



City of Austin  
Bicycle Planning Strategy  
and The Big Jump Initiative

*Urban Transportation Commission*

*Tuesday, June 13<sup>th</sup> 2017*



# What is the Big Jump?

- ▶ A three year challenge to double bicycle ridership in a specific geographic area by connecting key routes of the all ages and abilities bicycle network and inviting people to bicycling through education and encouragement efforts.



# What is the Big Jump?

- ▶ Builds on the success of the Green Lane Project which pioneered protected bicycle lanes as best-practice in urban bikeway design.





# The Big Jump is an *Imagine Austin* implementation strategy...



Priority Program #1:  
Invest in Compact

Priority Program #8:  
Align Code

Priority Program #3:  
Workforce Development

Priority Program #5:  
Creative Economy

Priority Program #2:  
Sustainable Water

Priority Program #4:  
Green Infrastructure

Priority Program #6:  
Household Affordability

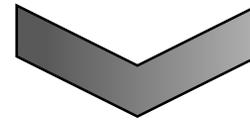
Priority Program #7:  
Healthy Austin

# ...guided by the *Austin Bicycle Master Plan*:



## A Shift in Focus:

~~“To Create and Promote the best environment for the friendly co-existence of bicycle riders and other transportation users in Austin”~~



**“To maximize the contribution of bicycling to Austin’s quality of life”**

# Austin's Bicycle Planning Strategy

The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the right side of the page, creating a modern, dynamic feel. The text is positioned on the left side of the page, set against a plain white background.

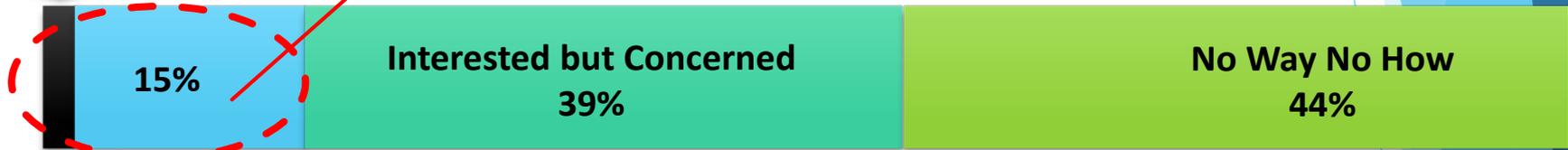
# Four Types of Transportation

## Cyclists in Austin By Proportion of Population

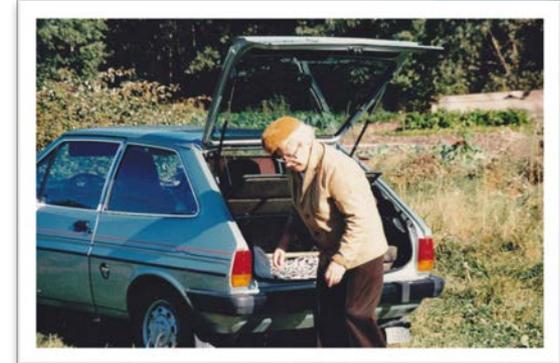


**Strong & Fearless 2%**

Less than 20% of Austinites will ride in Bicycle Lanes



**Enthused & Confident**

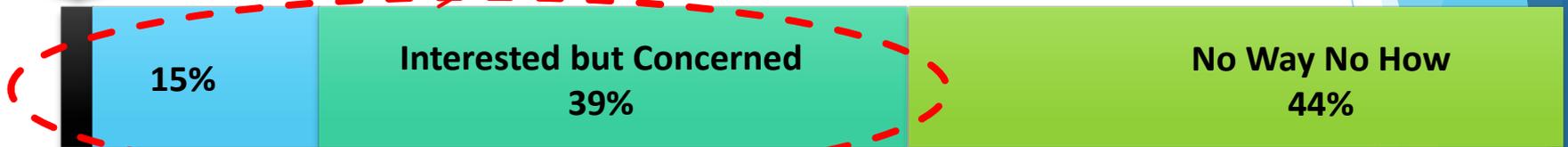


# Four Types of Transportation Cyclists in Austin By Proportion of Population



Strong & Fearless 2%

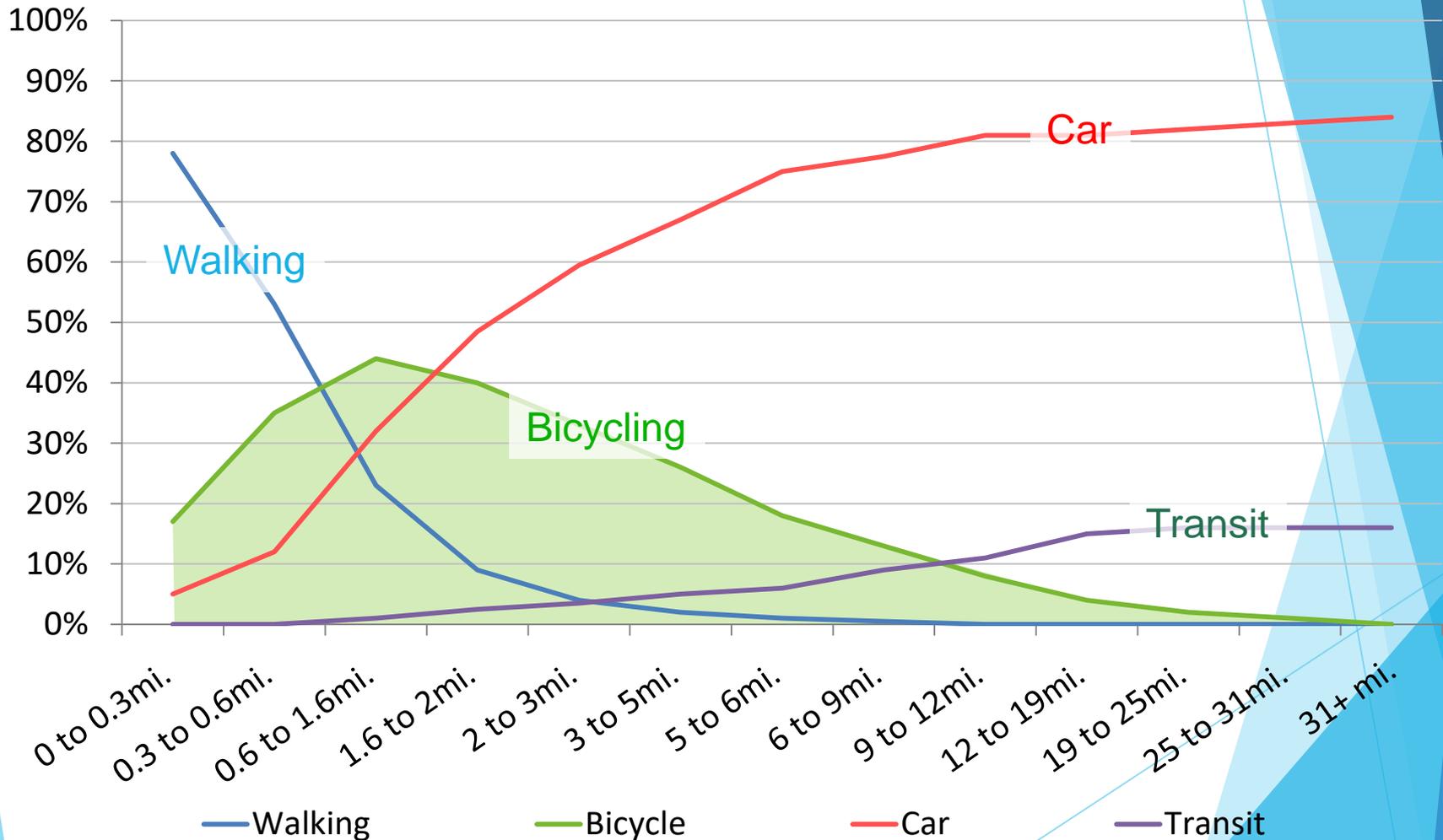
More than 55% of Austinites will ride in protected bicycle lanes



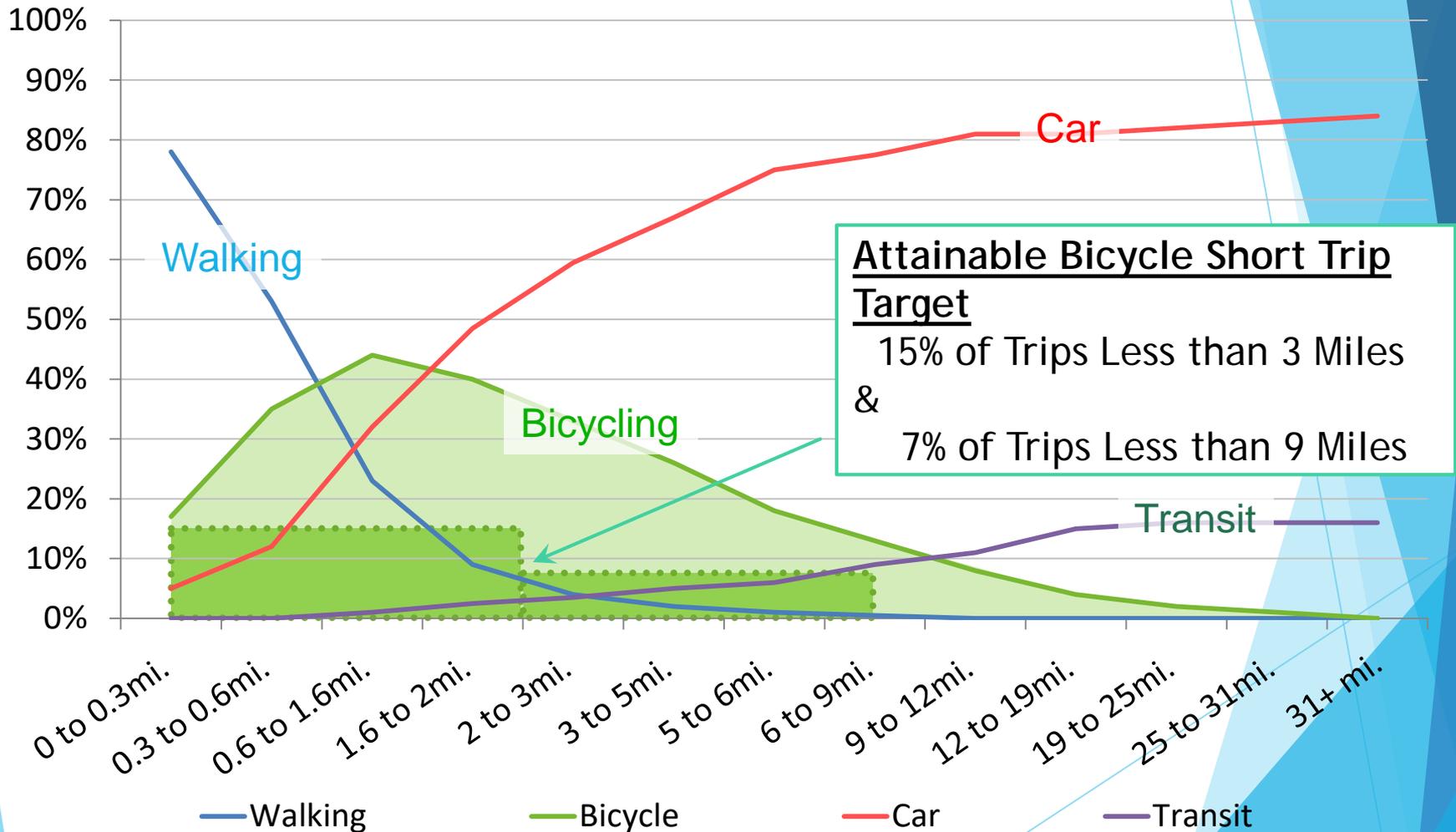
Enthused & Confident



# Capture Short Trips by Bicycle



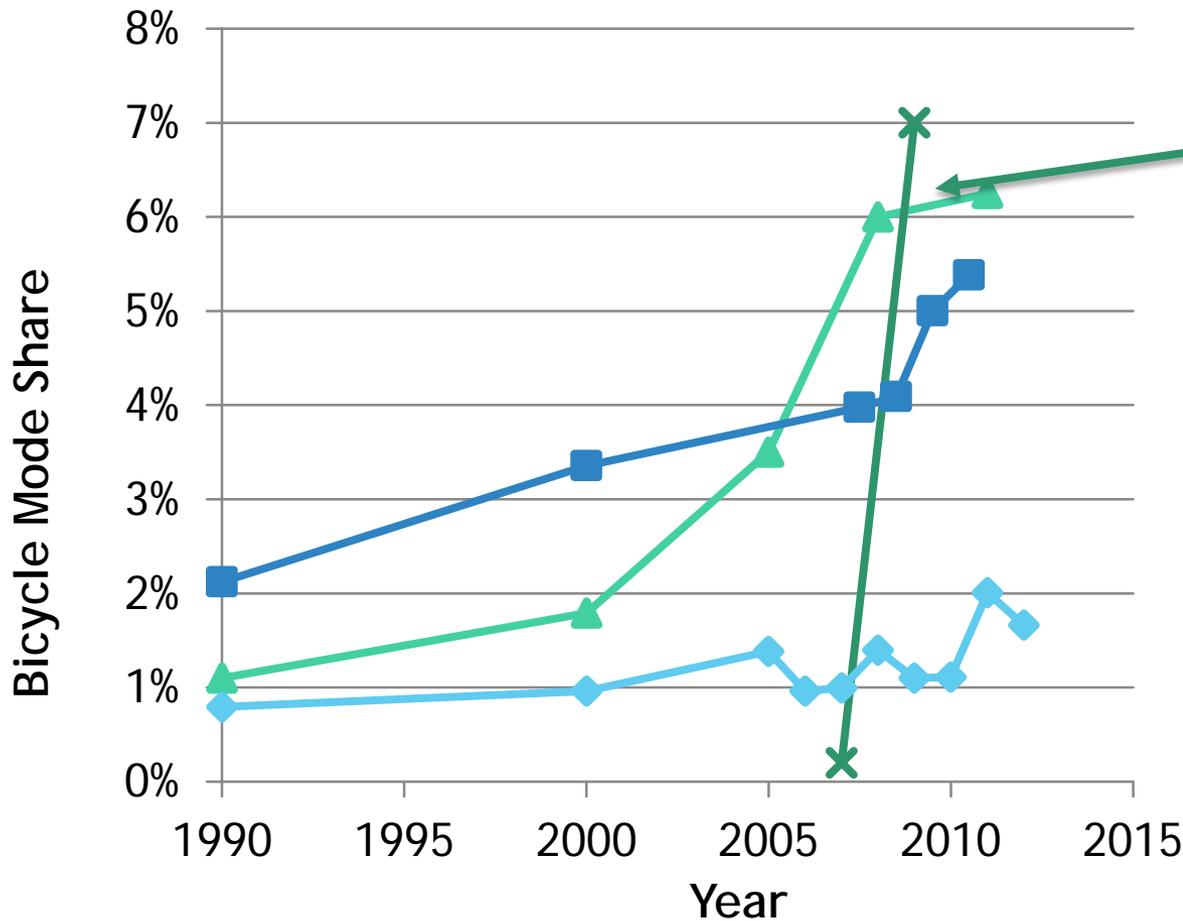
# Capture Short Trips by Bicycle



# Creating a Network:



# Rise of Cycling in Over Time in Portland, Seville, and Austin



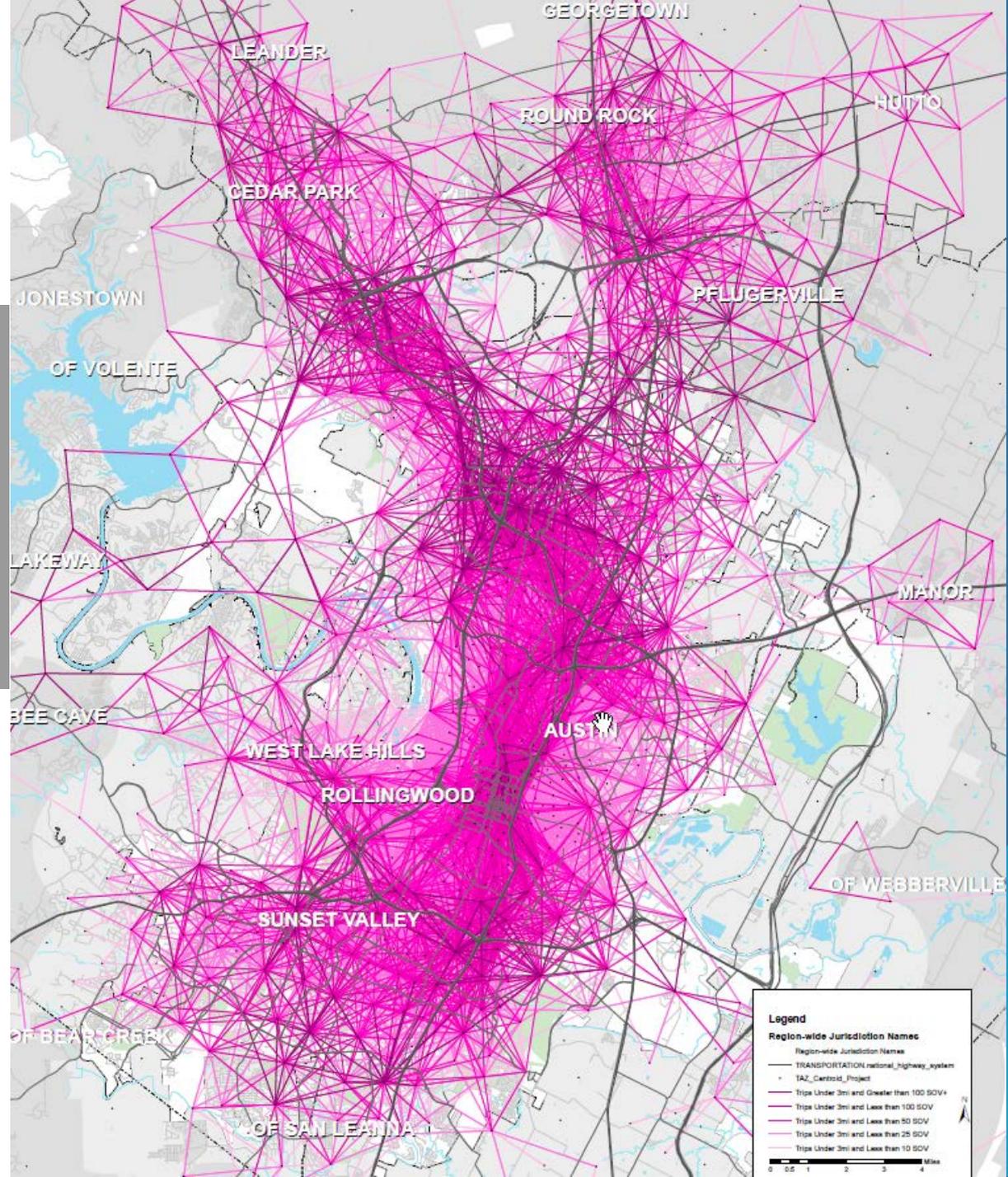
Seville's incredible increase in bicycle mode share was as a result of an 87 mile network of protected bicycle facilities implemented over 3 years.

Austin has the opportunity to implement a similar network

- Portland, OR
- Seville, Spain

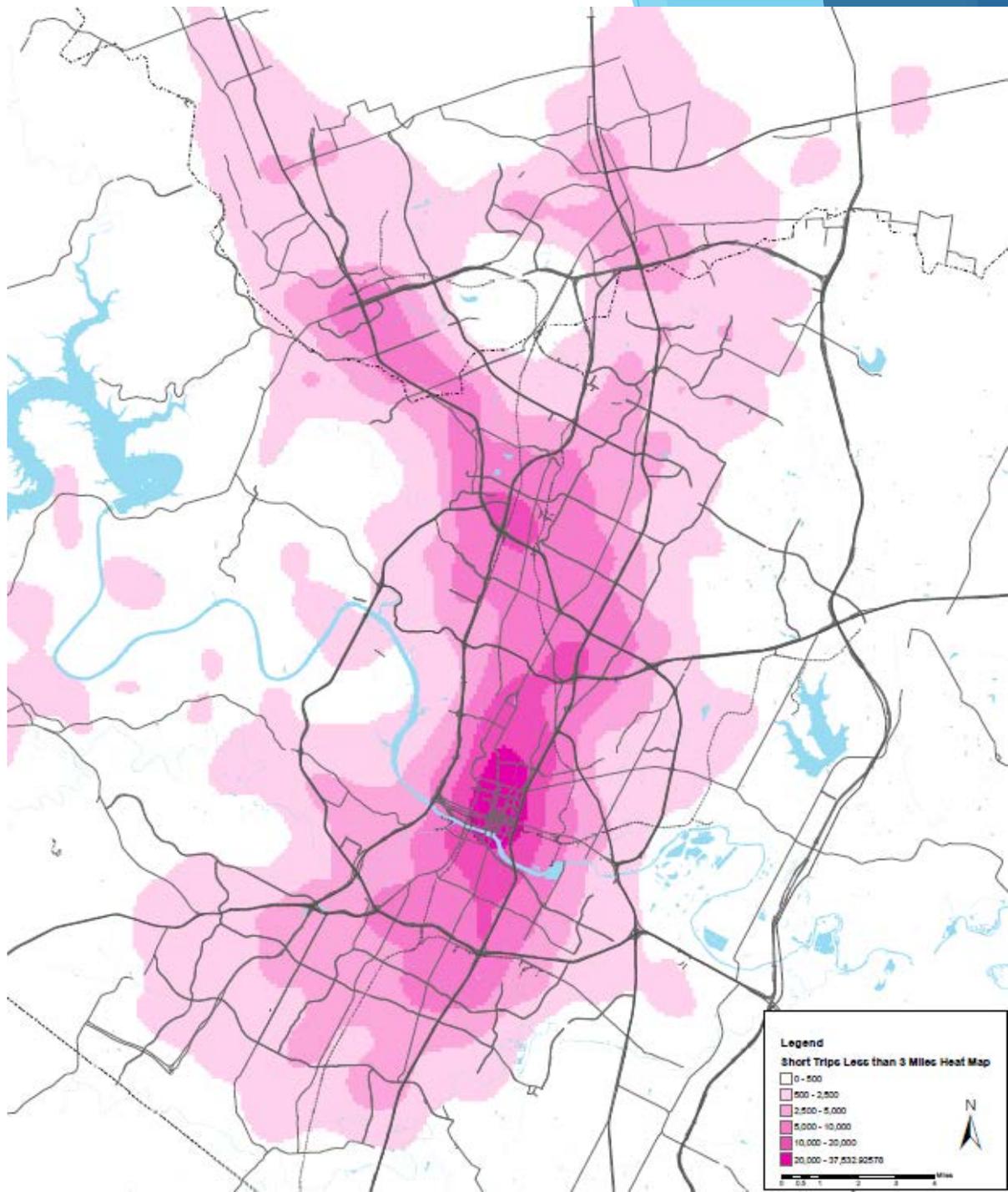
# Spider Diagram of Short Car-Trips (0-3 mile)

- The highest concentrations of short trips are in the central parts of the region
- Short trip patterns follow major freeways and related development patterns

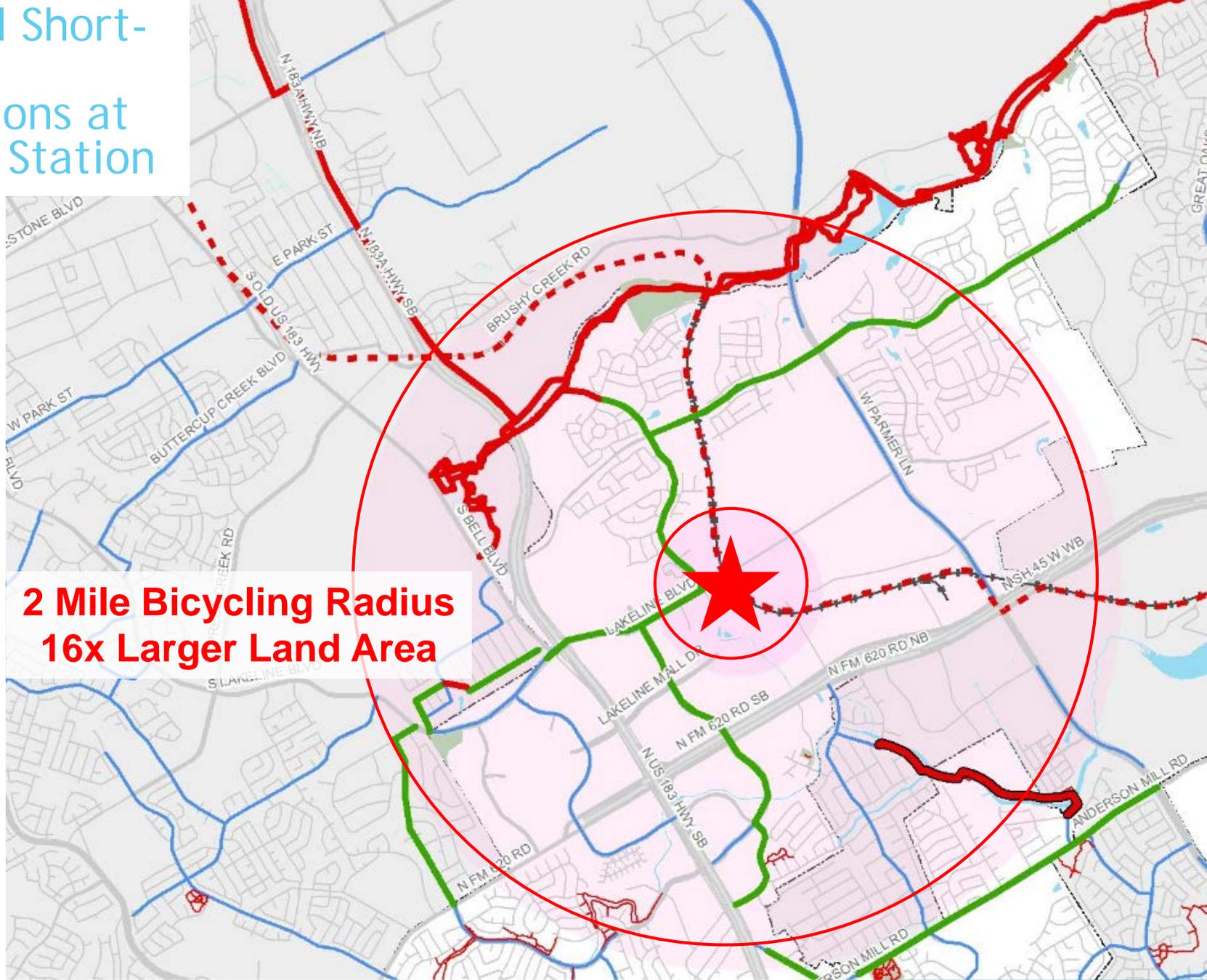


# Heat Map of Short Car-Trips (0-3 mile)

- The highest concentrations of short trips are in the central parts of the region
- Short trip patterns follow major freeways and related development patterns



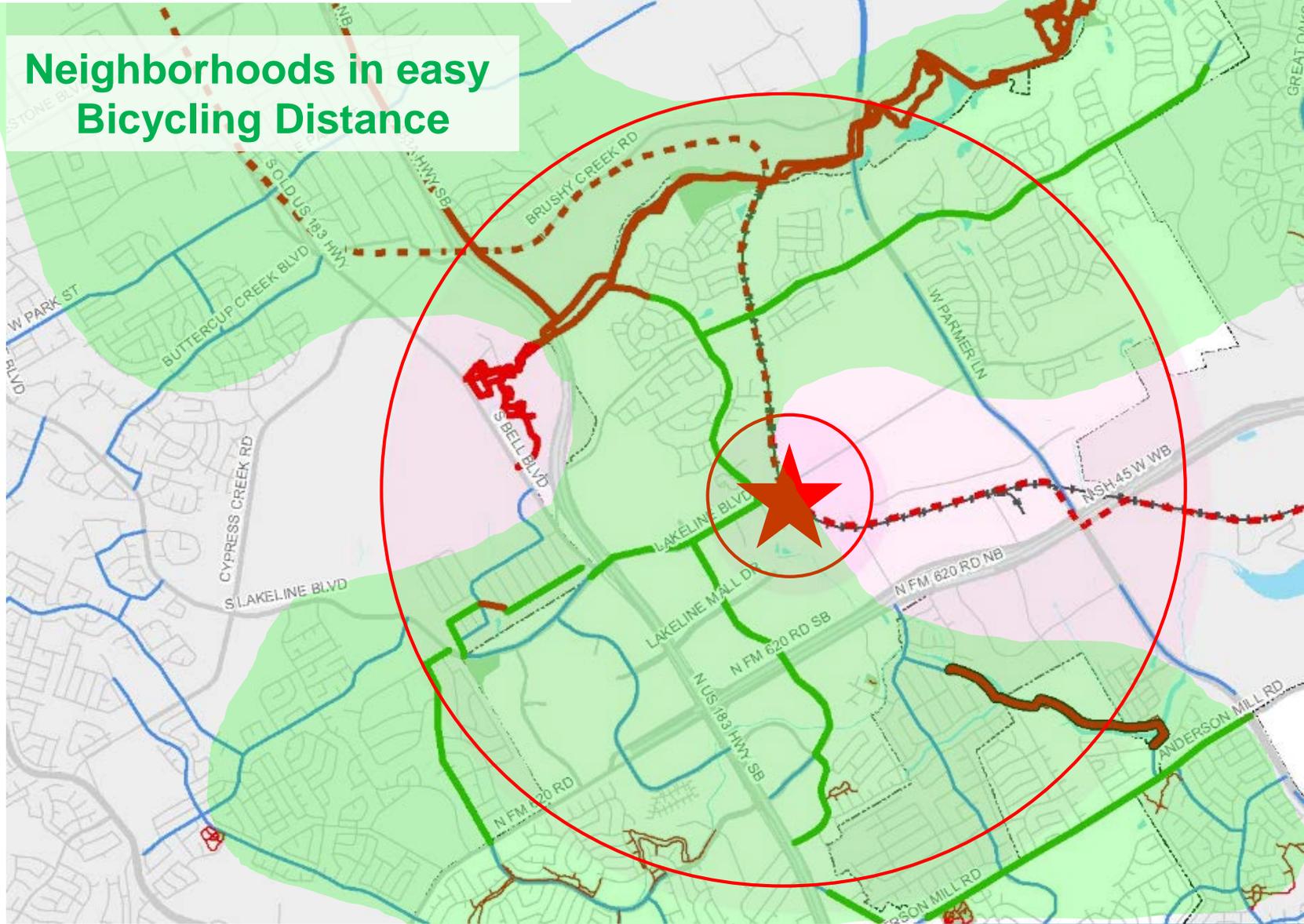
# Proposed Short-term Connections at Lakeline Station



**2 Mile Bicycling Radius  
16x Larger Land Area**

# Proposed Short-term Connections at Lakeline Station

**Neighborhoods in easy Bicycling Distance**

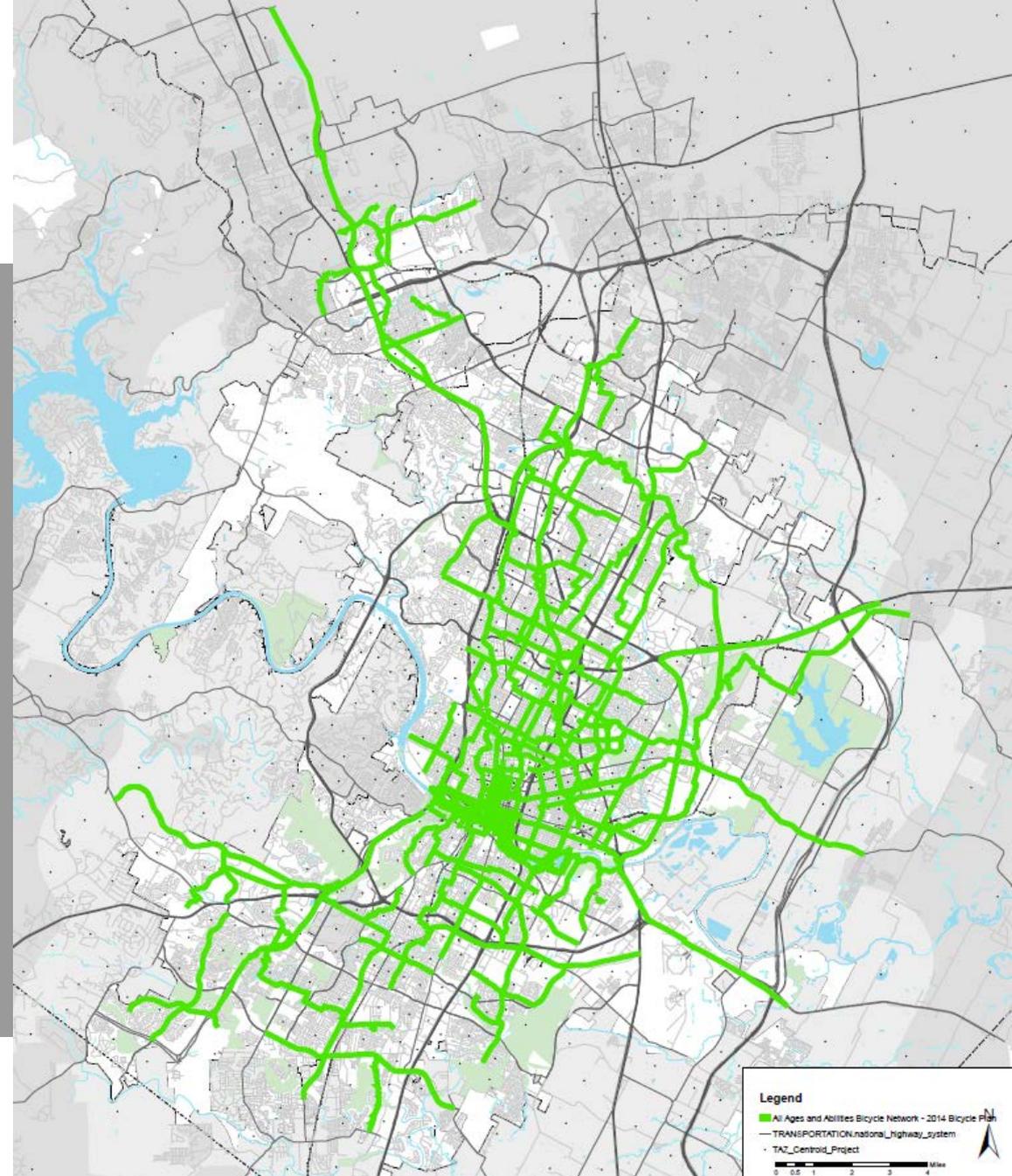


# Draft Short-term All Ages and Abilities Bicycle Network Central Austin

## Focus on where short trips exist

- The central city
- To major transit stations
- Key feeder routes to the central city
- To schools and to and along parks
- Supporting Imagine Austin Centers

\*Short Term defined as potential implementation within 5 years

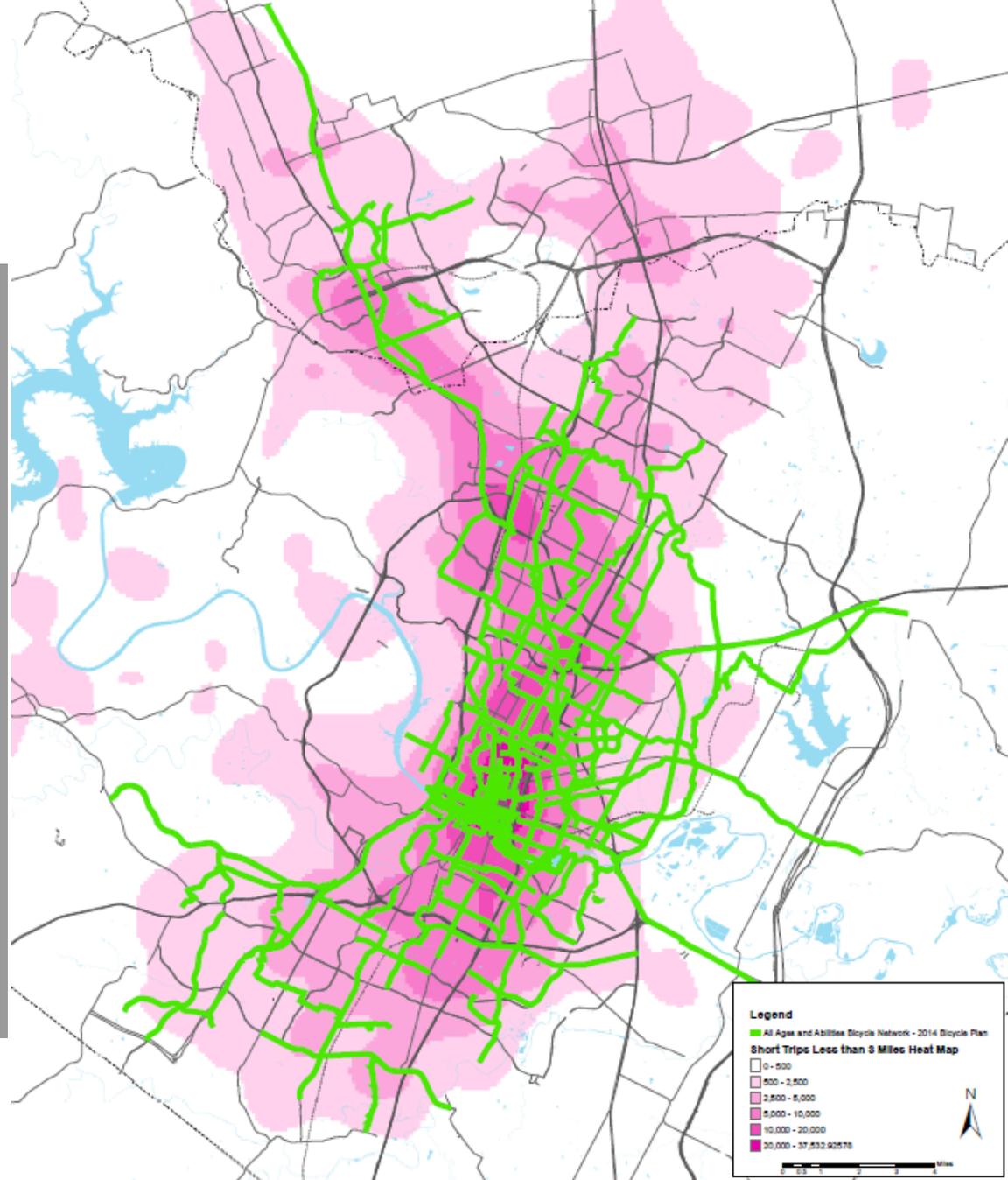


# Draft Short-term All Ages and Abilities Bicycle Network Central Austin

## Focus on where short trips exist

- The central city
- To major transit stations
- Key feeder routes to the central city
- To schools and to and along parks
- Supporting Imagine Austin Centers

\*Short Term defined as potential implementation within 5 years



# Benefits of Short Term Network Significant Mobility Improvements

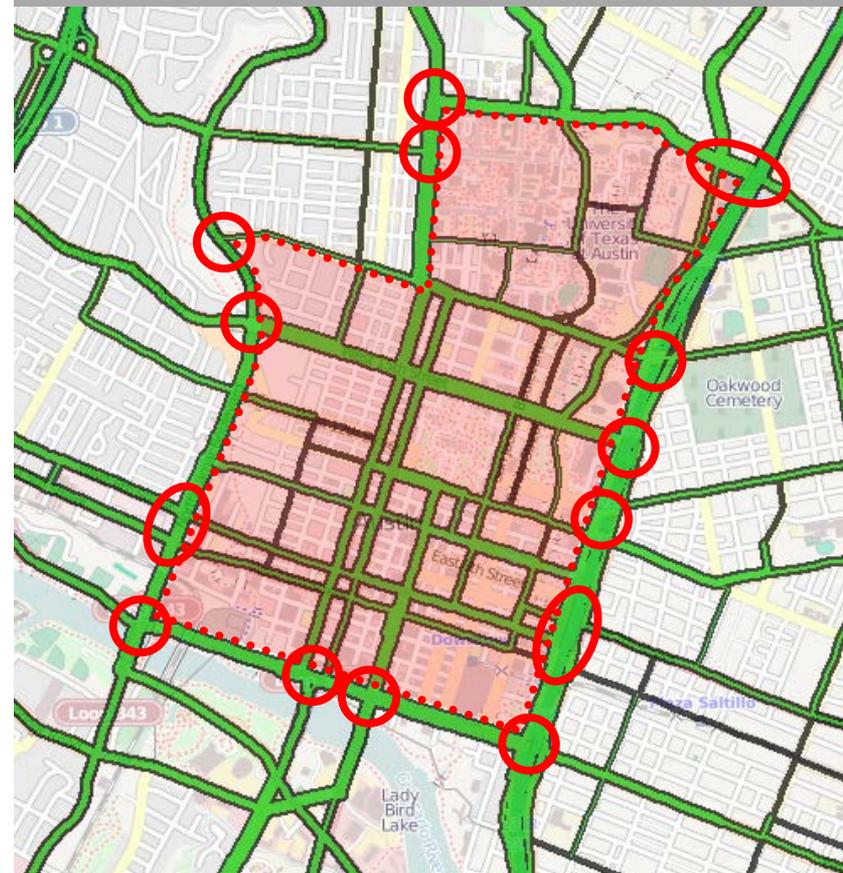
***Our Analysis Shows  
Of the 300k passenger vehicle trips that  
enter the “Ring of Congestion” Daily***

***36% are less than 3 miles***

***If only 15% of these trips 0-3 miles  
and 7% of trips 3-9 miles  
are converted to bicycle trips***

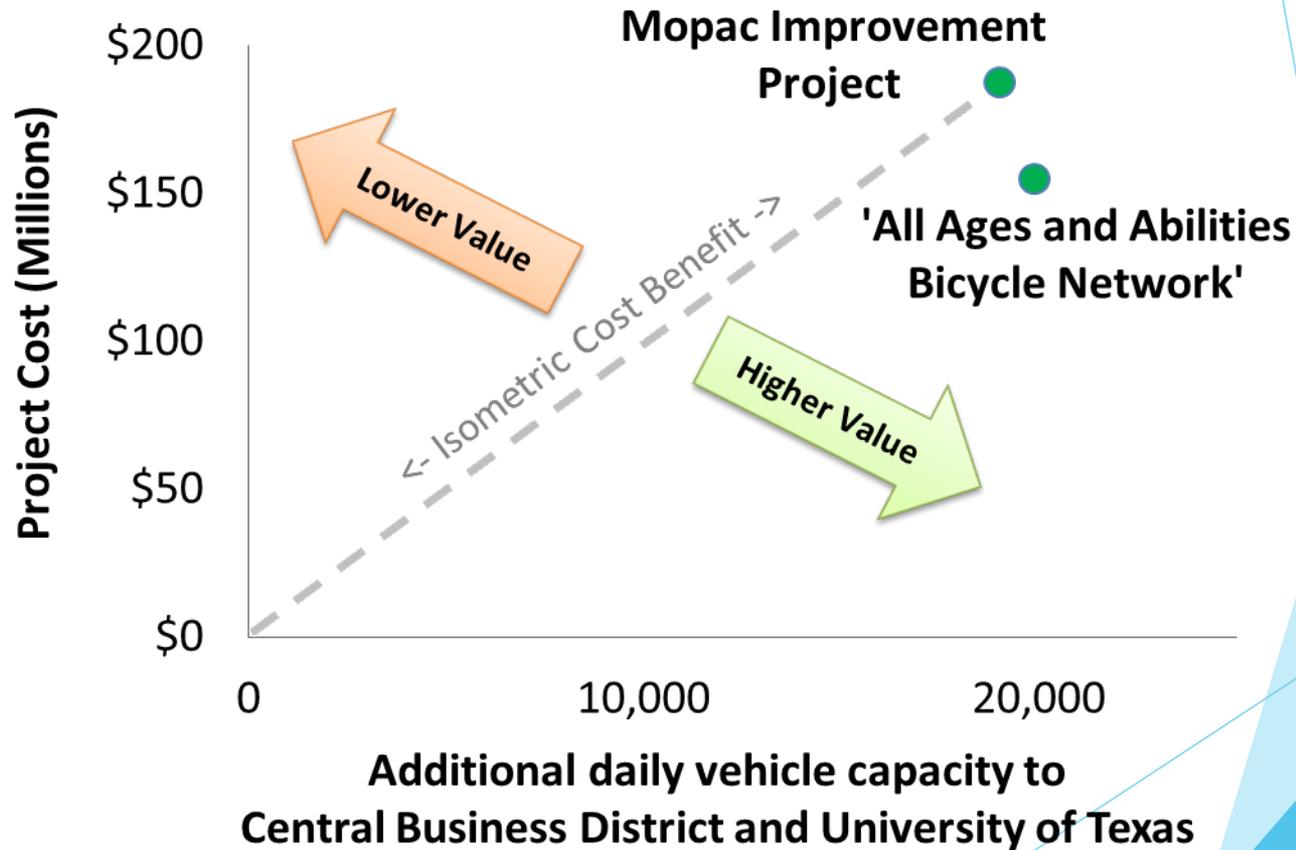
***There would be a total reduction of  
7% all motor vehicle trips  
to the Ring of Congestion***

The “Ring of Congestion”



# Cost Benefit to Regional Mobility

## Mobility Cost / Benefit

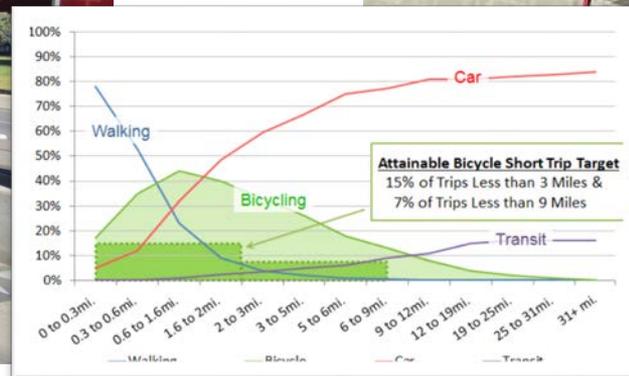


The Bicycle Master Plan strategy is designed to bring benefit to mobility, affordability and public health in Austin.

- ↓ 170,000 fewer daily trips
- ↓ 460,000 reduction in vehicle miles traveled
- ↓ \$170 million saved in direct driving costs annually
- ↑ 15% of Austinites meet daily physical activity
- ↓ Reduced congestion on I35

# City of Austin Bicycle Strategy

- ▶ Capture short trips to reduce congestion
- ▶ Strategic investment in protected facilities
- ▶ Build a comprehensive and connected all ages and abilities network
- ▶ Feed transit - first and last mile(s) - short trips to transit



# The Big Jump Focus Area

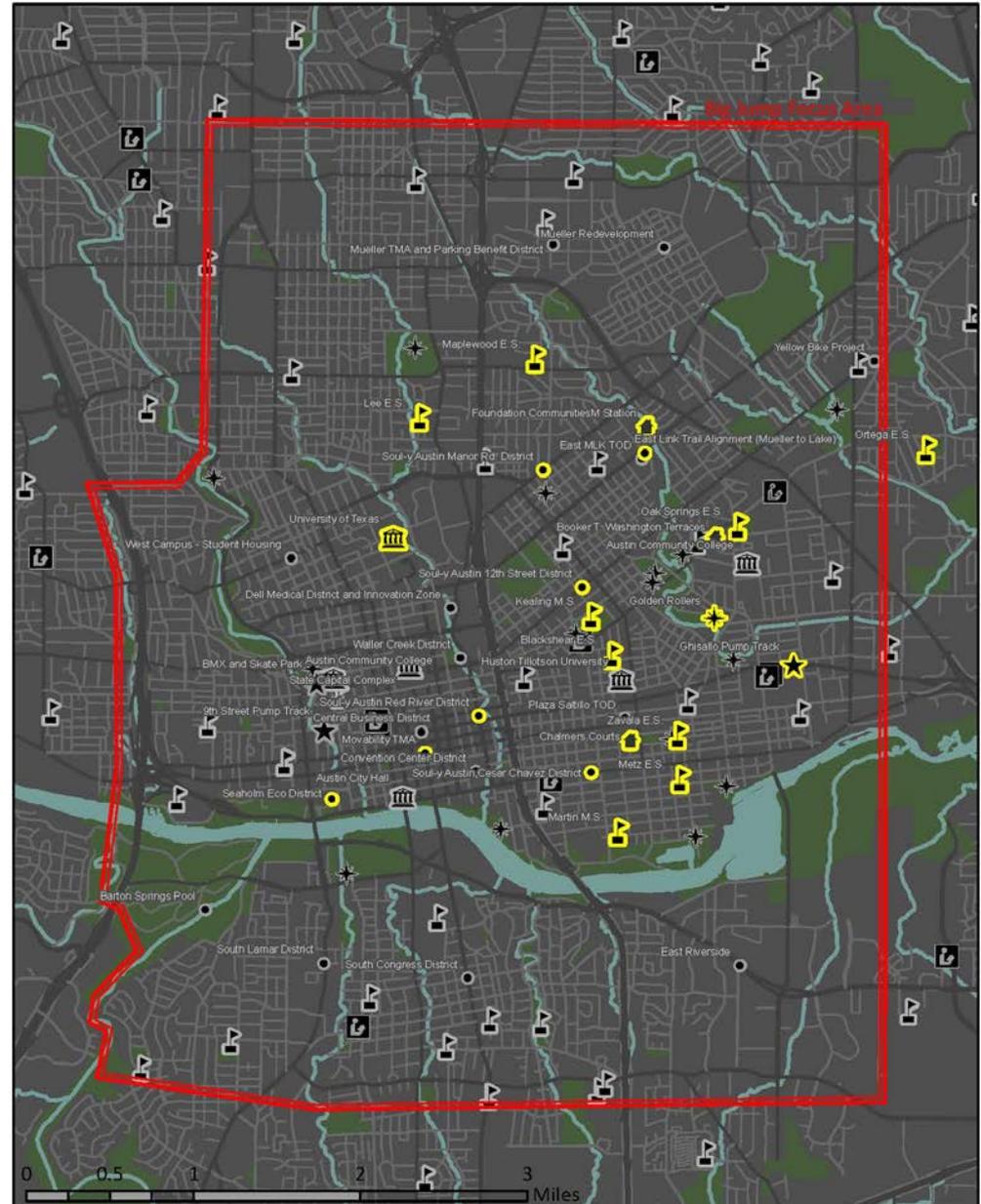
The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. The shapes are primarily triangles and polygons, creating a dynamic, layered effect on the right side of the slide.

# Key Community Assets

- Yellow icons are partners in the Big Jump initiative



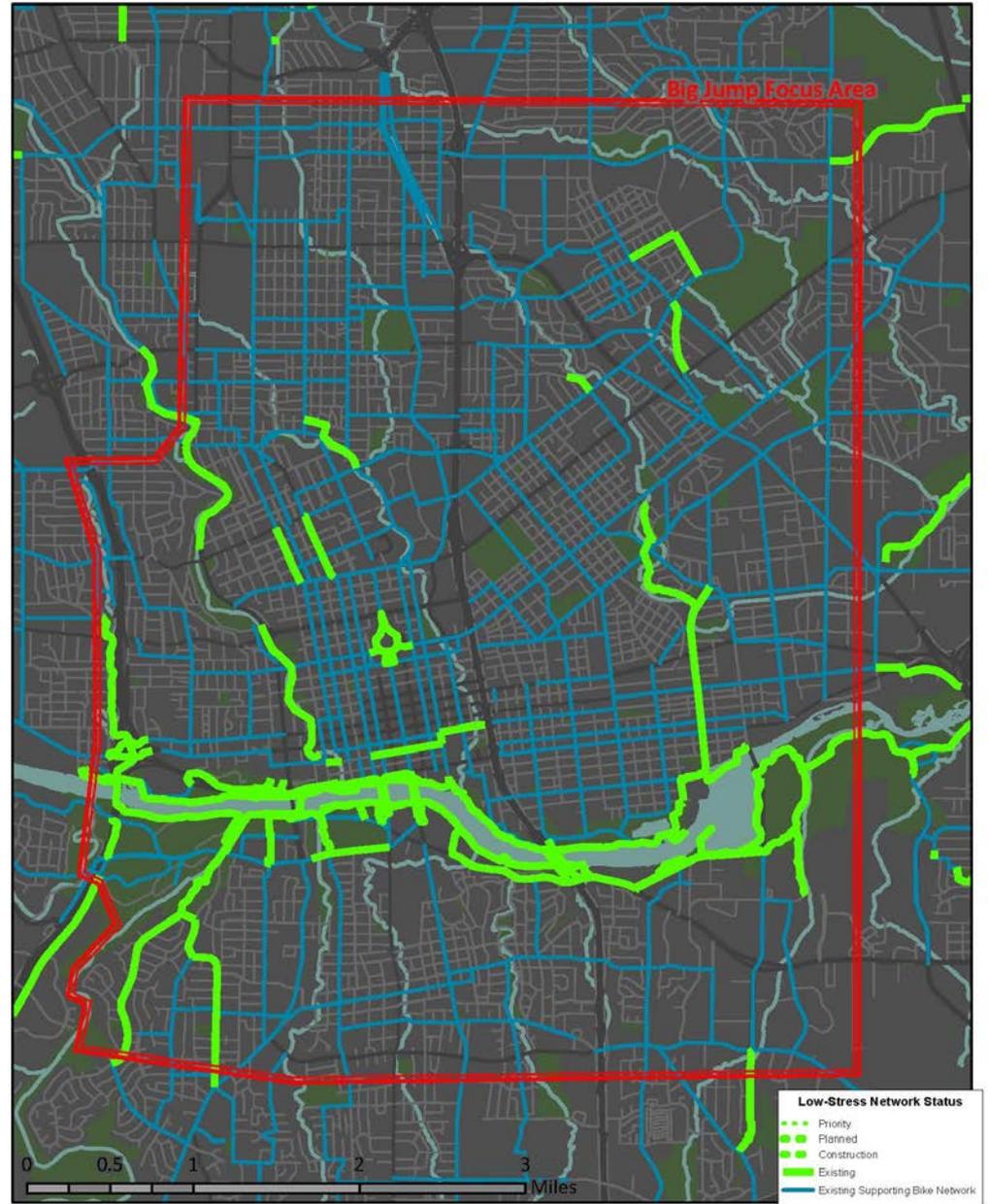
## Key Community Assets - Austin, TX



# Existing Low Stress Network



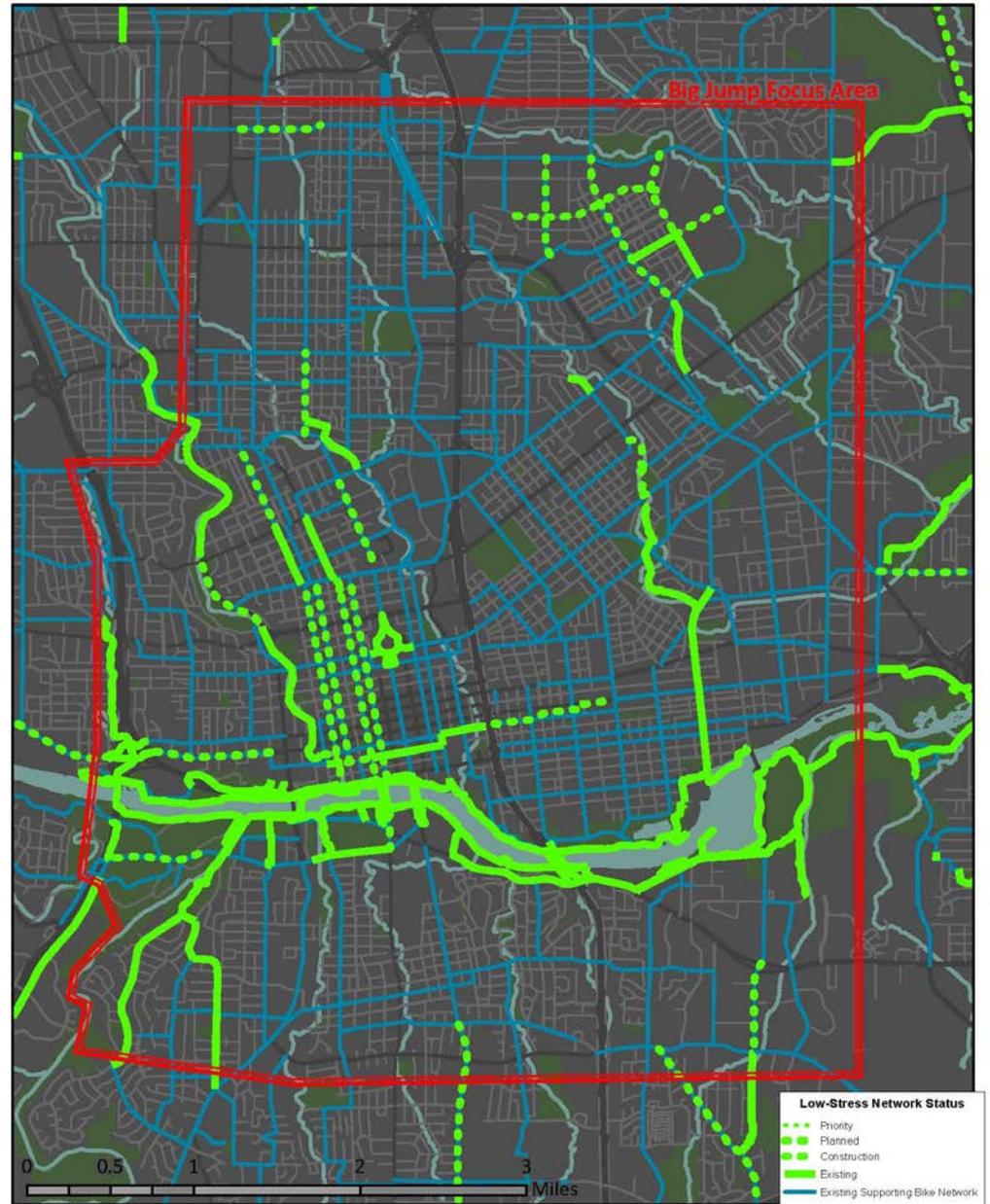
## Existing Low Stress Network - Austin, TX



# Planned Low Stress Network



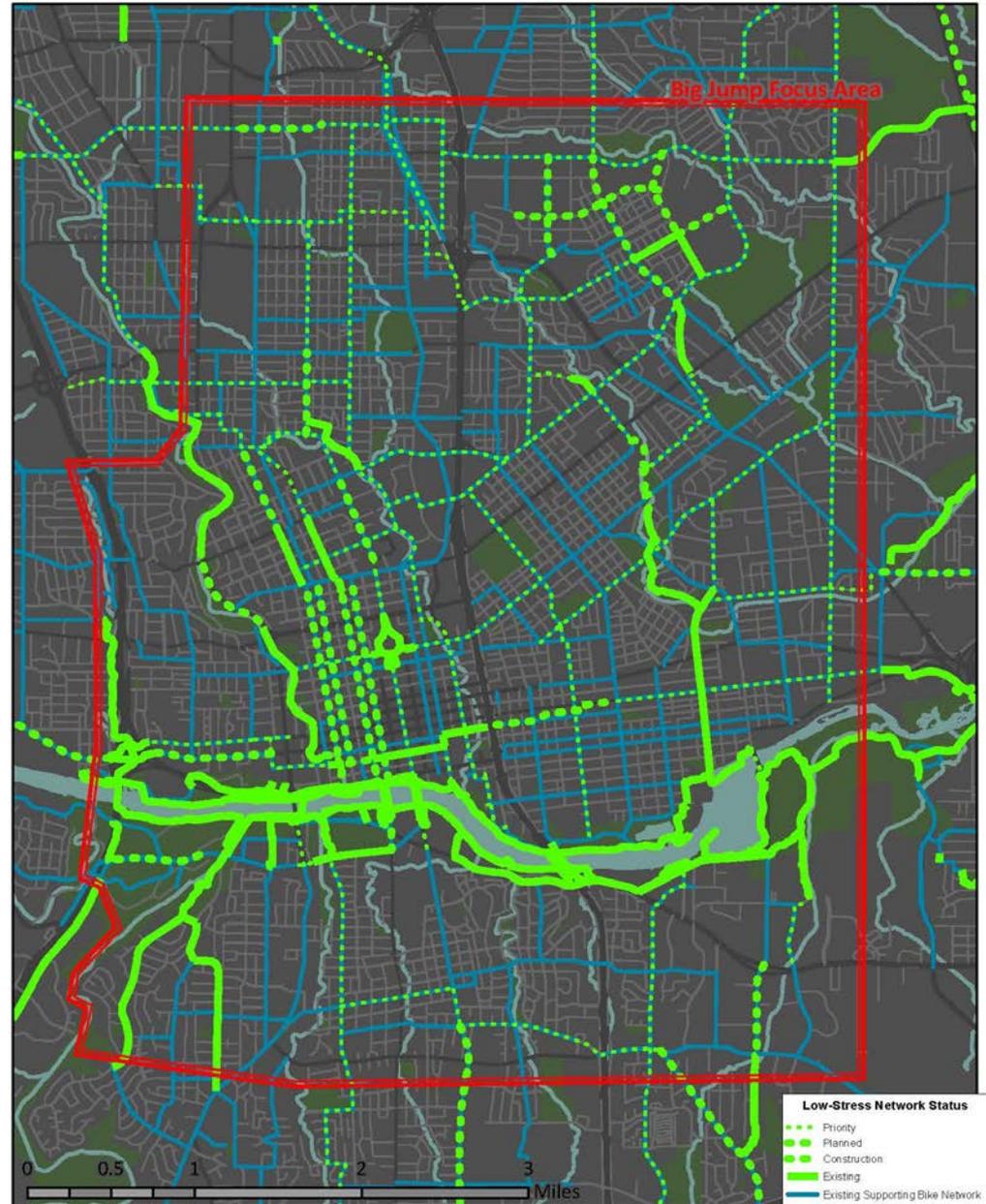
## Planned Low Stress Network - Austin, TX



# Priority Low Stress Network



## Priority Low Stress Network - Austin, TX



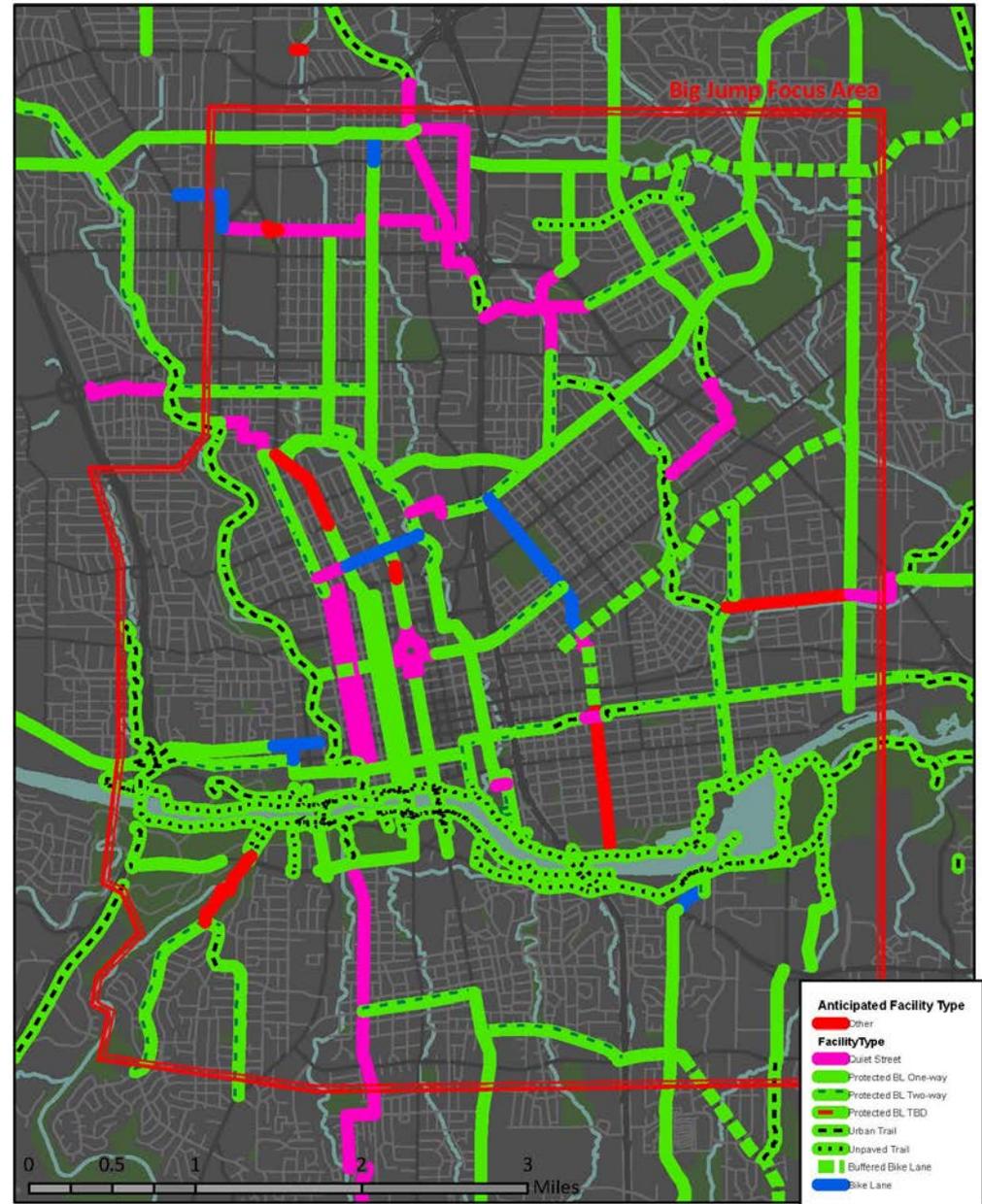
\*All projects will undergo feasibility analysis, coordination and/or public process prior to installation or construction.

# Low Stress Network - By Facility Type

\*All projects will undergo feasibility analysis, coordination and/or public process prior to installation or construction.



## Low Stress Network by Facility Type - Austin, TX



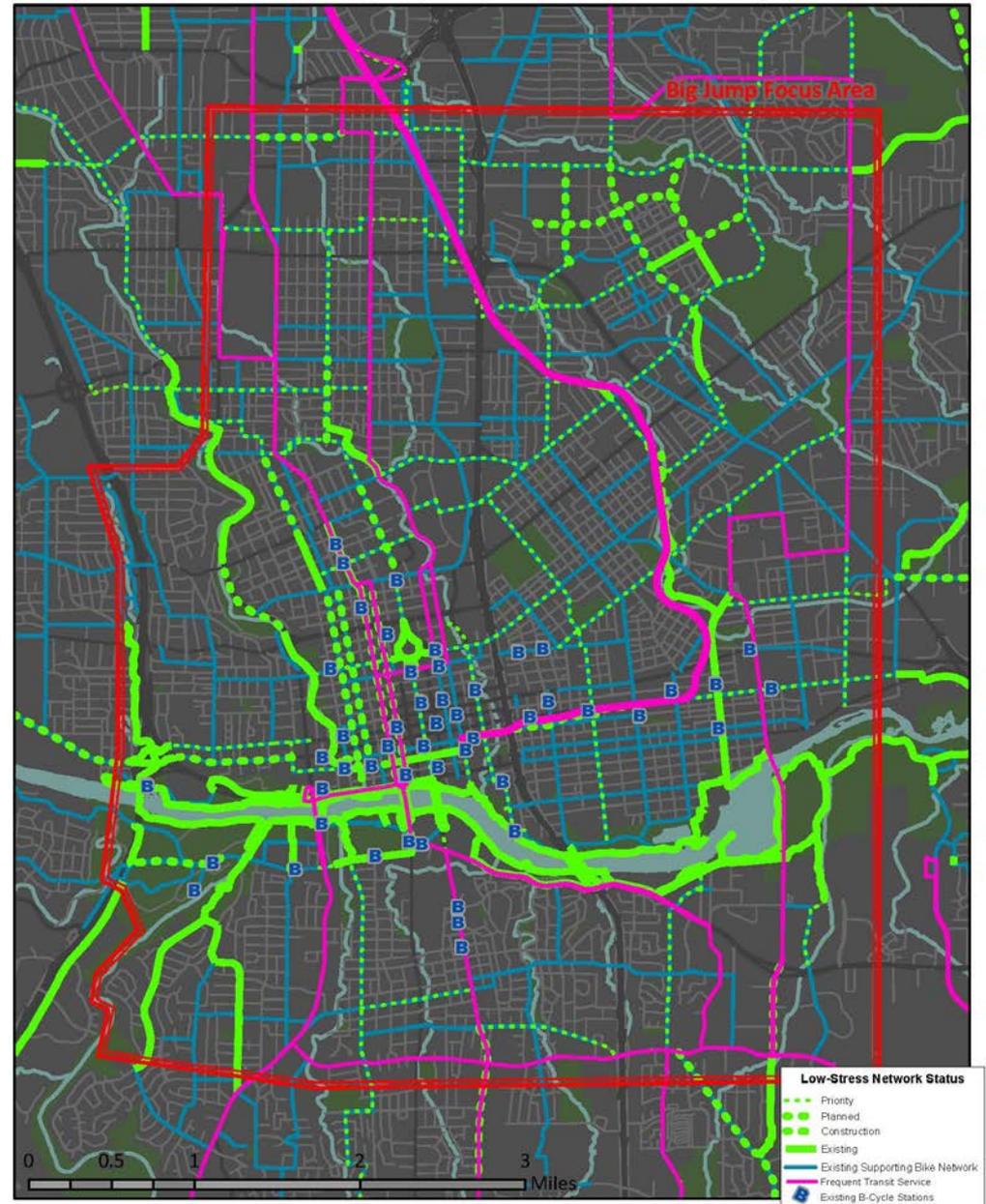
# Public Transport, Frequent Transit & B-Cycle

- Frequent Transit Service
- B-Cycle Station

\*All projects will undergo feasibility analysis, coordination and/or public process prior to installation or construction.



## Public Transport, Frequent Transit and B-Cycle - Austin, TX

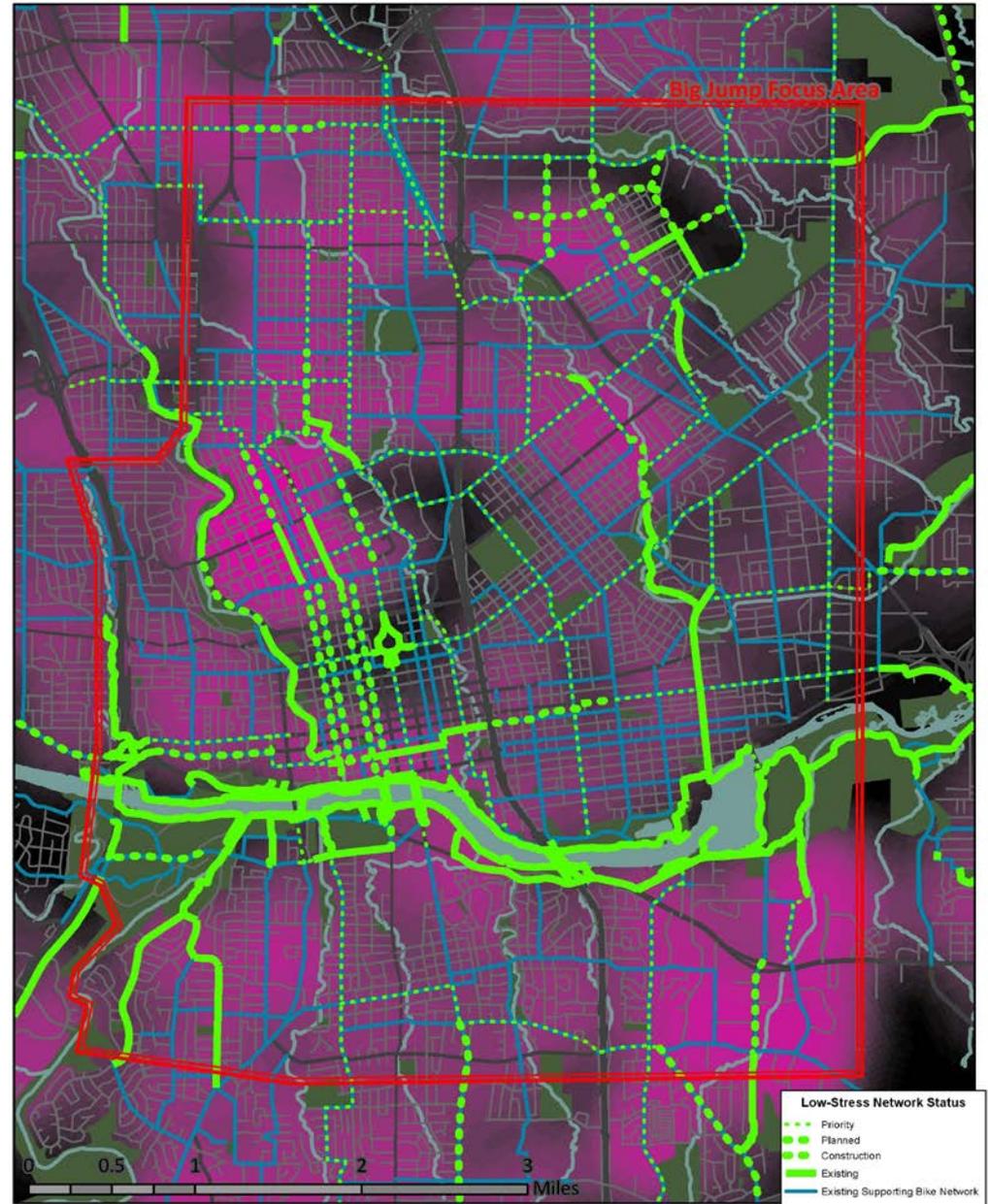


# Population Density

## Hot Spots:

- West Campus
- Central North
- Central South East

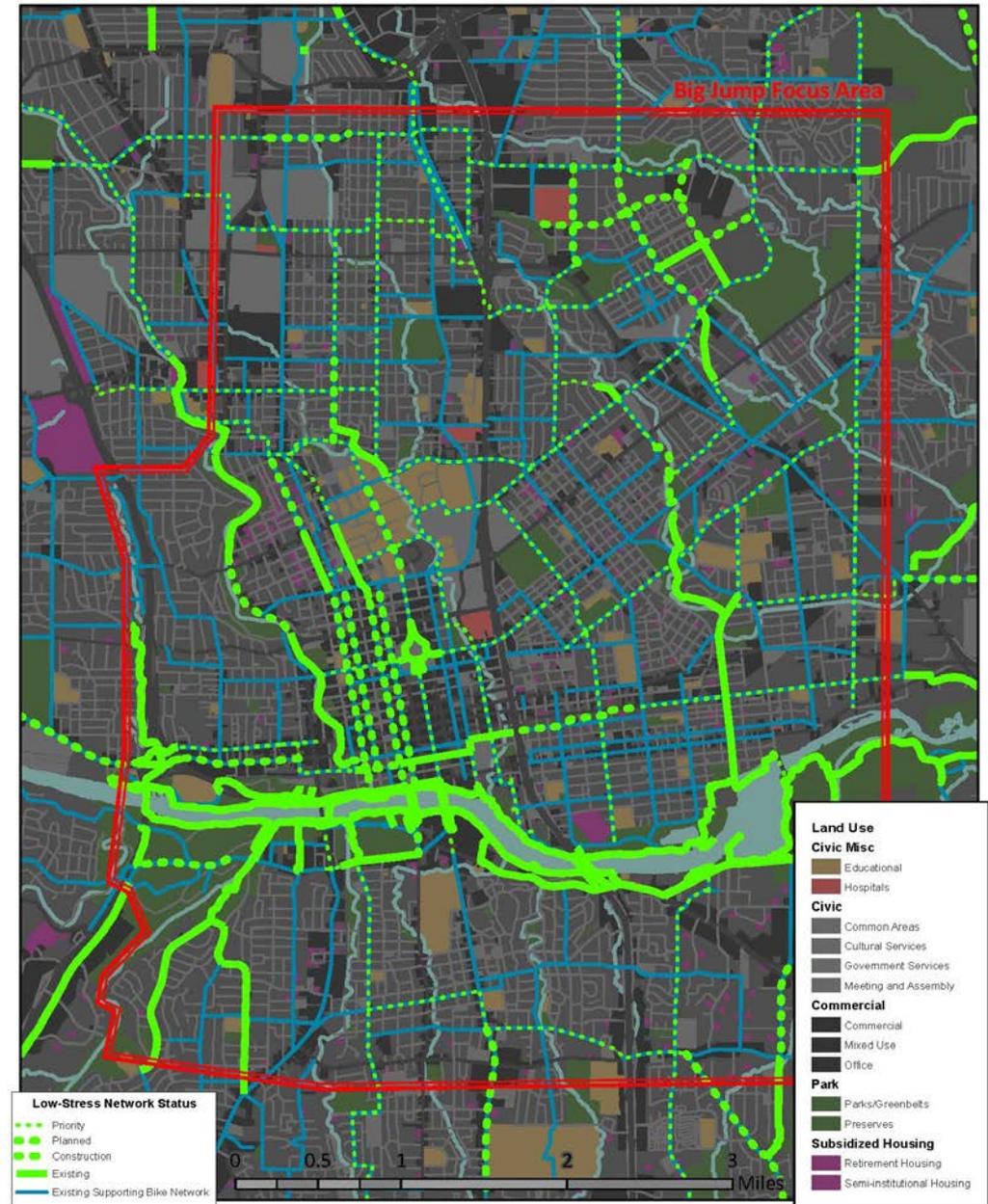
\*All projects will undergo feasibility analysis, coordination and/or public process prior to installation or construction.



# Land Use

- Education
- Hospitals
- Commercial
- Retirement & Student Housing
- Parks

\*All projects will undergo feasibility analysis, coordination and/or public process prior to installation or construction.

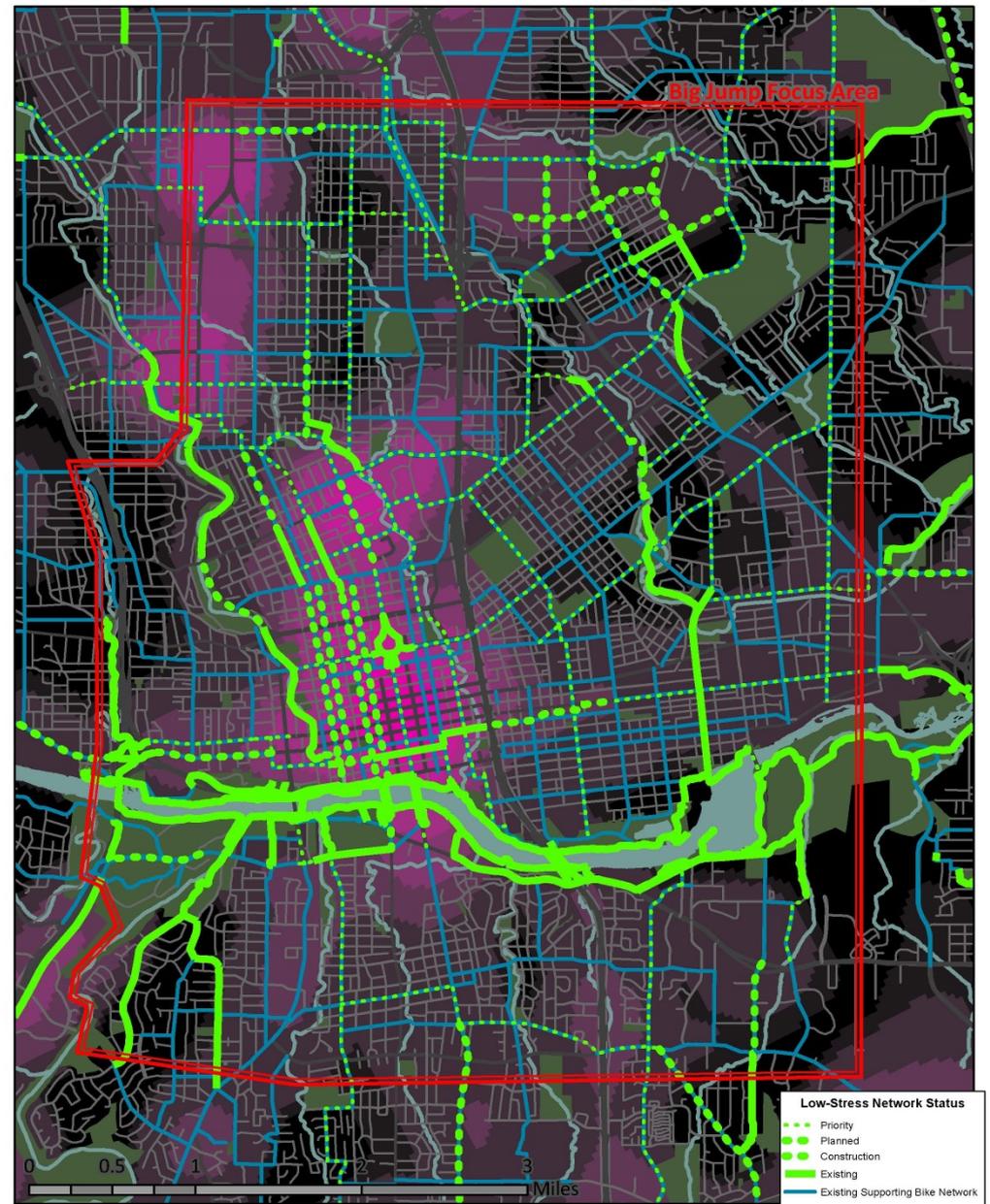


# Employee Density

## Hot Spots:

- UT
- Medical Complexes
- Downtown
- Diffuse through Mueller, Central East & South of the river

\*All projects will undergo feasibility analysis, coordination and/or public process prior to installation or construction.



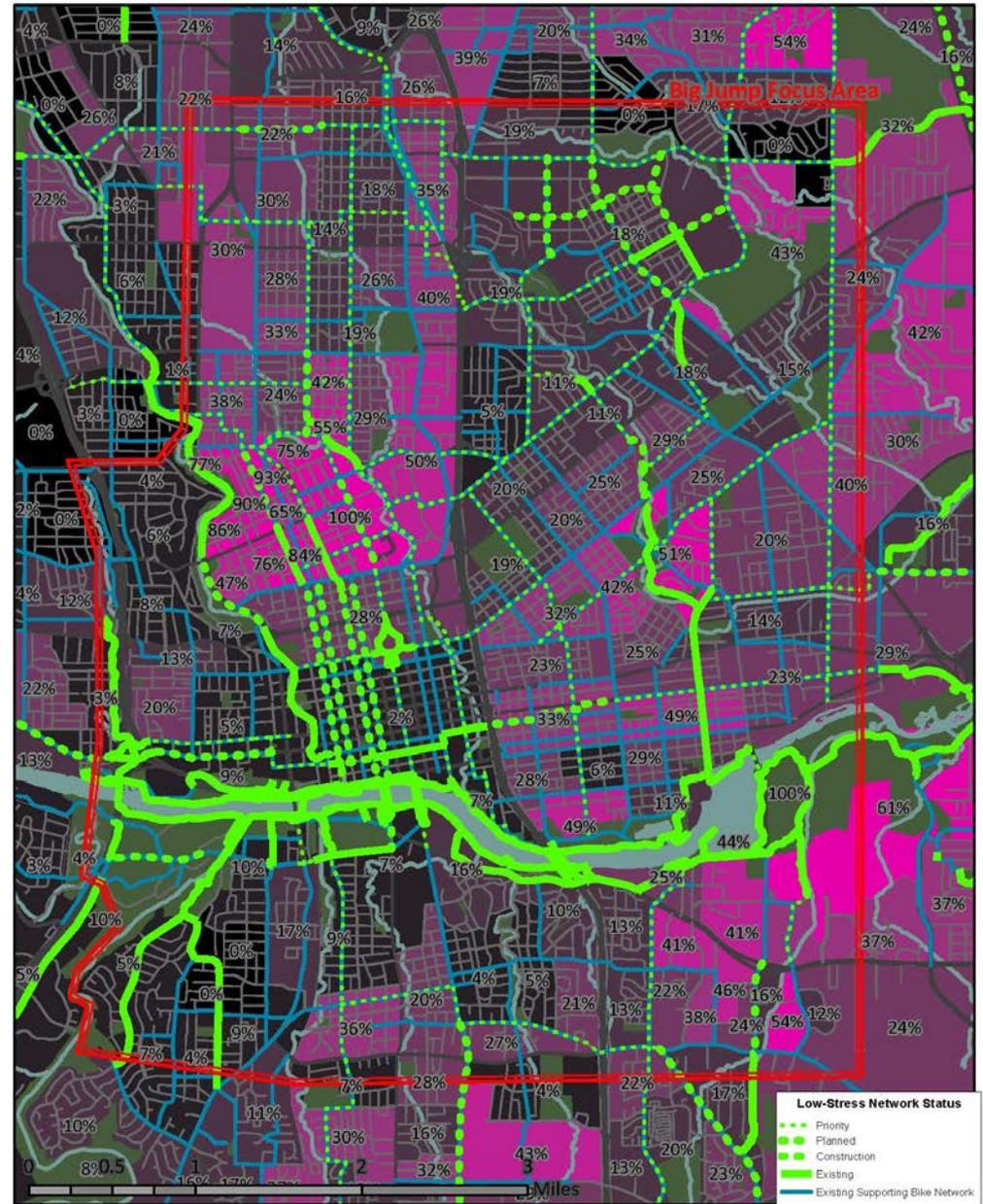
# Households Below Poverty

- Central South East
- Central East
- North and East of UT

\*All projects will undergo feasibility analysis, coordination and/or public process prior to installation or construction.



## Households Below Poverty - Austin, TX

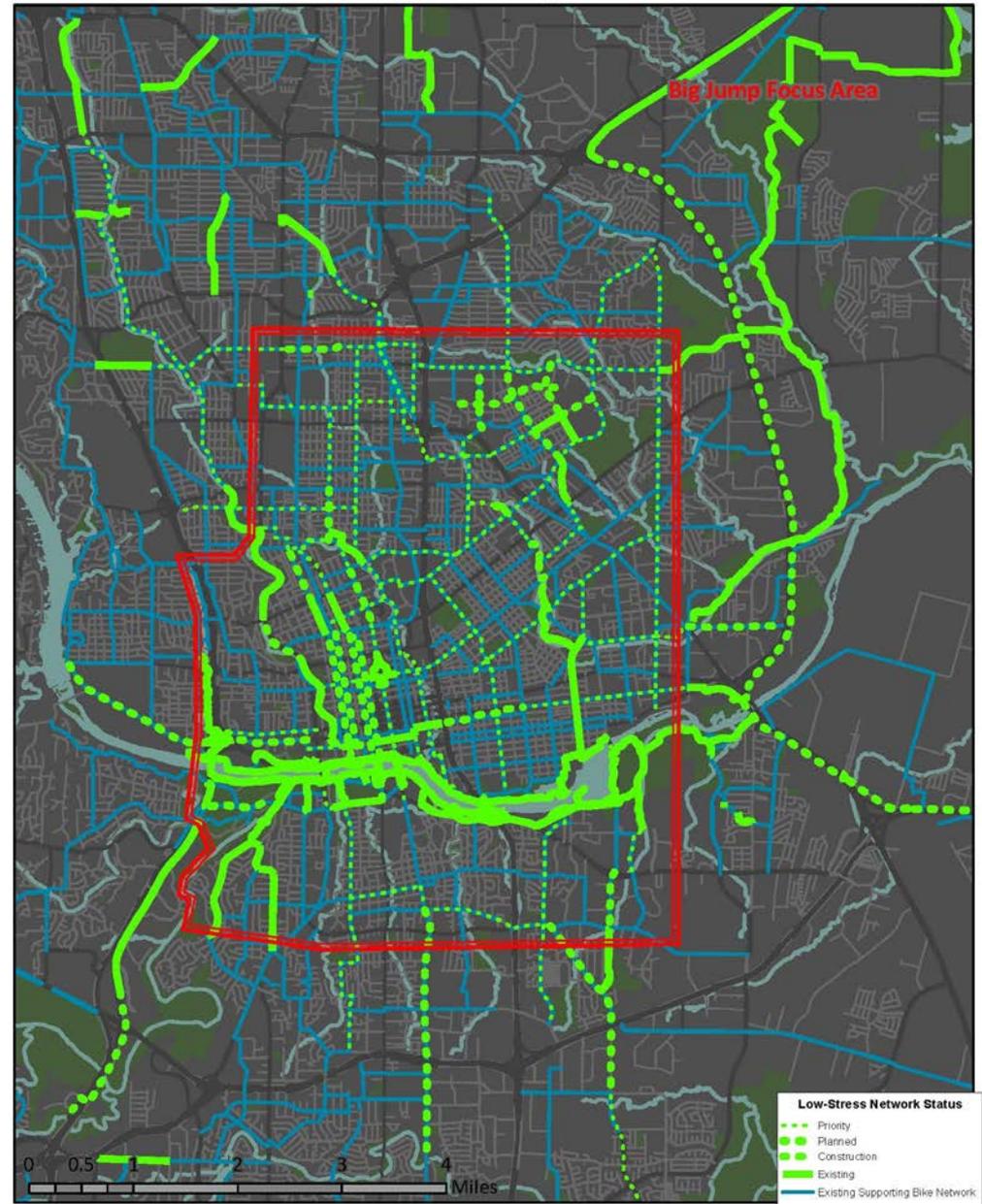




# Central City Low Stress Feeders

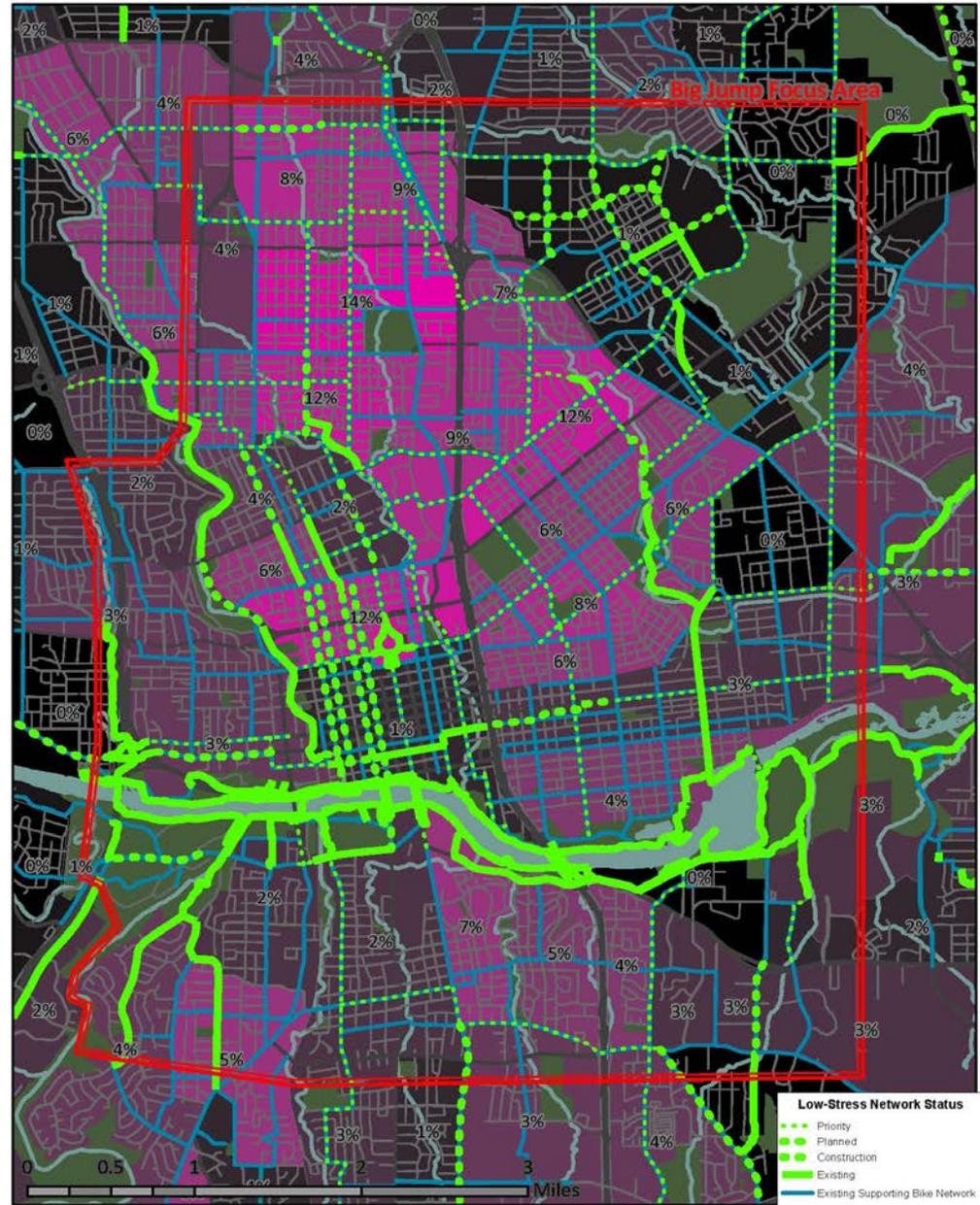


## Status of Central City Low Stress Feeders - Austin, TX



\*All projects will undergo feasibility analysis, coordination and/or public process prior to installation or construction.

# Bicycle Mode Share

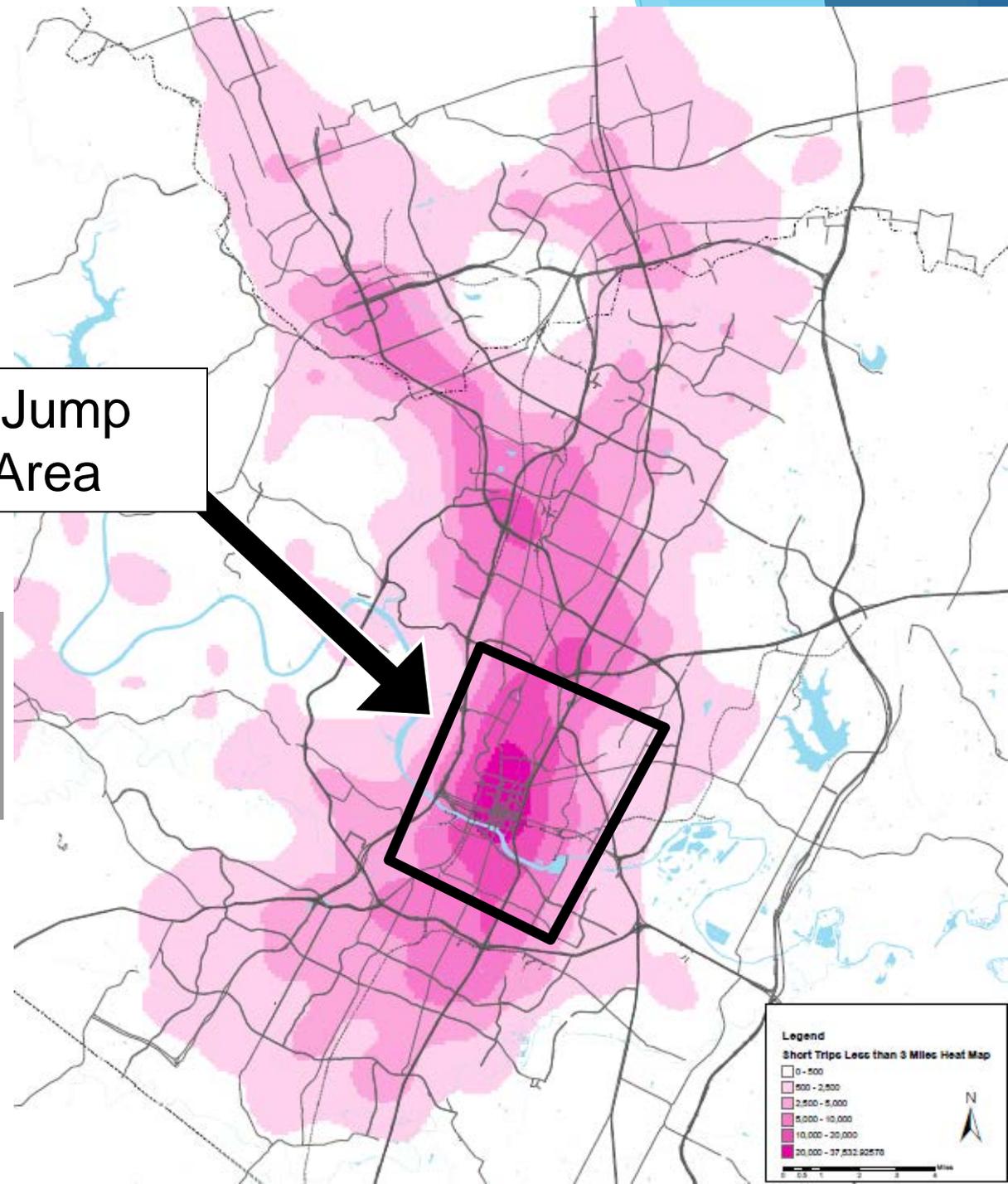


\*All projects will undergo feasibility analysis, coordination and/or public process prior to installation or construction.

# Heat Map Diagram of Short Car-Trips (0-3 mile)

The Big Jump  
Focus Area

- The Big Jump Focus Area has the highest concentrations of short trips in Austin



# The Big Jump Encouragement & Education Component

- ▶ A series of campaigns, developed with community stakeholders, will be developed to boost ridership.



# The Big Jump Encouragement & Education Component

- ▶ Where feasible and strategic, existing campaigns related to transportation demand management, safety and other initiatives will dovetail with Big Jump campaigns.





# City of Austin Bicycle Planning Strategy and The Big Jump Initiative

Austin Transportation Department  
Active Transportation and Street Design Division

Laura Dierenfield, Division Manager

512-974-7189

[laura.dierenfield@austintexas.gov](mailto:laura.dierenfield@austintexas.gov)