



KEY WEST

**Bicycle and Pedestrian
Master Plan**

Bicycle and pedestrian transportation master plan

Parking and Alternative Transportation Group

January 25, 2018



Today's Presentation

- Project Status Update
 - Progress on Key Tasks
- Overview - Proposed Bicycle Network
- Multimodal Connectivity Plan



Source: [fury.com](https://www.fury.com)



Project Status Update

Project Vision and Goals
Project Schedule



Vision and Goals

PROJECT VISION:

Key West is a vibrant biking and walking friendly community due to its innovative, collaborative and consistent work to establish connectivity, safety, and comfort on streets and other paths. Multi-modal mobility options support the quality of life and economic vitality for the City, its residents, businesses, and visitors.

GOAL 1: Accessibility and Mobility

GOAL 2: Safety and Comfort

GOAL 3: Sustainability and Stewardship



Proposed Project Completion Schedule

TASK DESCRIPTION	TASK	DEC		JAN				FEB				MAR				APR	
		3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Project Administration	1																
Public Engagement and Needs Assessment	2																
Existing Conditions Inventory	3																
Complete Streets Design Guide	4																
Bicycle and Pedestrian Network Plans	5																
Engineering Plan	6																
Programmatic Recommendations	7																
Multi-Modal Connectivity Plan	8																
Implementation Plan	9																
Final Bicycle and Pedestrian Master Plan	10																



We are here!



Report on Key Tasks

Public Engagement
Existing Conditions
Complete Streets Resource
Multimodal Connectivity Plan
Engineering Plans
Final Plan



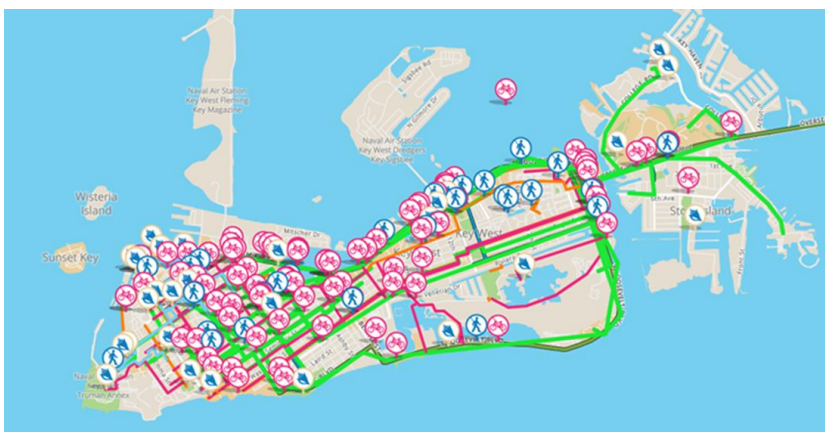
Public engagement

Online

- Wikimap
- Multimodal Surveys

In-person

- Common Sense Comment Boards
- Stakeholder Interviews
- Open House





KEY WEST

Bicycle and Pedestrian Master Plan

Preliminary Wikimap Summary

As of August 25, 2017, the WikiMap has received **85** line comments and **157** point comments from **204** users within the study area

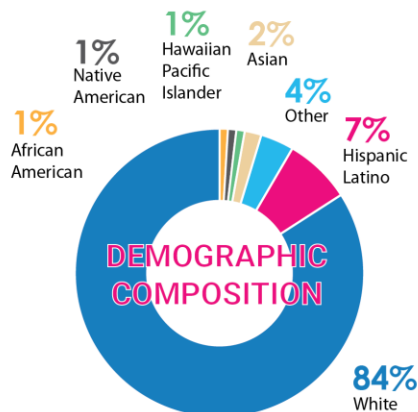
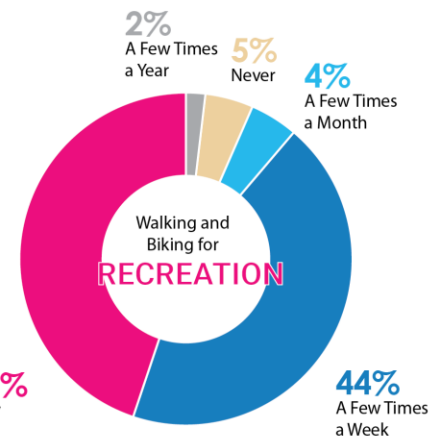
Wikimap summary

BICYCLING HABITS

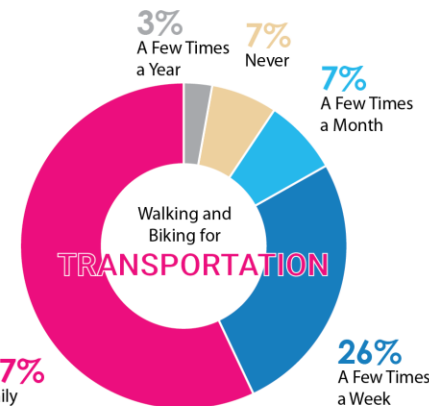
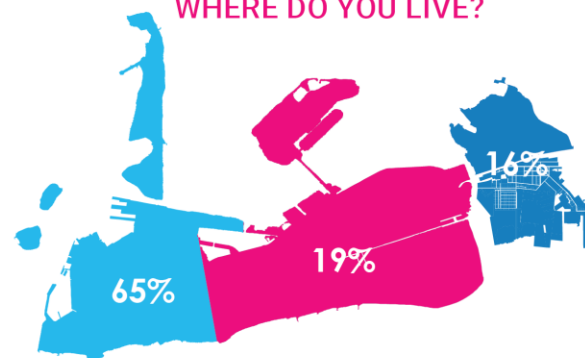
4% 20% 53% 23%



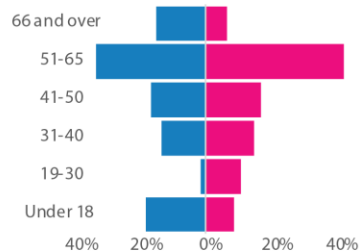
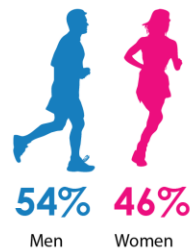
I do not ride a bicycle and am unlikely to ever do so
I prefer not to ride in traffic, so I stay on trails
I am willing to ride in traffic, but I prefer dedicated bike lanes and routes
I am willing to ride in mixed traffic with cars on almost any type of street



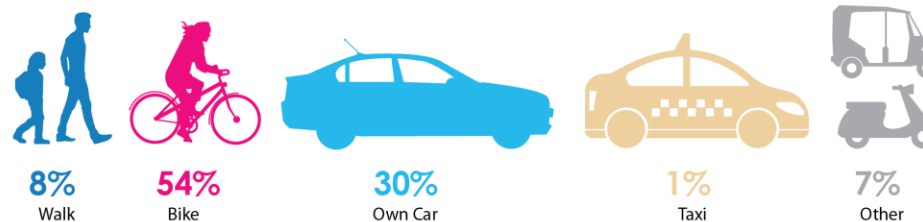
WHERE DO YOU LIVE?



SEX



PRIMARY MODE OF TRANSPORTATION



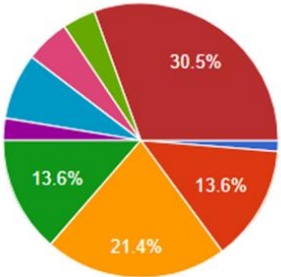


comment boards



Comment Board Location

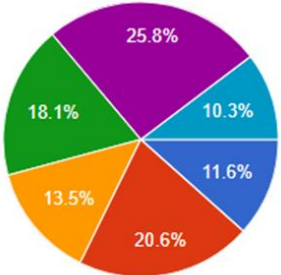
154 responses



- Bridge at Staples (BR)
- City Hall (CH)
- Faustos (FA)
- Hogfish (HF)
- Key West Business Guild (BG)
- Starbucks (SB)
- We Cycle Old Town (WC1)
- We Cycle Stock Island (WC2)
- Open House (OH)

Topic

155 responses

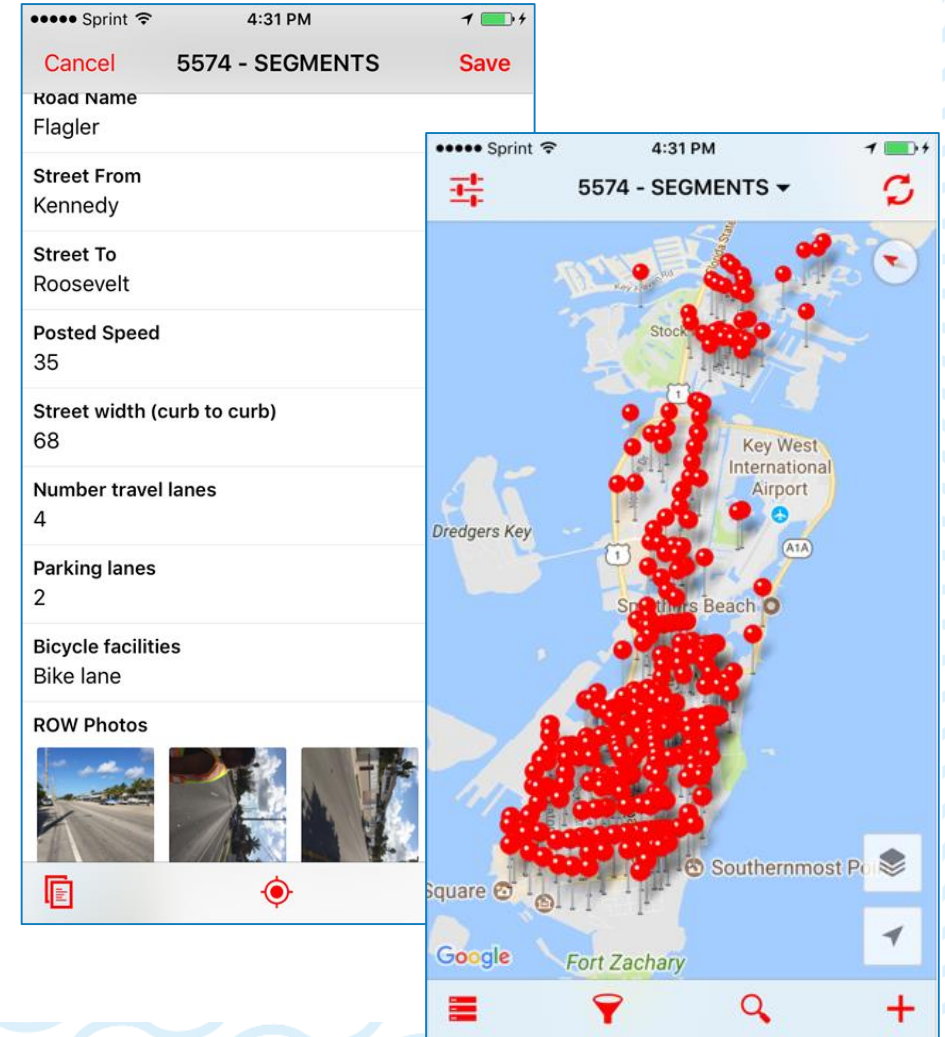


- Barriers for Walking
- Complete Streets
- Connectivity
- Mobility
- Safety
- Signage/Wayfinding

Existing conditions

Field Observations

- May 1-4, 2017
- Collected data on 61 intersections and 300 street segments
- Informed development of DRAFT network





Complete streets resource

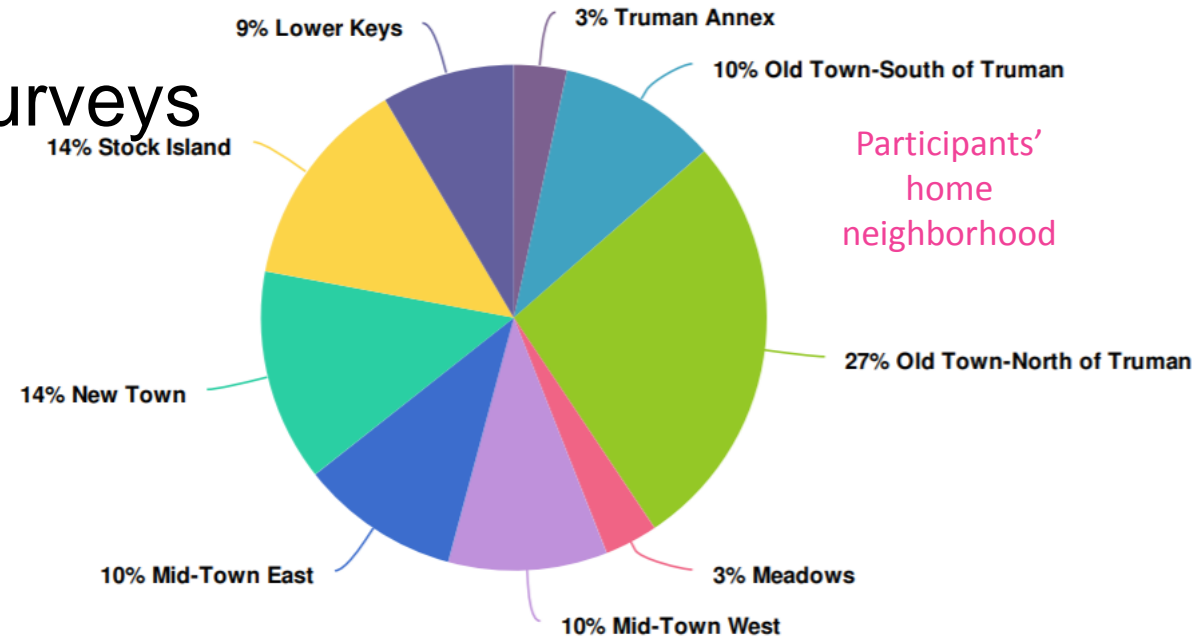
- Introduction to Complete Streets and this Guide
- Scenarios and Facility Design Guidance
- Other typical facility types
- Available resources
 - National resources
 - State and local resources





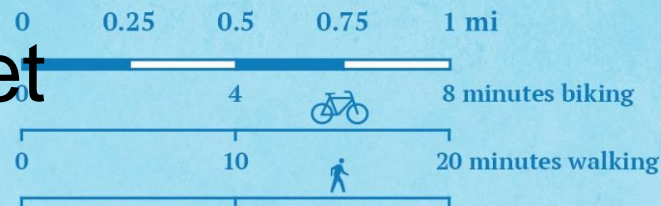
Multimodal connectivity plan

- Community Conversation via 5 Surveys
- 64 participants
- Survey topics:
 - Safety – August 23
 - Technology – August 31
 - Shared economy – September 7
 - Transit – September 14
 - Getting there and back – September 21
- **Survey focus:** how to encourage and support fewer on-island motor vehicle trips



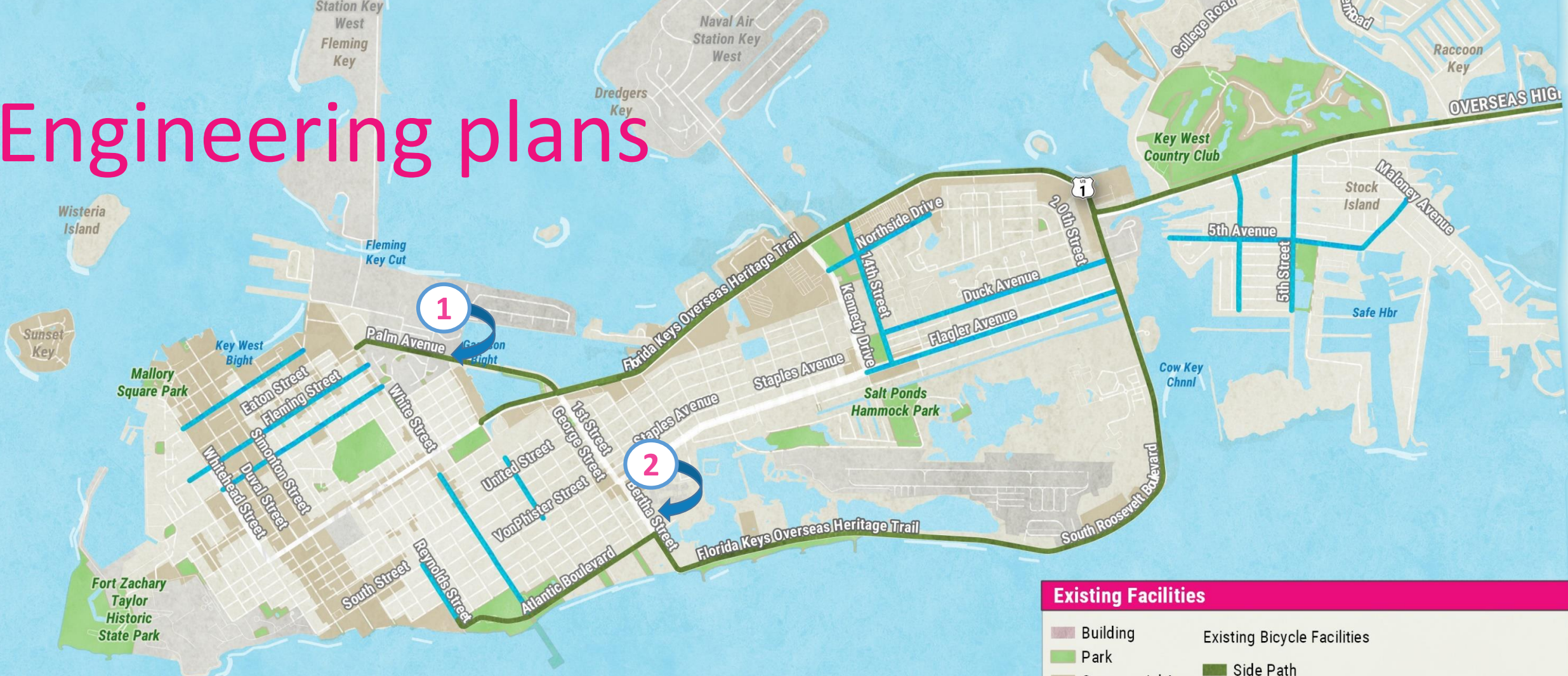
Engineering plans

- Palm Avenue
- Bertha Street



Existing Facilities

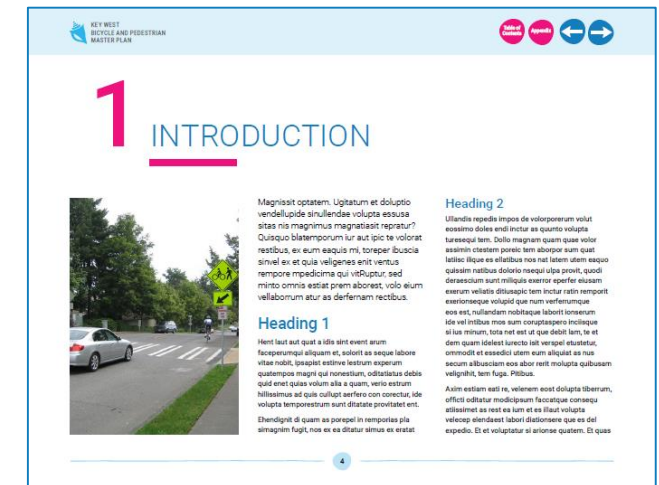
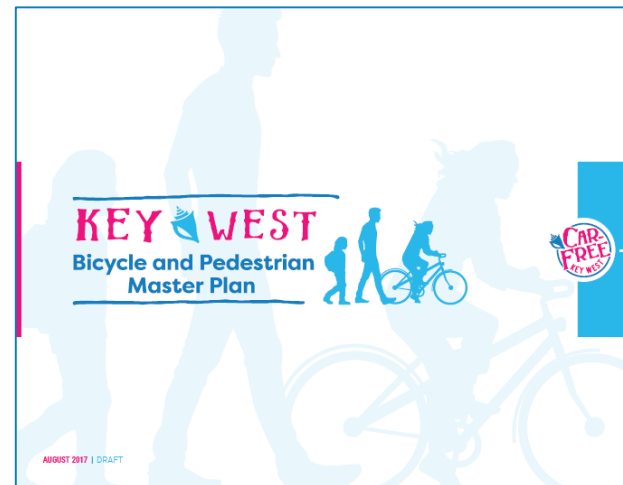
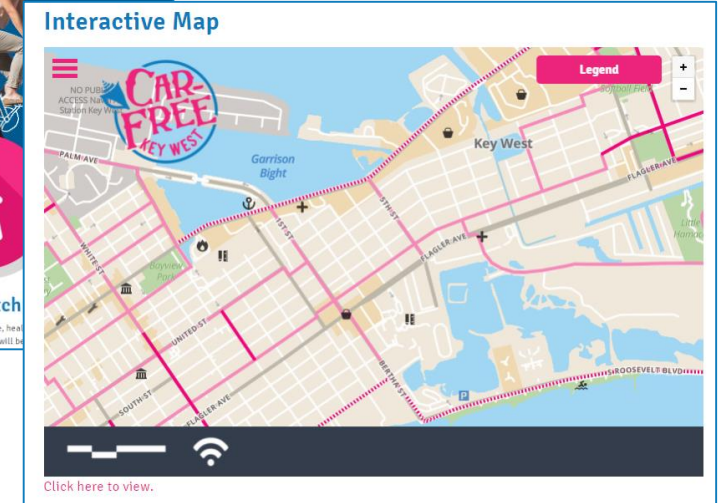
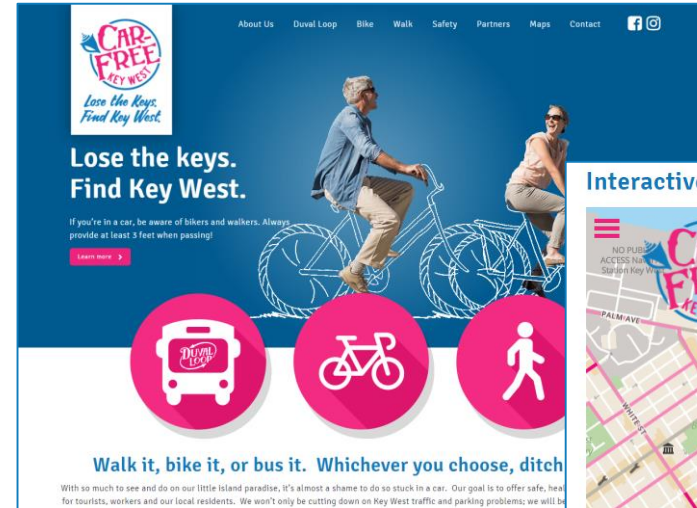
Building	Existing Bicycle Facilities
Park	Side Path
Commercial Area	Bike Lane





Final plan

- Shared branding with Car-Free Key West
- Bicycle and Pedestrian Network Map integrated with interactive map
- Easy to navigate digital resource





Proposed Bicycle network

Methodology and Guiding Principles

Review of Recommendations

Methodology and Guiding Principles

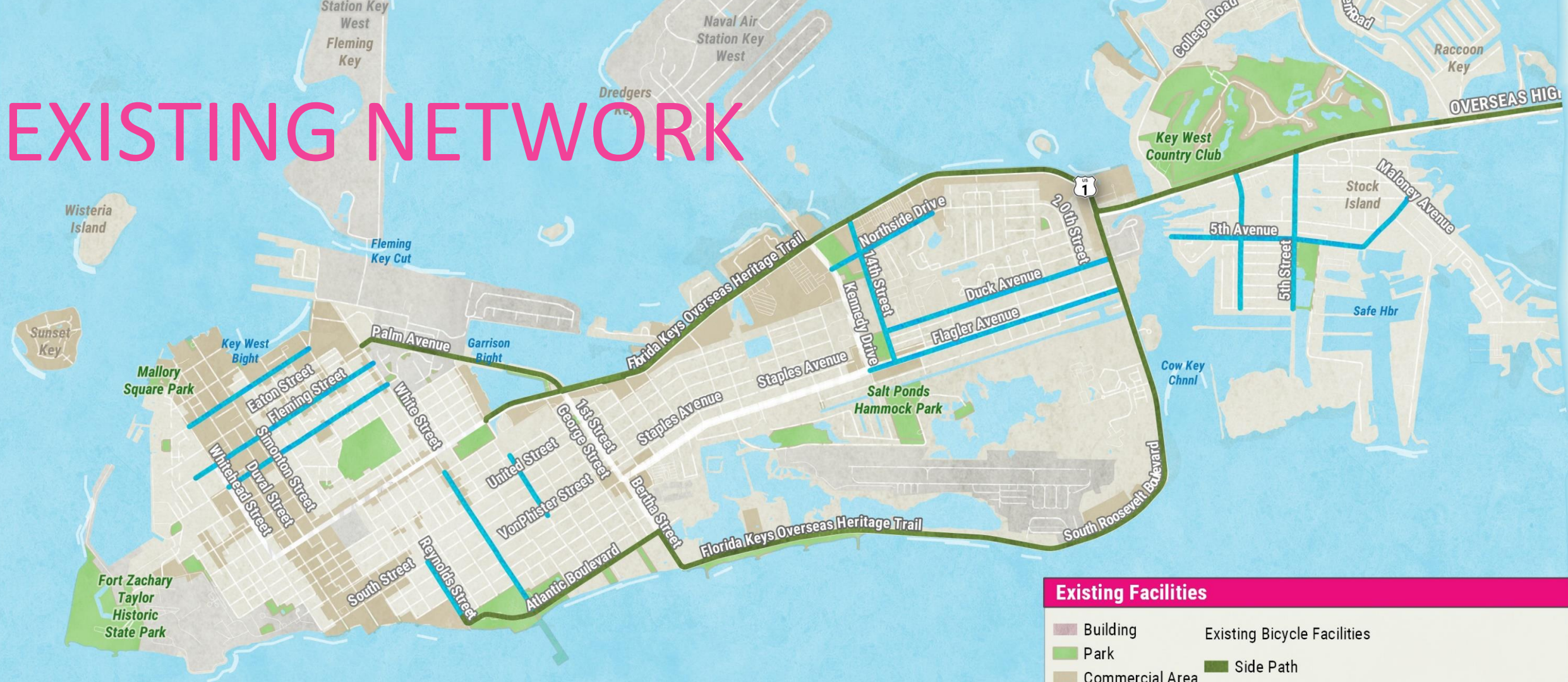
Guiding Principles

- Project Goals
- World Class
- Safe and Connected
 - All ages
 - Separation of modes
- Path as Place
 - The “getting there” is as nice as the “being there”

+ Opportunities and constraints = Network Recommendations

- Demand for parking
- Public input
- Field observations: experience vs. data
- Preliminary engineering
- Alternative Network
- Preferred Network

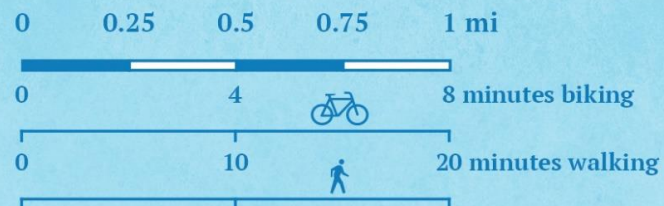
EXISTING NETWORK



Existing Facilities

	Building		Park
	Commercial Area		Side Path
			Bike Lane

* Local informal routes Not featured



EXISTING NETWORK

How does it measure up?

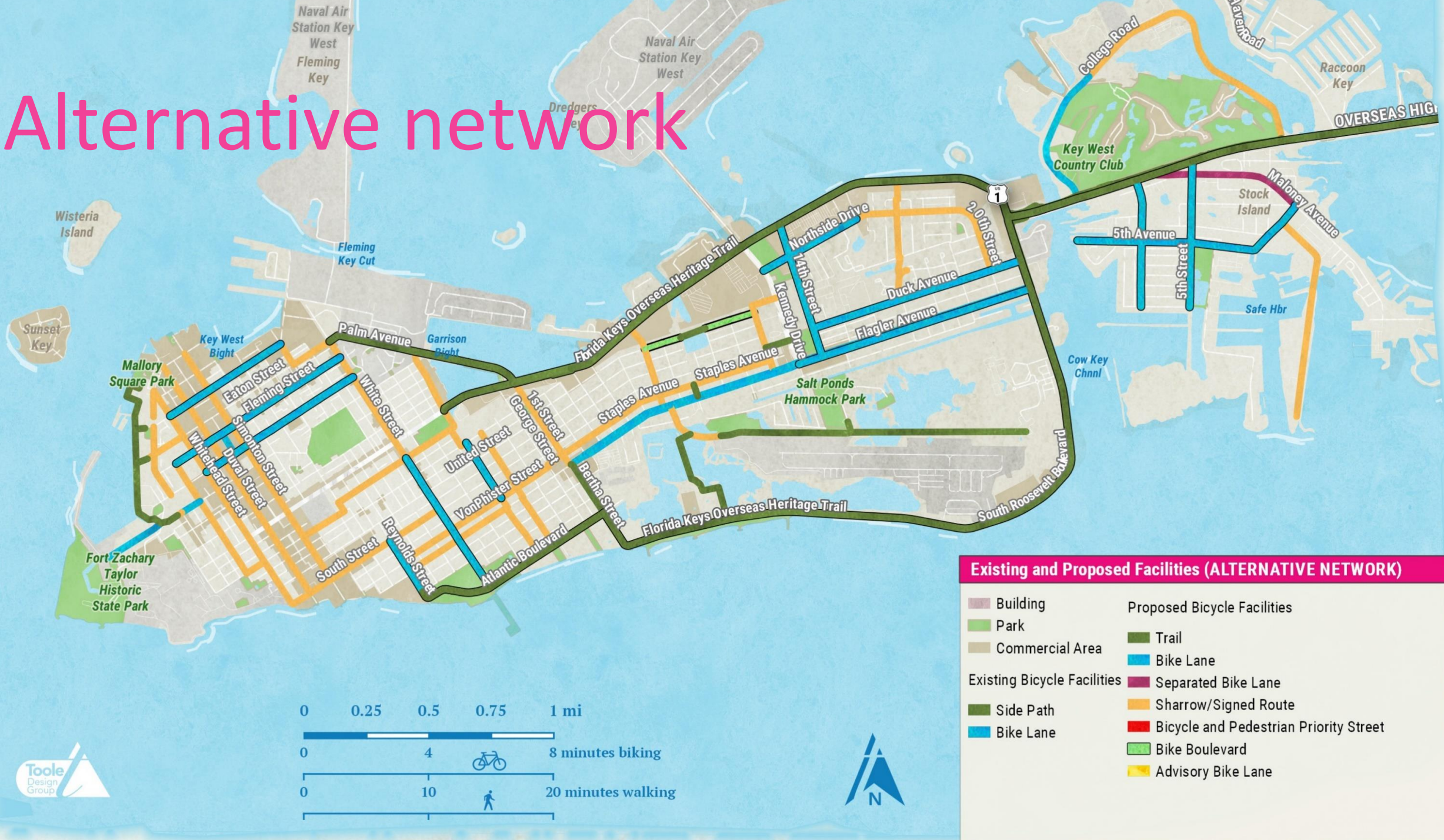
	Measures
Connectivity	↓
Separation between modes (comfort)	↓
On-street parking supply	↔
Cost	↔
Level of effort	↔

↑ High

↔ Neutral

↓ Low

Alternative network



Alternative network

How does it measure up?

	Measures
Connectivity	↑
Separation between modes (comfort)	↓
On-street parking supply	↔
Cost	↓
Level of effort	↓

↑ High

↔ Neutral

↓ Low



These are
jeff's
kids...

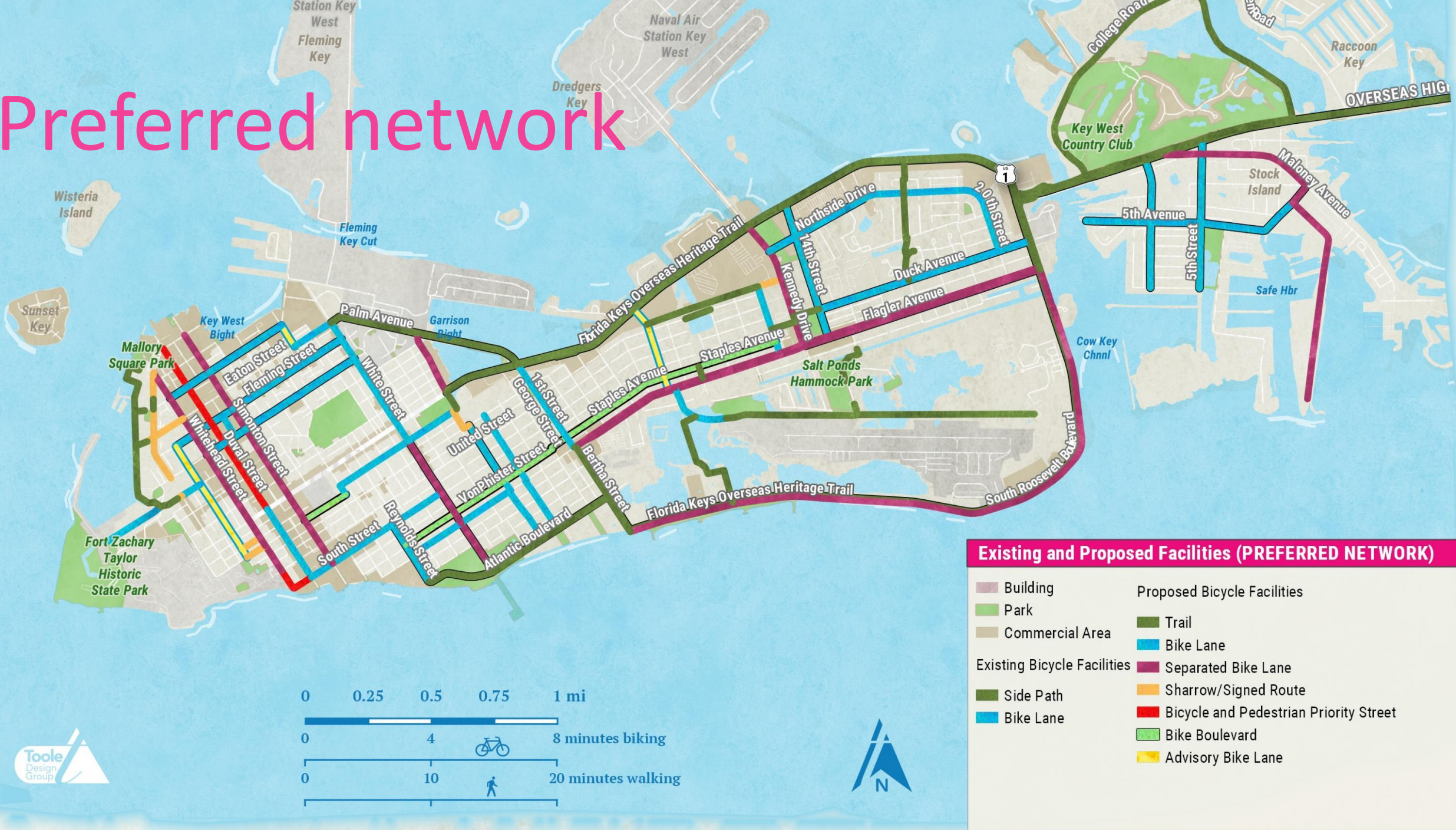




Where would you rather have Jeff's kids bike?



Preferred network



Preferred network

How does it measure up?

	Measures
Connectivity	↑
Separation between modes (comfort)	↑
On-street parking supply	↓
Cost	↑
Level of effort	↑

↑ High

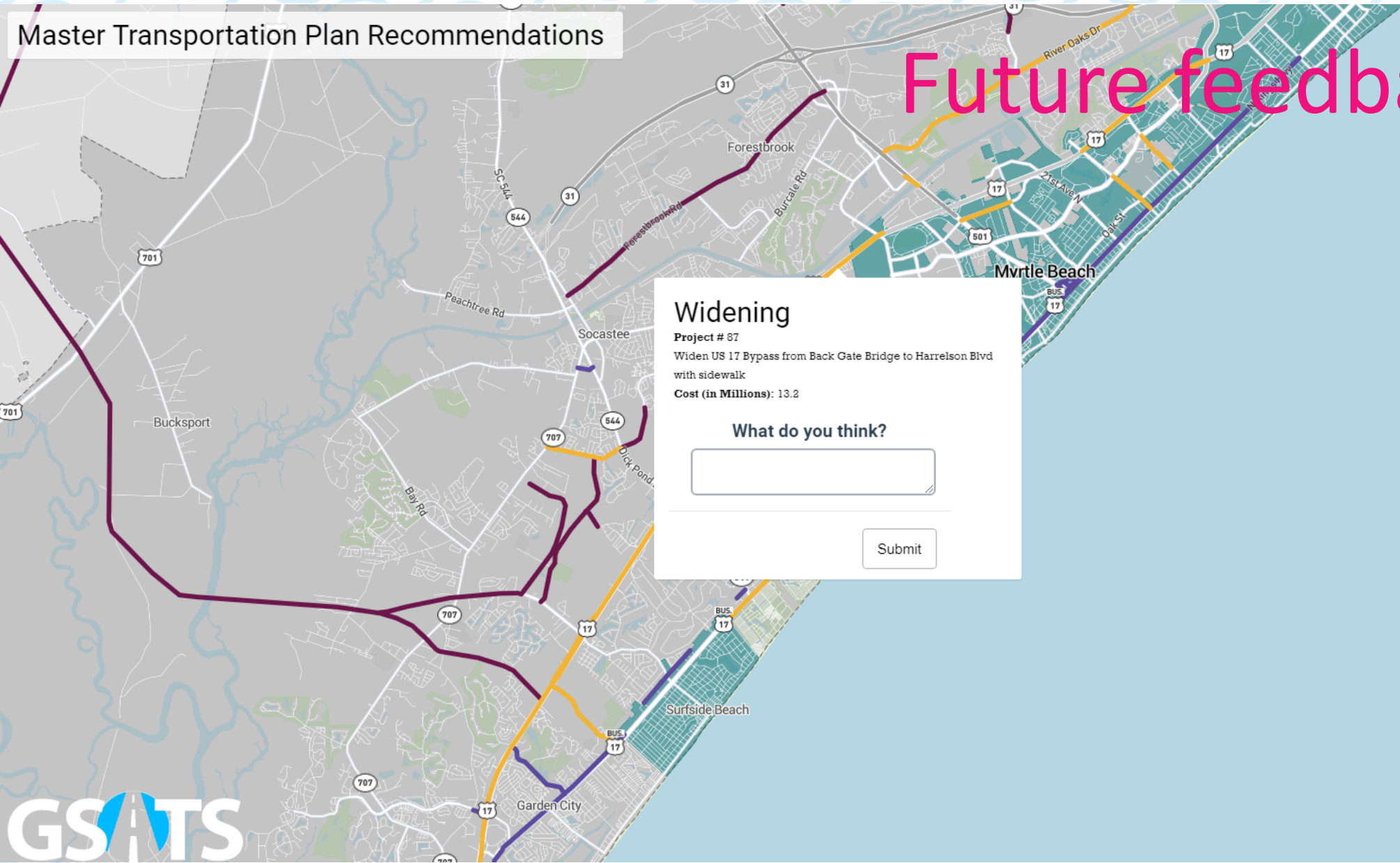
↔ Neutral

↓ Low

Pedestrian improvements



Future feedback map



Widening

Project # 87
Widen US 17 Bypass from Back Gate Bridge to Harrelson Blvd with sidewalk
Cost (in Millions): 13.2

What do you think?

Submit

Instructions

Click on a draft recommendation line to see more information and add your comments.

Draft Recommendations

- Access Management/Streetscape/Complete Streets
- New Construction
- Widening



Project Next steps

- Revise network and prepare for public comment
 - Move forward with:
 - Finalize Complete Streets Guidance
 - Multimodal Connectivity Plan
 - Programmatic Recommendations
 - Funding, Maintenance and Implementation Plan
 - Plan next round of public engagement
- Draft Plan



KEY WEST

**Bicycle and Pedestrian
Master Plan**

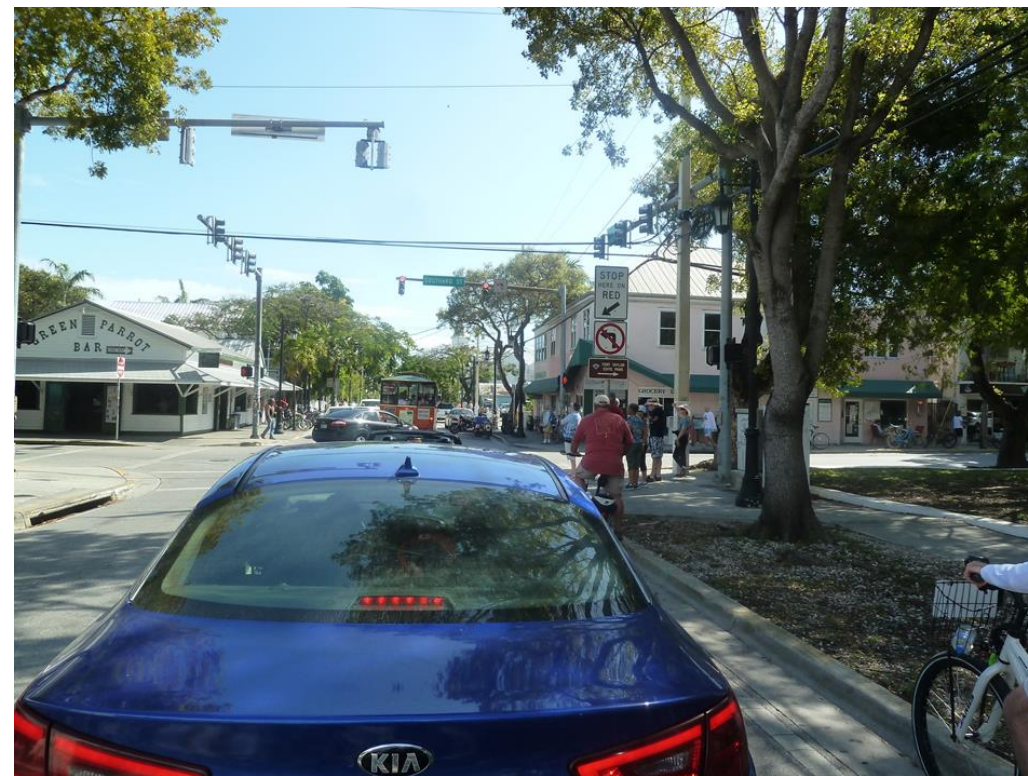
Multimodal Connectivity Plan

May 2, 2017

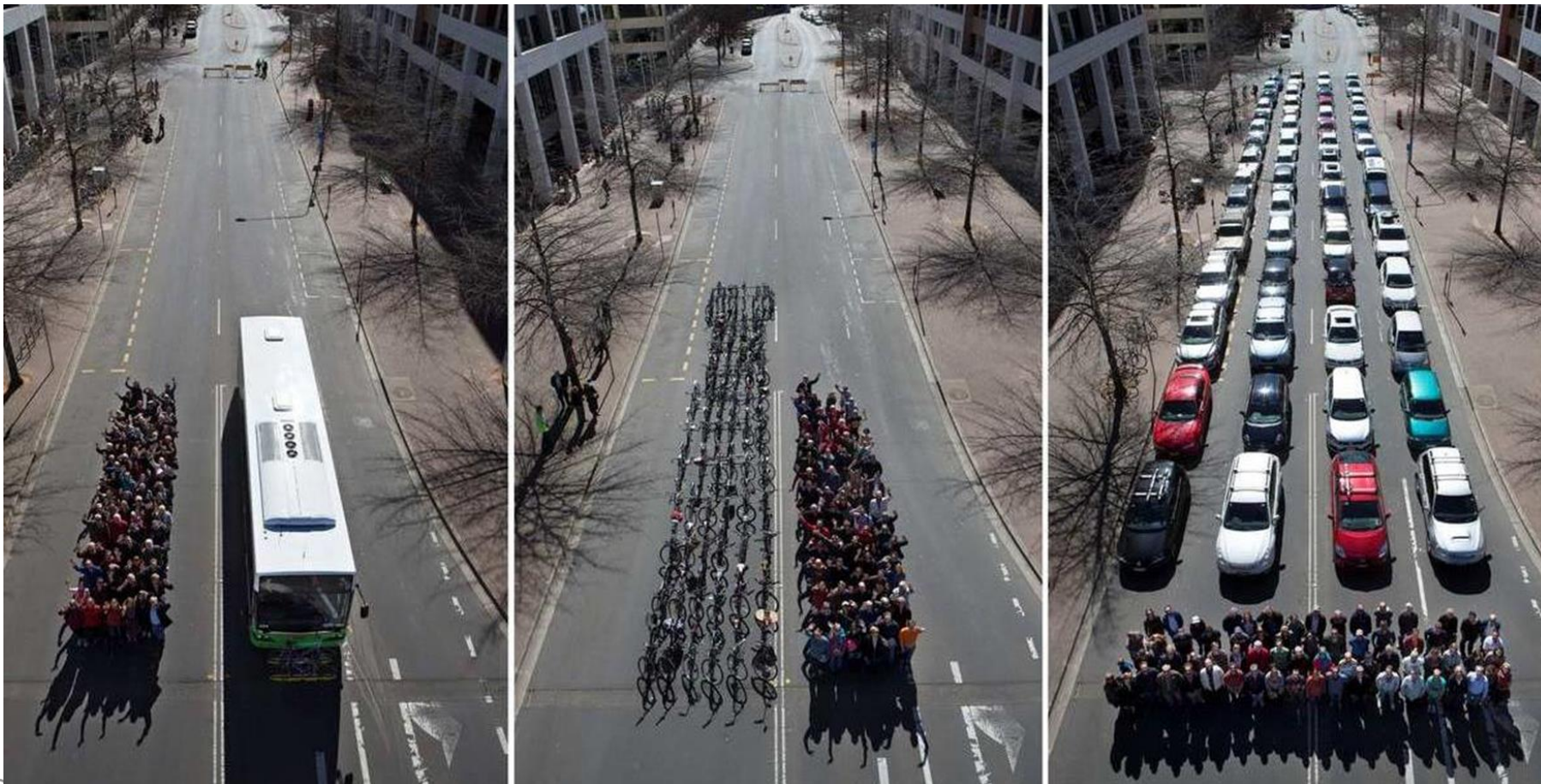


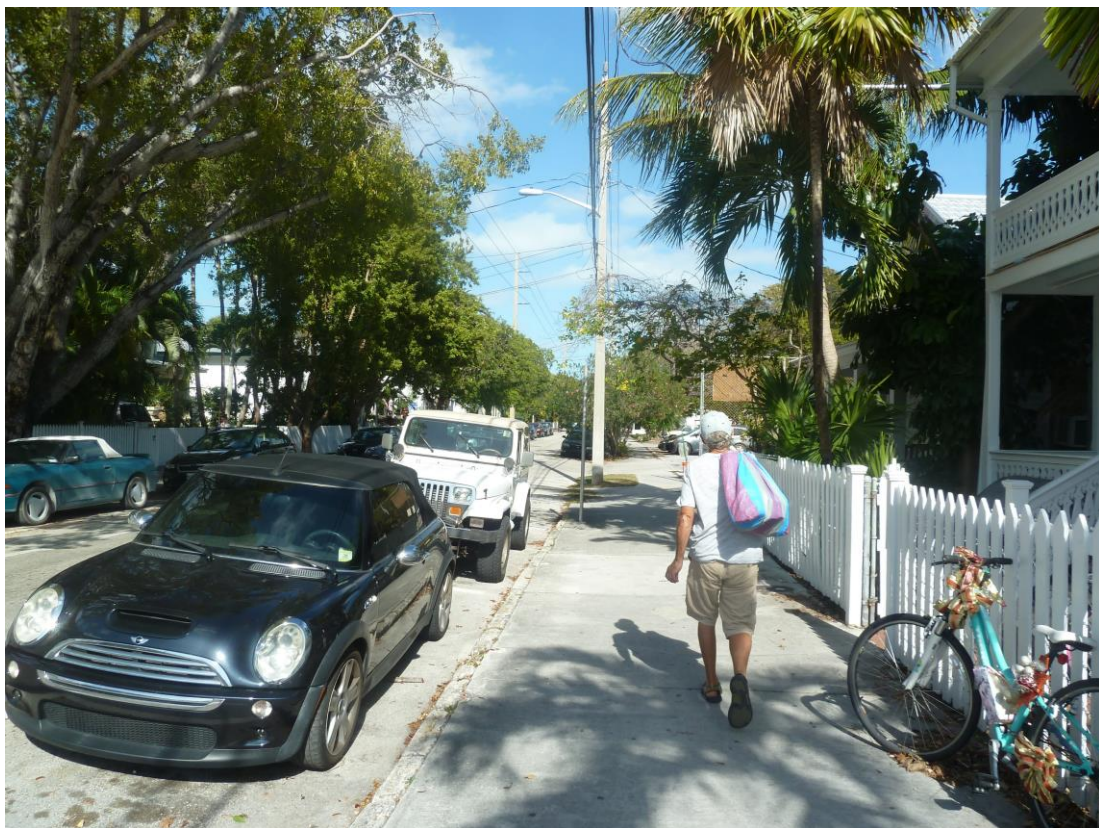
Multimodal Connectivity Plan

- A set of actions that support mobility
- Affects single mode travel
- Makes multimode travel more seamless
- Includes a mix of infrastructure, policy and program and technology elements
 - Hardware - infrastructure
 - Software – education, information (including technology)
 - Orgware – policies and programs



Multimodal transportation network





Connection between bike plan and parking and alternative transportation committee



How to connect the work

- Bicycle and Pedestrian Master Plan and the Parking and Alternative Transportation Group's work
 - Consider use of public right-of-way
 - Develop workable solutions for parking demand
 - Identify programs and strategies for multi-modal
 - Reduce crash risk for all



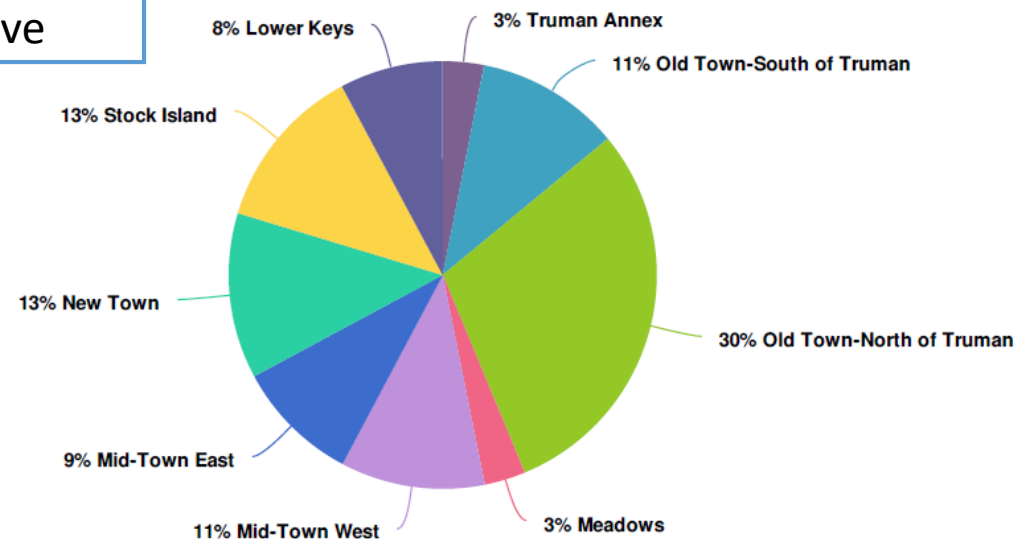


Multimodal Connectivity Plan

Approach

- Participant survey
 - Groups of respondents
 - Sequenced surveys over several weeks
- Focus on 5 areas:
 - Safety (46)
 - Technology (52)
 - Shared Economies (42)
 - Transit (33)
- Getting there and back (32)

Where I
live



My age

Value		Percent
20 to 35	<div><div></div></div>	14.7%
36 to 50	<div><div></div></div>	30.9%
51 to 65	<div><div></div></div>	33.8%
over 65	<div><div></div></div>	20.6%

Building a Multimodal Connectivity Plan

What we learned from the
surveys





Safety

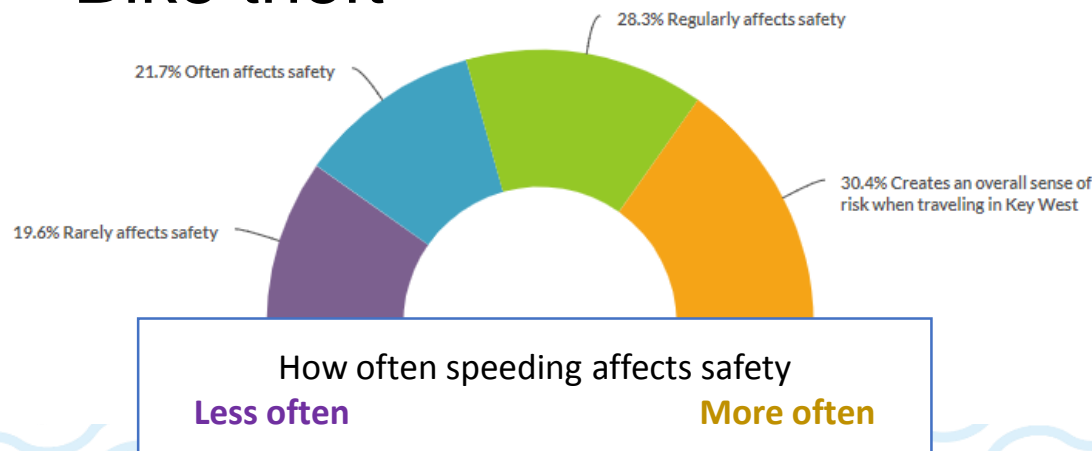




Safety

We asked about

- Speeding
- Other behaviors
- Most effective tactic
- Public education campaigns
- Bike theft



We learned that

- Desire for more enforcement
 - Speed
 - Travel patterns
 - Bike lights
 - Bike thefts
- Desire for more public education (media campaign and tied to enforcement)
- Certain infrastructure changes can reduce crash risk

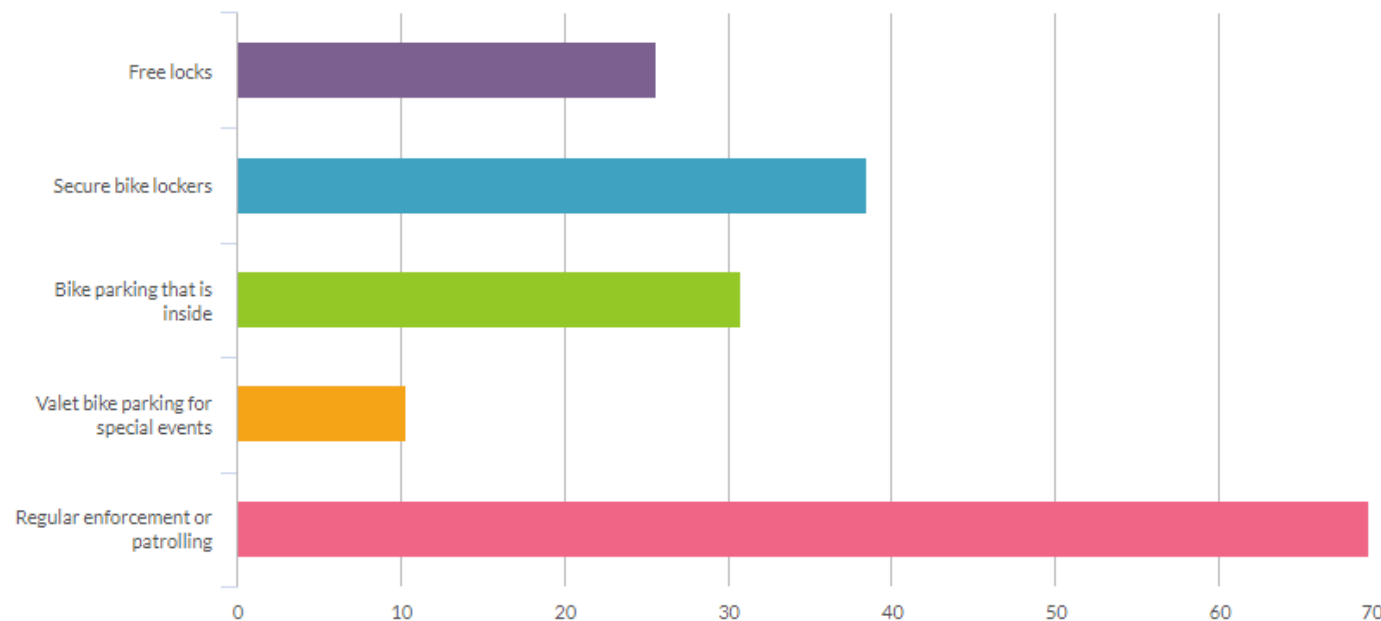


Safety

What does this mean for the Multimodal Connectivity Plan?

- Enforcement campaigns
- Secure bicycle parking
- Other infrastructure changes to reduce crash risk
 - Speeding
 - Site lines

10. What types of measures would reduce the likelihood your bike being stolen?



Technology





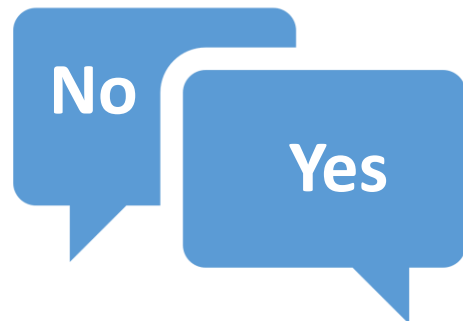
Technology

We asked about

- Smart phones
 - Real time information
 - Reservations
- Smart cards
 - Passes
 - Payments

We learned that

- Technology can help with travel choices, especially for
 - Real time information
 - Paying
 - tracking



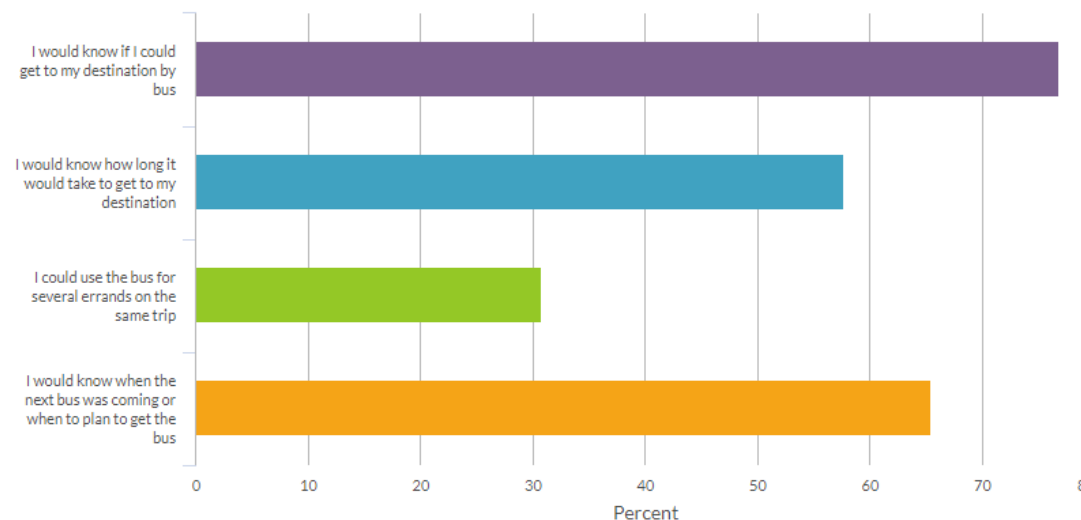
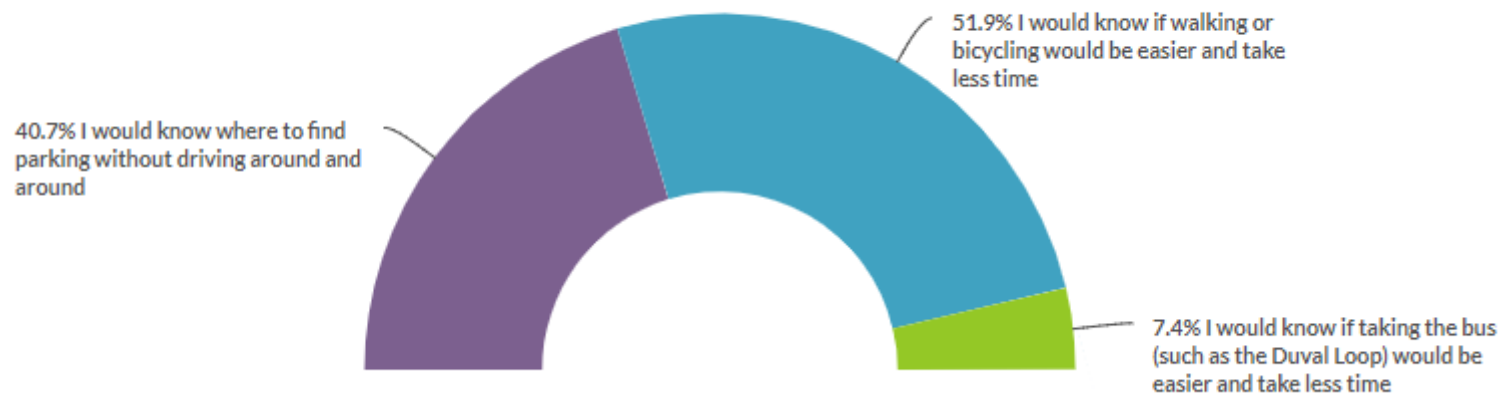
Technology

What does this mean for the Multimodal Connectivity Plan?

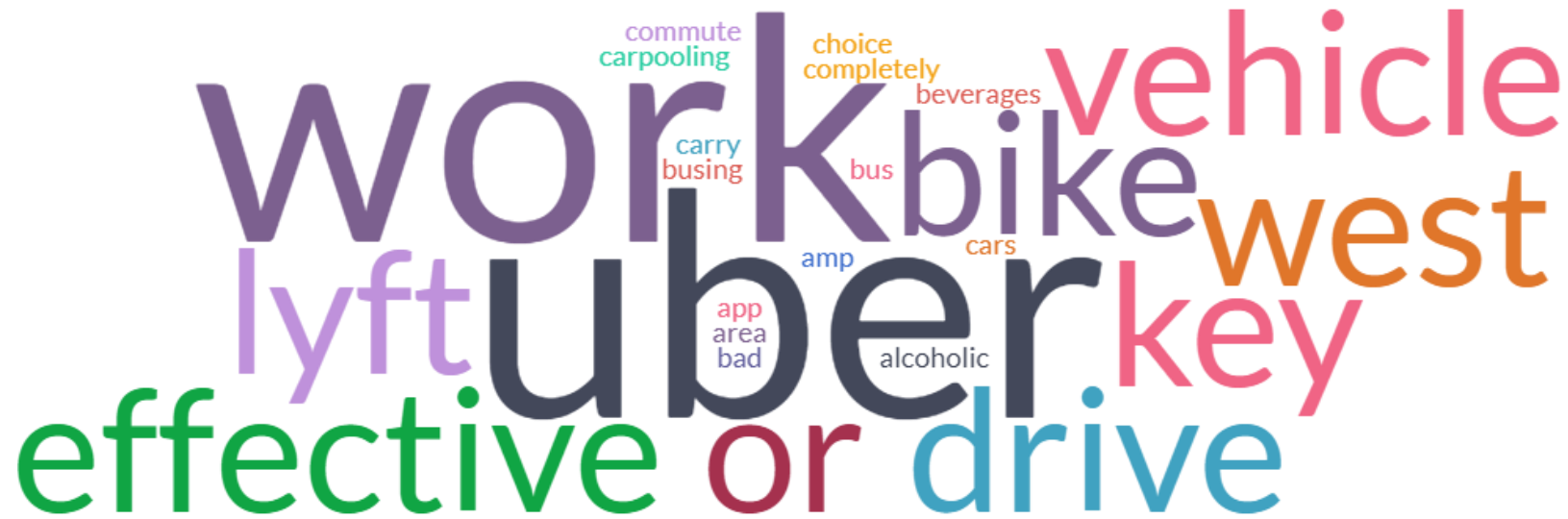
- Use technology for
 - Parking availability
 - Where's my bus
 - Use secure bike parking

How would technology help when using transit?

How would parking availability technology help you?



Shared economies



A word cloud visualization centered around the theme of shared economies. The most prominent words are 'work', 'vehicle', 'bike', 'west', 'uber', 'key', 'effective', 'or', and 'drive'. Other visible words include 'commute', 'carpooling', 'choice', 'completely', 'beverages', 'bus', 'cars', 'amp', 'app', 'area', 'bad', 'alcoholic', 'busing', and 'lyft'. The words are arranged in a dense, overlapping cluster, with colors ranging from purple to green.

Shared Economies

We asked about

- Taxi and Uber or Lyft use
- Bike share experience
- Car and van pools



Effect of car and van pools on congestion
Less effect **More effect**

We learned that

- Respondents prefer Uber and Lyft
- Bike share would not add much of a mobility gain

Car or van pools make sense*

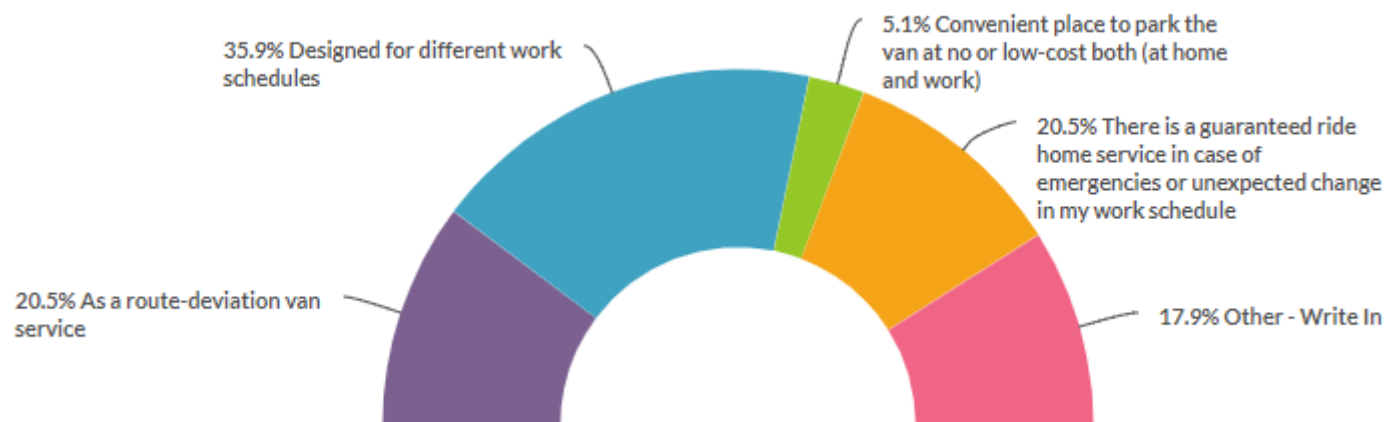
*More detailed information than can share today

Shared Economies

What does this mean for the Multimodal Connectivity Plan?

- Plan for Uber and Lyft to replace some car trips today, including dwell space
- Car and van pools - Travel between KW and keys to the north
- Car and van pools - Joint effort of City, business community, individual employers

Car and van pool
design considerations





Transit

express stops
frequent loop stock
city bus park
long routes keys
bike option



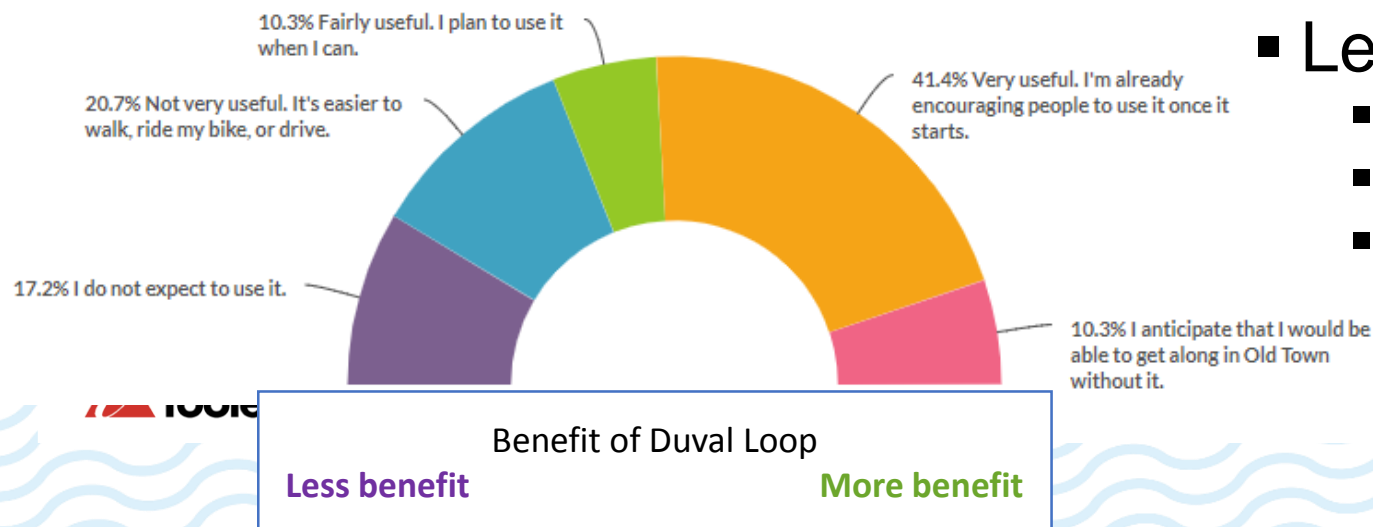
Transit

We asked about

- Ways to increase ridership
- New transit service aimed at reducing congestion

We learned that

- More is better
 - At stops (bus shelters, real time information, etc.)
 - Service frequency
 - Places served
 - Loop routes
- Less is better
 - Fewer circuitous routes
 - Lower fares
 - Shorter travel time between Key West and Big Pine Key





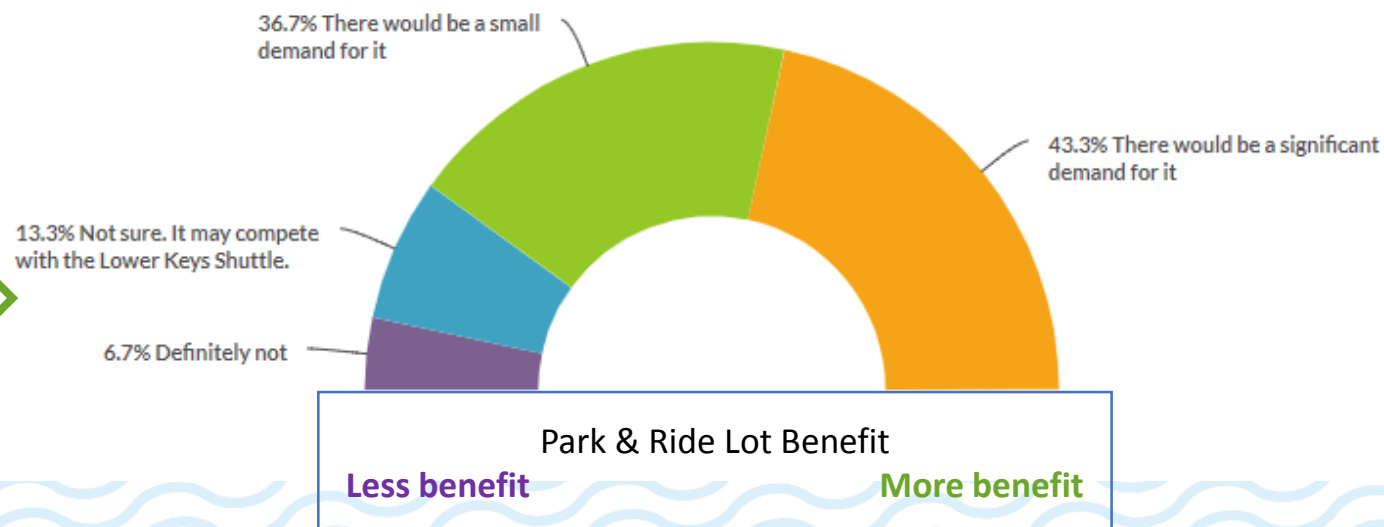
Transit

What does this mean for the Multimodal Connectivity Plan?

- Comprehensive transit plan to be done as part of multimodal planning
- This includes a funding plan or mechanism

**Congestion benefit from
park & ride lot in New
Town or on Stock Island**

Toole Design Group



Getting there and back





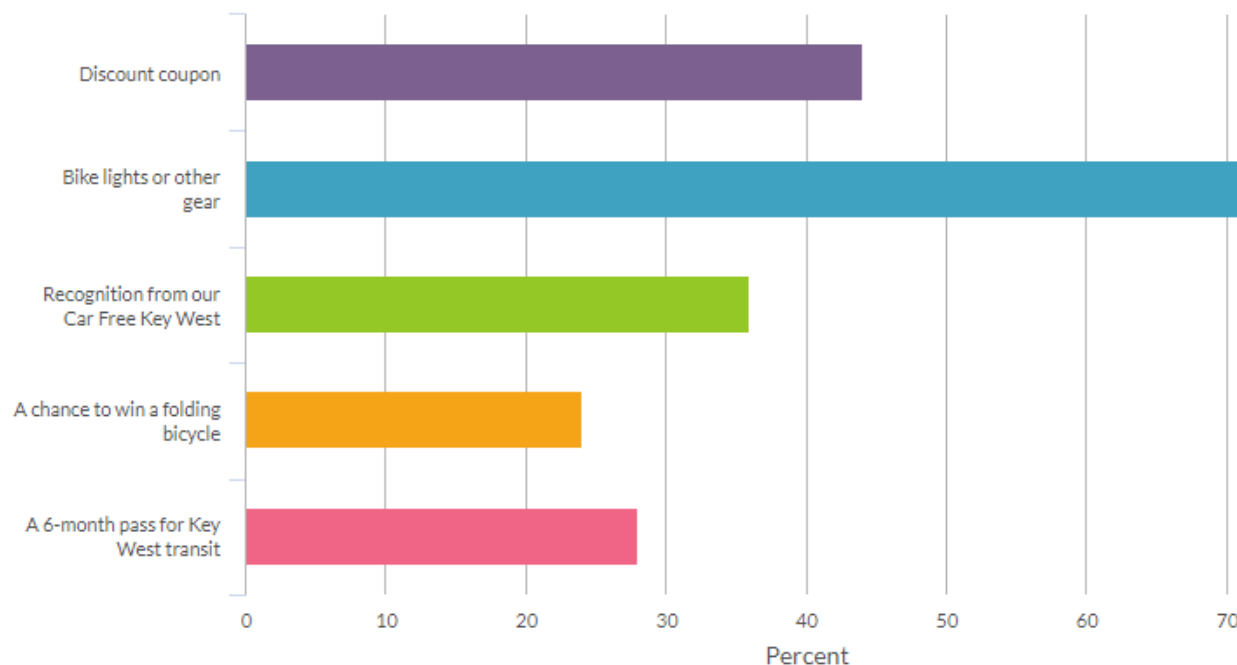
Getting there and back

We asked about

- Parking options
- Creating more walking and biking space
- End of trip needs
- TDM programs

We learned that

- Parking is a critical path issue
- End-of-trip biking facilities are needed
- An enhanced signage and way-finding plan is needed

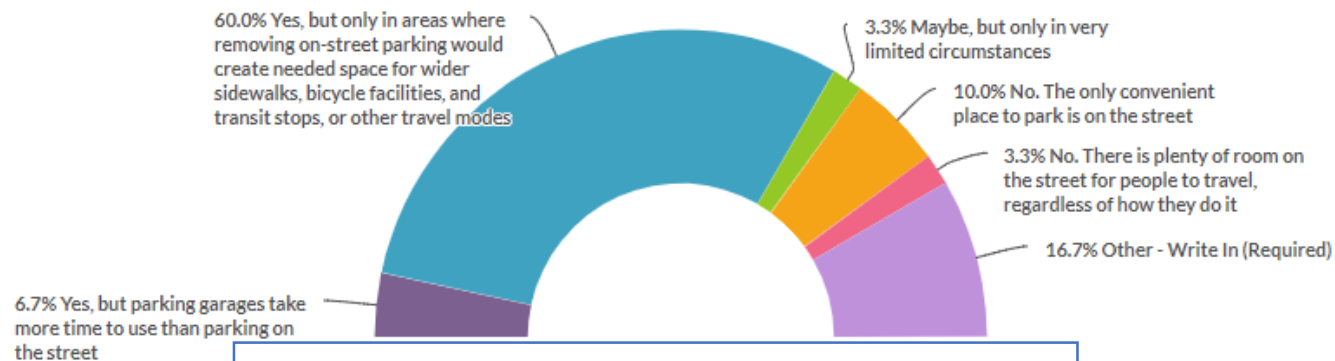


Getting there are back

What does this mean for the Multimodal Connectivity Plan?

- Comprehensive parking plan to be done as part of multimodal planning
- This includes a pricing strategy; architectural standards

Importance of convenient parking
Very important **Other things more important**



Would consider

Not an option



Bring it all together





Umbrella multimodal plan

Modes

Transit routes, stops

Bicycling routes, design

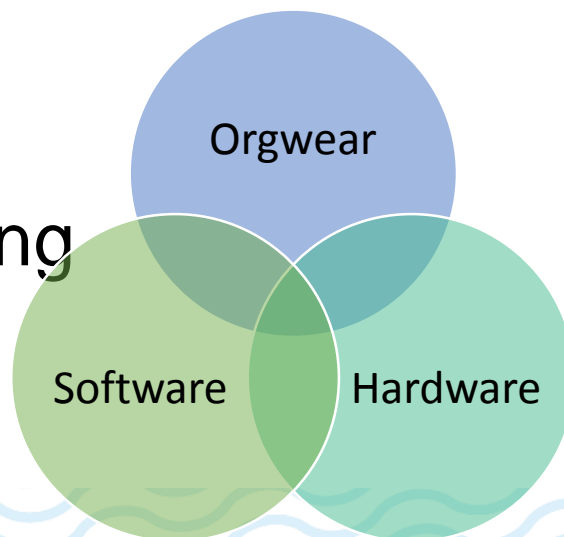
Walking routes, ADA compliance

Bicycle parking

Motor vehicle parking

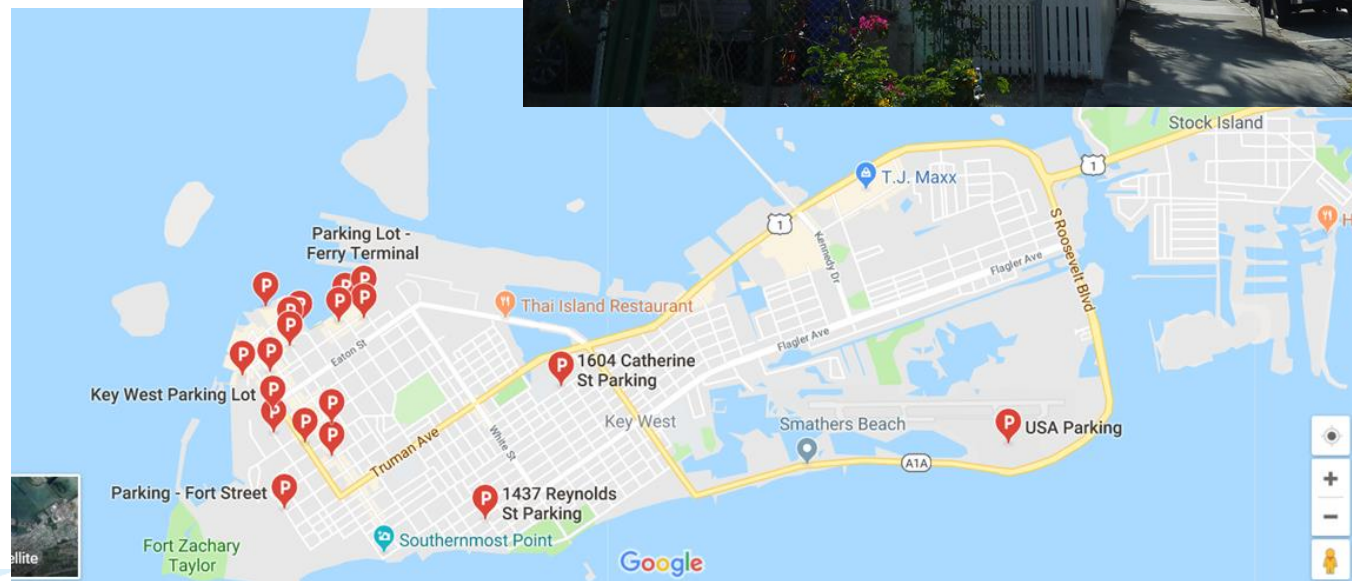
Strategies

- TDM
- Reallocation of public ROW
- Parking capture sheds
- Parking pricing
- Technology platforms
- Policies
- Partnerships



Critical path: Parking

- Policy that supports different parking model
- Parking structures that function well
- Have realistic capture sheds
- Parking structures that fit with local aesthetics





Aesthetics & Mixed Use Design

- Maintain the urban street front by having the sidewalk condition of the facility contain stores or provide a safe and pleasant walk experience.
- Using landscaping and changes in architectural materials, forms, and scales to enhance the facility façade along the street. Use landscaping to shield and enhance parking lot design.
- Architecturally break structure along its front



Garage in St. Augustine



Flexibility for re-use

SHARE



SHARE
4630



TWEET



COMMENT



EMAIL

AARON MARSHALL TRANSPORTATION 11.02.16 07:00 AM

IT'S TIME TO THINK ABOUT LIVING IN PARKING GARAGES



LMN ARCHITECTS