

- The following is an overview of the content that is proposed to be included in the 2014 Bicycle Plan Update

WHY UPDATE THE BICYCLE PLAN?

Creating the future Austin



City of Austin 2014 Bicycle Master Plan Update

March 21, 2014

- A brief explanation of why this update is important

Current Bicycle Planning Efforts: Urban Trails Master Plan and Bike Plan Update



- The Bike plan builds on existing plans with latest influences from Imagine Austin, the NACTO bikeway design guide, Austin's participation in the Green Lane Project, and Austin's Think Bike event

Bicycling and Active Transportation Support Imagine Austin Plan



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



City of Austin 2014 Bicycle Master Plan Update

March 21, 2014

- Integrating Imagine Austin plan into 2014 Bicycle Plan
- Bicycling is integral in all 8 priority programs



IMAGINEAUSTON
COMPREHENSIVE PLAN
Vibrant. Livable. Connected.

City Council Adopted
June 15, 2012

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”

March 21, 2014

- Update the vision for the bicycle plan
- This is a very important change in focus and is the foundation for our approach to the conversation for the 2014 update

HOW ARE WE APPROACHING THE UPDATE?

Elements of the 2014 Bicycle Plan Update



City of Austin 2014 Bicycle Master Plan Update

March 21, 2014

- An overview of our approach and fundamental elements that make the 2014 Bicycle Plan a significant change to the the 2009 plan

The Bicycle Plan is a 5 E's Approach

Engineering	Education	Encouragement	Enforcement	Evaluation
 <ul style="list-style-type: none"> • Updates for all ages and abilities network • Includes cycle tracks recommendations 	 <ul style="list-style-type: none"> • 45,000 children educated annually on bicycle safety. • 300 + taught in Defensive Cycling annually. 	 <ul style="list-style-type: none"> • 1,500 bike light sets distributed in 2013. • Policies to encourage developers to build showers, locker rooms, and secure bicycle parking. 	 <ul style="list-style-type: none"> • Almost 700 citations given to cyclists annually by APD (since 2007) • Vulnerable Road User Campaign 	 <ul style="list-style-type: none"> • 2% of Austinites use a bicycle to get to work; compared to a 1% national average (2011 US Census). • 6% in Central City

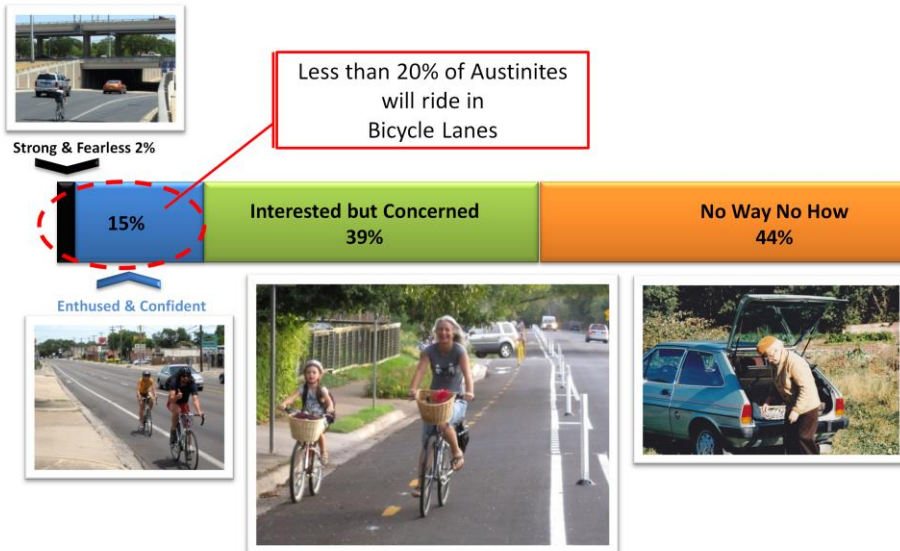


City of Austin 2014 Bicycle Master Plan Update

March 21, 2014

- The bicycle plan is a 5 E's plan.
- The most significant update from the 2009 Plan, and the content of this presentation, will be in the Engineering / Infrastructure recommendations and approach, the other sections will get minor updates

Four Types of Transportation Cyclists in Austin By Proportion of Population



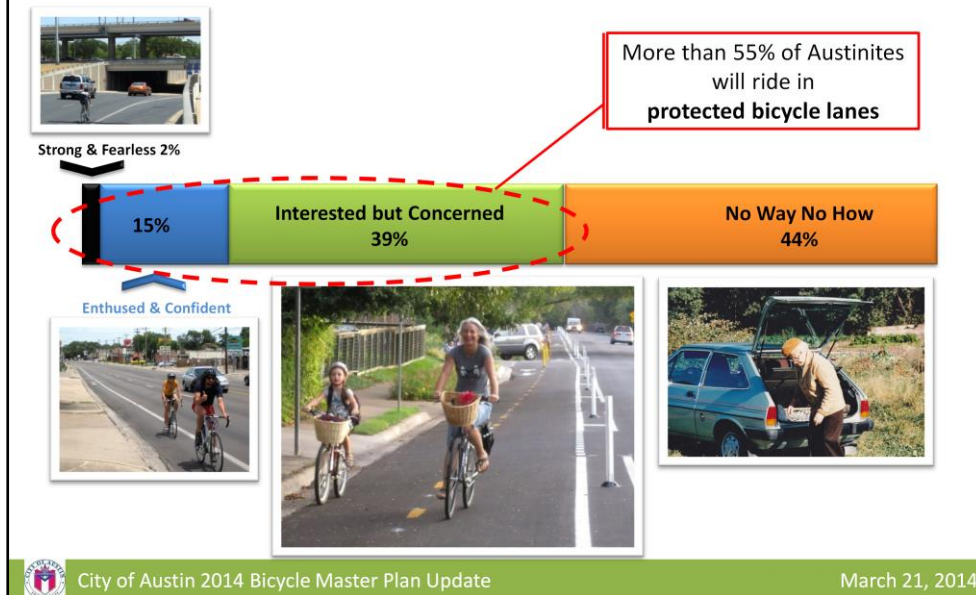
City of Austin 2014 Bicycle Master Plan Update

March 21, 2014

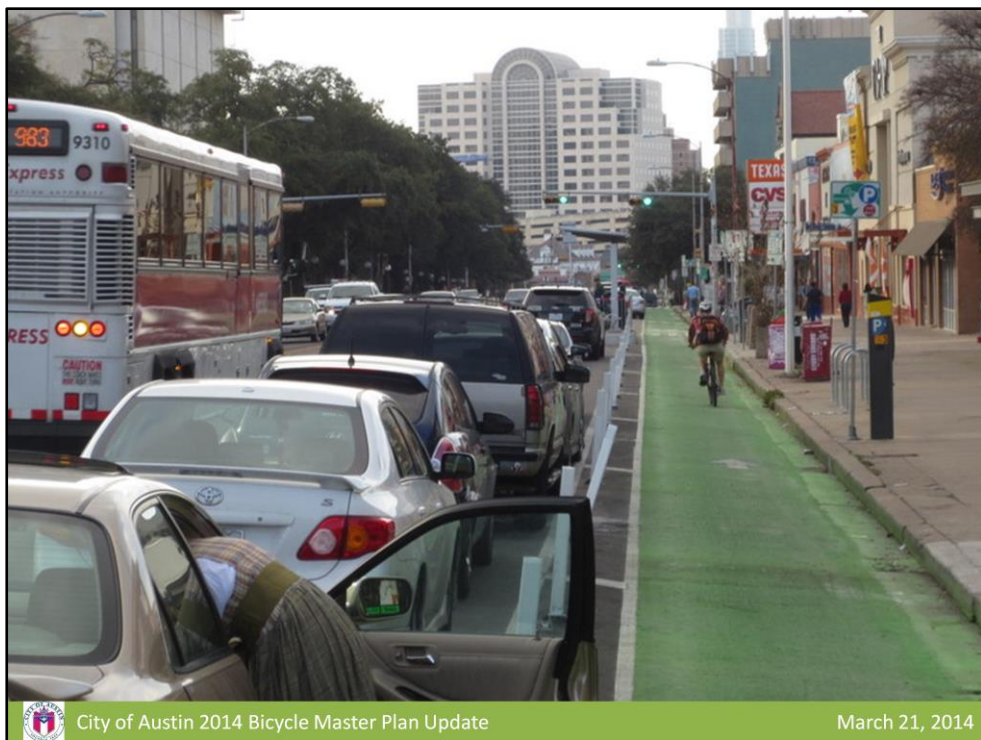
- Existing bicycle lanes based infrastructure attracts less than 20% of Austin's population

Four Types of Transportation Cyclists in Austin

By Proportion of Population



- A network of protected bicycle lanes will attract 55+% of the population. If we want a significant increase in bicycling and the benefits it brings to the City and its citizens, we will have to pursue protected networks.



- Guadalupe next to Campus

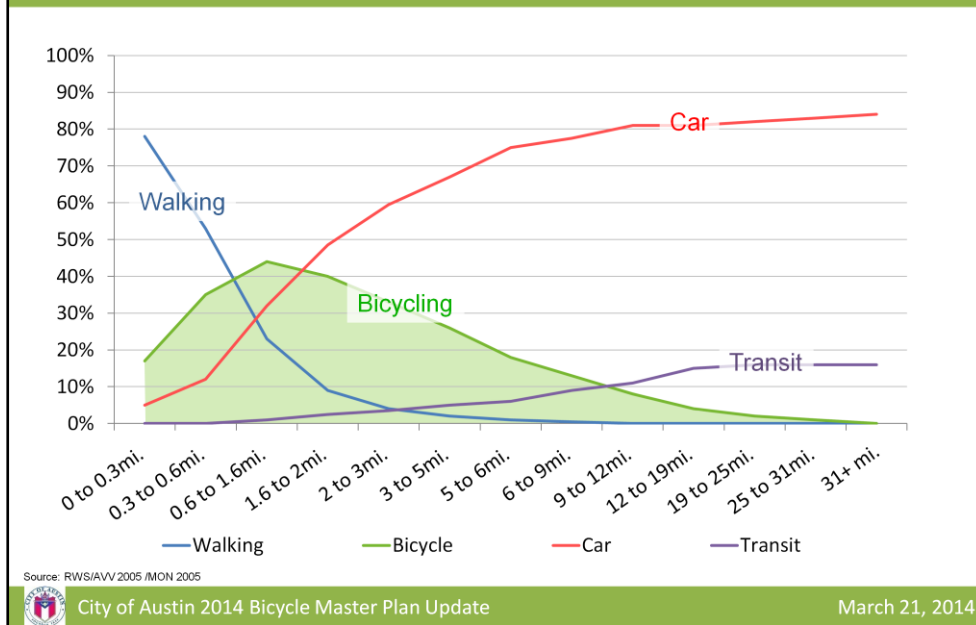


- Bluebonnet Lane Cycle Track in south Austin adjacent to Zilker Elementary

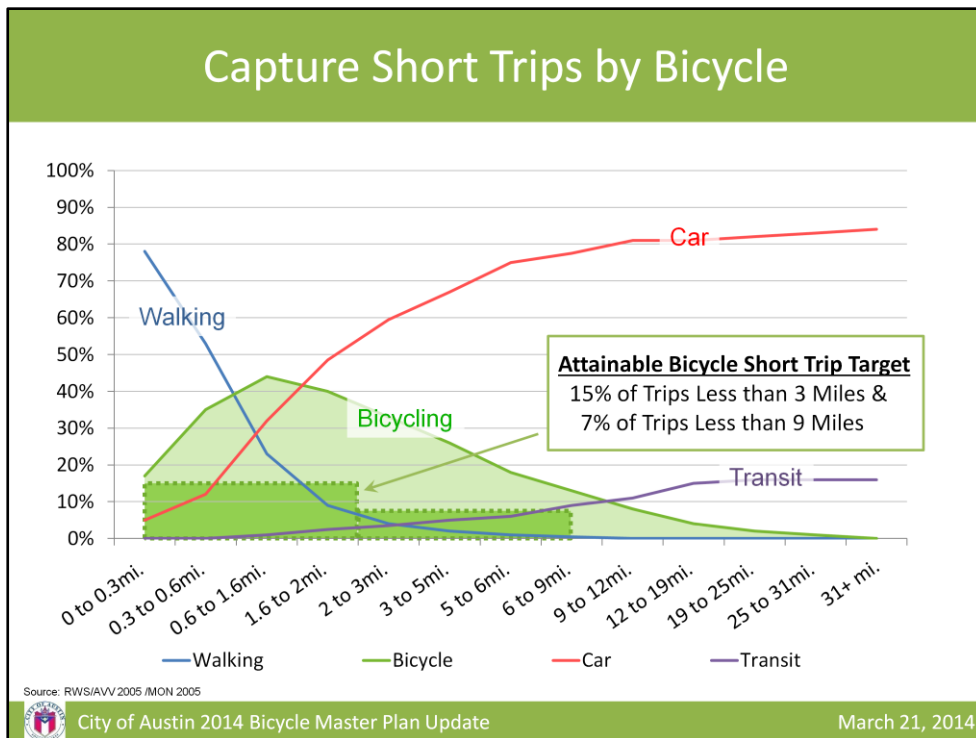


- Barton Springs Road

Capture Short Trips by Bicycle



- Each mode is more and less useful at different trip lengths. For short distances walking and bicycling are best, for longer distances cars and transit are better
- Given a safe bicycle network, trips in the 1-3 mile range can be the mode with the largest mode share.
- Targeting infrastructure investments to capture short trips is critical



- The green shaded boxes show the Bicycle Plan updates trip capture targets. The plan will capture the impact of achieving these targets.

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

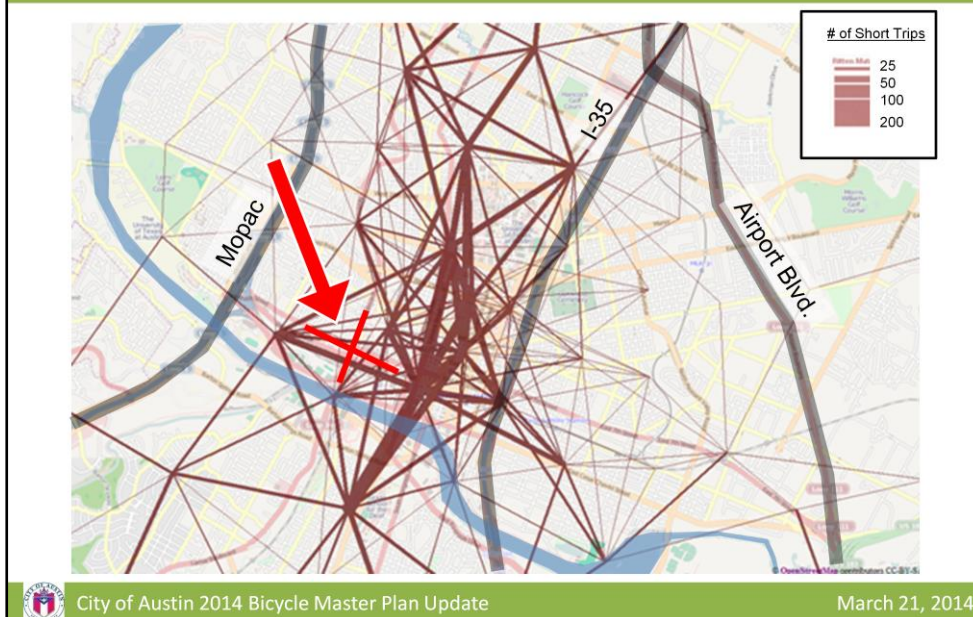


City of Austin 2014 Bicycle Master Plan Update

March 21, 2014

- You can see most of the short trips occur in the central city.
- They occur in every direction but you can see a north-south patterns as you would expect in our city.

Intersection of 5th/6th and Lamar



- This notoriously congested intersection has 50% of short trips going through it, a portion of which are perfect candidates to be converted to bicycle trips.

WHAT IS THE PLAN MADE OF?

Our strategic focus

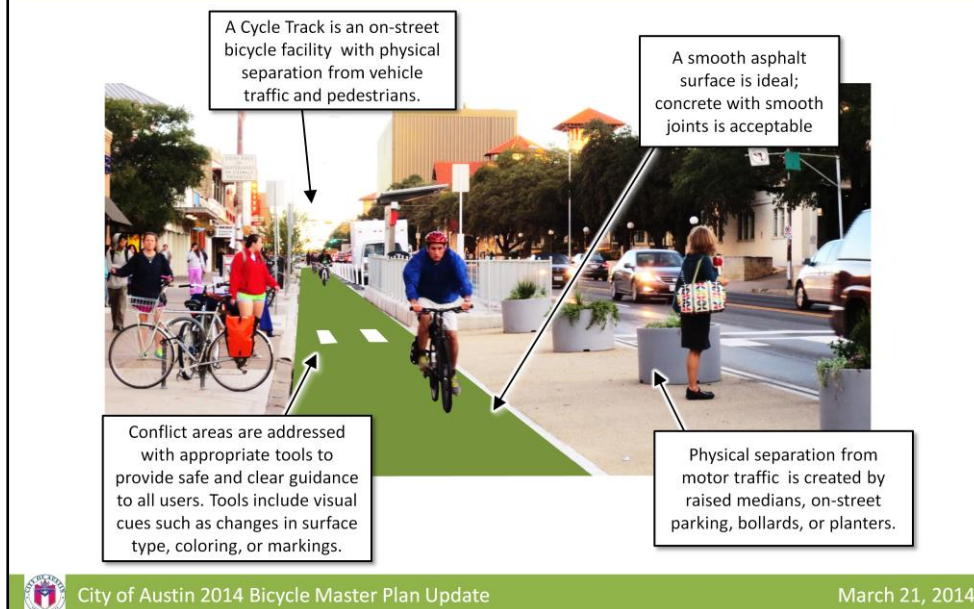


City of Austin 2014 Bicycle Master Plan Update

March 21, 2014

- An overview of the detailed recommendations of the 2014 Plan Update

Toolbox: Cycle Tracks



- Visual guide of the principal tools used in the plan

Toolbox: Quiet Streets

Quiet Streets are traffic calmed corridors that provide a comfortable environment for all ages and abilities.

Provide the opportunity for green streets elements such as tree plantings, rain gardens, and reductions in impervious cover.

Motor vehicle speed and volumes are managed to achieve safety and comfort for all ages or abilities.



Route guidance is provided through pavement markings and signage.

Target Speed and Volume:

- 25 mph or less (20 mph preferred)
- 1,500 vehicles per day preferred; up to 3,000 vehicles per day in limited areas.

Target Locations:

- **Residential streets** where traffic calming is desired.
- Commercial corridors where heavy motor vehicle traffic is less desired.



- Visual guide of the principal tools used in the plan

Toolbox: Intersection Treatments

INTERSECTION TREATMENTS help users comfortably cross major streets on key routes.

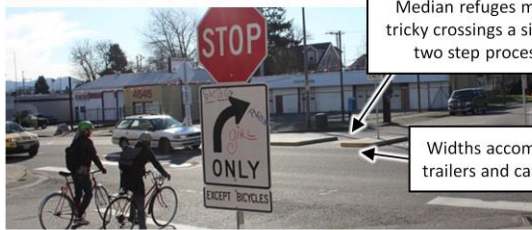
Intersection Treatments Include:

- Crossing signs and markings
- Median refuge islands and curb extensions.
- Crossing devices including actuated warning beacons and signals.



Crossing times should account for all ages.

Actuated warning beacons and signals make the toughest crossings safe and comfortable



Median refuges make tricky crossings a simple two step process

Widths accommodate trailers and cargo bikes



- Visual guide of the principal tools used in the plan

Creating a Network:



City of Austin 2014 Bicycle Master Plan Update

March 21, 2014

- Austin's approach will involve all of these facility types to form one all ages and abilities network
- Our street network does not support reliance on only one of these facility types

Creating a Network:



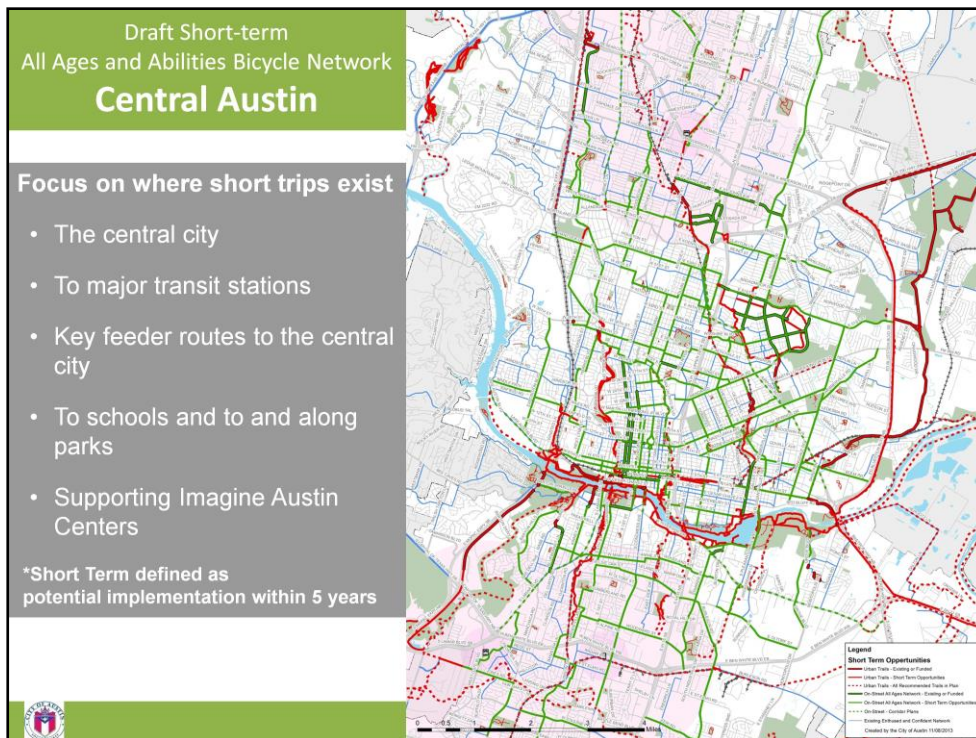
The 8 to 80 Test:






*An **8 year old** traveling with an **80 year old** should be able to traverse the city **comfortable and safely.***



- The plan proposes to hold our network to the 8 to 80 test



- This is a view of the short term network in the central city composed of on-street facilities and Urban Trails

Implementation and Cost Considerations		 Urban Trails	 On-Street Facilities
		The ultimate protected environment	Providing safe access to local destinations
Cost		\$1.5 - \$2 million per mile*	\$50k - \$500k per mile*
		*For comparison: 6-lane freeway approximately \$51 million per mile 4-lane arterial roadway approximately \$22 million per mile (Source: CAMPO 2035 Plan)	
Timeline		3-8 years per project	6 months - 2 years per project
 City of Austin 2014 Bicycle Master Plan Update		March 21, 2014	

- On-street facilities are much less expensive and can be implemented much faster than urban trails.

Working Around Trees

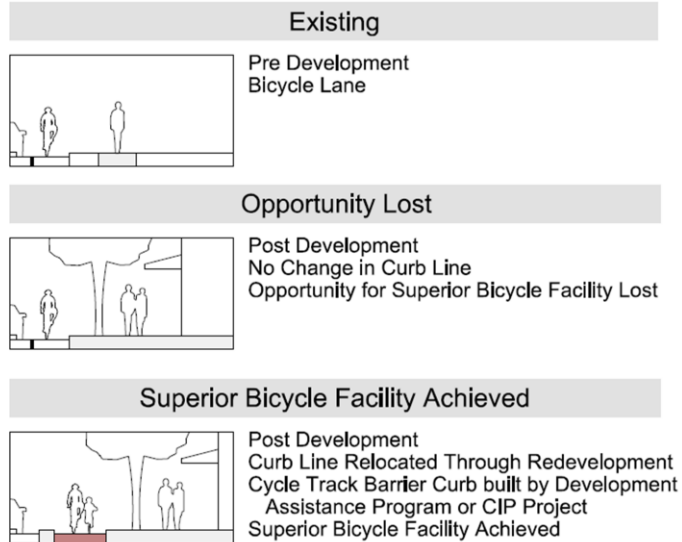


City of Austin 2014 Bicycle Master Plan Update

March 21, 2014

- Barton Springs Road

Implementation with Development



- It is important to ensure that corridors are shaped at time of development to provide safe bicycle facilities.
- This opportunity will not come again for many decades or more.

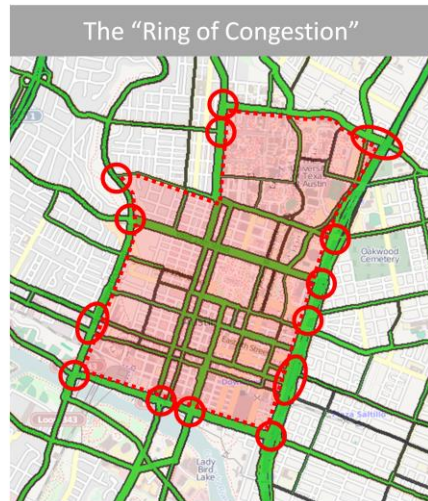
Benefits of Short Term Network Significant Mobility Improvements

Our *DRAFT* Analysis Shows
Of the 160k 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



City of Austin 2014 Bicycle Master Plan Update

March 21, 2014

- Meeting our trip capture targets with the proposed short term all ages and abilities network will result in significant mobility improvements

Reduced CO2 Levels due to Reduction in Ring of Congestion Trips

Single Direction Miles Daily	63,591
BiDirectional Miles Daily	127,182
Lbs of Co2 Daily	145,351
Lbs of Co2/day Stored per Day for Healthy Tree	0.04
Number of Trees required to Achieve CO2 Reduction	4,000,000



- The previously estimated reduction in trips can be converted into less miles traveled to calculate benefits. Benefit in reduction of CO2 is shown.



CITY OF AUSTIN 2014 BIKE PLAN UPDATE

For more information: <http://austintexas.gov/yourpath>

For comments contact: Nathan Wilkes, nathan.wilkes@austintexas.gov

City of Austin Bicycle Program



City of Austin 2014 Bicycle Master Plan Update

March 21, 2014

- And thus concludes an overview of the content that is proposed to be included in the 2014 Bicycle Plan Update