



Columbus Bike Plan

THE CITY OF
COLUMBUS
MICHAEL B. COLEMAN, MAYOR

Public Workshop
June 25, 2014

Welcome and Introductions

Columbus
Bike Plan



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Agenda/Purpose

- Celebrate our successes
- Columbus Bike Plan update
- What we have learned so far
- Build on the momentum
 - Seek your thoughts on bike facilities and challenges
- Next steps



Successes: The Vision

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“The City is investing in more bike facilities to increase bicycle use and make bicycling safer. These investments will promote active, safe, healthy transportation choices. The (Columbus Bike) Plan provides a long-term vision for the development of a citywide bicycle network consisting of off-street trails and on-street bike facilities, complemented by education and encouragement programs.”

-- City of Columbus, April 2014

Successes: Since 2008

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- 1,225 sharrow pavement markings on 26.8 miles of roadways
- 109 bike boulevard pavement markings on 3.8 miles of roadways
- 153 bicycle detector pavement markings at 48 intersections
- 13 miles of new bike trails
- 4.3 miles of shared-use paths
- 393 bike racks
- 18 bike shelters
- 209 Share the Road signs
- 3 bike corrals
- CoGo bike sharing program with 300 bicycles at 30 bicycle stations
- Mayor Coleman's Annual Bike to Work Week event
- Safe Streets Ordinance
- Mayor Coleman's Annual Twilight Bike Ride (July 11)

Culture shift

Successes: 2014 Plans

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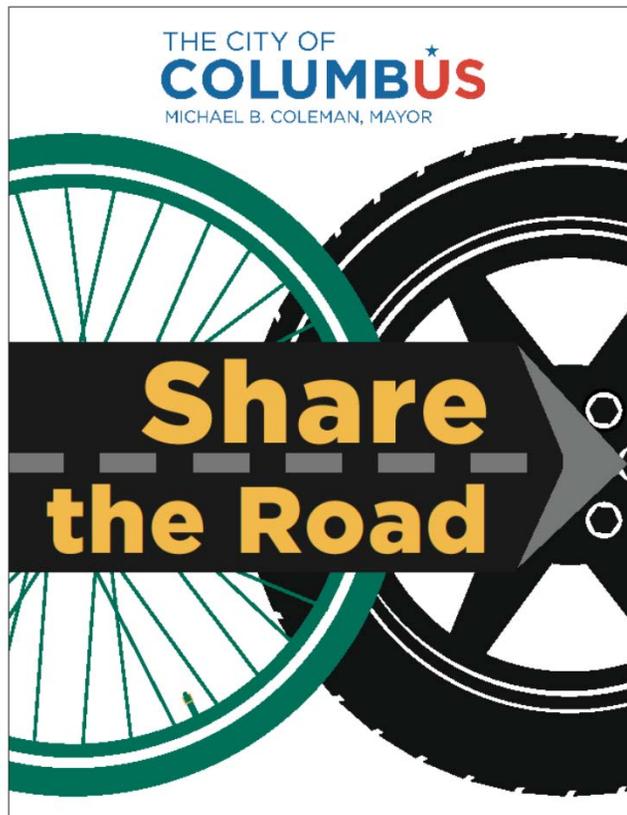


- City will invest \$5.6 million in bicycling facilities:
 - 56 sharrows pavement markings on 1.1 miles of roadway
 - 36 bike boulevard pavement markings on 2 miles of roadway
 - 1.5 miles of shared-use paths
 - 1.3 miles of bike lanes
 - 5 miles of bike trails
 - 50 bike racks



Share the Road – Phase 1

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Informational materials

Share the Road

WHAT

Mayor Michael B. Coleman created Share the Road to make Columbus roads safer for everyone – motorists and bicyclists. As part of the City's Bikeways Plan, it:

- Provides a long-term vision for the development of a citywide bicycle network consisting of off-street trails and on-street bike facilities, complemented by education and encouragement programs
- Promotes active, safe and healthy transportation choices
- Makes Columbus a more attractive and bikeable city for residents and visitors

HOW

The City is investing in more bike facilities to increase bicycle use and make bicycling safer. They include a wide range of improvements:

- Shared lane markings, also called sharrows, indicate that a lane on the road is for both cars and bicycles.
- Shoulder bikeways, also called paved shoulders, are road shoulders that are paved to make it easier for bicyclists to use.
- Bike lanes are a part of the road for bicycles only. Some bike lanes may have green pavement to make it easier for cars and

Under Ohio law and Columbus City Code, bicycles belong on the roadway. So, motorists and bicyclists must share the road safely. Bicyclists, must obey all relevant traffic laws.

Share the Road

Tip Card

Contact Information
City of Columbus, Division of Mobility Options
109 N Front St., Columbus, OH 43215
phone: 645-3111 or 311
email: 311@columbus.gov
web: sharetheroad.columbus.gov

lanes are bike lanes with additional space for bicycles and cars.
Bike paths are also called bike paths. There are two main types: a path, close to the roadway, like on Dublin Road and the Olentangy Greenway Trail.
Quiet streets are low-volume, low-speed streets where bicyclists travel using traffic calming and traffic calming treatments, signs and pavement markings and other treatments.
Marked parts of road intersections showing that bicyclists move to the front of the intersection and that cars yield to them.
Bicyclists along paths and roads.
Bike facilities brochure for more information.

Mayor Michael B. Coleman created Share the Road. The City of Columbus, through the Department of Public Service, administers the program; the Ohio Department of Transportation, Mid-Ohio Regional Council of Government and others.

Mayor Michael B. Coleman appointed a Share the Road committee made up of citizens representing diverse neighborhoods, organizations, businesses, public agencies and others, to guide and inform the project.

Share the Road facilities and roadway treatments all over the city. The Share the Road campaign will be on the air and around the city.



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Share the Road – Results

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Reached in 2013

- 875,736 TV viewers at least six times
- 750,000 Red, White & Boomgoers
- 314,000 City sewer and water customers
- 60,000 billboard viewers
- 1,147 Facebook and 1,525 Twitter followers
- 500+ E-news readers
- 23+ community events
- “How We Roll” riders



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Update & Schedule

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- January 2014 - January 2015

Task	Description	Status
Benchmarking	<ul style="list-style-type: none">• Compare Columbus' bicycle-related policies with other cities'• Recommend improvements	<ul style="list-style-type: none">• Under review
Bicycle and Pedestrian Counting Program	<ul style="list-style-type: none">• Research best practices• Pilot project: install automated counters in Columbus	<ul style="list-style-type: none">• Pilot project will launch summer 2014

Update & Schedule

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Task	Description	Status
Bikeway Program Evaluation	<ul style="list-style-type: none">• Evaluate peer cities on Bicycle Friendly Community designation, mode share, environmental impact policies, other measures• Evaluate related plans• Propose an evaluation strategy for Columbus	Under review

Update & Schedule

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Task	Description	Status
Bikeway Design Manual	<ul style="list-style-type: none">• Evaluate and update design manual to reflect innovative bike facilities	In progress
Education and Encouragement Campaign (Share the Road Phase II)	<ul style="list-style-type: none">• Build on/expand Share the Road Phase I	In progress Launch Phase 2 winter/spring 2015

Share the Road – Phase 2

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- Share the Road Phase 1 **PLUS**
 - Expand messaging from road safety-exclusive focus to promoting bicycling for more people, more often
 - More inclusion (non-traditional partners as well as the “invisible” bicyclists)
 - More grassroots, neighborhood-based, targeted education and encouragement
- Launch winter/spring 2015

*Size/extent of campaign is dependent on sponsor participation



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Learned from Survey

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Survey targeted 500 – 1,000; **2,299*** responses

- City of Columbus residents
- Adults, 18+ years old
- Bicyclists
- Drivers
- Under-represented populations (minorities, low-income residents, new Americans and immigrants)

*Not scientifically-representative

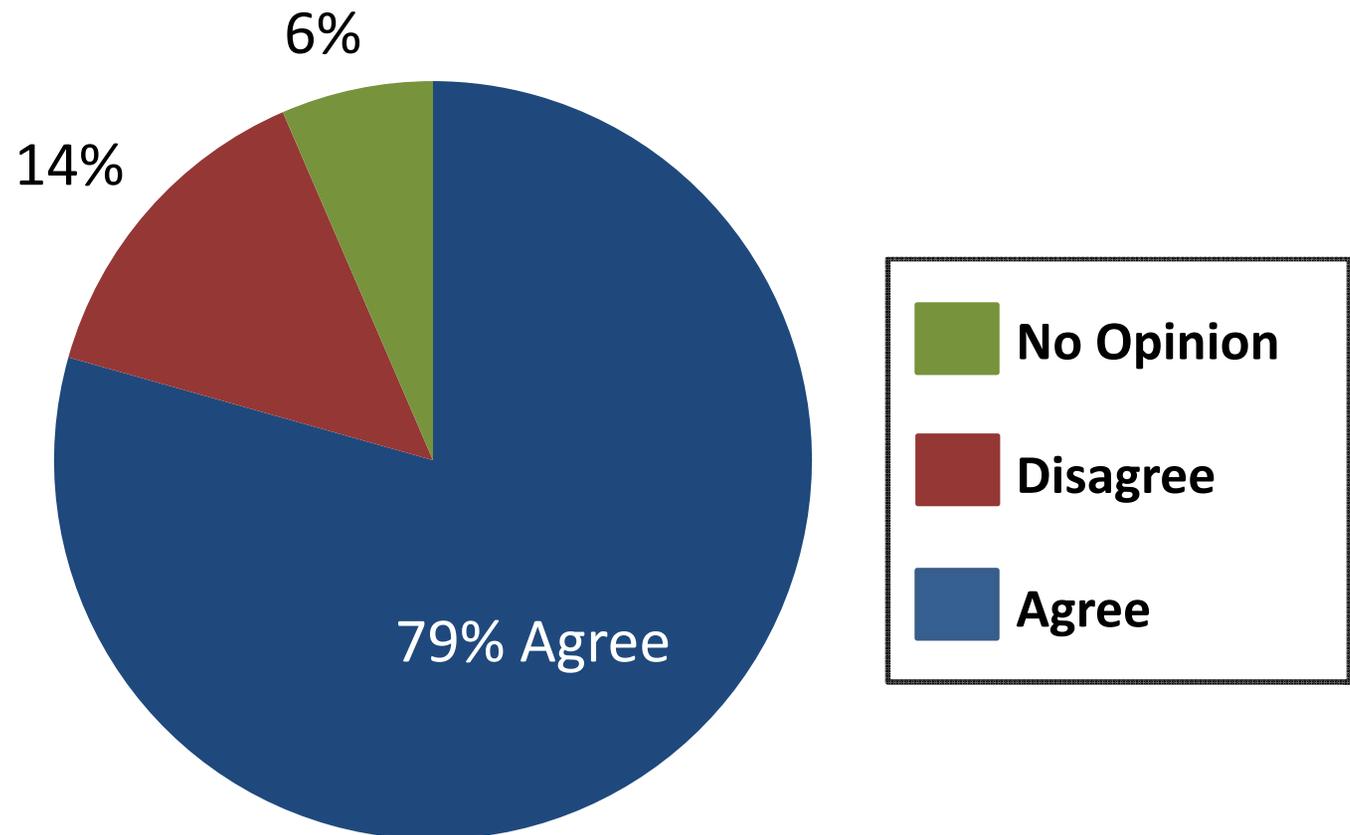


Learned from Survey

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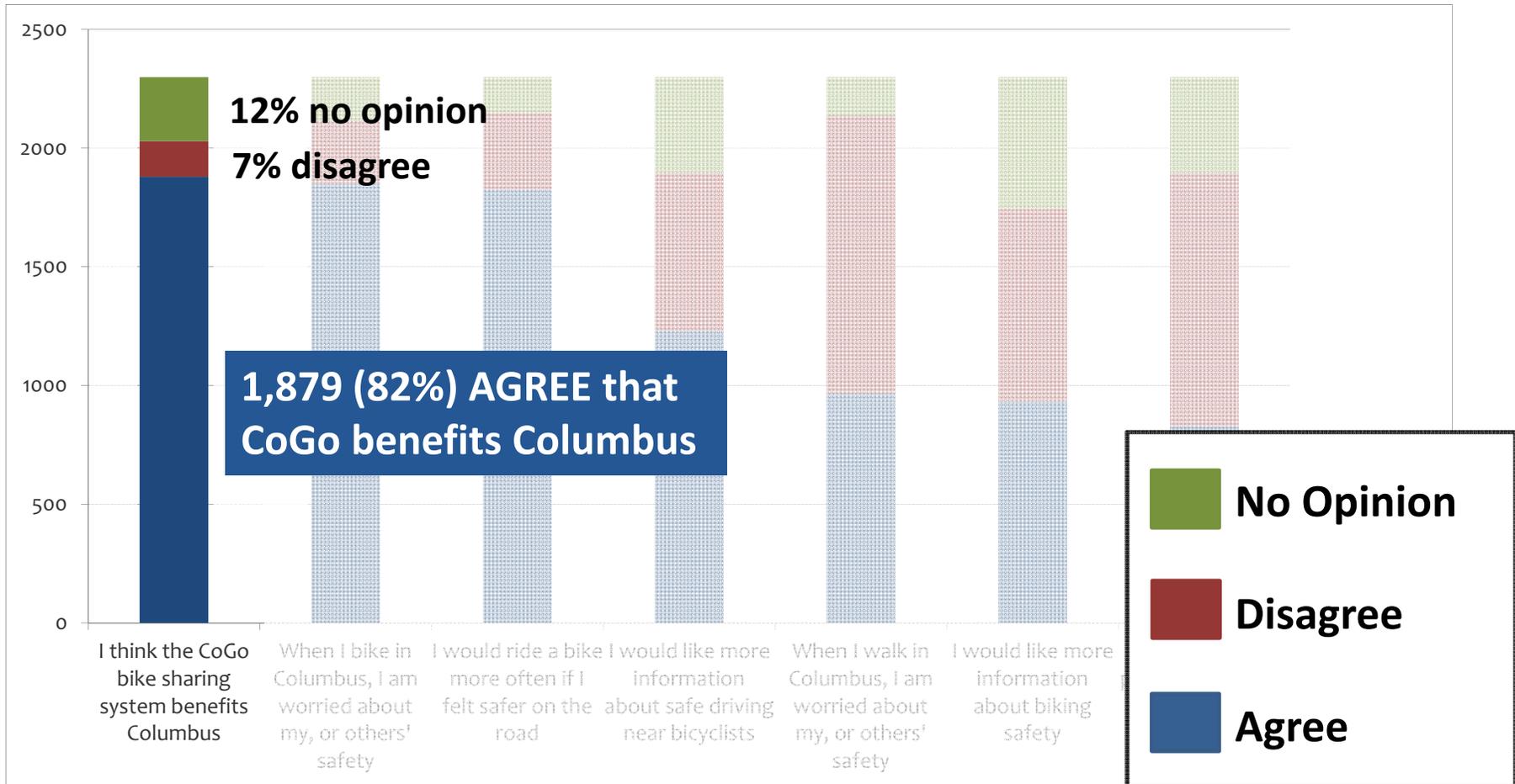


I would bike more often if I felt safer on the road



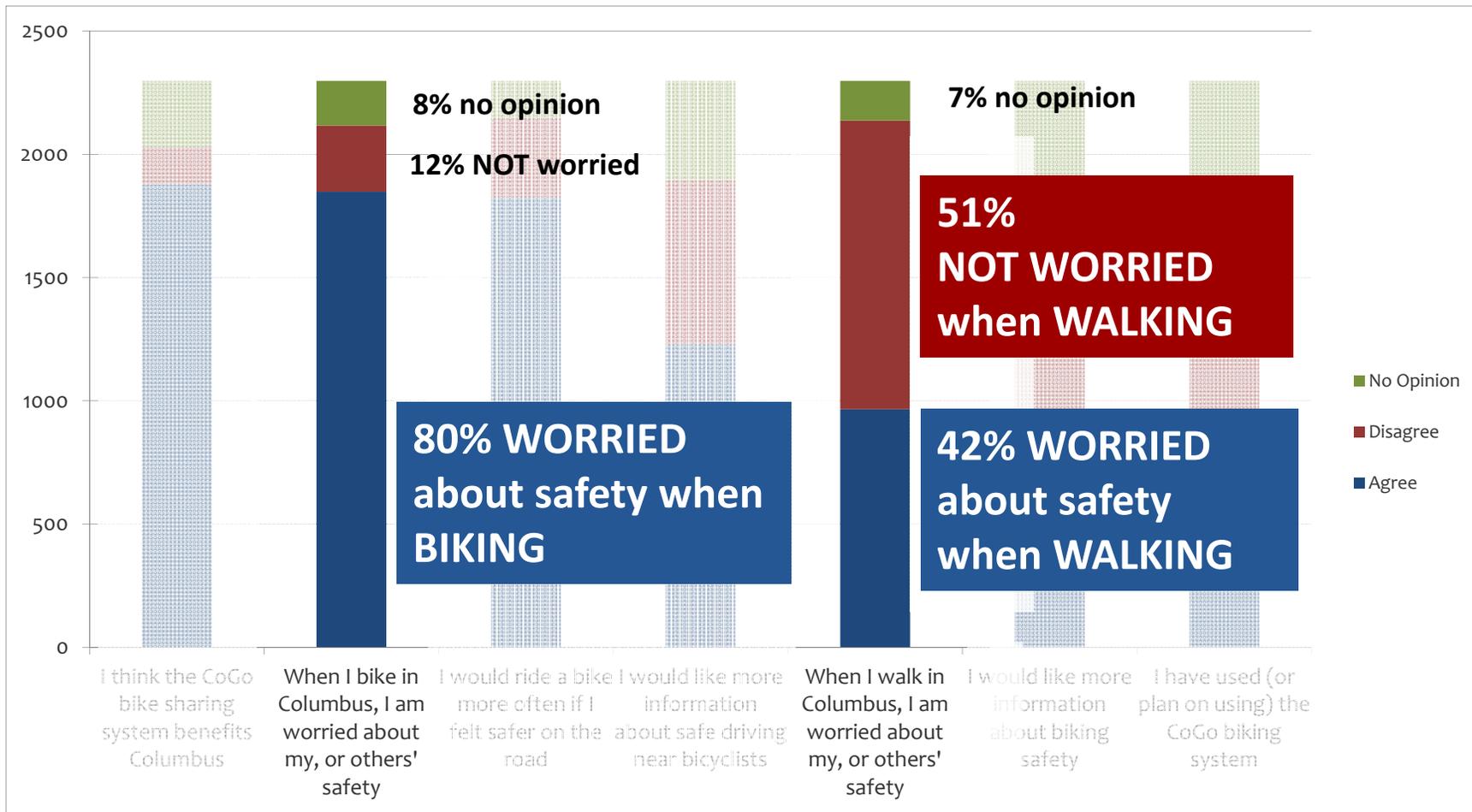
Learned from Survey

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Learned from Survey

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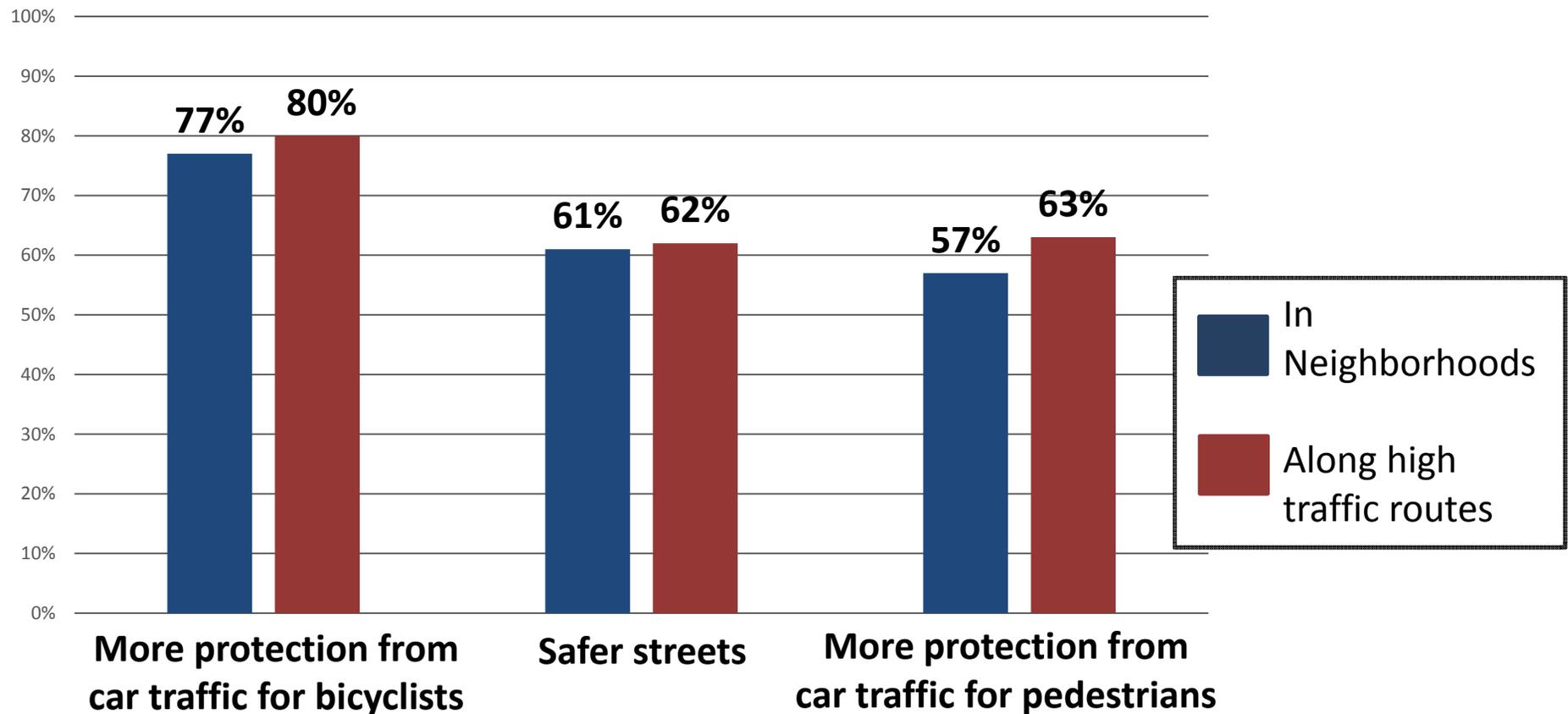


Learned from Survey

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Top Three Desired Changes

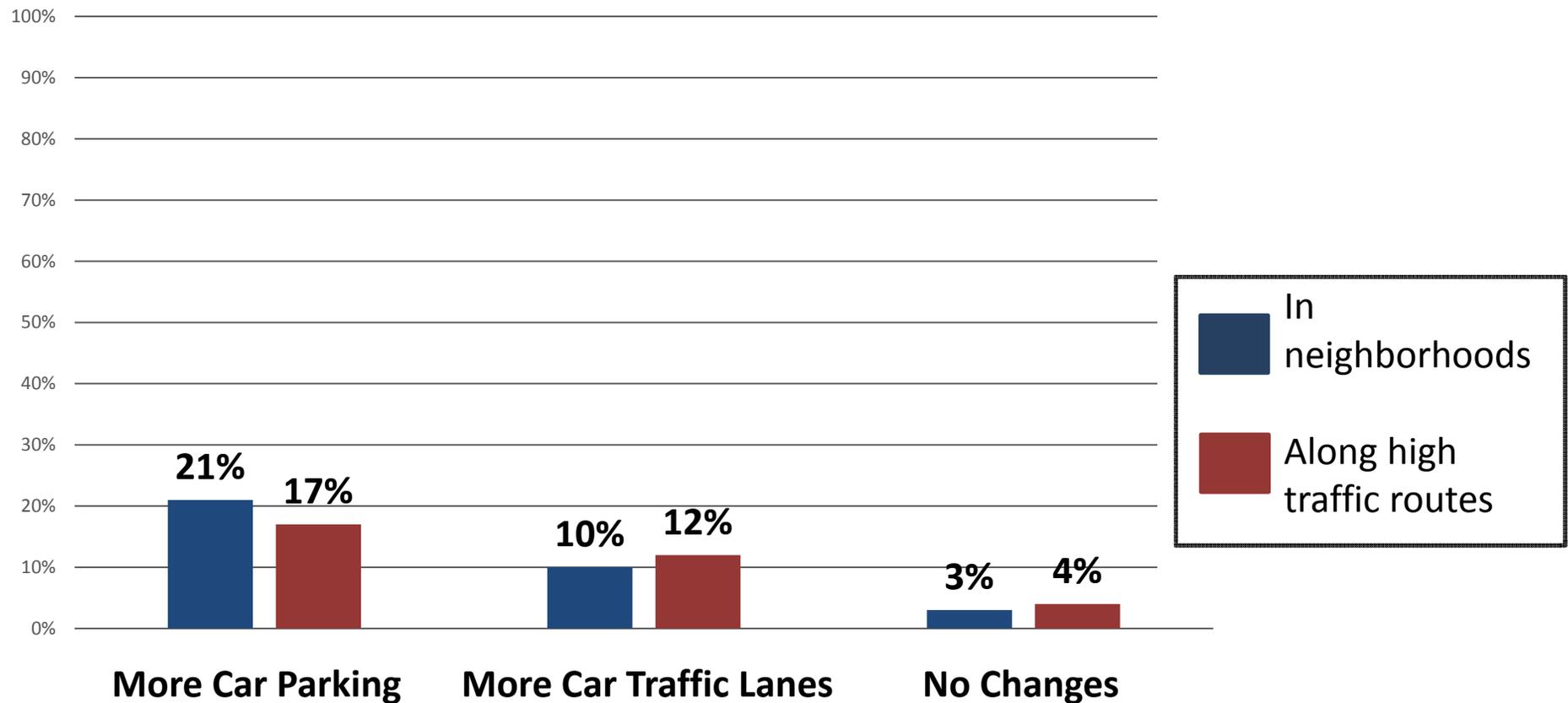


Learned from Survey

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Least Desired Changes

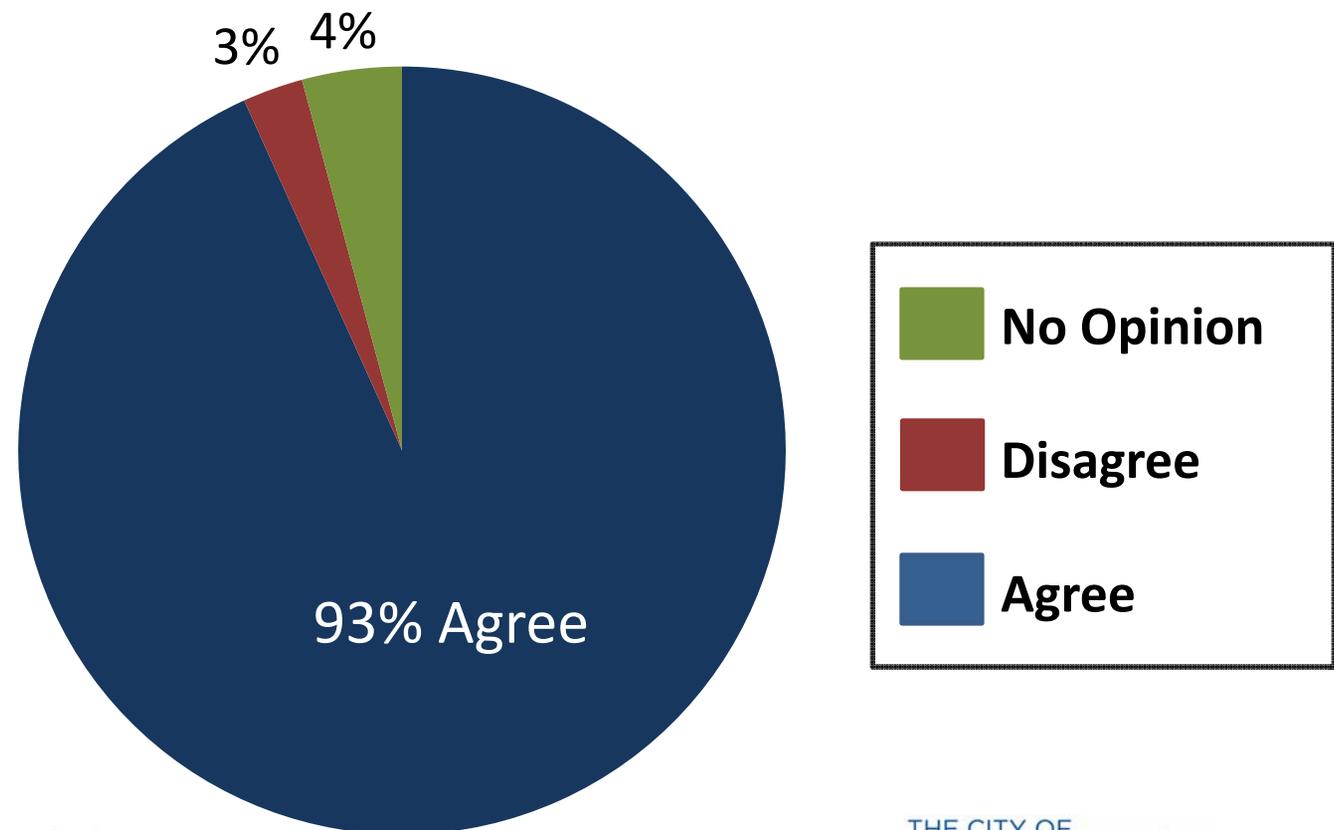


Learned from Survey

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1) The city should develop or improve **off-street trails or paths** for walking and biking

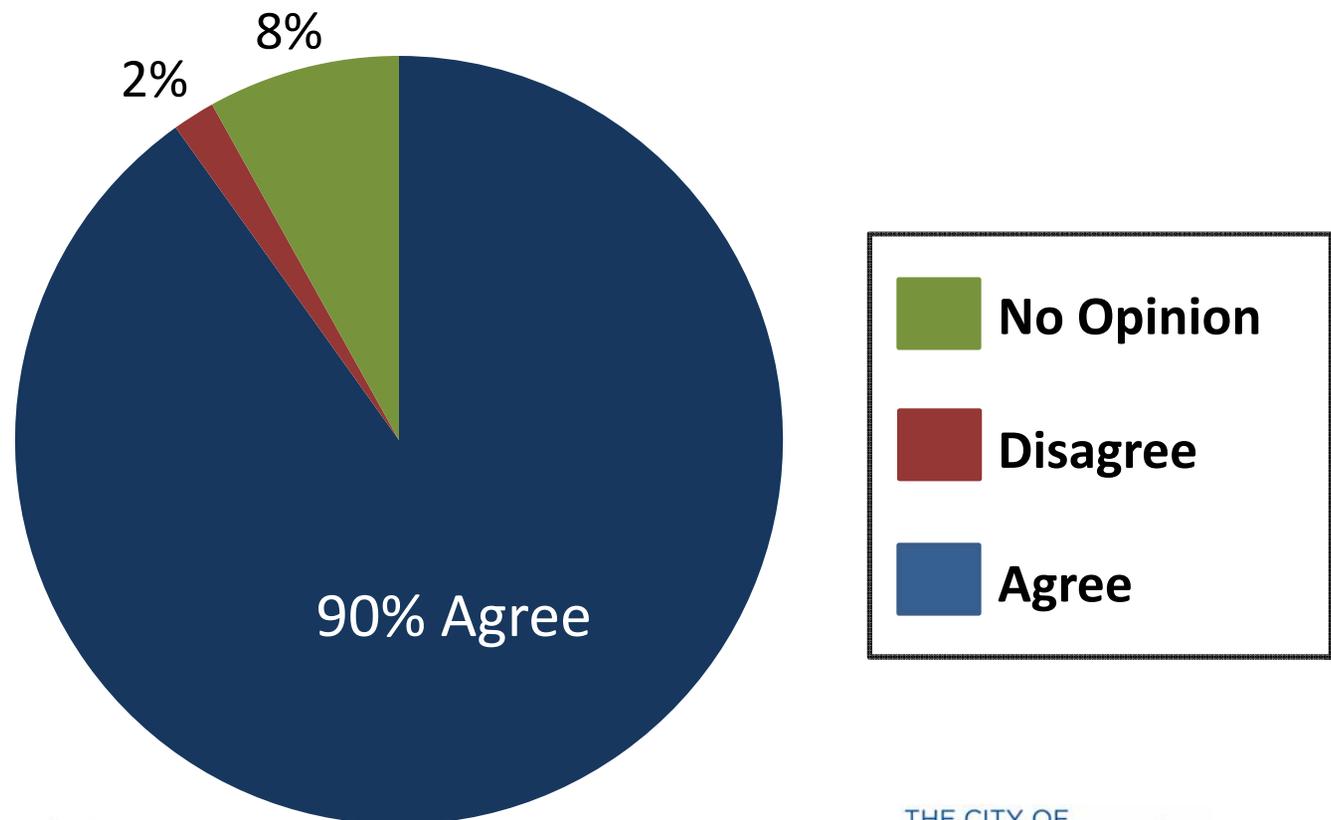


Learned from Survey

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2) The city should improve **ways for children to walk and bike safely to school**

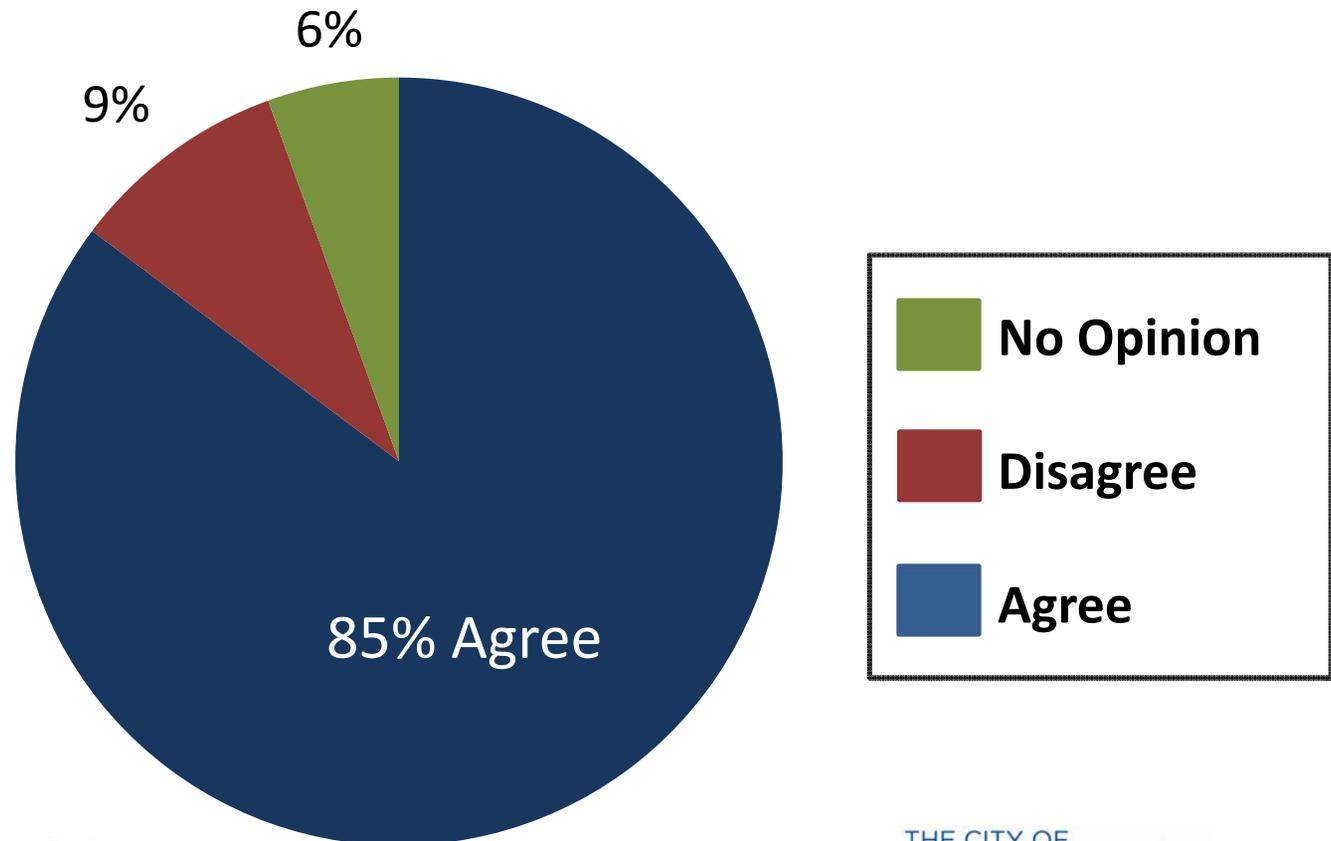


Learned from Survey

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3) The city should build **on-street, separated bikeways** (such as bike lanes)



Learned from Other Cities

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I choose
INFINITY miles to the gallon.

bikewalkmove.org

bike.walk.
MOVE



“Some say there are too many barriers to get northside residents to bike and walk more. I say, we’ve overcome barriers before.”



bike.walk.
MOVE

bikewalkmove.org

Made possible by the City of Minneapolis through funding from the Department of Health and Human Services and by Bike Walk Twin Cities, a program of Transit for Livable Communities, through the Federal Highway Administration.

Best Practice: Twin Cities

Personalized “I Choose” messages
Bike.Walk.MOVE. campaign

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Learned from Other Cities

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Designing safer streets

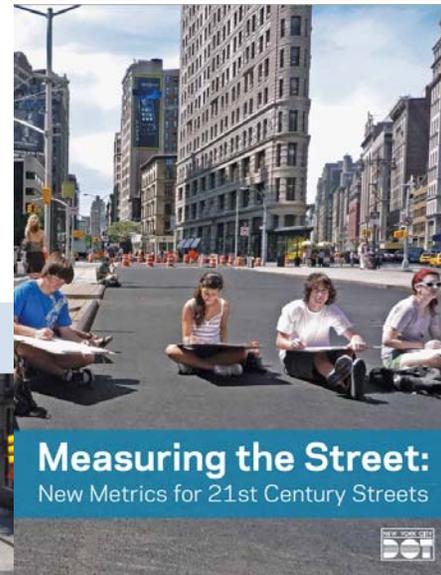
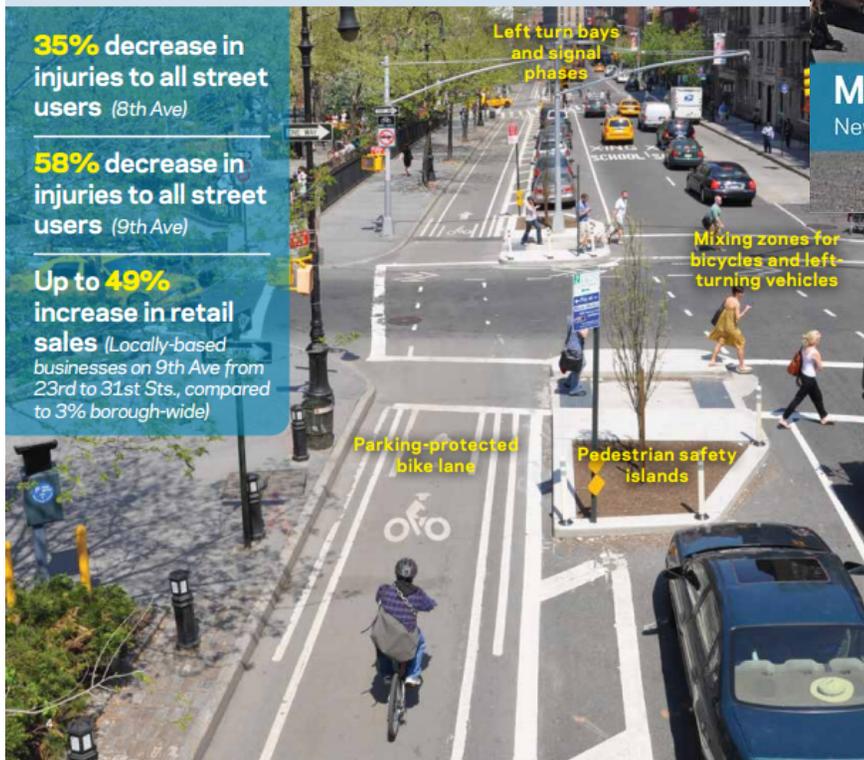
Safe and attractive options for all users

First protected bicycle lane in the US:
8th and 9th Avenues (Manhattan)

35% decrease in injuries to all street users (8th Ave)

58% decrease in injuries to all street users (9th Ave)

Up to 49% increase in retail sales (Locally-based businesses on 9th Ave from 23rd to 31st Sts., compared to 3% borough-wide)



Best Practice: New York City

- Extensive neighborhood education and engagement when new projects are introduced
- Before/after measurements to prove success

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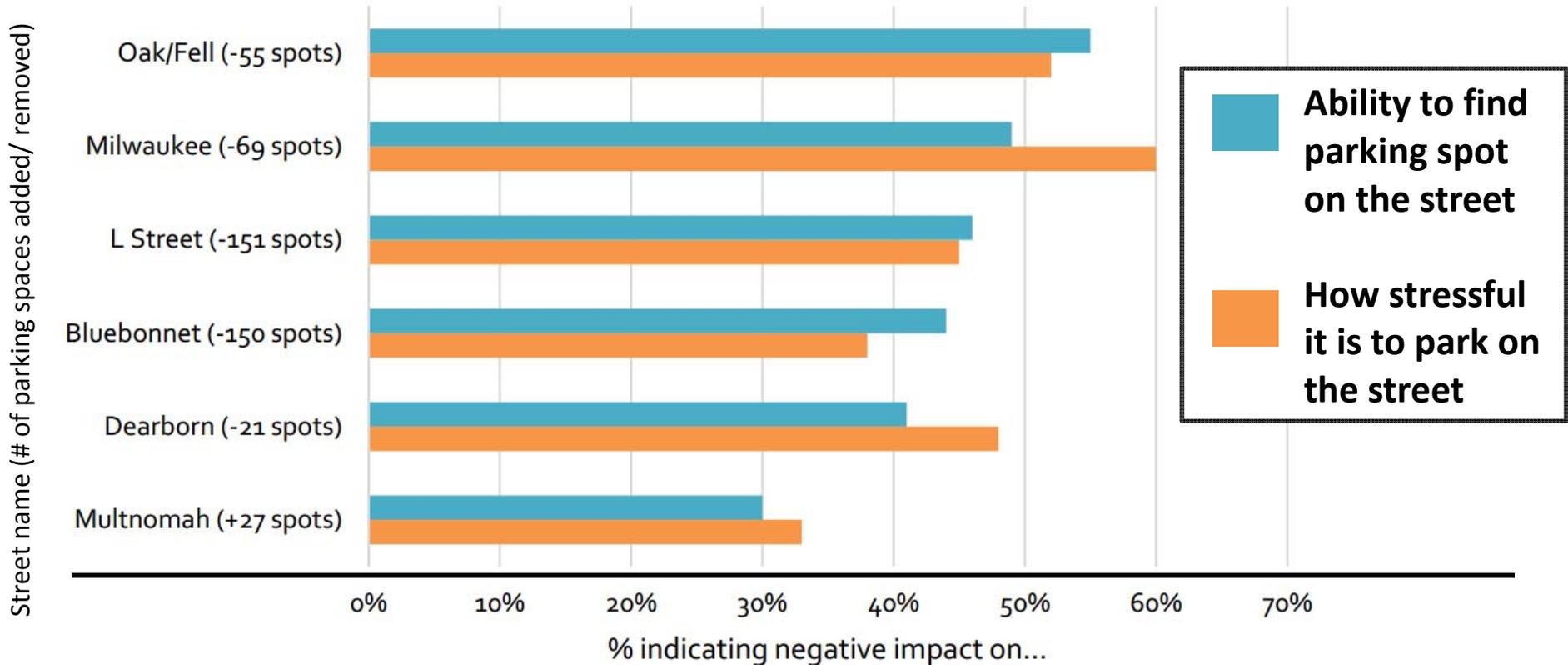
Best Practice: Stakeholder Outreach, Various Cities

- San Francisco – Focus groups with stakeholder groups, one per target audience (bicyclists, transit drivers, taxi drivers, truckers)
- New York – Act as a “consultant to the community”
- Tucson and Portland – Regular email newsletters. Tucson is a *BikeLife* city



Learned from Other Cities: Parking Perception vs. Reality

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Residents sometimes feel parking spaces are more difficult to find, even when the number of parking spaces within the project boundaries is not substantially impacted.

Learned from Other Cities: Economic Trade-Offs

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- City parking spaces are typically 23 ft x 8 ft wide, or 184 ft²
- A 184 ft² parking space can hold:
 - One car: spends \$21/hour avg.
 - Seven bikes: spend \$87/hour avg. total
 - Return more frequently and take up less space to shop

*www.peopleforbikes.org/blog/entry/streets-with-scarce-auto-parking-are-the-best-places-to-remove-auto-parking

*http://colabradio.mit.edu/wp-content/uploads/2010/12/Final_Thesis

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Discussion Guidelines

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See questions 1, 2, 3 & 4

First review/fill out the handouts individually

As a group, discuss:

1. Which 3 bike facilities would you most prefer to use; what 3 treatments would you least prefer
2. Which 3 spot improvements would you invest in?
3. How **safe/comfortable** would you feel biking along certain types of roads and paths? (identify top 2 or 3 as a group)
4. Identify challenges to implementing more bike treatments and **advise the City** how to address them

Prepare for report out



Report Out

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- Most/least desired bike treatments
- What makes you feel safest, most comfortable?
- How should City address challenges?

Next Steps

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- Digest your feedback
- Continue technical work/analysis
- Develop Share the Road – Phase 2 and seek sponsorship funding
- Convene public meetings for the Multi-Modal Transportation (Complete Streets) Plan this fall

All of today's materials are at
<http://columbus.gov/bikeplan>



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Table Discussion Handouts

Question #1: Which corridor treatments would you invest in for a safer and more comfortable bicycling environment in Columbus?

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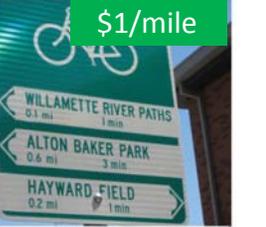


****Note****

Costs are order of magnitude adjusted. They do not represent the actual costs of infrastructure implementation, but rather present a relative comparison for the purposes of this exercise.

You have **\$100** to invest in bicycling infrastructure across Columbus over the next five years. See the description and relative cost of each treatment below. ****** Buy the amount of miles of each treatment you feel would be the best investment. Tally your sheet on your own, then, as a group, identify the top three preferred corridor treatments and the three least preferred options.

Corridor Treatments
(\$100 to invest)

					
\$5/mile	\$3/mile	\$2/mile	\$1/mile	\$2/mile	\$1/mile
# miles: total cost:	# miles: total cost:	# miles: total cost:	# miles: total cost:	# miles: total cost:	# miles: total cost:
Cycle Tracks	Buffered Bike Lanes	Bicycle Lanes	Enhanced Sharrows	Bicycle Boulevard/ Neighborhood Greenway	Bicycle wayfinding signage

Cycle tracks are bicycle-exclusive, on-street facilities. The user experience is similar to an off-street trail. They are either raised or at street level and use a variety of elements for physical protection from passing traffic.

Buffered bike lanes are widened bike lanes with painted buffer on one or both sides. Buffered lanes discourage vehicular encroachment and encourage bicyclists to ride outside of the "door zone"

These facilities use two stripes of paint or thermoplastic material to mark a travel lane for bicycles.

The "sharrow" typically consists of two chevrons and a bicycle symbol painted on the pavement. Enhanced sharrows use supplemental markings to increase the sharrows' visibility and show motorists where to expect bicycles.

Bicycle boulevards or neighborhood greenways are installed on low car traffic routes, often through residential areas. They use on-pavement bicycle symbols and a variety of traffic calming devices to reduce car speeds and volumes.

Wayfinding signage guides bicyclists along bicycle-preferred routes. Signage can also depict distance and travel time to popular destinations. Branding signage with city logos or a bike path logo/visual identity increases the route's recognition.



Question #2: Which spot treatments would you invest in for a safer and more comfortable bicycling environment in Columbus?

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You have **\$50** to spend on bicycling infrastructure across Columbus over the next five years. Buy the combination of treatments that you feel would be the best investment for making Columbus a safer and more comfortable place for bicycling. See the description and relative cost of each treatment below. **** Buy the number of locations of each treatment you feel would be the best investment. Tally your sheet on your own, then, as a group, identify the top three preferred spot treatments.**

Spot Treatments
(\$50 to invest)

 \$2/location	 \$2/location	 \$4/location	 \$1/location	 \$3/location
# locations: total cost:	# locations: total cost:	# locations: total cost:	# locations: total cost:	# locations: total cost:
Bicycle Intersection Safety Improvements	Green Pavement	Active Warning Beacons	High-visibility Crosswalks	Traffic Calming Strategies

****Note****
Costs are order of magnitude adjusted. They do not represent the actual costs of infrastructure implementation, but rather present a relative comparison for the purposes of this exercise.

Intersection improvements help reduce the chance of crashes within intersections and increase users' comfort in these areas. Treatment examples include colored pavement, bicycle markings, bicycle signals and bike boxes.

Designers use green pavement coloring as another method to remind others to look for bicycles. Coloring improves safety at conflict points between bicyclists and vehicles such as driveways and intersections.

Bicyclists or pedestrians activate flashing stop or caution lights at mid-block crossings or intersections to signal warning or "stop" to drivers. The beacons are combined with a pedestrian or bicycling crossing sign.

High-visibility crosswalks use thick "piano key" stripes to mark pedestrians' paths. Some crosswalks also use reflective paint and/or are paired with crossing signs and warning beacons.

Traffic Calming refers to devices designed to lower drivers' speeds and make a street safer for all roadway users. Speed bumps, bulb-outs, and traffic circles are examples of additions to a street that encourage this behavior.



Questions #1 and #2 supplemental descriptions and photos

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Cycle Tracks

Alternate Protection Strategies

12 Tubular Markers



7 Movable Planters



14 Raised Curb



Questions #1 and #2 supplemental descriptions and photos

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Intersection Treatment Examples



Questions #1 and #2 supplemental descriptions and photos

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Bicycle Boulevard/Neighborhood Greenway



Neighborhood Traffic Circle TUCSON, AZ



Diagonal Diverter PORTLAND, OR



Curb Extension Bioswale Retrofit PORTLAND, OR



Median Refuge Island DAVIS, CA



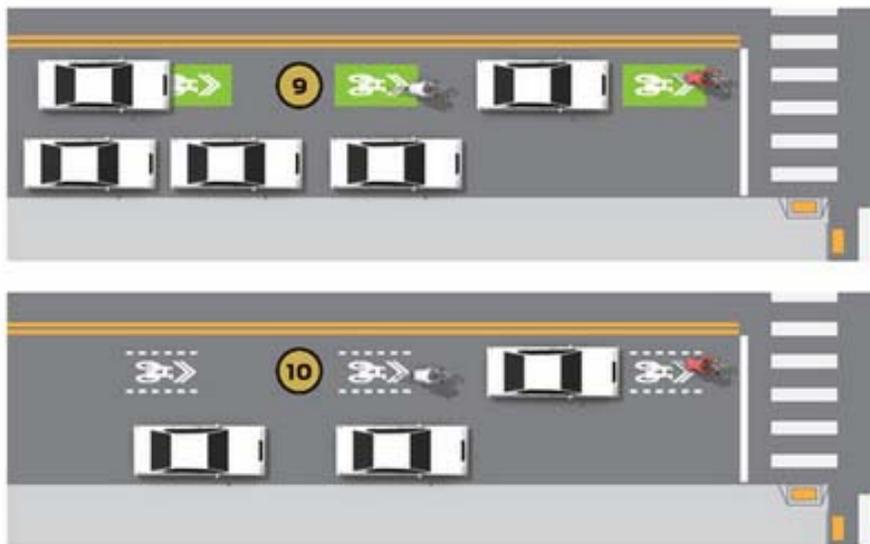
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Questions #1 and #2 supplemental descriptions and photos

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Enhanced Sharrows



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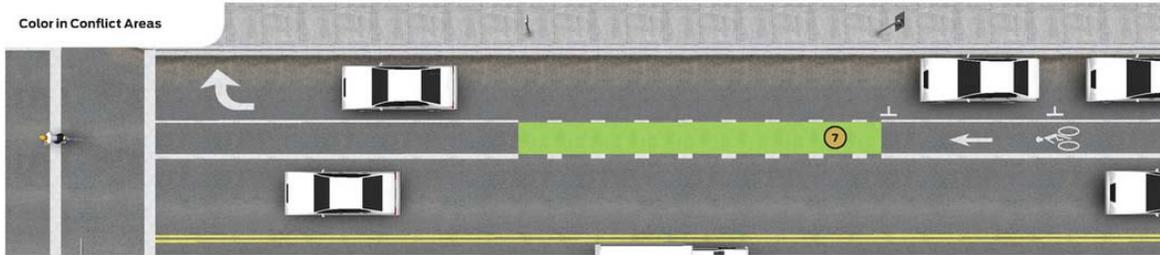
Questions #1 and #2 supplemental descriptions and photos

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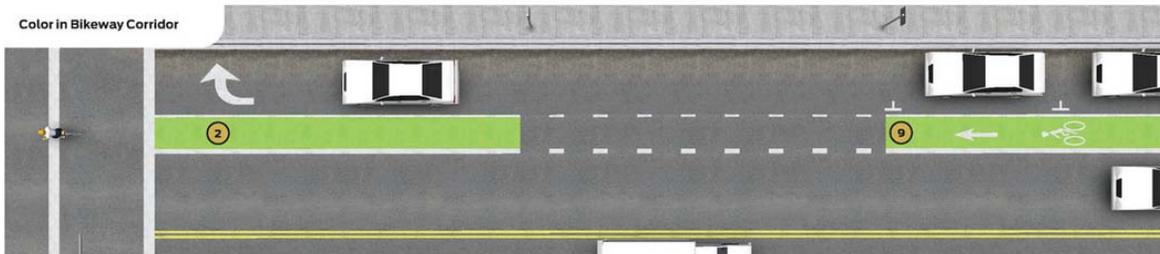


Colored Pavement

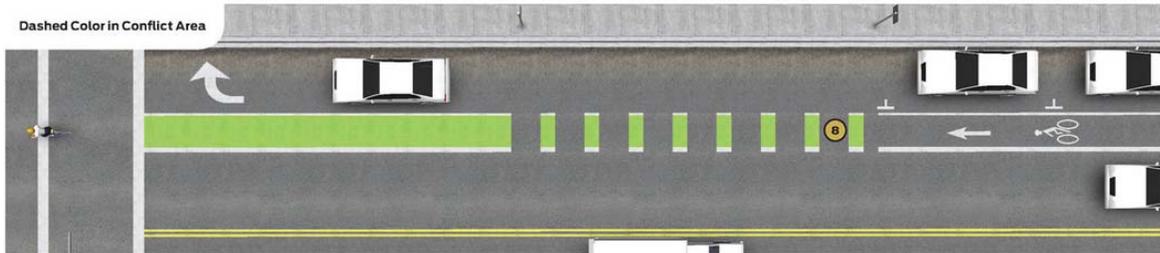
Color in Conflict Areas



Color in Bikeway Corridor



Dashed Color in Conflict Area



TUSCON, AZ



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Note Paper

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Question #3: Indicate how comfortable you would feel biking in each of these scenarios. Circle the notch on the scale that best describes your comfort level for each box below.

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Least Comfortable Most Comfortable	Least Comfortable Most Comfortable	Least Comfortable Most Comfortable	Least Comfortable Most Comfortable	Least Comfortable Most Comfortable
Residential street without bicycle facilities	Street with bike lane	Green bike lane and/or buffered bike lane	Shared-use path	4-6 lane arterial, no bicycle facilities
Least Comfortable Most Comfortable	Least Comfortable Most Comfortable	Least Comfortable Most Comfortable	Least Comfortable Most Comfortable	Least Comfortable Most Comfortable
Cycle track	Street with shared lane markings	Signed Bike Route with no other bicycle facilities	Wide outside lane, no shoulder	Bicycle boulevard/Neighborhood Greenway

