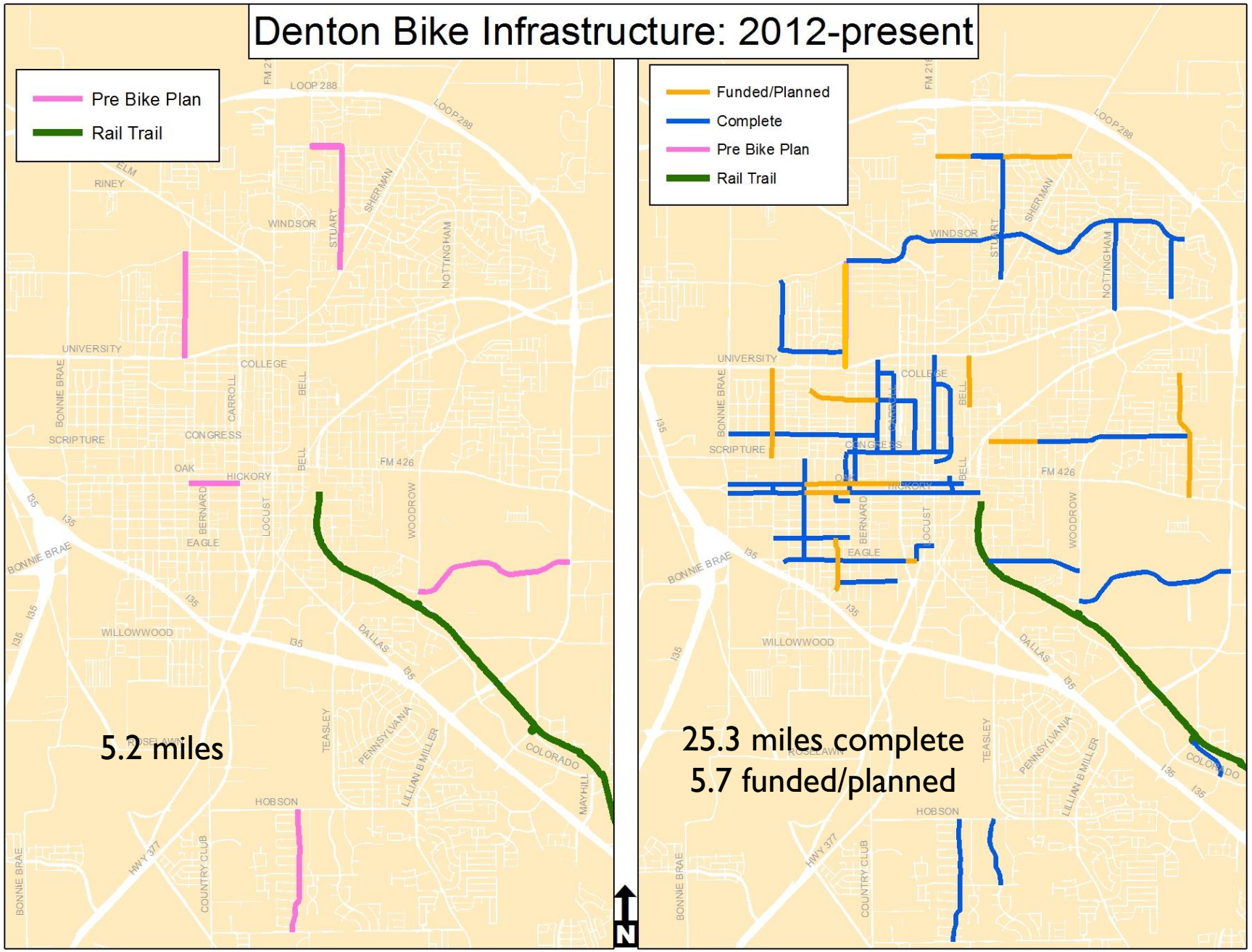
- 16' to 20' Wide, including parking area
- Speed Limit 35 MPH or less
- Local or Collector Street
- Use "Sharrow" as Needed
- Bike Route signs
- Both directions, typical

Wide Curb Lane/Urban Shoulder



- 14' to 16' Wide, plus gutter width, max of 18'
- Speed Limit 35 MPH or less
- Collector or Arterial Street
- Use "Sharrow" as Needed
- Bicycle Warning and Share the Road signs
- Both directions, typical

Denton Bike Infrastructure: 2012-present

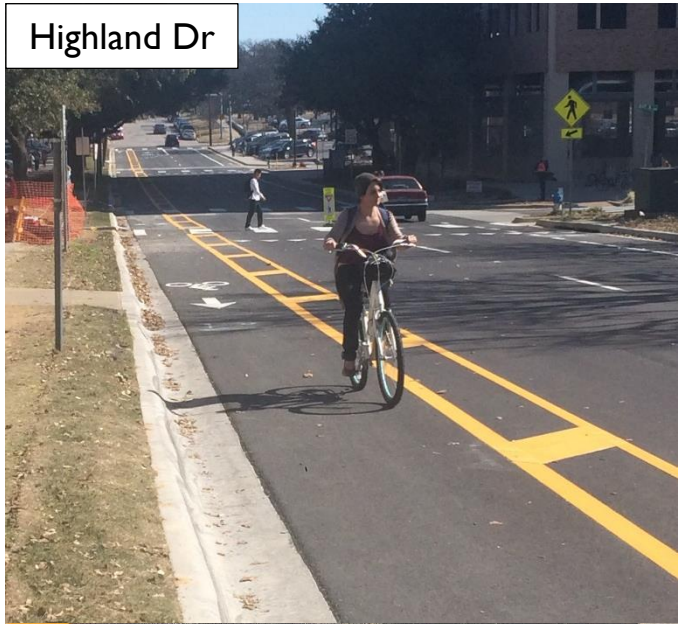


COMPLETED PROJECTS

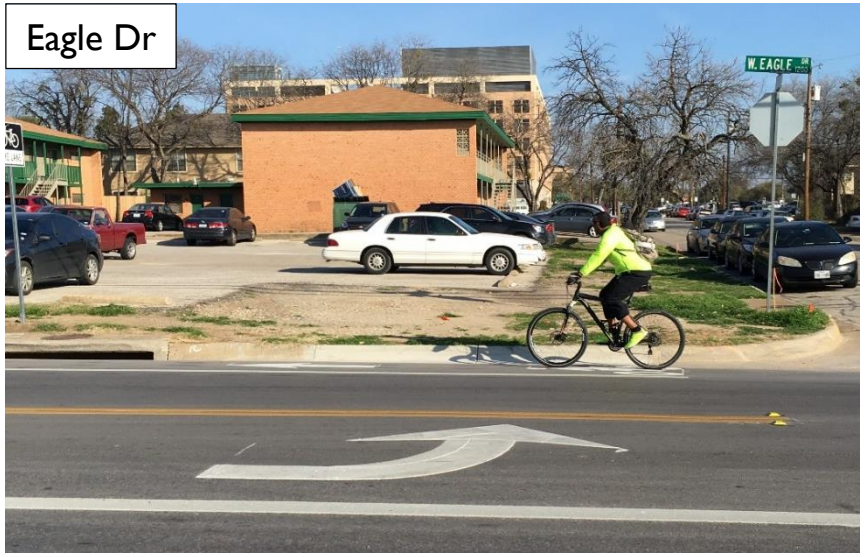
Fulton St

Oak St

Highland Dr



Eagle Dr



Paisley St

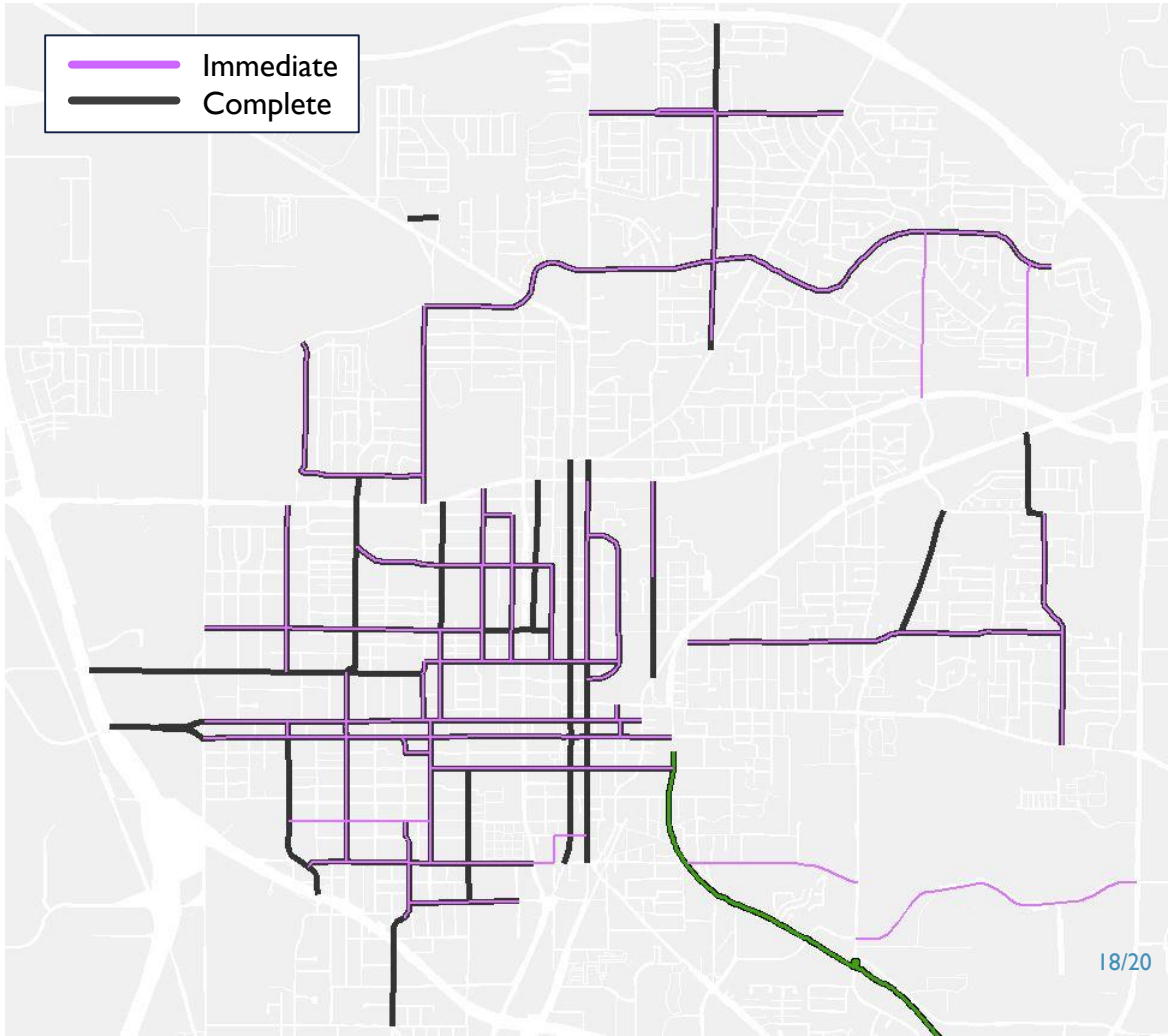
Windsor

Oak St

COMPLETED PROJECTS

Facility Type	Miles
Sharrows and signs	12
Bike lane	9
Other	4

Timeline	Total miles	Completed miles
Immediate	40	25
Short-range	39	6
Long-range	53	2 (funded, not complete)



STRATEGIC PLAN

Key Focus Area 5

SUSTAINABLE & ENVIRONMENTAL STEWARDSHIP

Strategic Outcome #3:

Increase Denton's bike and pedestrian mode share from 4.7 to 7.0 percent of total commuters by 2020.

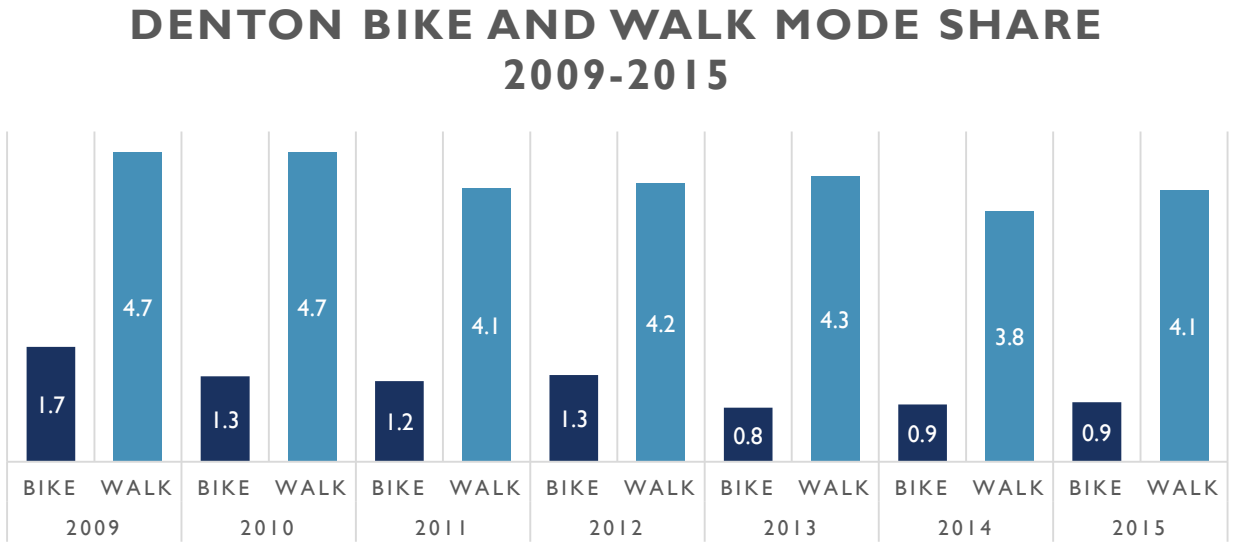
(Dataset: American Community Survey census data)

Key Action Step	Department	Target Date
Continue implementation of Bike Plan	Transportation	Ongoing

Tracking Our Performance

The department below is responsible for the Key Performance Indicators and targets corresponding to Strategic Outcome #3.

Department	Key Performance Indicator	2016-17 Target
Transportation	Number of Active Transportation safety and education activities, events, and initiatives	12
	Number of Active Transportation promotional events	10
	Centerline miles of on-street bike infrastructure, such as bike lanes and sharrows	7
	Number of trail and bikeway network gaps removed	4
	Number of sidewalk disconnects/gaps removed	4
	Number of transit stops with improved pedestrian and bicycle access	8



QUESTIONS / DISCUSSION

- Julie Anderson, Bike and Pedestrian Coordinator
- Pritam Deshmukh, Traffic Engineer
- Mark Nelson, Transportation Director