KEY WEST
Bicycle and Pedestrian Master Plan

Appendix A:

Public Engagement

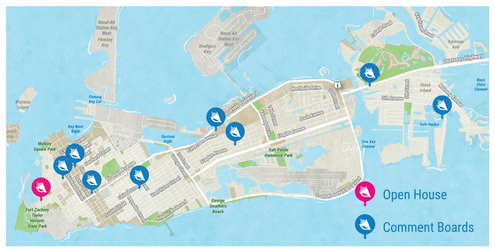
KEY WEST
Bicycle and Pedestrian Master Plan

ABOUT THE PLAN

We're developing the first Bicycle and Pedestrian Master Plan for Key West and Stock Island. The plan will offer common sense near- and long-term changes to our transportation network that reflect our need for a safety, mobility, and equity.

OPEN HOUSE

Be part of the process! Join us at the Open House from **4 - 6 PM**, on **Thursday, May 4** at the **Eco-Discovery Center** to tell us where you ride or walk, enter locations on the wikimap, meet the Advisory Team, and talk with friends and neighbors.



Florida Keys Eco-Discovery Center
35 E Quay Road
Key West, FL 33040

FIND US ONLINE!

- Website - bit.ly/kwbikepedplan
- Wikimap - bit.ly/KWBikePed
- facebook - carfreekeywest
- Email - kwbikepedplan@tooledesign.com

JOIN THE CONVERSATION TODAY!

HOW TO USE THE COMMON SENSE COMMENT BOARD

1. Select a topic to start - there are six in all
2. Complete the card, and post it on the board
3. See what others are saying
4. Pick another topic

BARRIERS TO WALKING

cards

COMPLETE STREETS

cards

CONNECTIVITY

cards

MOBILITY

cards

SAFETY

cards

SIGNAGE/ WAYFINDING

cards

Toole Design Group

SAFETY

The real and felt sense that one will not be OR is at risk of being injured when traveling on one or more modes of transportation.

For example, people walking or bicycling along Duck Avenue who want to cross US 1 may choose to travel to the east or west to cross at a signalized intersection because their perceived sense of safety related to traffic.

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CONNECTIVITY

The number of gaps (or lack of gaps) in any specific transportation network, whether it be the sidewalk, bikeway, transit, or roadway network, such as the bridge connecting Staples Ave across the water.

Connectivity also incorporates intermodal connections, i.e., the sidewalk leads to the bus stop or the bus stop has a bike parking.

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SIGNAGE/WAYFINDING

Wayfinding provides information about a person's current location, the distance to desired destinations, and indicates the route from their current location.

The City of Key West has signage designating bike routes, pedestrian crossings, and points visitors to tourist destinations.

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BARRIERS FOR WALKING

Everyone in Key West walks at some point in their trip. People who walk usually travel along sidewalks, trails, and shared streets.

Depending on how they are built, intersections may represent barriers for those who walk.

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MOBILITY

Mobility refers to the ability of people to travel for all daily activities and needs, regardless of travel mode.

Bike lanes and multi-use paths allow residents, workers, and visitors to travel between and within Key West and Stock Island. Mobility is hindered in Key West because bus routes and schedules may not serve as many as they could.

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COMPLETE STREETS

An approach to designing, building and operating streets (the public right-of-way) that accommodates the needs of all traveler, regardless of their age or ability, or travel mode.

For example, Caroline St between Grinnell and Simonton includes sidewalks, a bike lane and shared lane markings, one motor vehicle travel lane in each direction, and space for buses.

KEY WEST Bicycle and Pedestrian Master Plan

SIGNAGE/WAYFINDING

Which 3 destinations need better signage?

1)

2)

3)

What are the top 3 routes you think need better wayfinding?

1)

2)

3)

CONNECTIVITY

Where are the top 3 places where you would like better connectivity?

1)

2)

3)

SAFETY

On your average trip in Key West, rate on a scale of 1 to 5 (5 being the safest), how safe from a crash or injury do you feel?

Walking	**1**	**2**	**3**	**4**	**5**
Bicycling	**1**	**2**	**3**	**4**	**5**
Transit	**1**	**2**	**3**	**4**	**5**

COMPLETE STREETS

Which statement most closely matches how you feel about Complete Streets in Key West and Stock Island?

- ❒ Most streets are fine the way they are and don't need to be redsigned as Complete Streets.
- ❒ Many streets could be changed to better accommodate bicycling, walking, and taking transit.
- ❒ Nearly all the larger streets need to be re-designed as Complete Streets, but smaller, neighborhood streets are fine.
- ❒ Complete Streets can help make some streets and intersections safer for everyone.

MOBILITY

On a scale of 1 to 5 (1=not well, 5=very well) how well does each of these 3 transportation modes meet your mobility needs?

Walking	**1**	**2**	**3**	**4**	**5**
Bicycling	**1**	**2**	**3**	**4**	**5**
Transit	**1**	**2**	**3**	**4**	**5**

BARRIERS FOR WALKING

What are the top 3 intersections in Key West that represent the biggest barriers for people walking?

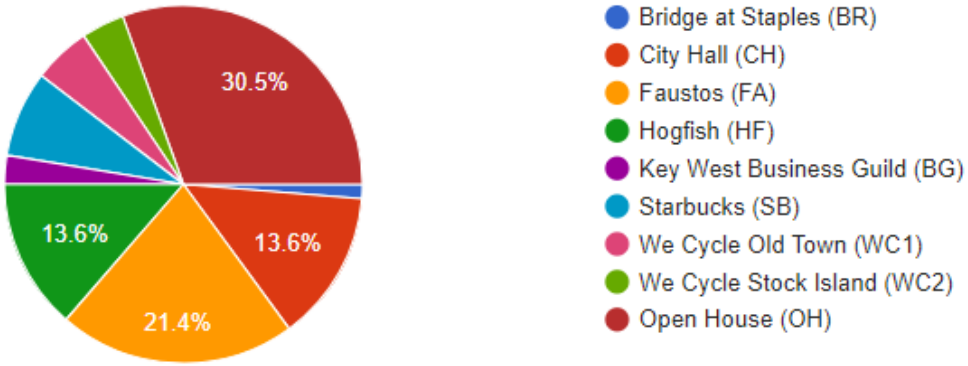
1)

2)

3)

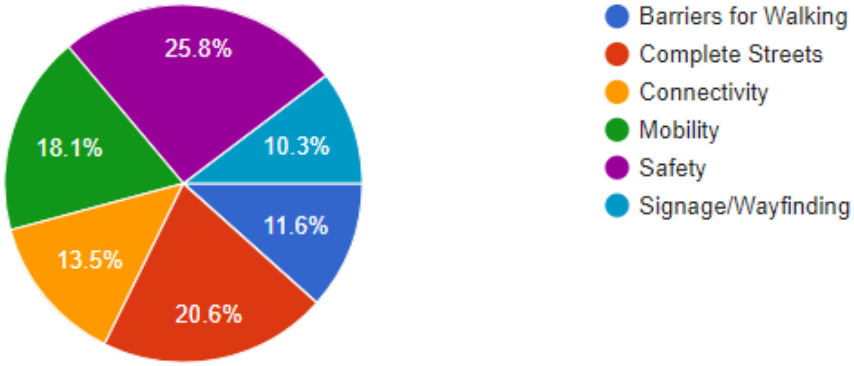
Comment Board Location

154 responses



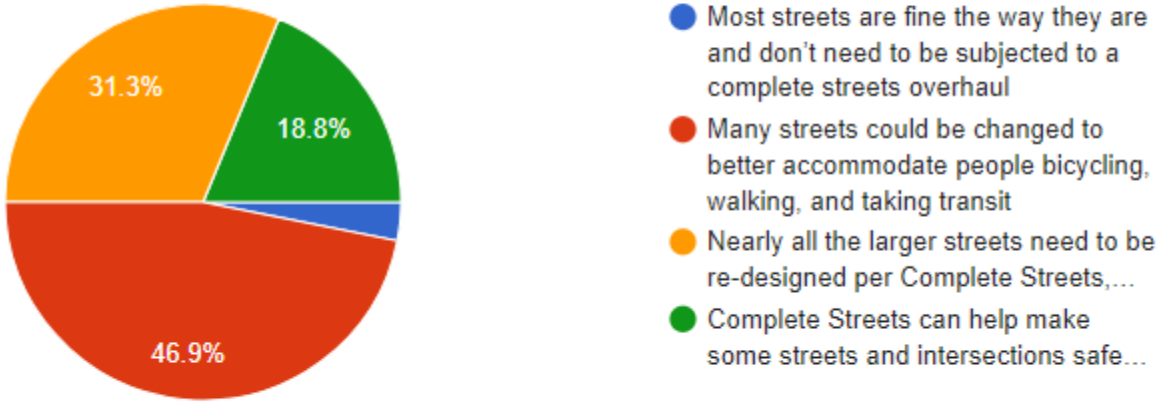
Topic

155 responses

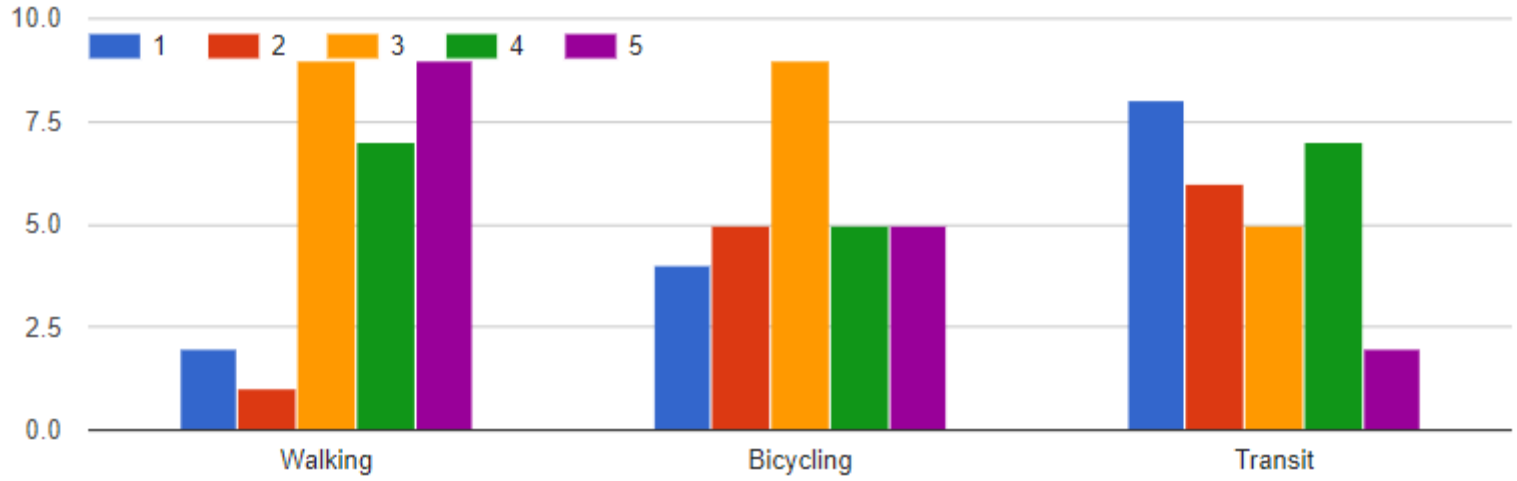


Which statement most closely matches how you feel about Complete Streets in Key West and Stock Island?

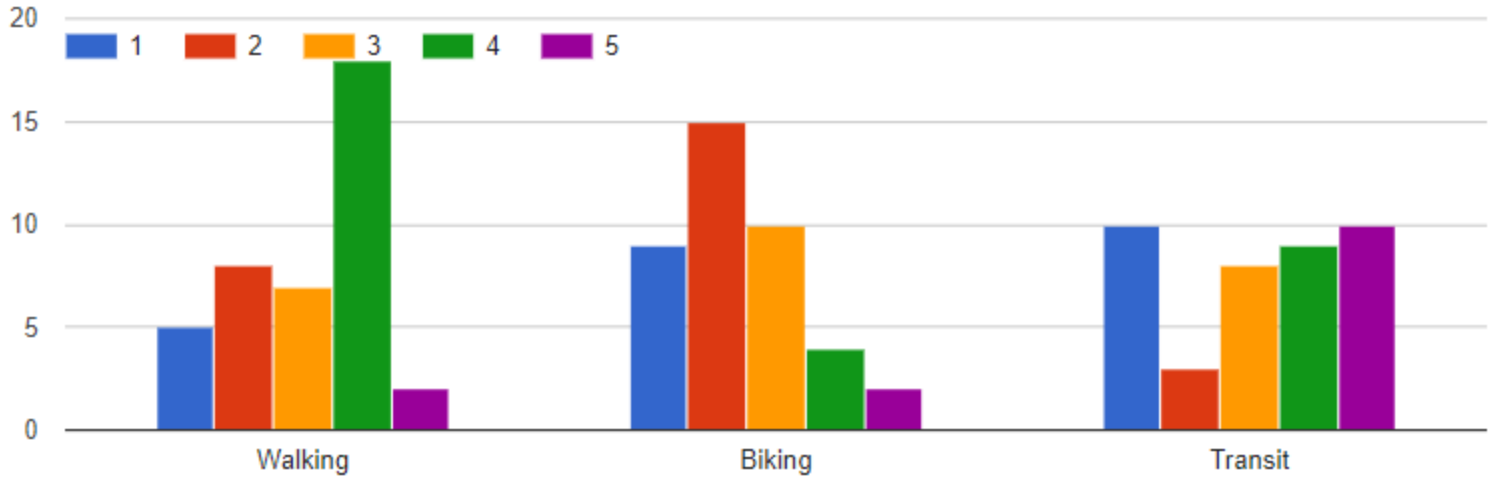
32 responses



On a scale of 1 to 5 (1=not well, 5=very well) how well does each of these 3 transportation modes meet your mobility needs?



On your average trip in Key West, rate on a scale of 1 to 5 (5 being the safest), how safe from a crash or injury do you feel?



CAR-FREE KEY WEST

BICYCLE FACILITIES

Place ONE sticker next to the facilty you'd feel most comfortable riding on:

Trail

- A bicycle facility physically separated from traffic, but intended for shared use by a variety of groups, including pedestrians, bicyclists, and joggers
- Can have separate footpath in areas of high bicycle traffic
- Major road crossings may have signals, warning beacons, refuge islands, or bridges and underpasses

VOTE HERE

Two-Way Separated Bike Lane

- A two-way bike lane along a roadway vertically separated from motor vehicle traffic by a curb, flexposts, and/or parking
- May be at sidewalk level, street level or intermediate height

VOTE HERE

One-Way Separated Bike Lane

- A one-way bike lane along a roadway vertically separated from motor vehicle traffic by a curb, flexposts, and/or parking
- Posts increase separation between bicycle riders and passing traffic
- Parking, if present, is between buffer and travel lane

VOTE HERE

www.cityofkeywest-fl.gov/bikepedplan

BICYCLE FACILITIES

Place ONE sticker next to the facilty you'd feel most comfortable riding on:

Buffered Bike Lanes

- A bike lane with a painted buffer to increase lateral separation between bicyclists and motor vehicles
- Buffers increase space between bicycle riders and hazards such as passing traffic and car doors

VOTE HERE

Green Bike Lanes

- Used to increase visibility of a bicycle facility, in areas of potential conflict
- Reinforces bicyclists' space in conflict areas (e.g., at intersections)

VOTE HERE

Bicycle Lanes

- An on-street bicycle facility designated by striping, signing, and pavement markings
- Bike lanes are separated from travel lane by solid white line
- Reduce the need for people riding bicycles and people driving cars to negotiate for space on the roadway

VOTE HERE

www.cityofkeywest-fl.gov/bikepedplan

BICYCLE FACILITIES

Place ONE sticker next to the facilty you'd feel most comfortable riding on:

Advisory Bike Lanes

- Used where the width of a two-way street is too narrow for a standard bicycle lane or separated bicycle lane. Appropriate on streets with low traffic volumes.
- Dashed bicycle lanes are provided on either side of a single, central vehicle lane.
- Motorists drive in the center lane and use bicycle lanes to pass other cars as needed

VOTE HERE

Bicycle Boulevards

- A street with low motorized traffic volumes and speeds, designated and designed to give bicyclists travel priority. Usually include traffic calming features to reduce speeds
- Usually in residential neighborhoods
- Stop signs may be moved to cross streets. Major road crossings may have signals, warning beacons, or refuge islands

VOTE HERE

Shared Lane Markings (Sharrows)

- A shared roadway with pavement markings providing wayfinding guidance to bicyclists and alerting drivers that bicyclists are likely to be operating in mixed traffic
- Alert drivers that bicycle riders may need full lane
- May be associated with "Bicycles May Use Full Lane" sign

VOTE HERE

www.cityofkeywest-fl.gov/bikepedplan

BICYCLE FACILITIES

Place ONE sticker next to the facilty you'd feel most comfortable riding on:

Signed Routes

- Focuses on providing wayfinding for people walking and biking
- Provides information including distances about different destinations within the city
- Typically on roadways comfortable for bicycle travel

VOTE HERE

www.cityofkeywest-fl.gov/bikepedplan

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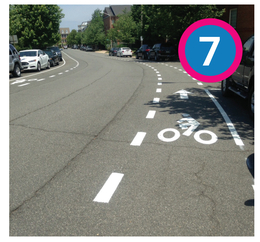
BICYCLE FACILITIES

» www.cityofkeywest-fl.gov/bikepedplan «



Place a sticker next to the rating that best describes your comfort level on that facility type


comfortable enough for me to bicycle with children


comfortable enough for me to bicycle by myself


uncomfortable for me to bicycle, but I could manage


too uncomfortable for me to bicycle

1 Trail	2 2-way separated bike lane	3 Separated bike lane	4 Buffered bike lane	5 Green bike lane	6 Bike lane	7 Advisory bike lane	8 Neighborhood Greenway	9 Shared lane markings (sharrows)

Report for Key West Multi-modal Connectivity: Survey 5 - Getting there and back

Response Counts

Completion Rate:	**100%**	
	Complete	32

Totals: 32

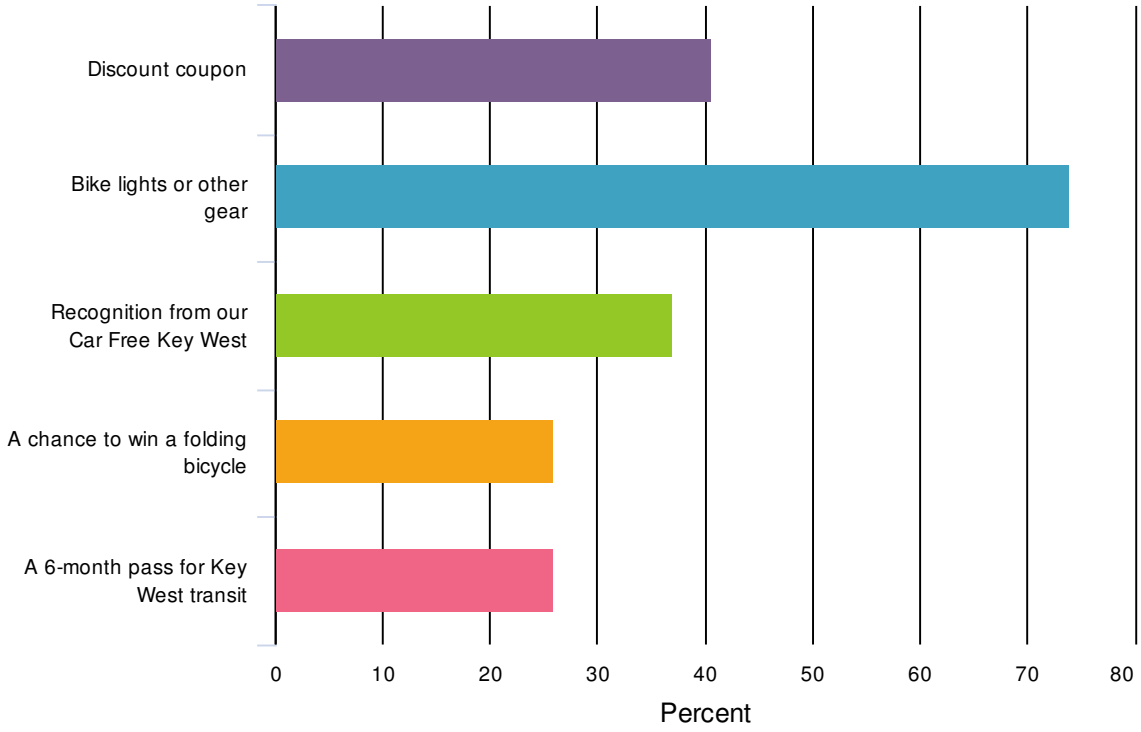
1. Rate the importance of the following 'getting there and back' conditions.

	More stars means more important
A place to park my bike or scooter that is convenient to my destination	★★★★★ Count: 32 Not Applicable: 0
Lockers and showers (a place to wash-up) at work	★★½☆☆ Count: 30 Not Applicable: 0
Options for a way home in case of an emergency	★★★½☆ Count: 31 Not Applicable: 0
Sufficient lighting along the way	★★★★☆ Count: 32 Not Applicable: 0
Plenty of bike share stations	★★★☆☆ Count: 30 Not Applicable: 0
Drop-off space for taxis, Uber, and Lyft	★★★☆☆ Count: 30 Not Applicable: 0
Bus stop with a clear pathway to the front door	★★½☆☆ Count: 29 Not Applicable: 0
Someone to ride the bus or a bike, or to walk with	★★☆☆☆ Count: 29 Not Applicable: 0
A place to park my car once and walk to everywhere I'm going	★★★½☆ Count: 31 Not Applicable: 0
Other	★★☆☆☆ Count: 4 Not Applicable: 0

2. How important is it to provide the following

	More stars means more important
Wayfinding for various routes to major destinations and parking facilities	★★★½☆ Count: 31 Not Applicable: 0
On-road information about how comfortable a bicycle route is (or suitable for families)	★★★½☆ Count: 32 Not Applicable: 0
Provide consolidated parking for cars in key locations to free up space for people bicycling (higher quality bicycle facilities)	★★★½☆ Count: 32 Not Applicable: 0
Provide consolidated parking for cars in key locations to free up space for people walking (ensure compliance with the Americans with Disabilities Act and increase sidewalk capacity)	★★★½☆ Count: 30 Not Applicable: 0

3. What types of monetary or other tangible incentives would encourage you to try bicycling, walking or taking transit for one trip in the next month?Check all that apply.



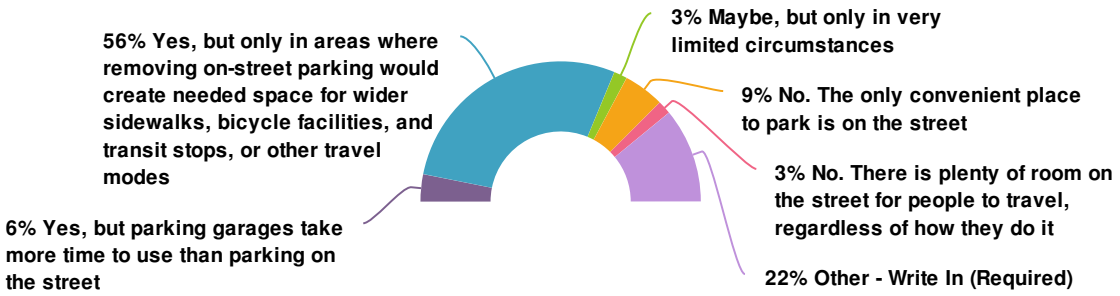
Value	Percent	Responses
Discount coupon	40.7%	11
Bike lights or other gear	74.1%	20
Recognition from our Car Free Key West	37.0%	10
A chance to win a folding bicycle	25.9%	7
A 6-month pass for Key West transit	25.9%	7

4. When you drive a car, how important is convenient parking to you?

Value	Percent	Responses
Very important. I don't mind paying to park in a convenient location	15.6%	5
Important, but I don't mind walking and I'll park farther away if it is free	40.6%	13
Free parking is more important to me than convenient parking	28.1%	9
I never drive, so I don't need a place to park a car	15.6%	5

Totals: 32

5. Do you generally support reducing the amount of on-street car parking in some areas and providing more parking garages nearby instead? Remaining space on the street would be used for a bicycle lane or wider sidewalks.



Value	Percent	Responses
Yes, but parking garages take more time to use than parking on the street	6.3%	2
Yes, but only in areas where removing on-street parking would create needed space for wider sidewalks, bicycle facilities, and transit stops, or other travel modes	56.3%	18
Maybe, but only in very limited circumstances	3.1%	1
No. The only convenient place to park is on the street	9.4%	3
No. There is plenty of room on the street for people to travel, regardless of how they do it	3.1%	1
Other - Write In (Required)	21.9%	7

Totals: 32

Other - Write In (Required)	Count
No. The roads are past capacity. And parking garages in old town are dead politically, so lets not waste any time on this. Reduce congestion by providing better bus options and better bike routes. No new parking garages are going to be built.	1
Possibly. Depends on area. Parking far away can create big problems trying to get to work when it's raining/flooding, etc.	1
Removing street parking reduces home values. I'm definitely against it.	1
We have plenty of parking garages, just need people to use them!	1
Yes less parking and park and ride available at additionally provided parking areas. Less free (cheap) parking please.	1
vehemently object to this idea	1
we live in old town and can only park on the street. I don't need to park right in front of my house but I need to be within a few blocks so there needs to be some parking in areas where people live	1
Totals	7

6. The City uses parking revenue to pay for public improvement projects. What is the most you would pay to park your car during the day or evening?

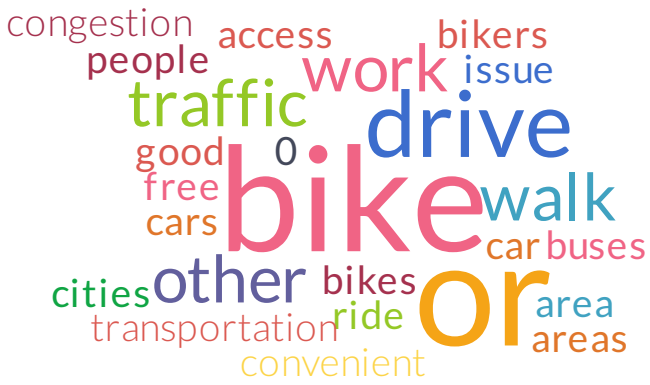
	up to $5	up to $10	up to $15	$20 or more	Never pay for parking	Total Checks
All day (while I am at work)						
Checks	4	6	2	0	19	31
Row Check %	12.9%	19.4%	6.5%	0.0%	61.3%	
In the evening (while I am dining or visiting friends)						
Checks	10	9	2	1	10	32
Row Check %	31.3%	28.1%	6.3%	3.1%	31.3%	
Total Checks						
Checks	14	15	4	1	29	63
% of Total Checks	22.2%	23.8%	6.3%	1.6%	46.0%	100.0%

7. Which of the 3 bicycle wayfinding signage styles is most appropriate for Key West?

Value	Percent	Responses
PedestrianwayfindingSanAntonioBcyclelogo.jpg	25.9%	7
jacksonhole.PNG	33.3%	9
JTPhotosAug2013_Bikesignage__6_20130803.JPG	40.7%	11

Totals: 27

8. Is there anything else you'd like to tell us about Getting there and back?



ResponseID	Response
4	I hope TDC will help in discouraging people to rent a car in Miami and "Drive the Keys". Not only could traffic and accidents be curbed, but there would be less congestion on the island.
7	All 3 of the signs would work, but they don't necessarily have to be just for bike info. (we don't have good wayfinding for anyone)... Bike info could go in the bike lane too?
11	no
18	I don't ride my bike to work because my bike would not be there when I go back to it. The bike thieves are terrible. I don't know of a bike lock that can keep them from stealing my bike. I have a $200 bike and a $800 bike, I never leave either of them unattended even when locked. My boyfriend had his $600 Townie stolen and he had a very expensive well regarded lock on it and at a well lit area. Zero tolerance for bike thieves.
19	I Used To bike To work on Fleming St. But Now I drive because the city removed all the easy access bike racks further away and of those they hold 90% less bikes so hard to find space and inconvenient locations.
21	Enforcement of laws for ALL vehicular traffic, motorized or human powered

ResponseID	Response
23	I didn't answer #3 because none of those answers were appropriate to me. I (and I think others) could be "inspired" to walk or bike one day a month as part of a campaign. No need to be "bribed" and a roundtrip free pass or a one day free pass is all it would take for me to try out public transit. I'm not sure if this is a good idea, but maybe that day could include people on the bus who explain stuff to you -- the right bus to get on, where it connects, how often it stops. A public awareness day so I don't feel conspicuous not knowing, and feel confident that someone will tell me what's going on and how to maximize my relationship with public transit.
24	It's a dilemma creating more garages, which encourages more cars and more congestion to get to them, further exacerbating the issue. Closing sections of Duval St. to cars to make it all pedestrian would encourage more walk/bike usage, and attractive.
25	Critical safety issue..bikers must have front & rear lights for night cycling..inforce!
27	More signage is needed to inform bikers to ride with the traffic, ride the direction of one way streets. Even though bikes are allowed on the sidewalk, there should be signs encouraging bikes to use bike lanes where they exist. Also, there should be more bike lanes, such as Eaton street, Caroline, Whitehead and Duval.Bike tours should be prohibited from using sidewalks at all. Totally inappropriate! Over the past few years, I have notice an increase in lack of respect for bike riding rules. That needs to addressed. Such as having the bike confiscated by the police or code enforcement. Not obeying the rules creates danger for the rest of us. There needs to be many more bike racks in the popular areas and abandoned bikes should be periodically removed. Thanks for all your work.
28	I use all modes of transportation, but when I need my car I want it to be convenient. The mobility of our older residents must be considered, too. Our tourists generally do a "car tour" to see where they are. Limiting access to our tourists sights would discourage visiting. In "car free" tourist areas in other cities I drive around the area and determine which part might interest me enough to park and explore. Or it's too difficult to bother with.
31	I walk a lot and don't use public transportation here. We only use a car for grocery shopping or if we need to leave key west. From experience in other cities public transportation needs to be convenient and reliable. I've heard from people that buses (lower keys shuttle) doesn't run often enough of quickly enough to make it worthwhile (this is second hand information).
32	We are long past the point where there should be any free parking downtown for tourists. If they are taking up spots in residential neighborhoods, they need to pay in some way - either we meters or impact fees or something. Only economics will make tourists stop driving around old town in rental cars. We need to provide them better options - good buses or encourage hotel shuttles or lyft or uber - rather than give them another place to park downtown. Make it cost to drive downtown and they will find other ways to get downtown.

ResponseID	Response
33	The largest issues Key West currently faces with using a bicycle for transportation is visibility at intersections on side streets. At most intersections you need to be in the lane of traffic before you can see on-coming traffic. The greatest issue is the cross walks on N. Roosevelt Blvd. Building additional bikeways on other streets will not decrease the reliance on N. Roosevelt Blvd. The cross walks need to be upgraded with "Push to Signal" crosswalks.
34	bike more, save money. Promote cycling education amongst the youth as well as adults whether they ride bikes or drive cars or just walk.

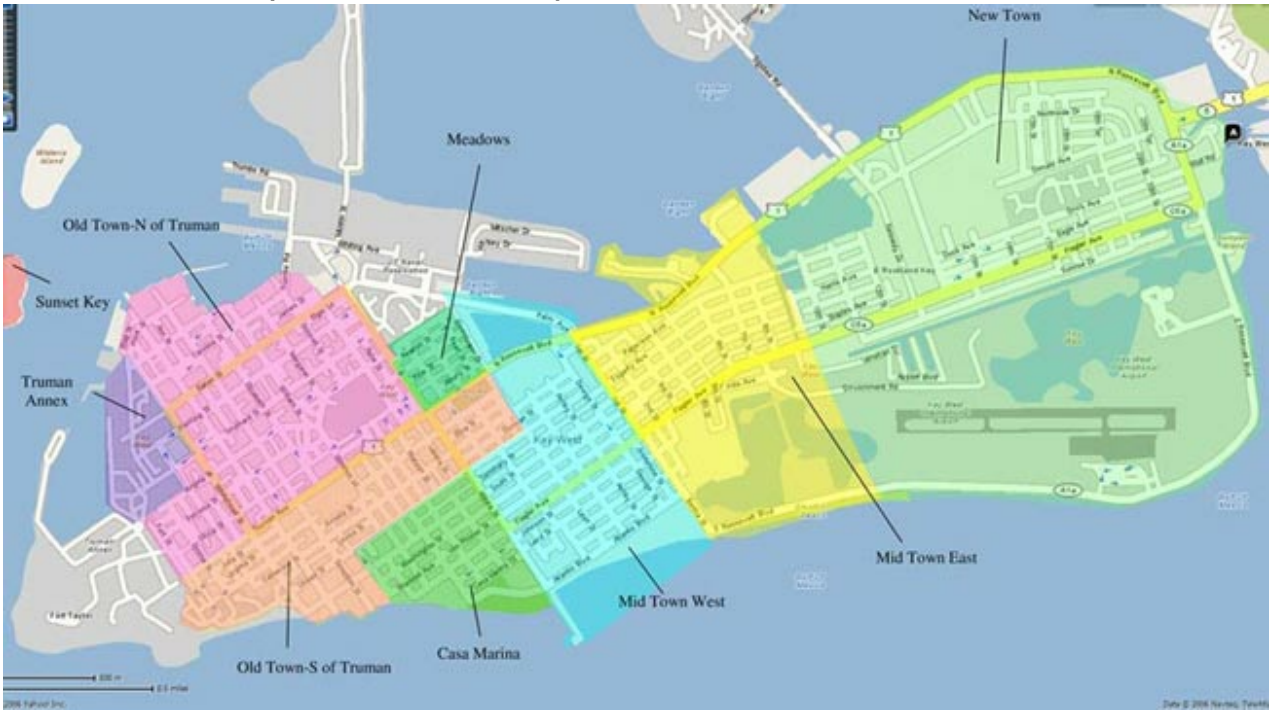
Report for Key West Multi-modal Connectivity: Participant Sign-up

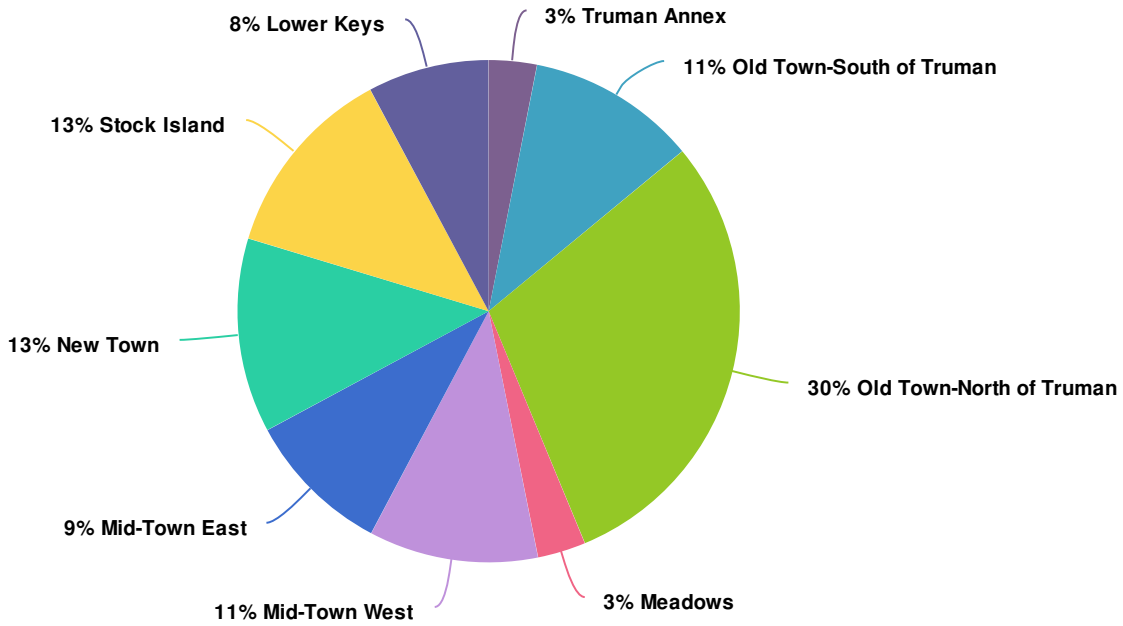
Response Counts

Completion Rate:	**100%**		
	Complete		69

Totals: 69

2. Look at the map below, then click on the neighborhood name from the list that corresponds to where you live.

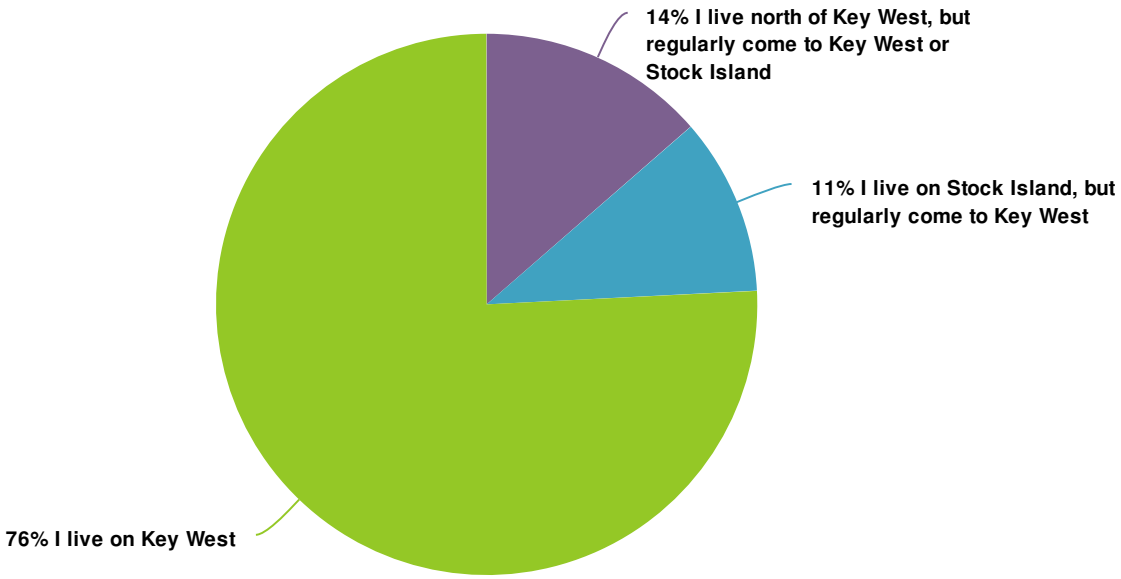




Value	Percent	Responses
Truman Annex	3.1%	2
Old Town-South of Truman	10.9%	7
Old Town-North of Truman	29.7%	19
Meadows	3.1%	2
Mid-Town West	10.9%	7
Mid-Town East	9.4%	6
New Town	12.5%	8
Stock Island	12.5%	8
Lower Keys	7.8%	5

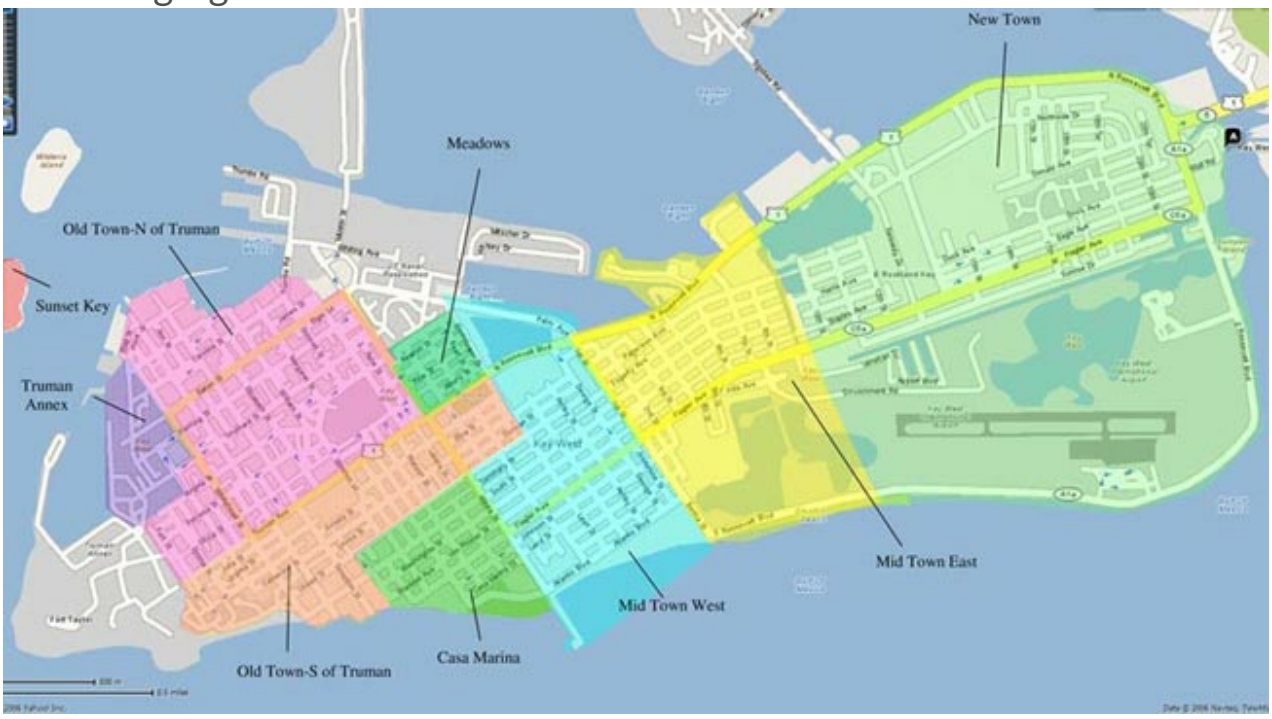
Totals: 64

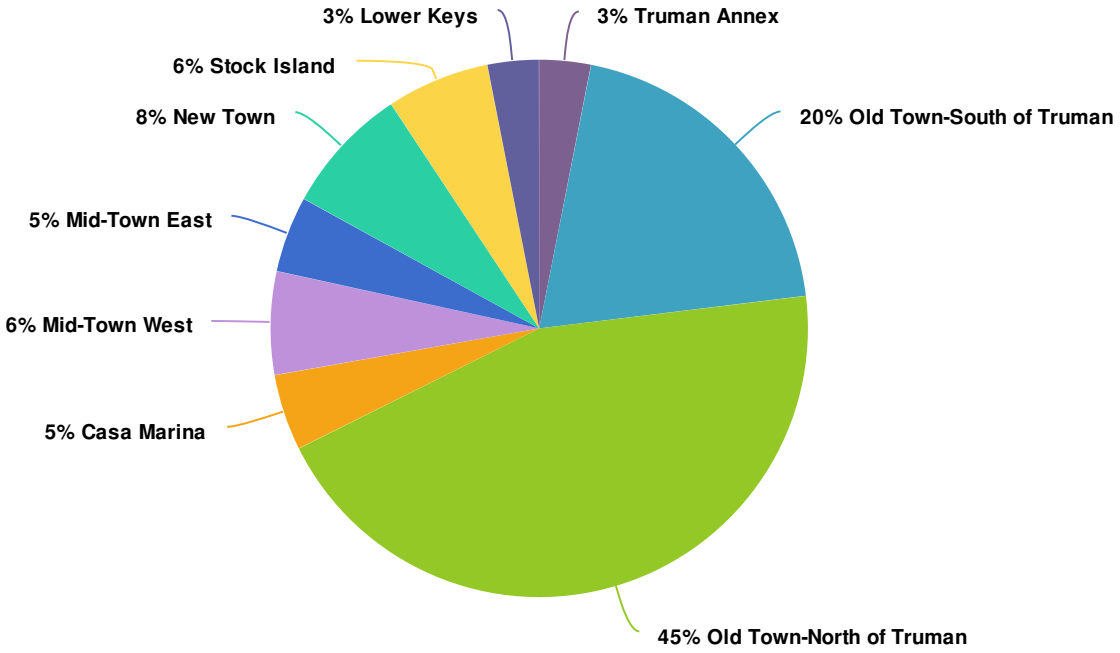
3. Which of the statements below best suits you



Value	Percent	Responses
I live north of Key West, but regularly come to Key West or Stock Island	13.6%	9
I live on Stock Island, but regularly come to Key West	10.6%	7
I live on Key West	75.8%	50
	Totals:	66

4. Look at the map below, then click on the neighborhood name on the list that corresponds to where you work, go to school, volunteer, or spend time hanging out.

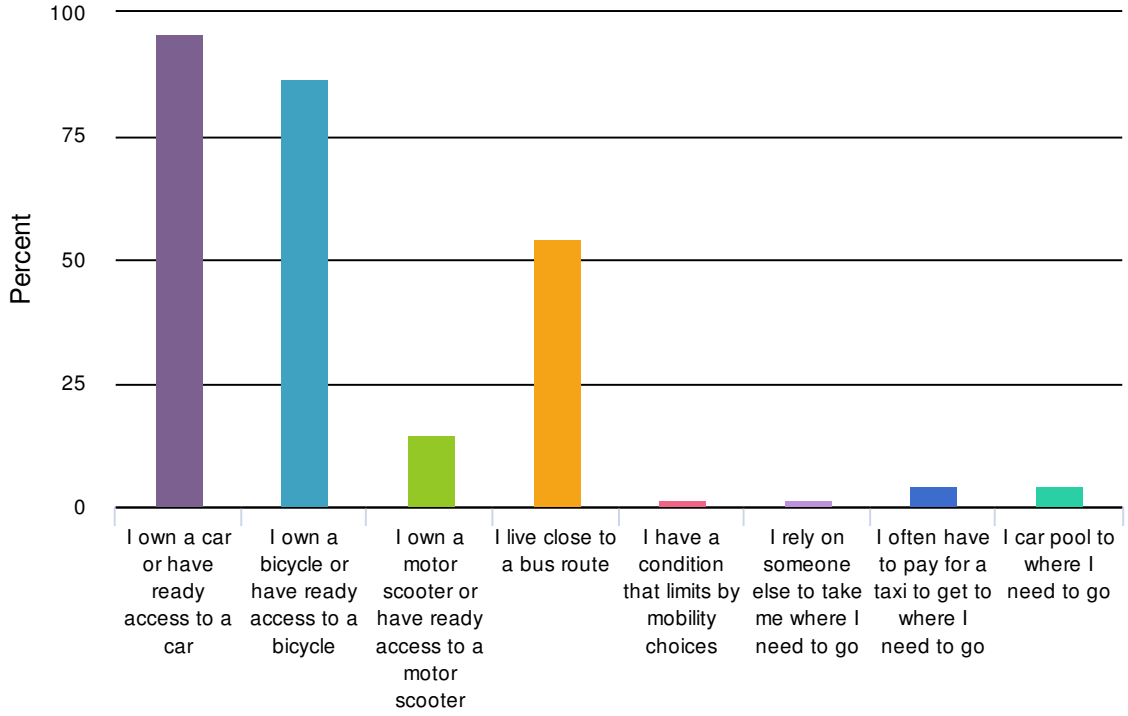




Value	Percent	Responses
Truman Annex	3.1%	2
Old Town-South of Truman	20.0%	13
Old Town-North of Truman	44.6%	29
Casa Marina	4.6%	3
Mid-Town West	6.2%	4
Mid-Town East	4.6%	3
New Town	7.7%	5
Stock Island	6.2%	4
Lower Keys	3.1%	2

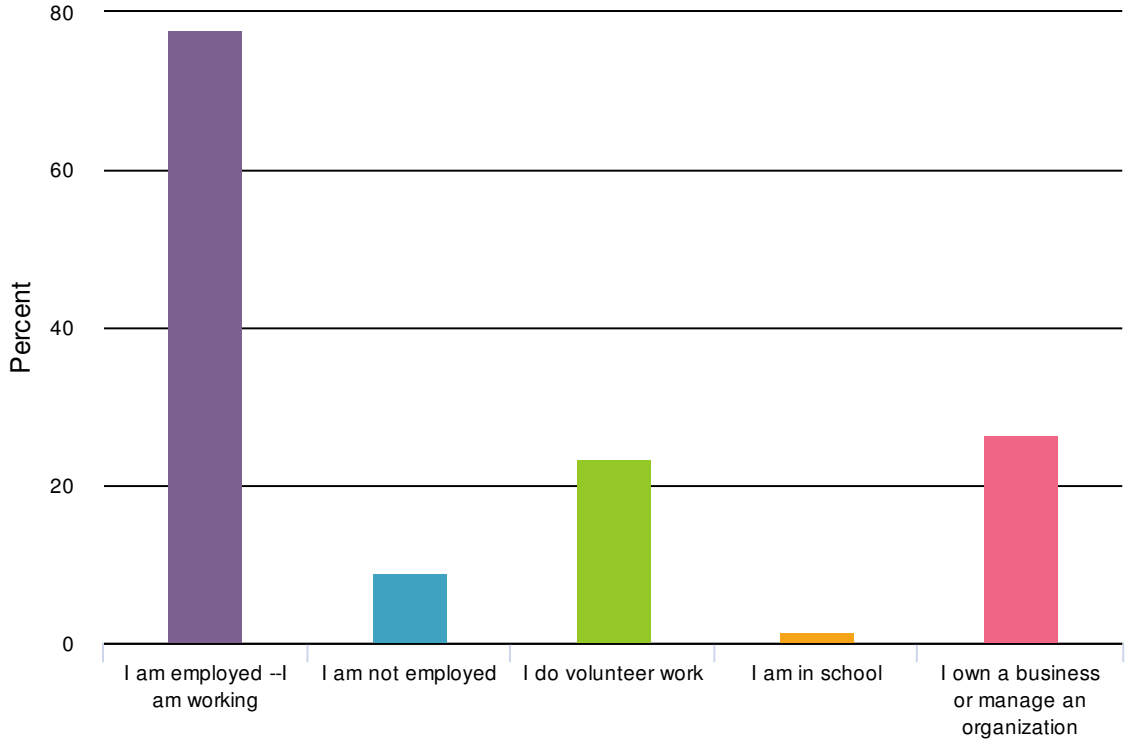
Totals: 65

5. Which of the following are true?



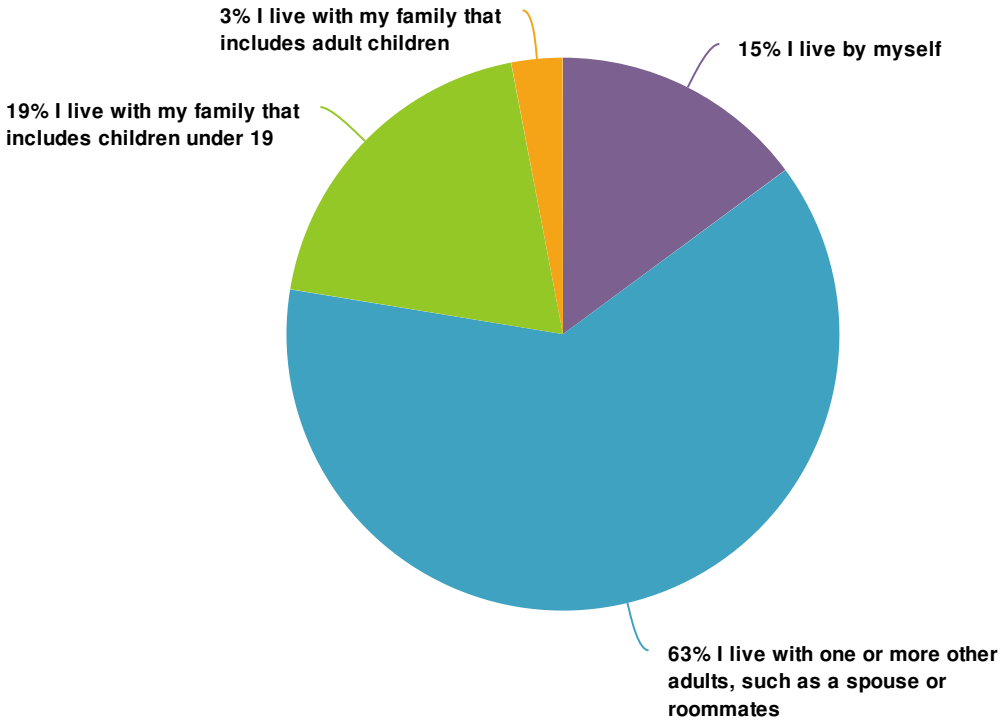
Value	Percent	Responses
I own a car or have ready access to a car	95.6%	65
I own a bicycle or have ready access to a bicycle	86.8%	59
I own a motor scooter or have ready access to a motor scooter	14.7%	10
I live close to a bus route	54.4%	37
I have a condition that limits by mobility choices	1.5%	1
I rely on someone else to take me where I need to go	1.5%	1
I often have to pay for a taxi to get to where I need to go	4.4%	3
I car pool to where I need to go	4.4%	3

6. How do you spend most of your days?



Value	Percent	Responses
I am employed -- I am working	77.9%	53
I am not employed	8.8%	6
I do volunteer work	23.5%	16
I am in school	1.5%	1
I own a business or manage an organization	26.5%	18

7. Tell us a bit about your household

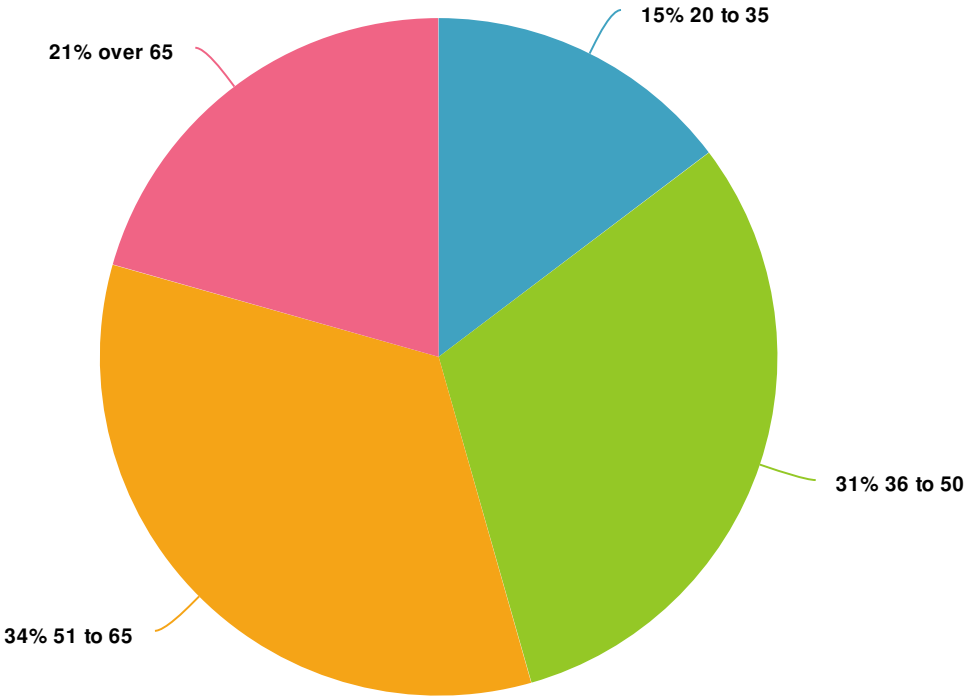


Value	Percent	Responses
I live by myself	14.9%	10
I live with one or more other adults, such as a spouse or roommates	62.7%	42
I live with my family that includes children under 19	19.4%	13
I live with my family that includes adult children	3.0%	2

Totals: 67

Other - Write In	Count
Totals	0

8. Which range best matches your age?



Value	Percent	Responses
20 to 35	14.7%	10
36 to 50	30.9%	21
51 to 65	33.8%	23
over 65	20.6%	14

Totals: 68

9. Travel on Key West would be ideal for me if:

Count	Response
2	Less congestion, if bicyclists would obey traffic laws, & scooters also, no golf carts on main drags such as Truman or Flagler.
1	A car and bicycle mobility plan was fully thought out and realized. More focus, emphasis and forward thinking by our elected officials and community leaders on alternative modes of transportation.
1	Better/More Bike paths.
1	Bicycle lanes were better defined and publicized and bicycles were prohibited on some streets, such as Eaton, Truman, and Duval.
1	Bicycle paths were safer
1	Bicycle □ parking is plentiful. Bicycle's were required to yield but not stop at our abundant stop signs and stop lights. There was an emphyisis to encourage our may tourists to either not drive or to park and leave their automobiles when they arrive in KW.
1	Bike lanes were improved or added to one way streets that are not as heavily used for vehicular traffic. Reduce the conflict/proximity of bikes and vehicles. Pedi cabs should be restricted from the main vehicular streets. Residents and employees from the Lower Keys are not going to bike into Key West and are unlikely to park in outlying areas and shift to another form of transit.
1	Bike travel were safer, buses/trolleys were more regular and easier to use, parking were more available
1	Bikes would obey same rules of road as motorists.

Count	Response
1	Cab drivers were more patient. The crosswalks onN. Roosevelt were safer crossing.
1	Golf carts and scooters were eliminated and pedestrian crossings on US 1 were removed.
1	Had a park and ride with mass transit from stock island or boca chica
1	I could have more bike routes on and off KeyWest
1	I find it pretty convenient already.
1	I had a longer lunch hour so I can bike home and back. Otherwise, it's mainly hot and sunny. I need more canopy to want to ride.
1	I walk as much as possible, including with a small child and in addition to speeding cars I have a problem with bicycles riding (as opposed to walking) on the sidewalks because I have had a number of near misses (some that involved my child) with cyclists that were going too fast, not looking as they reached a corner and had I not jumped or dragged my child out of the way they would not have been able to yield to us or avoid us. make roads safe for bikes and get them off the sidewalks.
1	Ideally more bicycle friendly. I have been struck by car is twice.
1	If it was easier to ride a bike and not get run over I would ride everyday it wasn't raining.
1	If it where safer to ride a scooter or bicycle
1	If roads were paved correctly and wider.
1	It is pretty ideal now but in a truly ideal world: Bike paths are shaded and safe from auto traffic. Sidewalks are free of enormous utility poles. Busses are smaller and run more frequently. Some streets in the downtown area are pedestrian and/or bicycle only (car-free). Drivers are courteous.
1	It was friendlier toward pedestrians and cyclists.
1	It wasn't so durned hot!
1	Less people drove cars, streets were in good repair, there was less parking and more bicycle lanes, and cars and other vehicles were not always speeding
1	More convenient/frequent bus transportation. No cars allowed in Old Town West of White Street with parking & bike racks near Police Station & Trolly Service throughout Old Town
1	More dedicated bike lanes: safe, wide, and unrestricted movement for better transport flow. I move quickly on my bike, and open lanes are needed so the trek is as brief as possible. i.e., Southard & Fleming Sts provide movement, not constant stop signs (I do not like the new one at Mangia Mangia, c'mon!).

Count	Response
1	More roads had designated bike plans and the drivers were more alert to bicyclists/pedestrians. Also, it would be great if the pedestrian crossing areas on North Roosevelt had flashing lights only when someone was trying to cross to better alert drivers. It's hard to see if someone is in the crosswalk while driving in the left lane because the car in the right lane blocks the view if the pedestrian is coming from that direction.
1	Safer for bikes, more bike paths isolated from traffic. Better and safer street crossing for bikes. Slower car speed.
1	Speed limits were reduced by thirty percent
1	Speeding laws very more strictly enforced
1	The streets were less congested and bicycling were safer.
1	There was a regular and reliable bus option.
1	There was more parking, for bicycles and cars.
1	There were better marked bike lanes.
1	There were both better means of public transportation. Although in theory the Duval loop is a great idea, i don't think using a city bus is the best alternative. I think a great idea would be some kind of express shuttle that travels N - S and E-W. Much like they use in cities like San Francisco. Bike paths that are on our busiest streets are not ideal. Many bikers do not adhere to the laws. It just adds to the congestion problems.
1	There were fewer cars and more safe bike routes.
1	There were less cars!!
1	There were less cars. Better transportation for tourists to get around the city.
1	There were more dedicated bike lanes that I felt safe riding in
1	There were more shade for pedestrians and bicyclists Safety for both pedestrians and bicyclists could be enhanced
1	There were wider/more bike lanes
1	Very content to have are with pedestrian only access between 11am and 2am. I do not believe we have a general shortage of car parking but can support a case for hub parking with excellent distributor public transport connectivity.
1	We all respected each other!
1	We had more safe bidycle lanes.

Count	Response
1	We had safe bike routes and efficient public transportation
1	Why was ride sharing left out of your survey?
1	You reduce vehicular traffic.
1	all or most of the streets were closed to cars or at least limited severely and public parking were more appropriately priced compared with other cities (needs to be much higher)
1	bikes would go with the traffic. Drivers would respect bikes. I was just hit yesterday by a motor scooter as I was turning left onto my lane.
1	everyone actually obeyed the law and followed the rules. Everyone needs to pay attention to what they are doing and be aware of what is going on around them. Too many bicycle, scooter, pedestrian and car accidents occur on this small island because people think they are above the law.
1	it was affordable and cost efficient to use other than my car.
1	modernized transportation (not big buses) clear routes. Last time I checked it looked like I needed to make 3 transfers to go from east side of the island to old town in order to get to work.
1	streets were wider.
1	the police would stop speeders and the streets were repaved. In my 19 years here, I've never seen a radar gun being used.
1	the streets were in better condition. many of the main thoroughfare streets through key west are not in good shape.
1	there were more bike paths or routes that catered to the needs of a cyclist.
1	there were places to park my car. I have a bike but I am afraid to leave it outdoors at my work overnight because it will be stolen. I am unable to leave my bike inside my office. I do not have a bike rack for my car and would not want to load it to bring it back and forth every day. I have 2 bikes -- a cheap bike to leave locked up when I go inside to eat and a very expensive bike I will not let out of my sight because it will be stolen even if on a very good lock.
1	there were safer bike routes with wider designated bike lanes.
1	to fell more safe riding bikes and had secure/plentiful spaces to lock the bicycle
1	we could indeed figure out a way to decrease vehicular traffic.

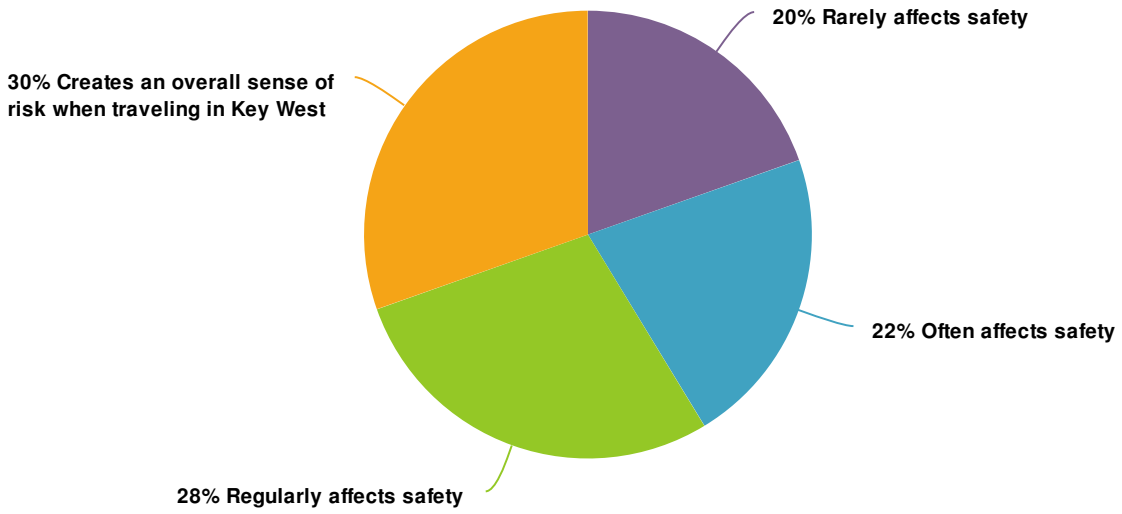
Report for Key West Multi-modal Connectivity: Survey 1 - Safety

Response Counts

Completion Rate:	**100%**	
	Complete	46

Totals: 46

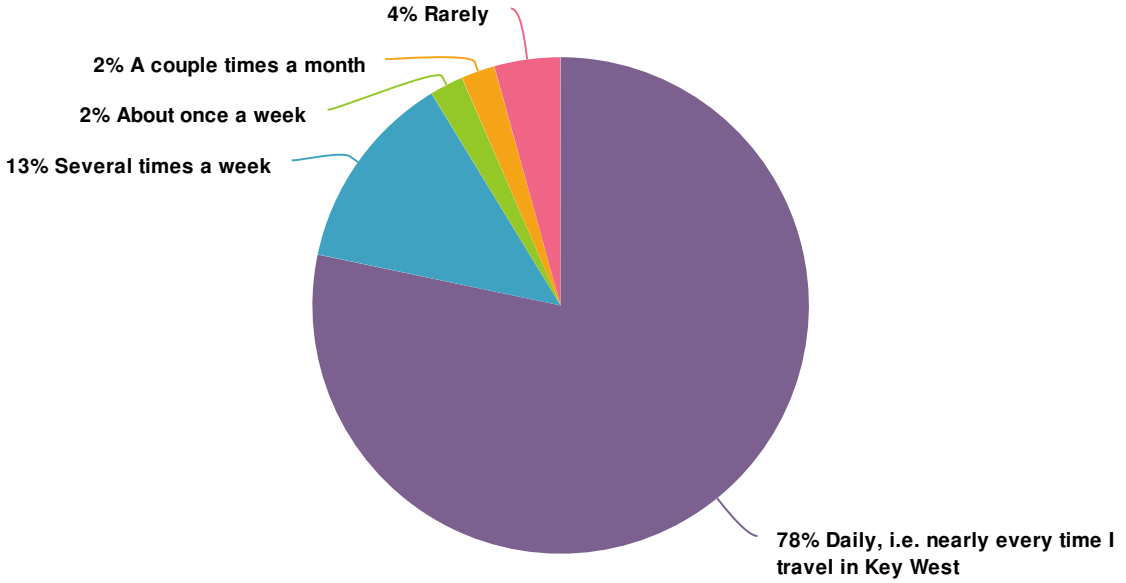
1. How significant a problem is speeding by motorists for overall roadway safety? Select the option which best fits your experience.



Value	Percent	Responses
Rarely affects safety	19.6%	9
Often affects safety	21.7%	10
Regularly affects safety	28.3%	13
Creates an overall sense of risk when traveling in Key West	30.4%	14

Totals: 46

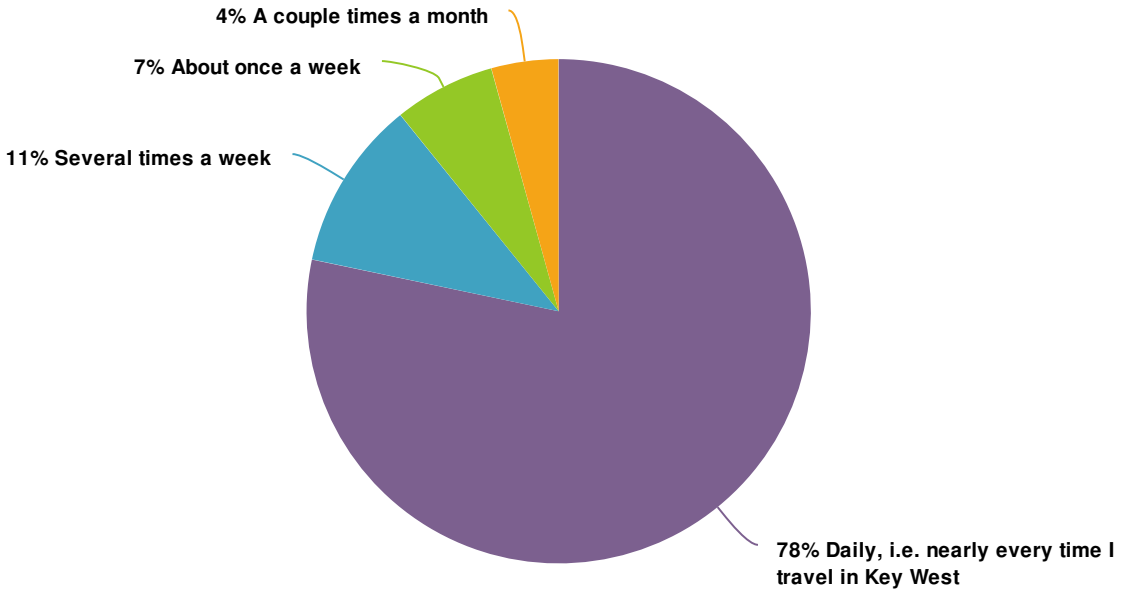
2. Other than speeding, how often do you observe motorists and scooter drivers not observing traffic laws? This includes: going through red lights not yielding the right-of-way not fully stopping at stop signs parking in no parking areas, including on crosswalks and in bike lanes driving too closely to the vehicle ahead of them using cell or smart phone



Value	Percent	Responses
Daily, i.e. nearly every time I travel in Key West	78.3%	36
Several times a week	13.0%	6
About once a week	2.2%	1
A couple times a month	2.2%	1
Rarely	4.3%	2

Totals: 46

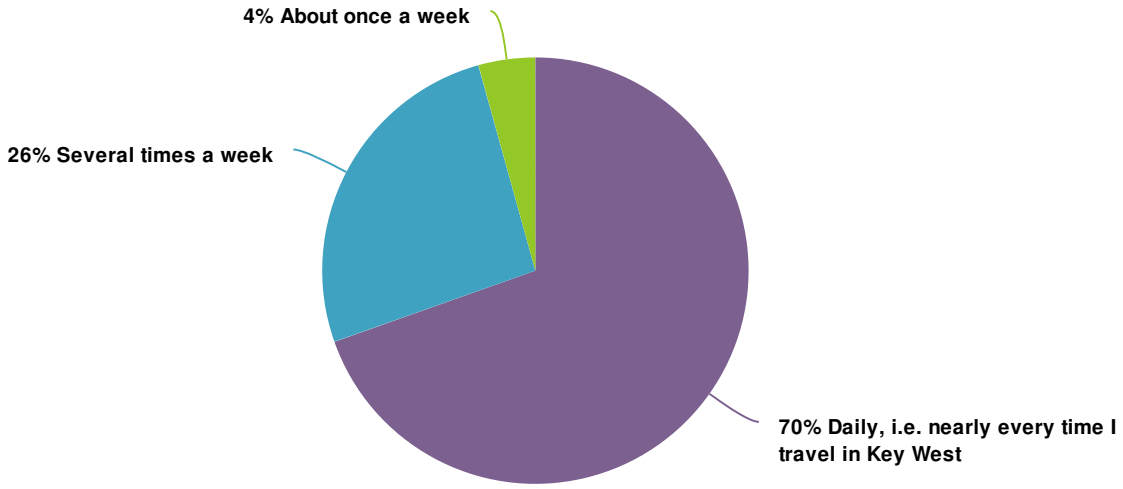
3. How often do you observe people bicycling not observing traffic laws? This includes: going through red lights not yielding the right-of-way not fully stopping at stop signs parking in no parking areas on the sidewalk bicycling in other reckless ways using cell or smart phone



Value	Percent	Responses
Daily, i.e. nearly every time I travel in Key West	78.3%	36
Several times a week	10.9%	5
About once a week	6.5%	3
A couple times a month	4.3%	2

Totals: 46

4. How often do you observe people walking and not observing traffic laws? This includes: crossing the street when the light is red or the don't walk signal is on stepping off the curb to cross where there is no signal WITHOUT looking for on-coming traffic crossing where there is not crosswalk on larger roads walking in the roadway on streets (not Duval Street) using cell or smart phone



Value	Percent	Responses
Daily, i.e. nearly every time I travel in Key West	69.6%	32
Several times a week	26.1%	12
About once a week	4.3%	2

Totals: 46

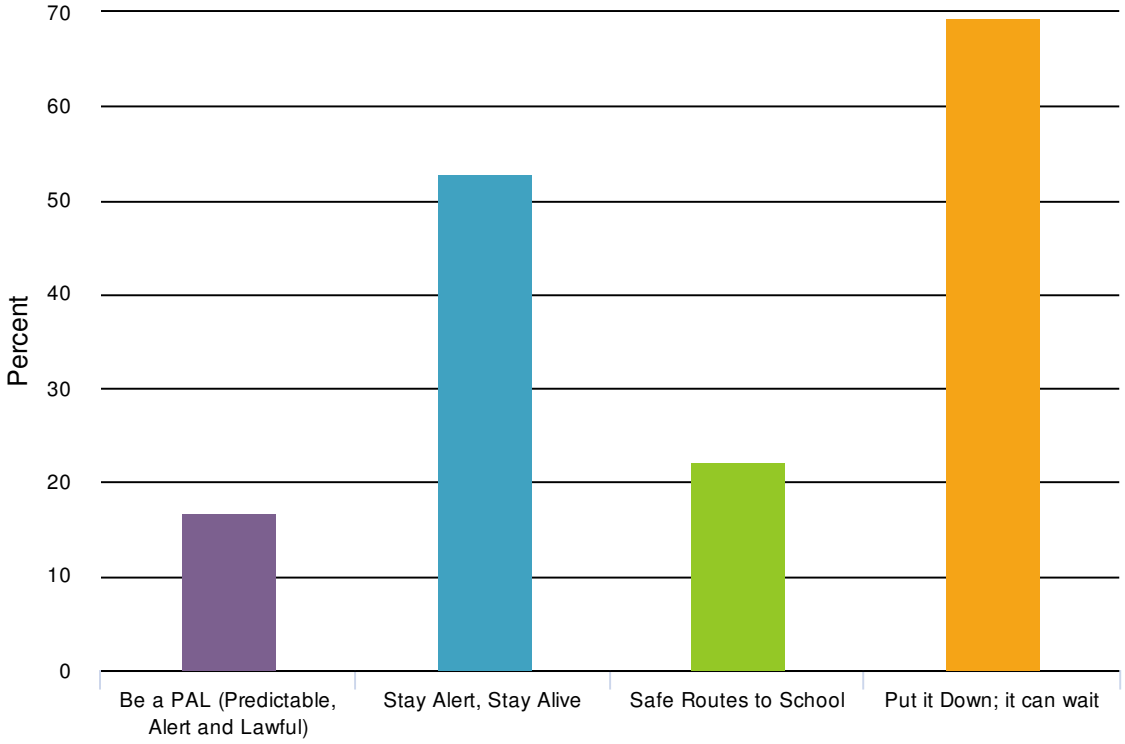
5. Which measures would contribute to overall roadway safety? Rate measures for their importance or effectiveness.

	More stars means more important and effective.
Regular enforcement	★★★★½ Count: 46 Not Applicable: 0
Enforcement stings (add brief description)	★★★½☆ Count: 41 Not Applicable: 0
Media campaign	★★★☆☆ Count: 43 Not Applicable: 0
Signage about school zones or distracted driving, bicycling and walking	★★½☆☆ Count: 42 Not Applicable: 0
Other	★★★½☆ Count: 21 Not Applicable: 0

6. [OLD VERSION] Which current safety programs are you aware of? check all that apply

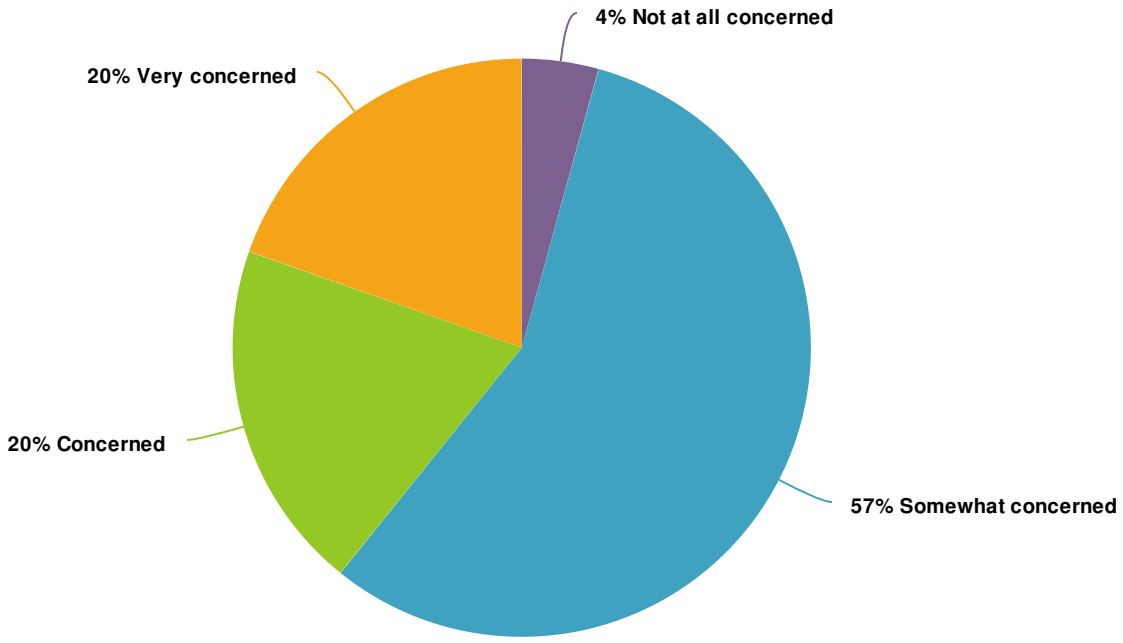
No data to display

7. Which current safety programs are you aware of?check all that apply



Value	Percent	Responses
Be a PAL (Predictable, Alert and Lawful)	16.7%	6
Stay Alert, Stay Alive	52.8%	19
Safe Routes to School	22.2%	8
Put it Down; it can wait	69.4%	25

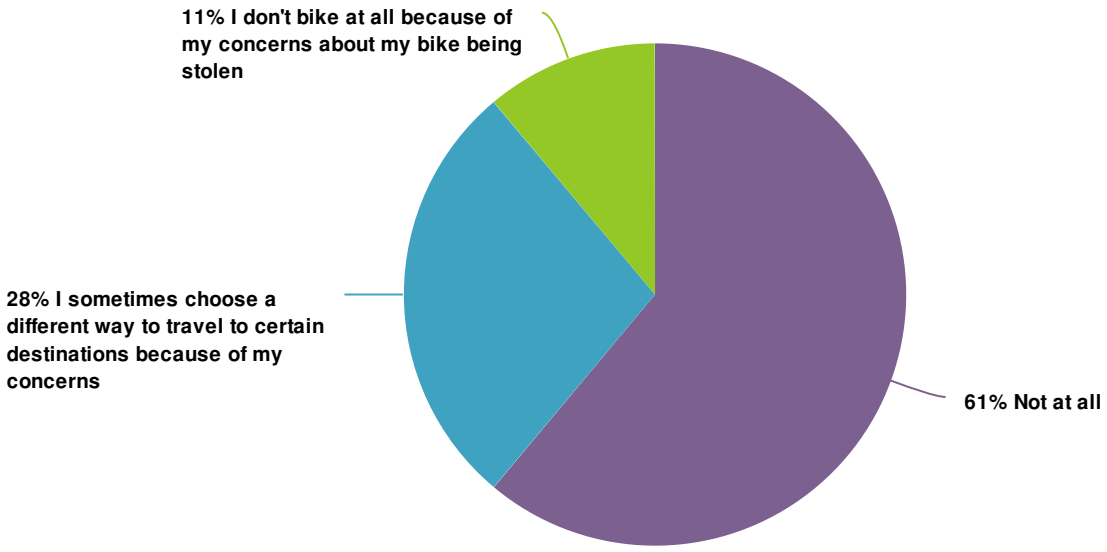
8. How concerned are you about bicycle thefts in Key West?



Value	Percent	Responses
Not at all concerned	4.3%	2
Somewhat concerned	56.5%	26
Concerned	19.6%	9
Very concerned	19.6%	9

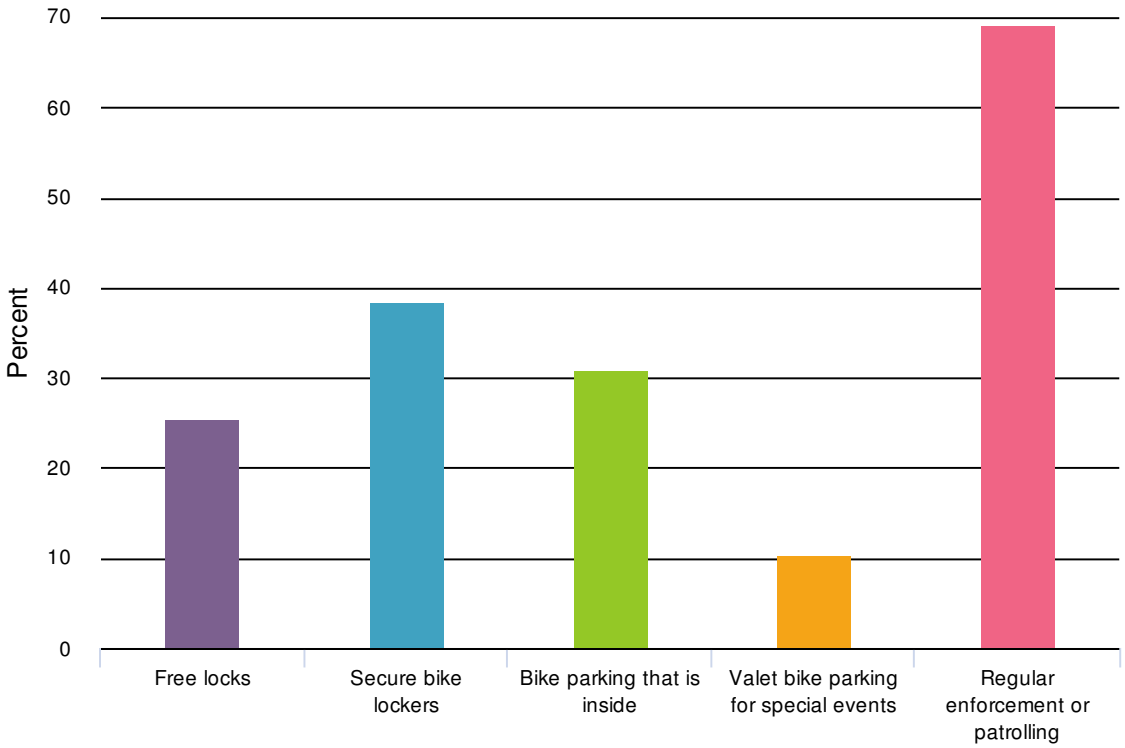
Totals: 46

9. Does your level of concern about bicycle theft affect your decision to ride?



Value	Percent	Responses
Not at all	61.1%	11
I sometimes choose a different way to travel to certain destinations because of my concerns	27.8%	5
I don't bike at all because of my concerns about my bike being stolen	11.1%	2
	Totals:	**18**

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



Value	Percent	Responses
Free locks	25.6%	10
Secure bike lockers	38.5%	15
Bike parking that is inside	30.8%	12
Valet bike parking for special events	10.3%	4
Regular enforcement or patrolling	69.2%	27

11. Is there anything else you'd like to tell us about Safety?

Count	Response
1	Bicyclists should be encouraged to take less busy routes through key west. The busiest corridores are often chocked by slow or swerving bicycles while more appropriate routes are another block away.
1	Bike paths need to have wider lanes, and more of them, dedicated. The so-called "share" on US 1 is dangerous in the extreme, you have to be suicidal to actually ride your bicycle on it.
1	Cabs often speeding, more than anyone else Already overload of signs Need more bike racks all over KW
1	Drivers do not understand how they infringe on bike lanes. Car doors are a constant danger to Old Town bike lanes. Bike riders who wear dark clothing while riding against traffic with no lights after dark are a danger to themselves and give law abiding bike riders a bad image. Locals abuse more traffic laws than tourists but both need better education about consequences of their behavior.
1	Educate tourists. Educate kids. Educate drivers that they don't own the road and bikes have a right to use it too.
1	Education and communication are key to making a safe environment. Most people I converse with about getting around town have very different ideas of the best way to be safe on the roads while walking, cycling, and driving. I would be more than happy to volunteer my time to help educate citizens, especially the youth, on the best practices to use while getting around town to keep everyone safe.
1	I don't know anything about question 6. Pedestrian and Bicycle safety programs need to be developed, implemented and marketed.

Count	Response
1	I don't think drivers are adequately trained. For instance, they don't understand that the vehicle going straight has the right-of-way at an intersection. I daily see drivers turn in front of on-coming traffic. I daily see people texting while driving and biking. And people renting scooters can't decide if they should ride with traffic or in the bike lane.
1	I find the greatest offenders are tourists and visitors because they just don't know or are not reminded of road and pedestrian safety. Bike, scooter and cart rentals need to do a better job.
1	I live in KW and walk a lot so I see regular abuse or ignorance with respect to laws. Experience in my profession has shown that regular enforcement is needed. Signage is minimally effective, most people know they aren't supposed to speed but do anyway. Speeding and roadway issues here seriously detract from quality of life (I am raising my child in town and am always concerned with vehicles ignoring laws) and probably detract from tourist enjoyment of what used to be a calm beach town.
1	I never ride my bike on Duval, Eaton, or Truman and I always wear my helmet (or my wife would kill me). There are many intersections (such as United and Simonton) that pedestrians cannot see the color of the traffic light and do not have the "red hand of death' .
1	I rarely if ever see traffic any enforcement in KW. Have the city support a chip program to secure on bikes and locate them if they are stolen. A change in the traffic laws to allow bicycles to yield at stop signs rather than stop at the inordinate amount of stop signs in our town. The city is incredibly short on bicycle parking. Make bicycle parking pleantiful.
1	I would like to know if there are any bike locks that can not be broken by thieves?
1	In regards to #9, where can we submit information about our bikes? Serial numbers, pictures, etc.? Does KWPD or MCSO allow us to register our bikes with them? Are they willing to provide numeric stickers saying that this is a bike that has been registered into their database? Being proactive is always a good thing.
1	Individuals are responsible for securing their own bikes. Crack down on sales outlets for stolen bikes. Roadway safety would be improved by creating separation - safe bike lanes.
1	It's motorists and bicyclists at fault. First for both TEXTING, TALKING ON CELL PHONE--huge distraction for both. Tourists have no idea the one way streets, and there is a LACK OF SIGNAGE in old town. Bicyclist ignore one way streets feeling they are above the rules of traffic. Pedestrians seem just completely clueless and tend to walk, jog down the middle of the street or bike lane ignoring the sidewalks. I have lived in Old Town for 15 years and no one follows traffic rules.
1	Key West is a dangerous place to ride a bicycle. I will only ride on a sidewalk when I come onto the island. Too many cars and they drive too fast!
1	More Signage at the Triangle that Key West is a bike friendly town and a major form of transport. Bike endangerment by drivers will be scrutinized and prosecuted. (In Amsterdam, bike seem to have the right of way.)

Count	Response
1	Pedi cabs are a nuisance as are electric cars. The "Car-Free Key West" mega bus is the dumbest thing I have ever heard. What a waste of taxpayer money.
1	People should not be able to rent bikes without being provided information about safety and their responsibilities to obey the same laws as autos
1	Regarding "5. Which measures would contribute to overall roadway safety?", more general enforcement will help, but stings probably have little effect on the rotating temporary residents. Better infrastructure and education would probably be most effective.
1	Stop sign intersections should have a yield sign for bicycles only. Cars should stop. Bikes should yield without having to put a foot on the ground and proceed over the hump of the intersecting road from a dead stop. Put some damn radar guns on the streets of old town, especially the east-west streets.
1	The city needs to stop putting bike lanes alongside parked cars, use sharrows instead. Bike lanes only favor motor vehicles.
1	The main concern I have when it comes to bicycle safety is lack of ability to see on coming traffic from an intersection, such as a two way stop, due to park cars blocking the view. As well as the poor use of crosswalks. The crosswalks on N. Roosevelt Blvd should be given a push button signaling device so that on coming traffic is alerted to a pedestrian or cyclist attempting to cross. There is no enforcement of FL State Law which requires vehicles to yield to pedestrians. I have witnessed several members of law enforcement fail to yield.
1	There seem to be too many accidents for everyone being in a hurry, except for the pedestrians, who don't care if the light is red. They look at a driver like it's our fault for daring to have to drive in KW. Duval Street is the worst area for this.
1	measurement for question 9. none are real reducers of the likelihood to prevent stealing. More bike racks, highly visible and in prominent areas would be better.
1	separation of cars and bikes would do best. More bikes toward the less congested roadways is safer. Drivers are horrible on major roads.
1	there is a sort of "wild west" culture among bicyclists in Key West. By whatever means we will need to consider a long-range strategy to shift our bike- culture to one of self-preservation (safety)

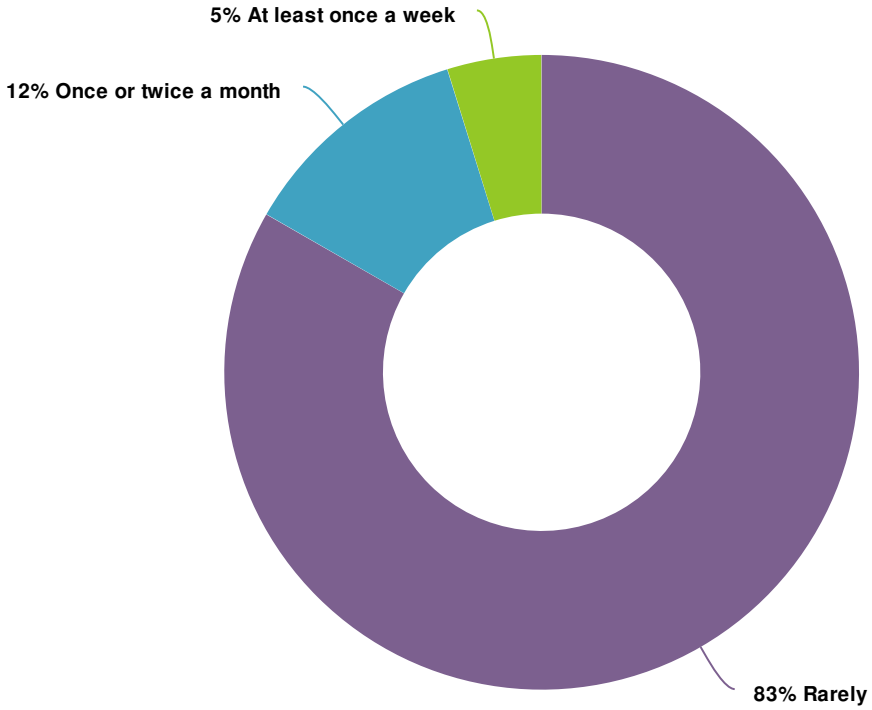
Report for Key West Multi-modal Connectivity: Survey 3 - Shared Economies

Response Counts

Completion Rate:	**100%**		
	Complete		42

Totals: 42

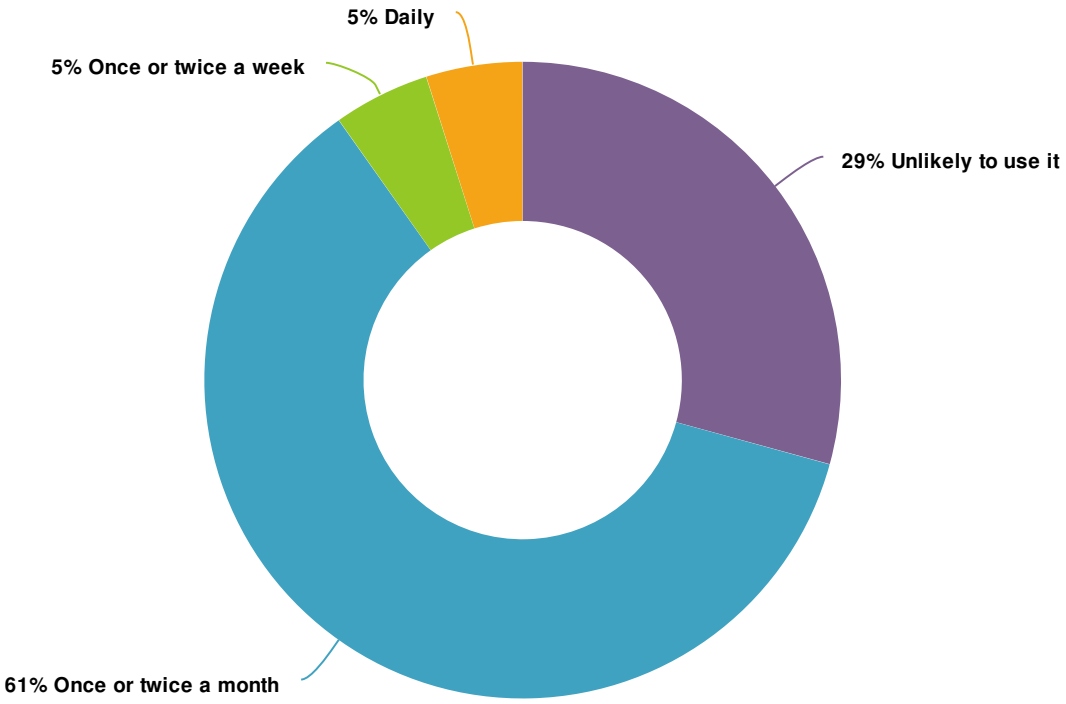
1. How often do you use taxis for your travel needs?



Value	Percent	Responses
Rarely	83.3%	35
Once or twice a month	11.9%	5
At least once a week	4.8%	2

Totals: 42

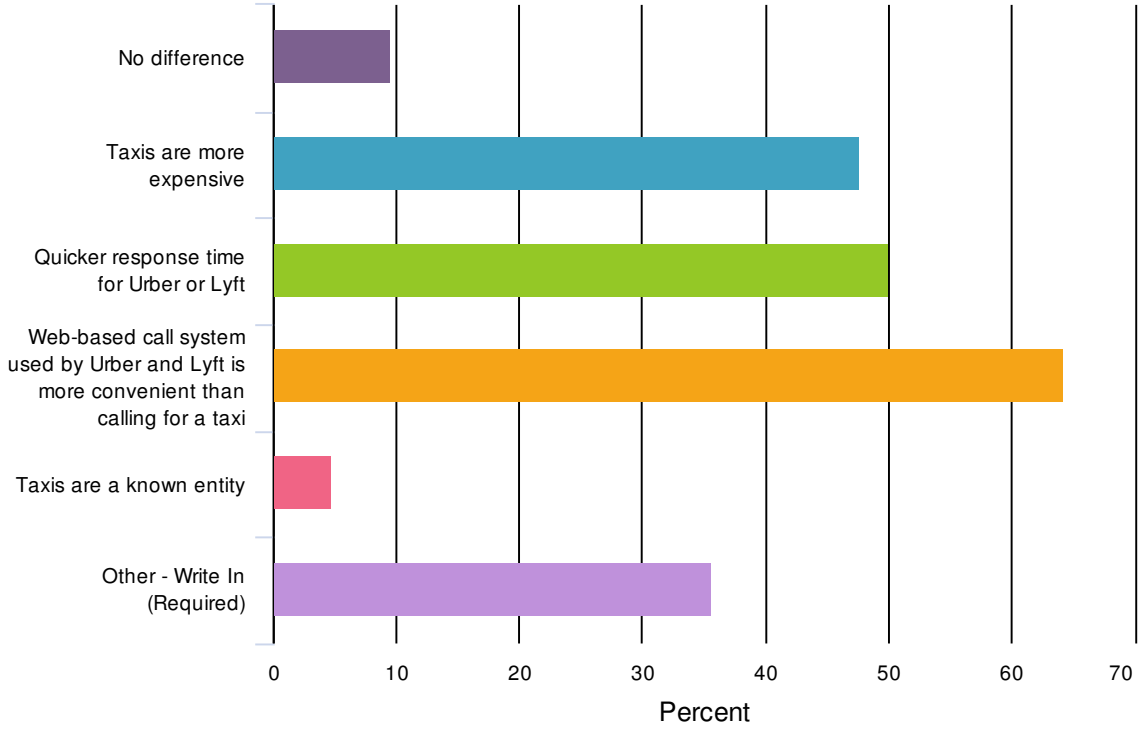
2. How often have you or would you use Urber of Lyft for your travel needs?



Value	Percent	Responses
Unlikely to use it	29.3%	12
Once or twice a month	61.0%	25
Once or twice a week	4.9%	2
Daily	4.9%	2

Totals: 41

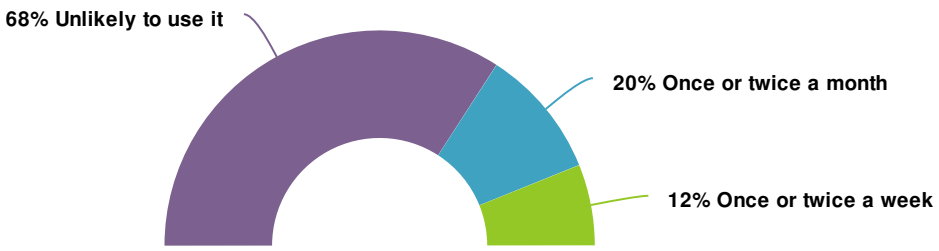
3. What is the difference in mobility between a taxi and Urber or Lyft?Check all that apply.



Value	Percent	Responses
No difference	9.5%	4
Taxis are more expensive	47.6%	20
Quicker response time for Urber or Lyft	50.0%	21
Web-based call system used by Urber and Lyft is more convenient than calling for a taxi	64.3%	27
Taxis are a known entity	4.8%	2
Other - Write In (Required)	35.7%	15

Other - Write In (Required)	Count
Can rate drivers & see ratings	2
never used uber or lyft; don't know	2
Local taxis are not nice.	1
Taxi drivers are less friendly and cars are not as clean	1
Taxi drivers are local.	1
Uber and Lift are clean	1
Uber or Lyft drivers have had cleaner/newer vehicles and have been very kind!	1
Uber/Lyft cars are generally newer and cleaner	1
have yet to use Uber Lyft	1
haven't used uber	1
taxis are rude, frequently pull in front of me and cut in while I'm driving my car	1
uber driver not i had was not local and didn't speak english. very strange that they didn't know where they were going in this small town	1
uber/lyft more comfortable/cleaner	1
Totals	15

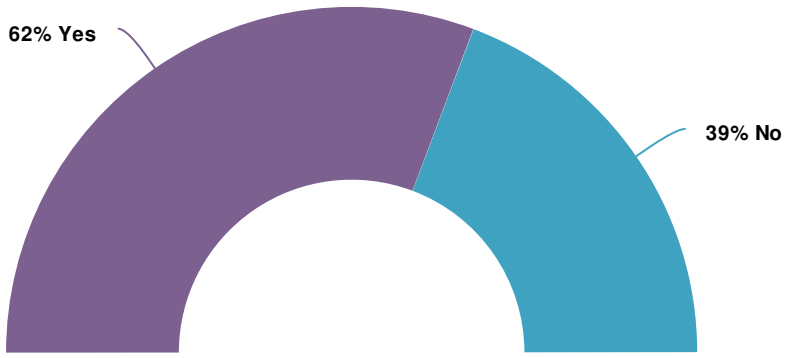
4. If bike share was available in Key West, how likely are you to use it for your travel needs if bikes are conveniently located?Click here to learn about bike share, but then come back to the survey!



Value	Percent	Responses
Unlikely to use it	68.3%	28
Once or twice a month	19.5%	8
Once or twice a week	12.2%	5

Totals: 41

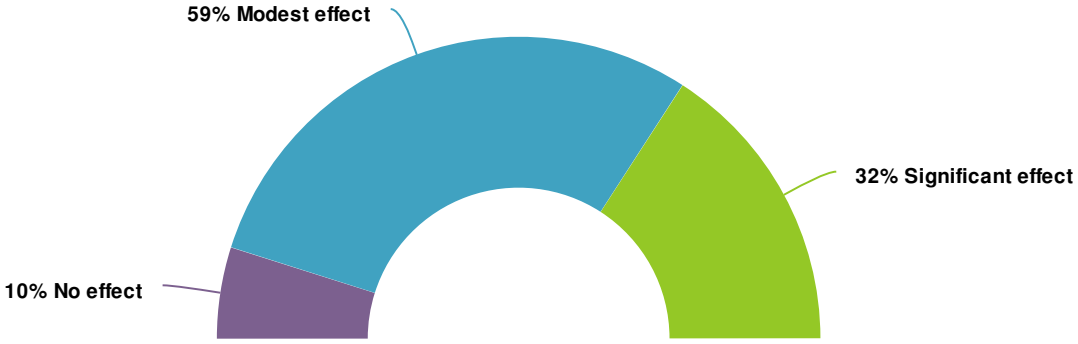
5. Do you use bike share when you are in other communities where it is available?



Value	Percent	Responses
Yes	61.5%	8
No	38.5%	5

Totals: 13

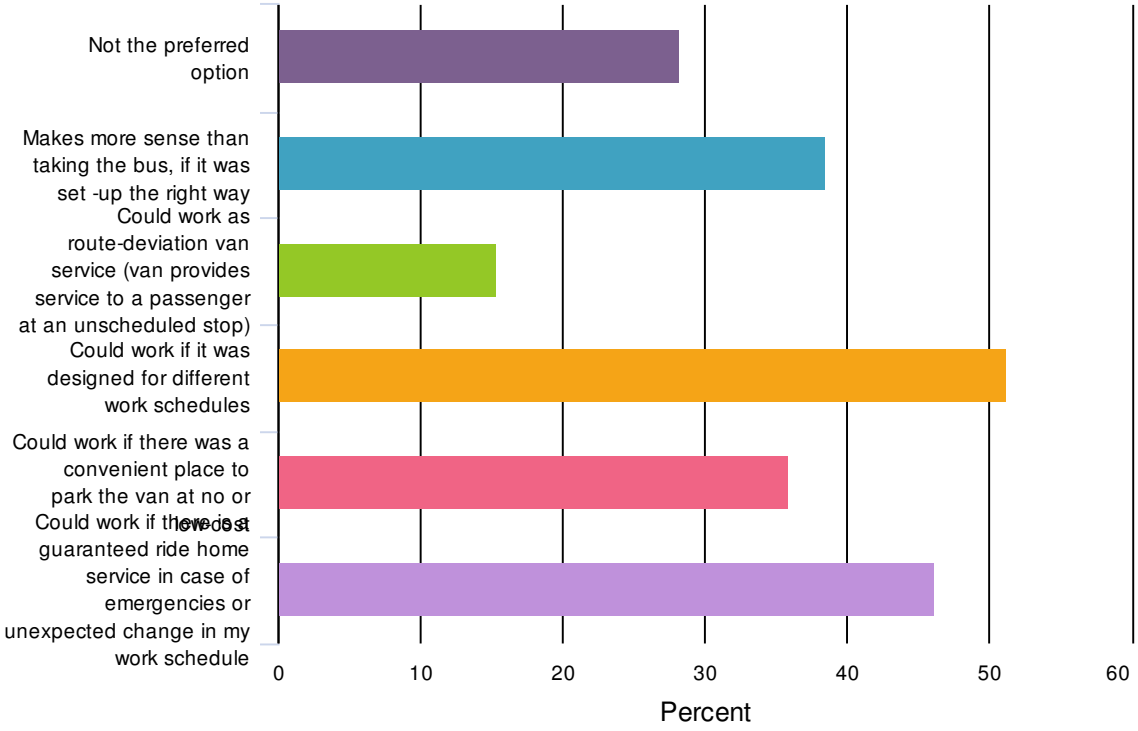
6. How much do you think car or van pools could reduce traffic congestion on Route 1 and downtown?Click here to learn more about van pools, then come back to the survey!



Value	Percent	Responses
No effect	9.8%	4
Modest effect	58.5%	24
Significant effect	31.7%	13

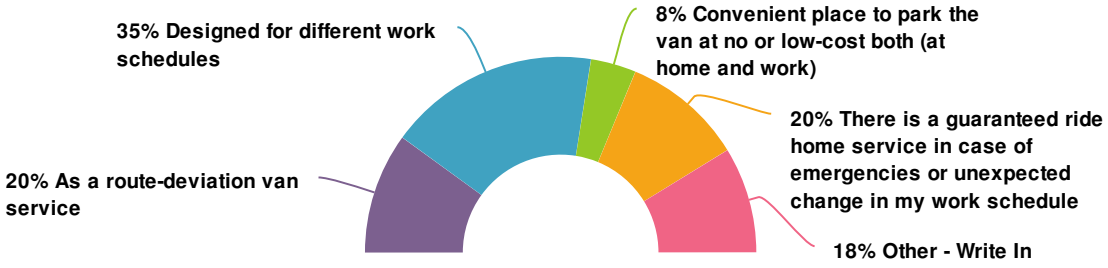
Totals: 41

7. How important are car or van pools for commuting to and from work?Check all that apply.



Value	Percent	Responses
Not the preferred option	28.2%	11
Makes more sense than taking the bus, if it was set -up the right way	38.5%	15
Could work as route-deviation van service (van provides service to a passenger at an unscheduled stop)	15.4%	6
Could work if it was designed for different work schedules	51.3%	20
Could work if there was a convenient place to park the van at no or low-cost	35.9%	14
Could work if there is a guaranteed ride home service in case of emergencies or unexpected change in my work schedule	46.2%	18

8. How would a car or van pool service need to be set up?



Value	Percent	Responses
As a route-deviation van service	20.0%	8
Designed for different work schedules	35.0%	14
Convenient place to park the van at no or low-cost both (at home and work)	7.5%	3
There is a guaranteed ride home service in case of emergencies or unexpected change in my work schedule	20.0%	8
Other - Write In	17.5%	7

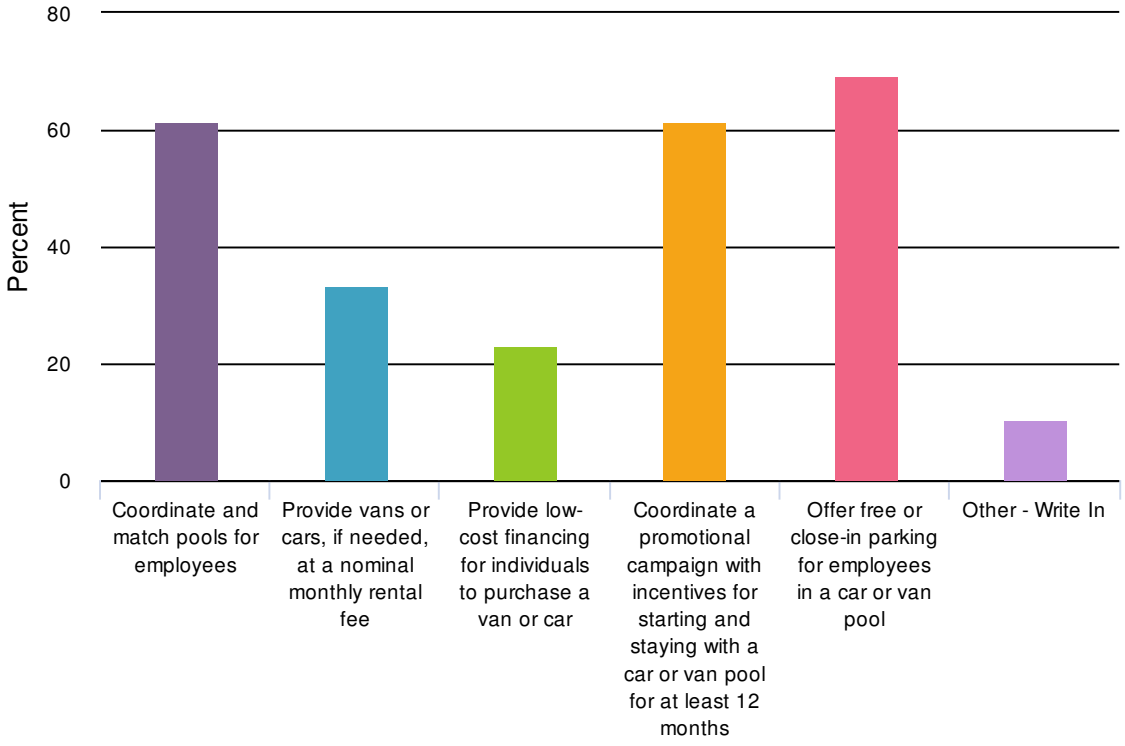
Totals: 40

Other - Write In	Count
Like Uber?	2
I don't have an opinion as my lifestyle does not necessitate a long commute.	1
I have no interest	1
I would never use	1
This has as much chance of working as The City's stupid Loop. What a waste of taxpayer dollars.	1
With linear routes up and down U.S. 1 it makes more sense to have a good bus system.	1
Totals	7

9. What role should the City play in helping to set up car or van pools?Check all that apply.

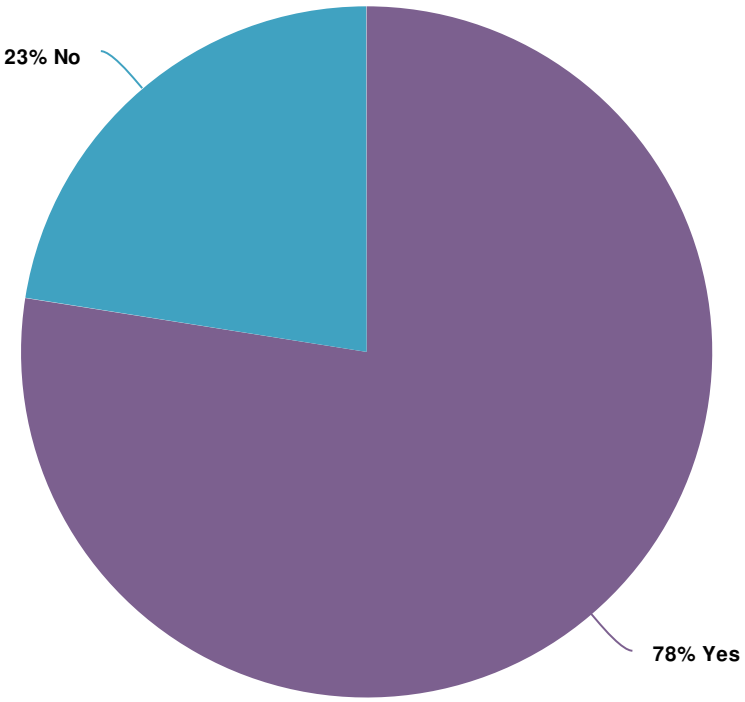
	The City should take the lead on this	The business community should take the lead on this	Individual employers should take the lead on this	Total Checks
Coordinate and match pools Checks Row Check %	13 30.2%	16 37.2%	14 32.6%	43
Provide low-cost financing for individuals to purchase a van or car Checks Row Check %	8 20.0%	19 47.5%	13 32.5%	40
Coordinate a promotional campaign with incentives for starting and staying with a car or va pool for at least 12 months Checks Row Check %	21 44.7%	16 34.0%	10 21.3%	47
Other Checks Row Check %	3 42.9%	1 14.3%	3 42.9%	7
Total Checks Checks % of Total Checks	45 32.8%	52 38.0%	40 29.2%	137 100.0%

10. What role should employers play in helping to set up car or van pools?Check all that apply



Value	Percent	Responses
Coordinate and match pools for employees	61.5%	24
Provide vans or cars, if needed, at a nominal monthly rental fee	33.3%	13
Provide low-cost financing for individuals to purchase a van or car	23.1%	9
Coordinate a promotional campaign with incentives for starting and staying with a car or van pool for at least 12 months	61.5%	24
Offer free or close-in parking for employees in a car or van pool	69.2%	27
Other - Write In	10.3%	4

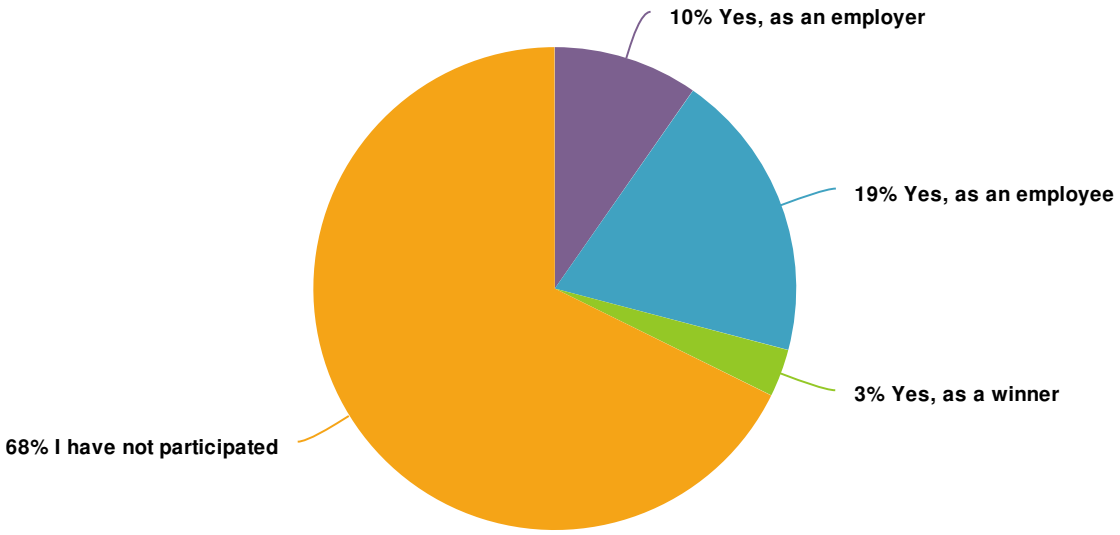
11. Are you aware of the City's Green Commute Challenge?Click here to learn more about Key West's Green Commute Challenge, then come back to the survey!



Value	Percent	Responses
Yes	77.5%	31
No	22.5%	9

Totals: 40

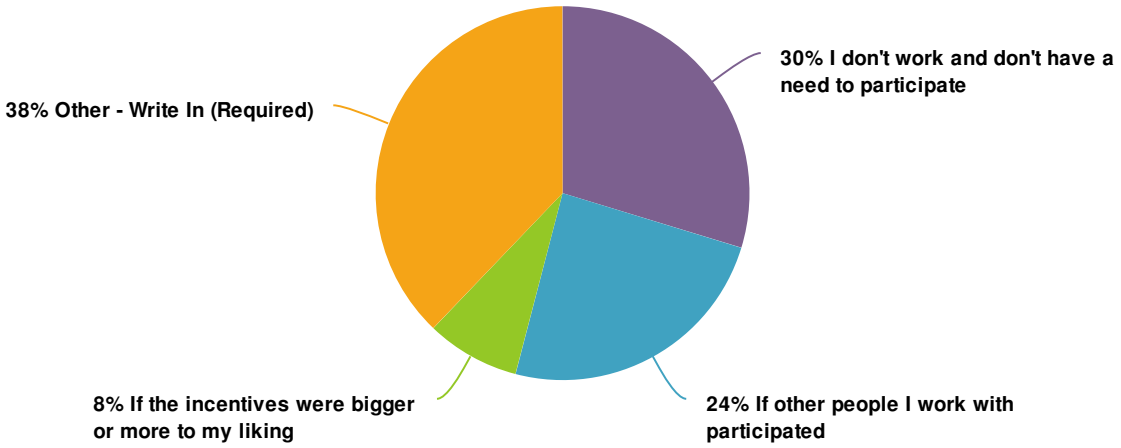
12. Have you participated in the Green Commute Challenge?



Value	Percent	Responses
Yes, as an employer	9.7%	3
Yes, as an employee	19.4%	6
Yes, as a winner	3.2%	1
I have not participated	67.7%	21

Totals: 31

13. What would encourage you to participate?



Value	Percent	Responses
I don't work and don't have a need to participate	29.7%	11
If other people I work with participated	24.3%	9
If the incentives were bigger or more to my liking	8.1%	3
Other - Write In (Required)	37.8%	14

Totals: 37

Other - Write In (Required)	Count
more prizes matched to the style of commuting. Not necessarily bigger.	2
I bike less than a mile to work.	1
I don't need it	1
Realtors must have their own car	1
Self-employed, and already bike everywhere!	1
There is nothing the government can or should do to encourage this ridiculousness.	1
Van pools are not effictive for people with families and kids for the most part. After school activies preclude it.	1
been too busy to find out about it. I walk to work most days and live in old town and walk whenever possible	1
n/a	1
no set schedule - various jobs at various times - primarily use scooter	1
self employed	1
target to large employers, only 4 at my workplace	1
we plan on it but are not ready yet	1
Totals	14

14. Is there anything else you'd like to tell us about car- or van-pooling in Key West?

ResponseID	Response
11	It would be interesting to look into the UberPool option, then there could be multiple options at multiple times?
15	It's really only something that upper keys residents need.
17	no
18	This is completely ridiculous.
26	While making it easier and more convenient to not drive own vehicle, increase costs for parking
27	It works well in the Washington DC area and it could work well in Key West.
32	The greatest need is probably serving workers who live outside Key West and work in Key West
34	I think much of the traffic issue is with tourists that come to KW with their own cars or rental cars. Need safer bike lanes, Uber & more frequent and flexible public transit.
38	Only effective if longer distances are involved, i.e., going from one municipality to another.
40	Today I am fortunate enough to be able to walk or bike to most destinations. My work commute is about 1 mile, easy by both methods. Bus transport is inexpensive but not a part of my plans. Since we own a hybrid vehicle, we drive when necessary because of weather or need to carry stuff. Uber or Lyft would only be a first choice if weather is bad and we were enjoying alcoholic beverages.
41	Offering free parking would be a great incentive.
45	I would suggest that coordinating with Lyft Line and Uber Pool and promoting busing would be more effective than vans. The Carpooling App by Waze has particular promise as it does not encourage increased congestion.

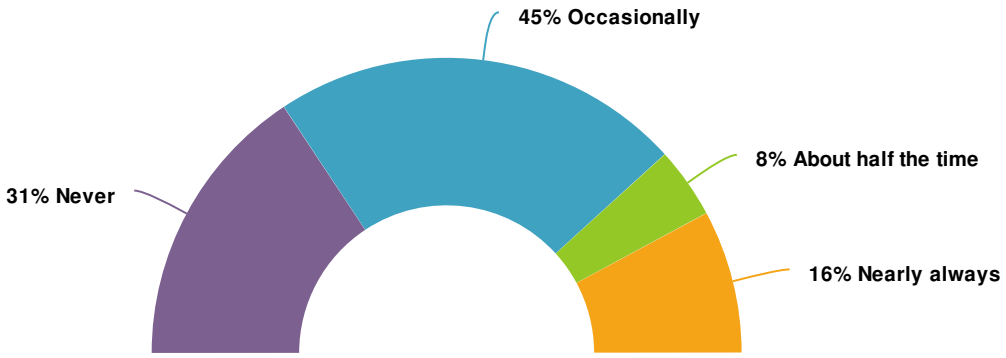
Report for Key West Multi-modal Connectivity: Survey 2 - Technology

Response Counts

Completion Rate:	**100%**	
	Complete	52

Totals: 52

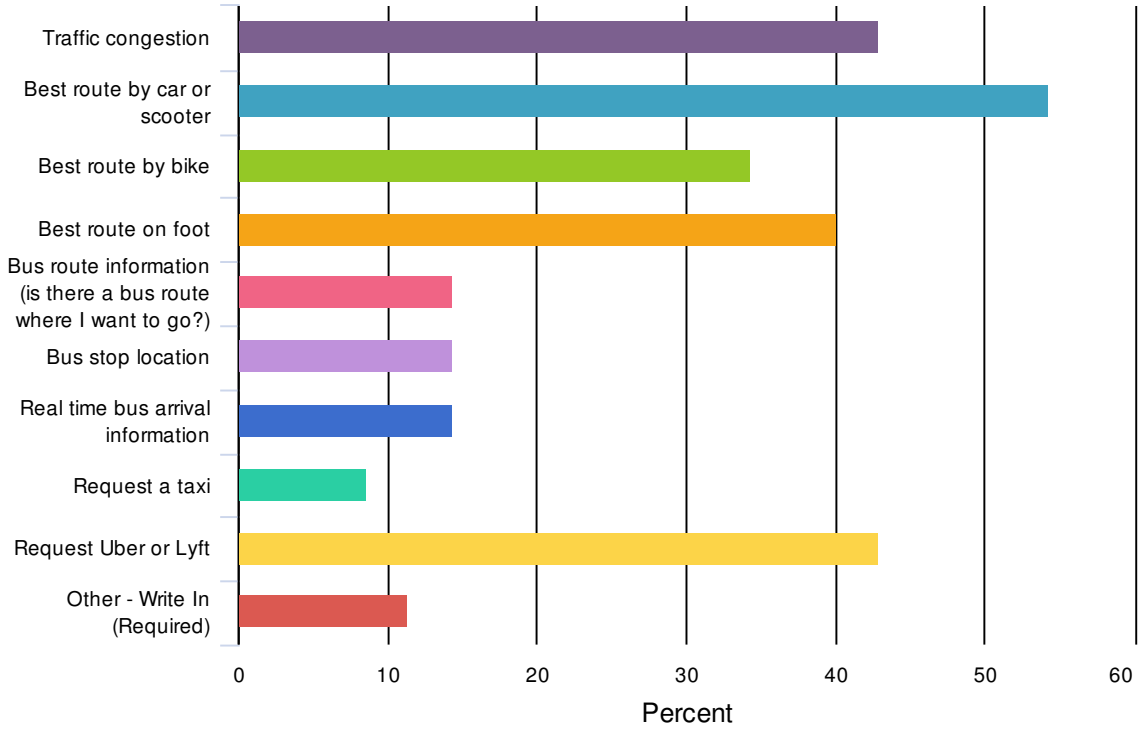
1. How often do you use your smartphone or other computer to help make a choice about how to travel each day?



Value	Percent	Responses
Never	31.4%	16
Occasionally	45.1%	23
About half the time	7.8%	4
Nearly always	15.7%	8

Totals: 51

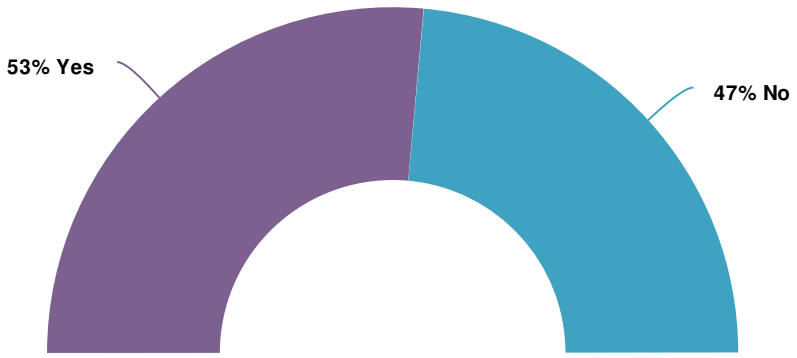
2. What types of information do you query and use?Check all that apply.



Value	Percent	Responses
Traffic congestion	42.9%	15
Best route by car or scooter	54.3%	19
Best route by bike	34.3%	12
Best route on foot	40.0%	14
Bus route information (is there a bus route where I want to go?)	14.3%	5
Bus stop location	14.3%	5
Real time bus arrival information	14.3%	5
Request a taxi	8.6%	3
Request Uber or Lyft	42.9%	15
Other - Write In (Required)	11.4%	4

Other - Write In (Required)	Count
Know routes to travel in KW	1
Weather	1
check for local traffic problems on Facebook	1
rain forecast	1
Totals	4

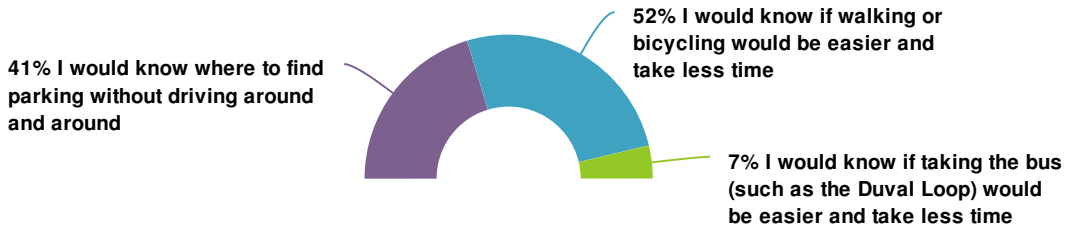
3. Would real time information about parking availability for your car affect your choice of travel mode?



Value		Percent	Responses
Yes		52.9%	27
No		47.1%	24

Totals: 51

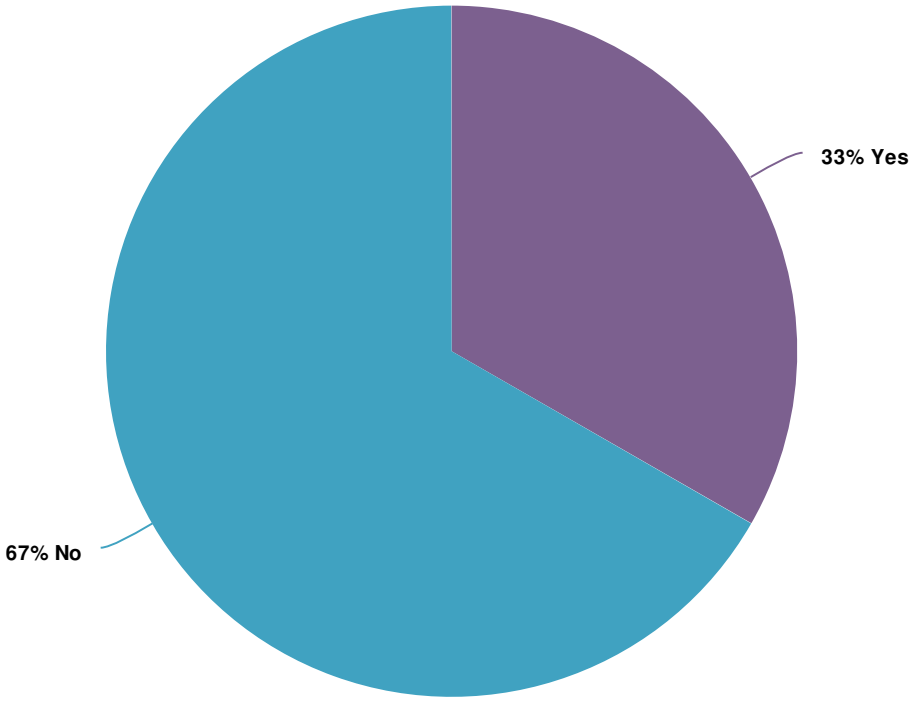
4. How would it affect your choice?



Value	Percent	Responses
I would know where to find parking without driving around and around	40.7%	11
I would know if walking or bicycling would be easier and take less time	51.9%	14
I would know if taking the bus (such as the Duval Loop) would be easier and take less time	7.4%	2

Totals: 27

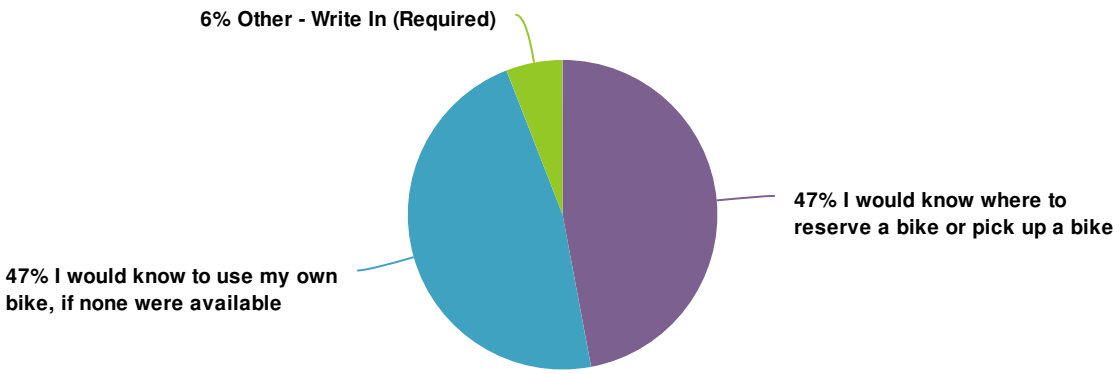
5. Would real time information about bike share availability affect your choice of travel mode?



Value	Percent	Responses
Yes	33.3%	17
No	66.7%	34

Totals: 51

6. How would it affect your choice?

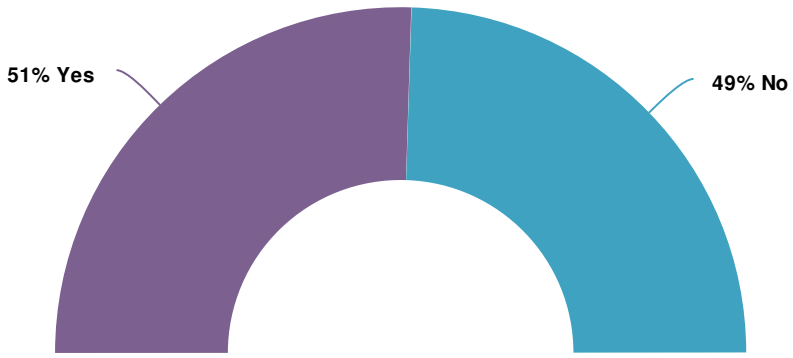


Value	Percent	Responses
I would know where to reserve a bike or pick up a bike	47.1%	8
I would know to use my own bike, if none were available	47.1%	8
Other - Write In (Required)	5.9%	1

Totals: 17

Other - Write In (Required)	Count
I think this is a good idea for visitors especially.	1
Totals	1

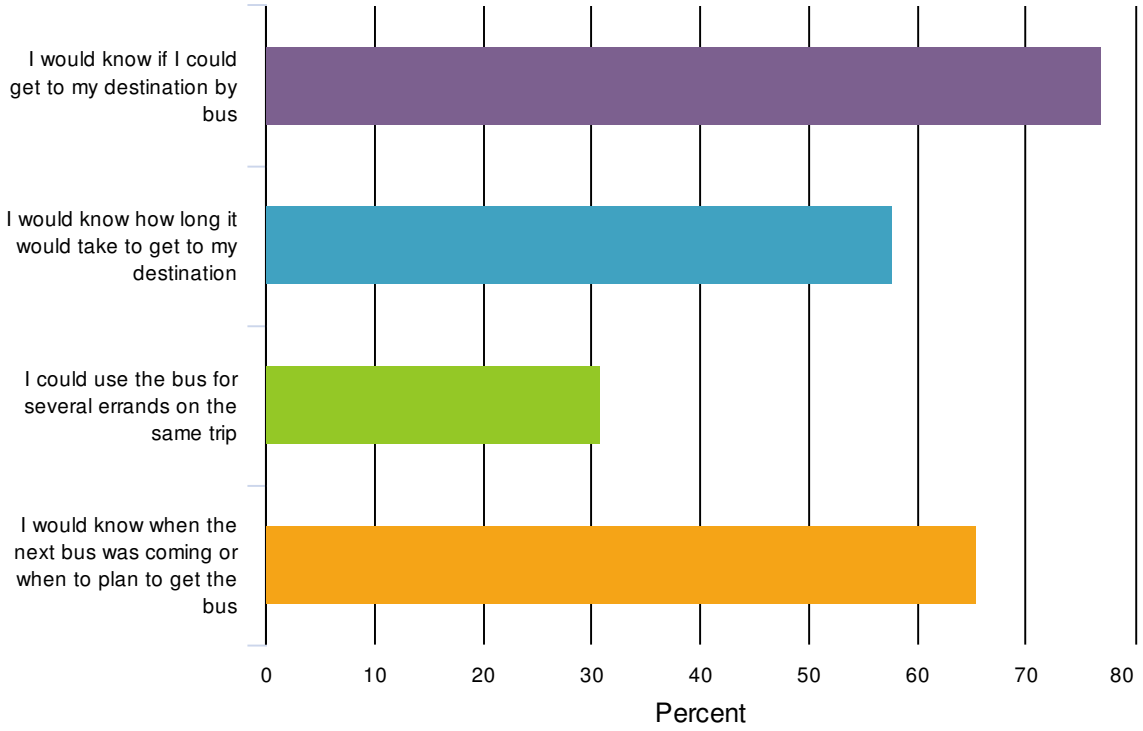
7. Would real time information about bus service affect your choice of travel mode?



Value		Percent	Responses
Yes		51.0%	26
No		49.0%	25

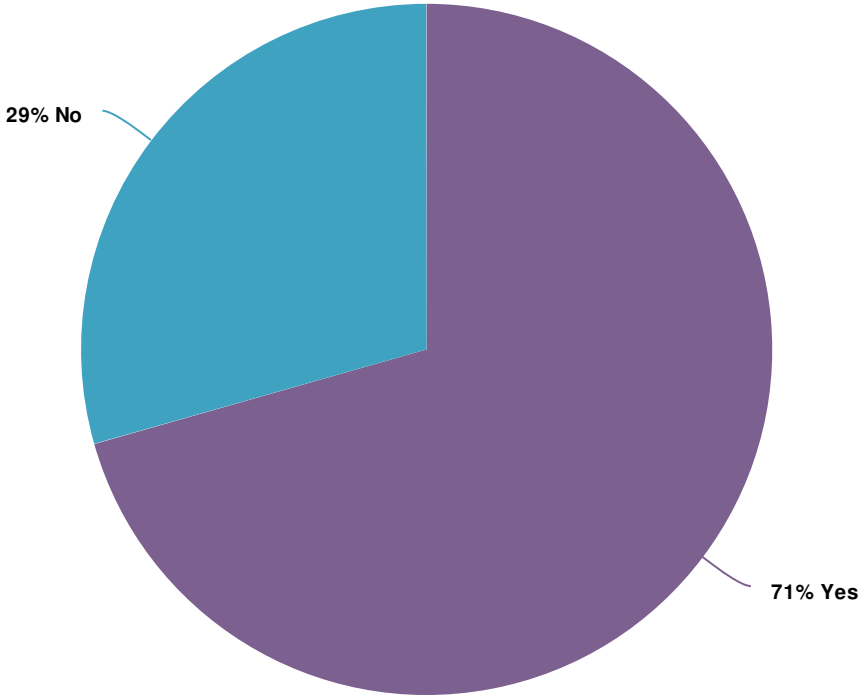
Totals: 51

8. How would it affect your choice?



Value	Percent	Responses
I would know if I could get to my destination by bus	76.9%	20
I would know how long it would take to get to my destination	57.7%	15
I could use the bus for several errands on the same trip	30.8%	8
I would know when the next bus was coming or when to plan to get the bus	65.4%	17

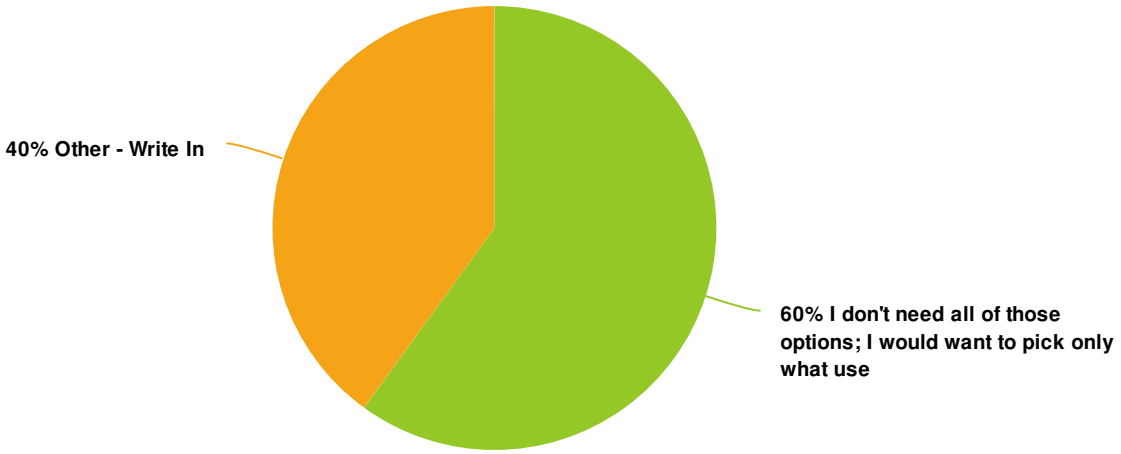
9. Would you consider using a single card or app that allows you to find and pay for all mobility choices? These choices would include traveling by bike, on foot, public transit and cars.



Value	Percent	Responses
Yes	70.6%	36
No	29.4%	15

Totals: 51

10. Why not?

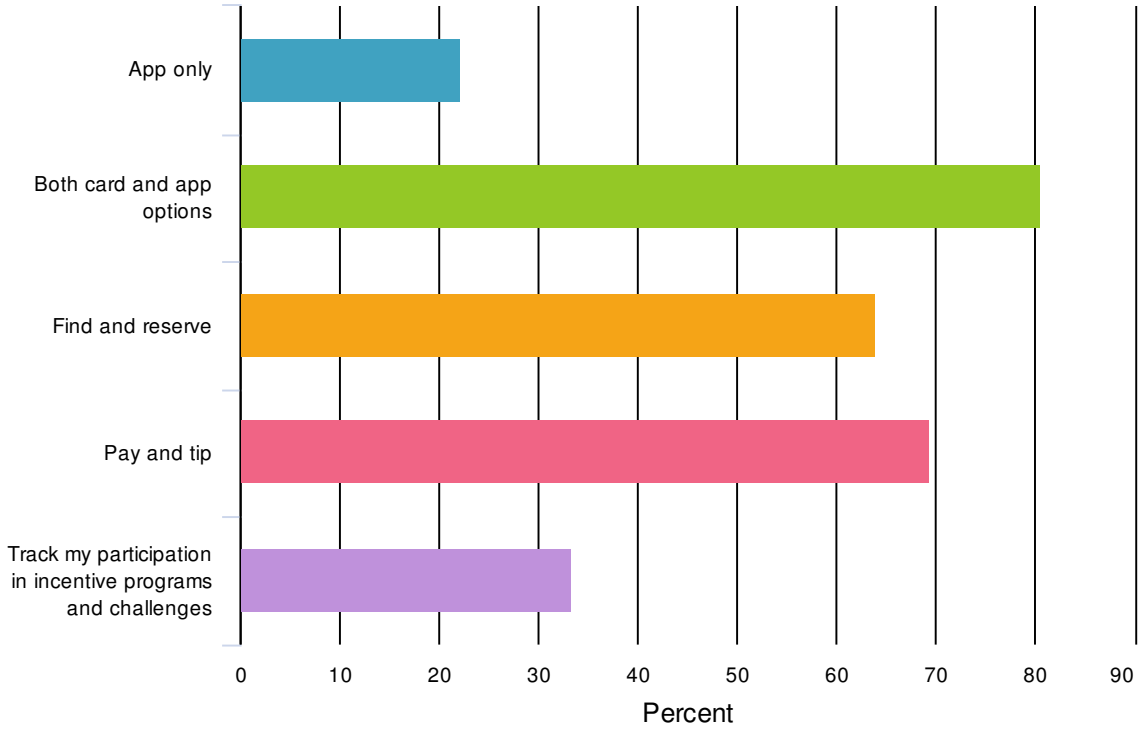


Value	Percent	Responses
I don't need all of those options; I would want to pick only what use	60.0%	9
Other - Write In	40.0%	6

Totals: 15

Other - Write In	Count
Don't need that type of technology to ride my bike. I live in Bahama Village and have my own parking space on my property for my car.	1
I like my car and I will never give it up.	1
I must drive into Key West from Sugarloaf. I amn unlikely to take transit or bicycles once in.	1
I own two bikes and can walk, carpool if major rain event	1
I rely on modes of transportation that I already own	1
N/A	1
Totals	6

11. What features would you want?Check all that apply.



Value	Percent	Responses
App only	22.2%	8
Both card and app options	80.6%	29
Find and reserve	63.9%	23
Pay and tip	69.4%	25
Track my participation in incentive programs and challenges	33.3%	12

Other - Write In	Count
Totals	0

12. How else can technology support Car Free Key West?

Count	Response
1	?
1	All ride share, bike share and public transportation options need to be integrated.
1	App is better than card. App is accessible for tourists on the fly by download. A card presents too many difficulties.
1	Arrival time signs at bus stops, a la :"next bus in 3 minutes", etc Discount monthly passes for County or City employees
1	Better bus transport from the Lower Keys to and returning from Key West
1	City of KW public transit technology not user friendly and is worthless today
1	Closest Bike Rack locations
1	Focus on locals as I find it hard to believe you will ever get visitors to download and use an app in any kind of useful percentage.
1	Highlight public parking lots in Old Town on Google Maps, Waze, Apple Maps etc. So visitors to the island know were to park. Parking meters that can be paid for and refilled with a smart phone remotely.
1	Hurricane evacuation real time data.

Count	Response
1	I don't think traditional Bike Share is necessary in our small town. Locals own bikes and tourists can easily and inexpensively rent from many shops and hotels. However, interactive maps that show bike parking/racks, prefferred walking and cycling routes, real time bus departures, etc would be useful.
1	I think the app would be useful if bike accidents could be reported so dangerous intersections would be marked
1	It cant. What a waste of money. I have already seen it create more traffic. Great job, Key West!
1	Key West is a small community in population and physical size, I don't believe that technology like live parking/traffic or bike share availability are factors that results in changes in people decision making process when choosing a mode of transportation.
1	May not apply as I use my own bike
1	Mobile friendly websites or apps would be very helpful.
1	Rather than having the parking meters or machines for payment, it would be great if an App could be used instead such as ParkMobile or Pay by Phone. I know this would not help with limiting cars, but it would be an added convenience.
1	Sincerely discourage tourist and. Suitors from traveling into The Florida Keys & Key West by automobile.
1	an easy to use, easily accessible way to have conversations via social media about what is working well (re: bike/ped), what is not working, ideas for improvements. It would be helpful if the participants could identify the "region" of town where they live/work
1	let you know when events maybe happening along your route so you can plan around them
1	parking apps for garages and availability. highly visible signs along Roosevelt letting tourists know where to go and where to park.

13. Is there anything else you'd like to tell us about Technology?

Count	Response
1	Definitely a help for tourists looking for Parking or transportation...residents have own pattern for transit unless going to special event. We always bike to avoid traffic and parking issues. Always need more bike racks.
1	I like the ideas being explored here. I've not put anytime into researching the topic of technology, but think ease of information is key. Thanks!
1	It is getting better?
1	It's prone to storm surge.
1	It's useful? Yeah, that's it. Useful.
1	No
1	Nope
1	Push safety messages to visitors via apps they use while in KW
1	Trying to compete with the likes of Uber and Lyft on a technology basis is a fools errand.
1	Use it to discover this will make matters worse at the cost of the taxpayers.
1	We need better parking meter stations. Half the time, they are out of service.
1	Why do we not have ZIP car?
1	for Question 3 - All answers are valid. Real time info on parking availability would my choice for all options. Building a multilevel parking structure on Simonton at the new firehouse with electronic availability display system would be hugely beneficial. Less congestion of cars driving around aimlessly looking for spots would create a nicer environment for bicyclists.
1	make sure it is easy to use and doesn't provide too much information/data simply because technology advances allow it. I have used applications where the creator (who is obviously an IT expert) seems to think the entire user population is as proficient at or as enamored with technology as he is. A cool app or feature isn't necessarily a useful one.
1	no
1	no other than you have to continually update and upgrade to the newest, best options.

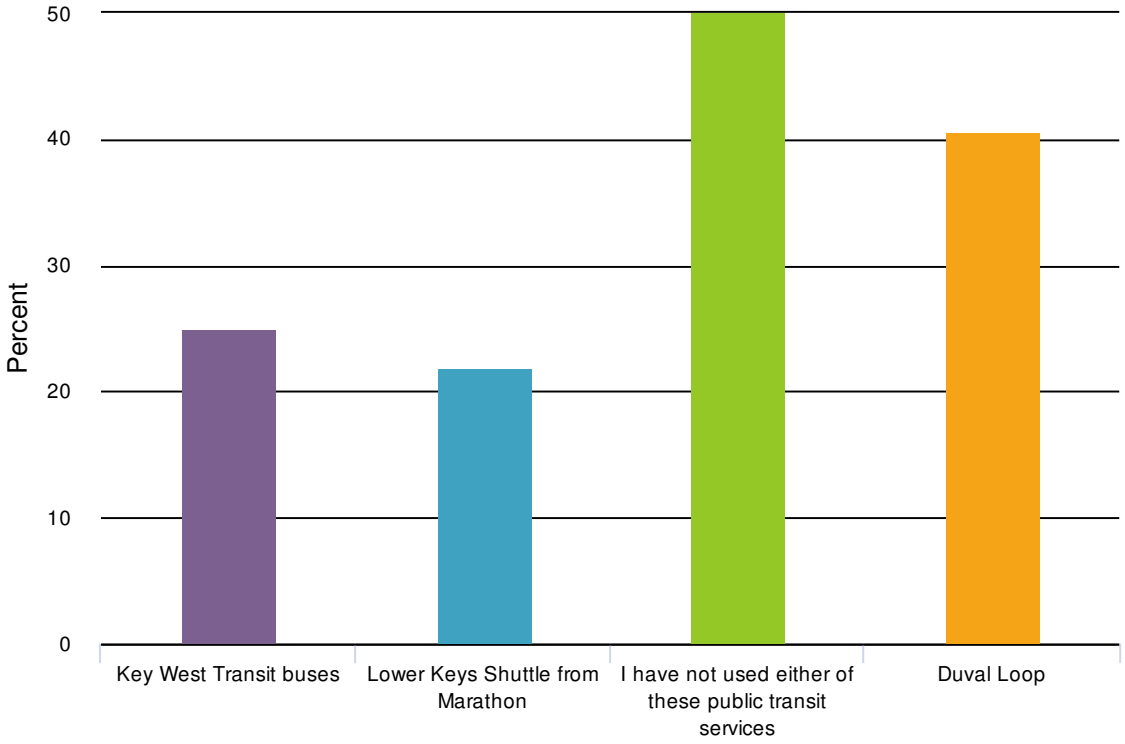
Report for Key West Multi-modal Connectivity: Survey 4 - Transit

Response Counts

Completion Rate:	**100%**	
	Complete	33

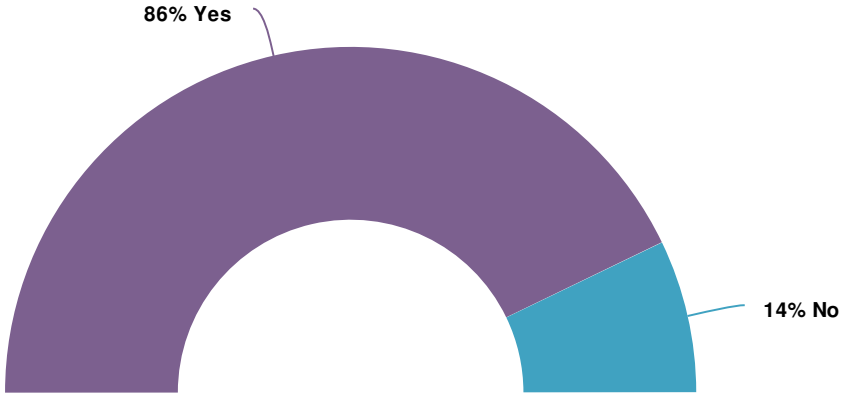
Totals: 33

1. Have you used or do you currently use public transit?Select all that apply.



Value	Percent	Responses
Key West Transit buses	25.0%	8
Lower Keys Shuttle from Marathon	21.9%	7
I have not used either of these public transit services	50.0%	16
Duval Loop	40.6%	13

2. Should the Lower Keys Shuttle offer a route with service ONLY between Big Pine Key and Key West?



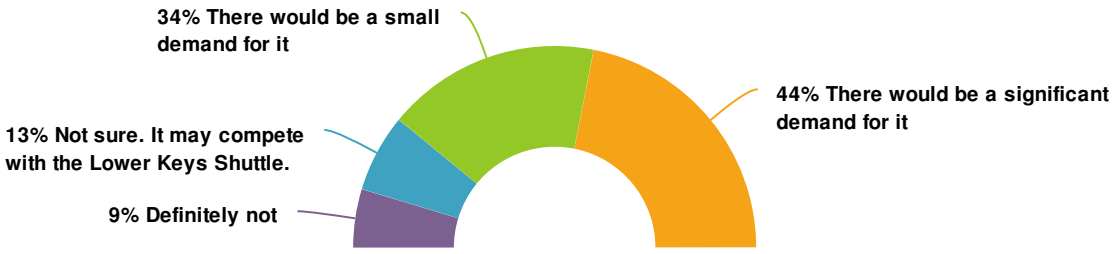
Value	Percent	Responses
Yes	85.7%	6
No	14.3%	1

Totals: 7

3. Which of the following would encourage more residents, employees, and tourists to use public transit? Rate the importance of each

	More starts means its more important
Bus stops with protection for hot , windy, or rainy days	★★★★☆ Count: 29 Not Applicable: 0
Routes requiring fewer transfers	★★★★☆ Count: 27 Not Applicable: 0
Faster Travel times	★★★★½ Count: 28 Not Applicable: 0
Easier access to route information (other than on the website)	★★★★☆ Count: 28 Not Applicable: 0
On-demand or route-deviation service	★★★½☆ Count: 27 Not Applicable: 0
Simpler, more direct routes	★★★★½ Count: 26 Not Applicable: 0
More routes in places currently not served	★★★★☆ Count: 28 Not Applicable: 0
More frequent bus service	★★★★½ Count: 28 Not Applicable: 0
Lower fares	★★★☆☆ Count: 26 Not Applicable: 0
Park and ride garages in New Town and Stock Island	★★★★☆ Count: 29 Not Applicable: 0
Information and maps at bus stops	★★★★½ Count: 28 Not Applicable: 0

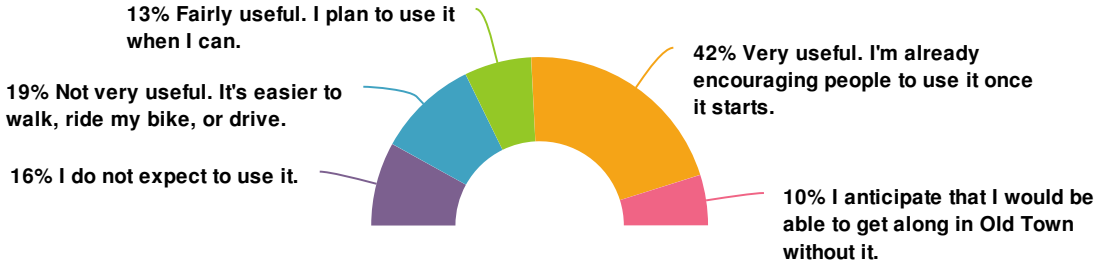
4. Would parking facility in New Town or Stock Island with shuttle service be effective in reducing the number of motor vehicles coming to Key West?



Value	Percent	Responses
Definitely not	9.4%	3
Not sure. It may compete with the Lower Keys Shuttle.	12.5%	4
There would be a small demand for it	34.4%	11
There would be a significant demand for it	43.8%	14

Totals: 32

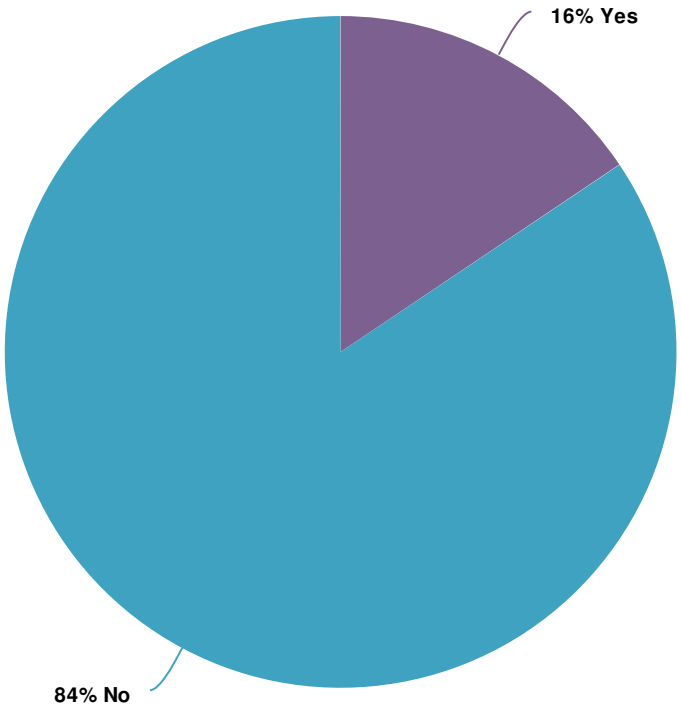
5. How useful is the Duval Loop for travel in Old Town Key West?



Value	Percent	Responses
I do not expect to use it.	16.1%	5
Not very useful. It's easier to walk, ride my bike, or drive.	19.4%	6
Fairly useful. I plan to use it when I can.	12.9%	4
Very useful. I'm already encouraging people to use it once it starts.	41.9%	13
I anticipate that I would be able to get along in Old Town without it.	9.7%	3

Totals: 31

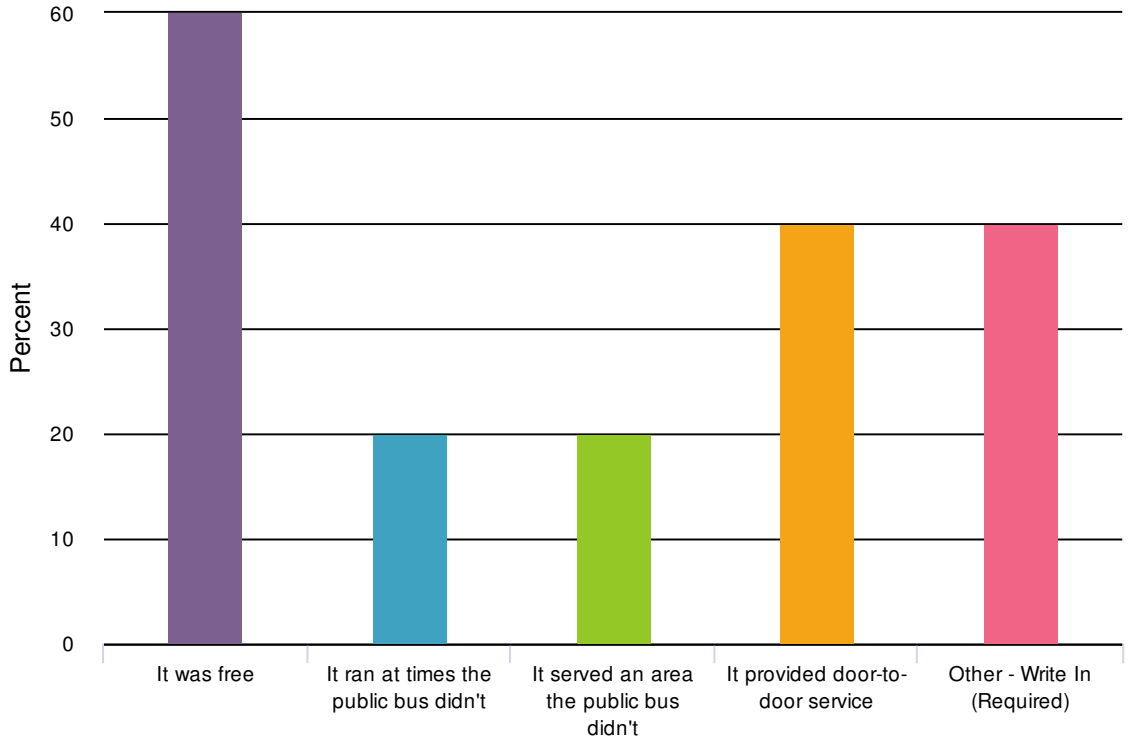
6. Do you currently or have you in the past used bus service provided by a business instead of public transit?



Value	Percent	Responses
Yes	15.6%	5
No	84.4%	27

Totals: 32

7. Why was this private transit service attractive to you?check all that apply

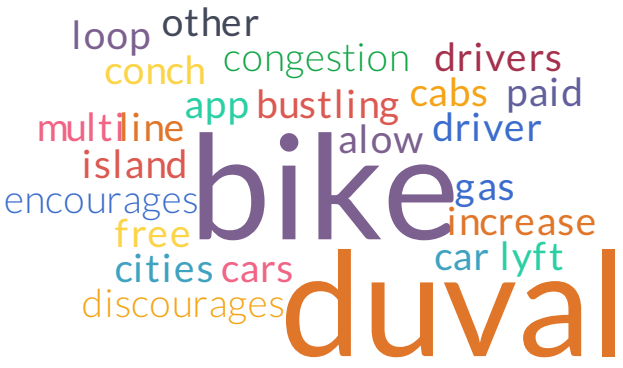


Value	Percent	Responses
It was free	60.0%	3
It ran at times the public bus didn't	20.0%	1
It served an area the public bus didn't	20.0%	1
It provided door-to-door service	40.0%	2
Other - Write In (Required)	40.0%	2

Other - Write In (Required)	Count
Faster	1
Greyhound to airport	1
Totals	2

8. What other transit options might work in Key West?

Option 1

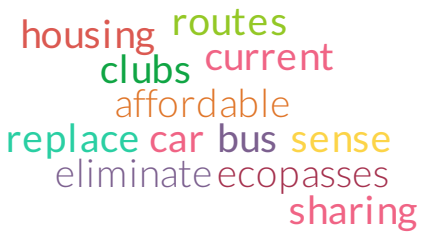


Count	Response
1	Bike share stations all over the island
1	Free trolley like Duval Loop
1	Get rid of pedi cabs.
1	More subway style straight routes, back and forth
1	Multi-use of Conch trains and trolleys
1	Safe bike paths
1	Waze Ride Sharing app that unlike Lyft Line and Uber Pool only alow gas to be paid for and only allow a trip into town and a trip out of town for each driver, which discourages new professional drivers and encourages car pools.
1	shutting down Duval to cars entirely to reduce congestion and increase safety like has been done in so many other bustling cities

Option 2

Count	Response
1	Allow private industry to build parking garages.
1	Be able to use your SunPass
1	Direct/Express to Stock Island
1	Mini vans for more frequent bus service
1	N. Roosevelt loop that operates like the Duval Loop and meets up with the loop at Caroline Street.
1	Ride share vans on the Uber model

Option 3



Count	Response
1	Car sharing clubs
1	Ecopasses for affordable housing
1	Eliminate most of our current bus routes and replace with ones that make sense.

9. Is there anything else you'd like to tell us about transit in Key West?

ResponseID	Response
15	If advertised correctly, the Park and Ride option is great! Express routes would be awesome for New Town/Stock Island/The Airport.
16	Current bus routes are incredibly long and if you are trying to be efficient, you should actually take one route in and a different route back. This is confusing to folks. Needs to be linked to Google Maps transit option. Need maps at stops.
21	The options for Lower Keys residents seem limited.
22	no
26	Use a different vehicle for the Duval loop. One that is more tram like that people want to hop on.
28	Congestion metering. Charge to bring a private car onto Key West proper. Cost changes based on time of day/year. Encourage park and ride on Stock Island with express shuttles (even water shuttles) to various points on the island.
30	Bike sharing might work in the future if the RFP is reworked so as not to bar local businesses from entry.
31	the stars were not working on question 2. maybe because I'm using chrome
32	City bus took me 1 hr to get up town. That's ridiculous on a 4 mile island. Never used it again

ResponseID	Response
33	The Loop is making things worse. The number of City and Utility vehicles is ridiculous. Want to initiate ride sharing? Send your workers in the same trucks and vans so there's not one taking up space on every corner.
36	Roadways are just too congested, with PARKED VEHICLES. Remove them, open up for bike lanes that have carrying capacity, and it will make it more appealing, and SAFER.
37	More frequent bus service
39	The Duval Loop is fabulous!
40	The Duval Loop seems to be doing well, but it's another bus service in an already clogged area. However, it seems to be getting used so it's probably keeping more cars off the streets. The hard thing about old town in the sheer number of walkers not paying attention to the signals, bikers not knowing how/where to ride and running stop signs and the drivers that just refuse to follow the traffic signals/stop signs. I think the city bus may help with more stops and more complete information not requiring transfers or long distances between the services.
44	Chuck all the existing bus routes except for the Duval Loop and the workforce bus that comes down the keys. Our routes make no sense, are not frequent and go in circles. All the research shows people do not want to ride buses that run infrequently and do not go in a straight line. There is no reason to have a bus meandering around in circles when the entire island is 3 miles by 4 miles. If you ran buses in straight lines, expected that people could walk the equivalent of four blocks to catch one, and ran them frequently, everyone would catch the bus and use it.
46	Riding my bike is the easiest way to get around. please help make this beautiful city more bike friendly.

WELCOME

KEY WEST

Bicycle and Pedestrian Master Plan

SUSTAINABILITY BOARD MEETING & PUBLIC WORKSHOP

PROJECT: KEY WEST BICYCLE AND PEDESTRIAN MASTER PLAN

DECEMBER 13, 2018

6:00 PM & 8: 00 PM

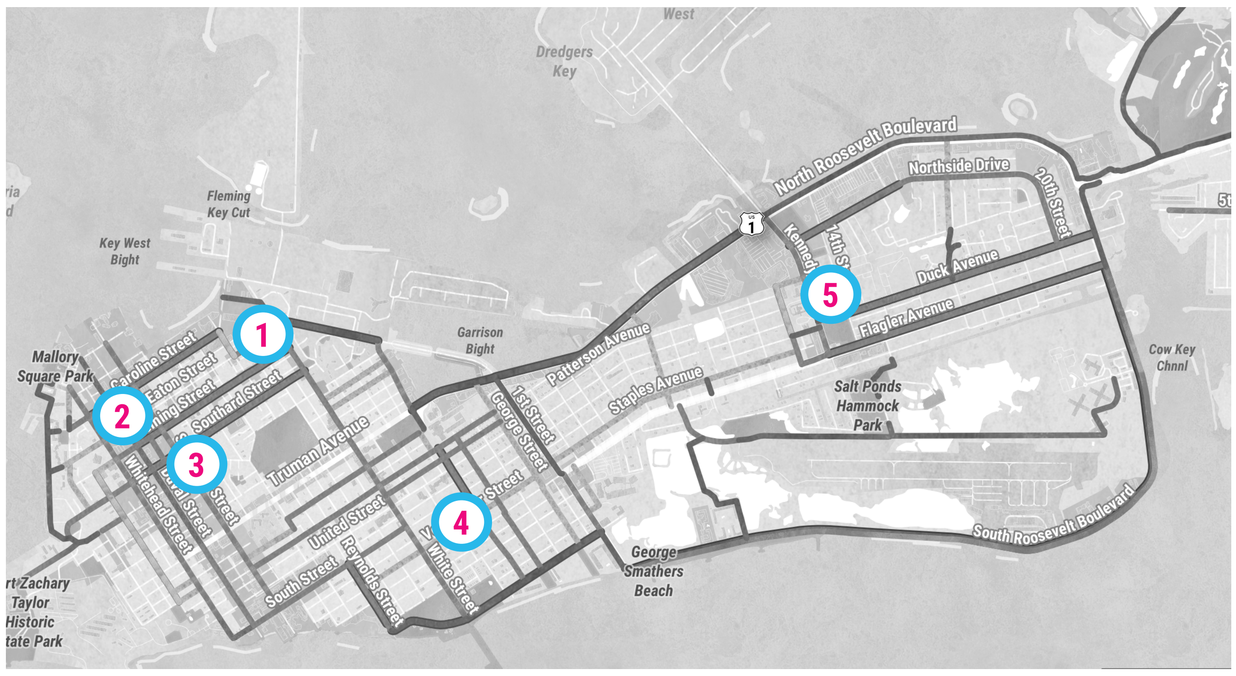
KEY WEST
Bicycle and Pedestrian Master Plan

COMPLETE STREETS SCENARIOS

What are Complete Streets?

Complete Street streets are built to accommodate the needs of all traveler, regardless of age or mobility. The term refers to the publicly-owned space between private property on either side of the street, and may include the sidewalk, curb and gutter, and roadway. ‘Complete Streets’ is used interchangeably with three things: a policy that leads to a process that results in a desired outcome.

The City of Key West has a Complete Streets approach to its transportation network, incorporating Complete Streets outcomes as part of the Land Development Regulation overhaul.



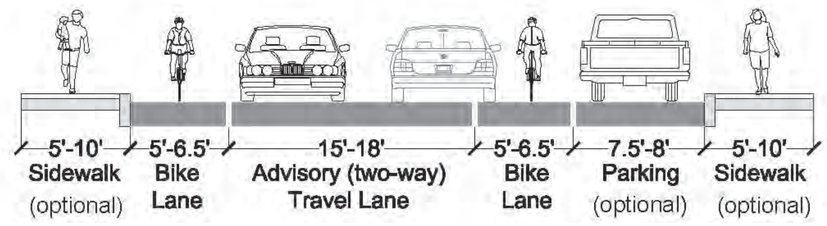
1 Advisory Bike Lanes

Advisory Bicycle Lanes are striped on narrow streets where motorized vehicles must share space with other vehicles and give the right of way to bicycles. A typical example allocates 18-feet or less for two-way motorized vehicles who must slow or wait until the bike lane is clear to pass. This innovative facility reprioritizes low-volume streets to better accommodate bicyclists and can be easily implemented with new roadway striping. Implementation of these facilities requires a Request to Experiment from FHWA, but have been used successfully in Hanover, NH.

Typical context is an urban residential neighborhood setting with low overall motor vehicle traffic speeds and volumes.

Scenario Location

Grinnell Street, just south of and including intersection at Caroline Street



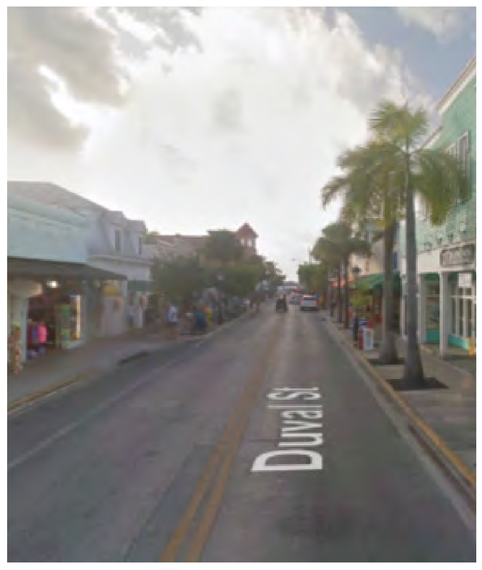
2 Pedestrian and Bicyclist Priority Street

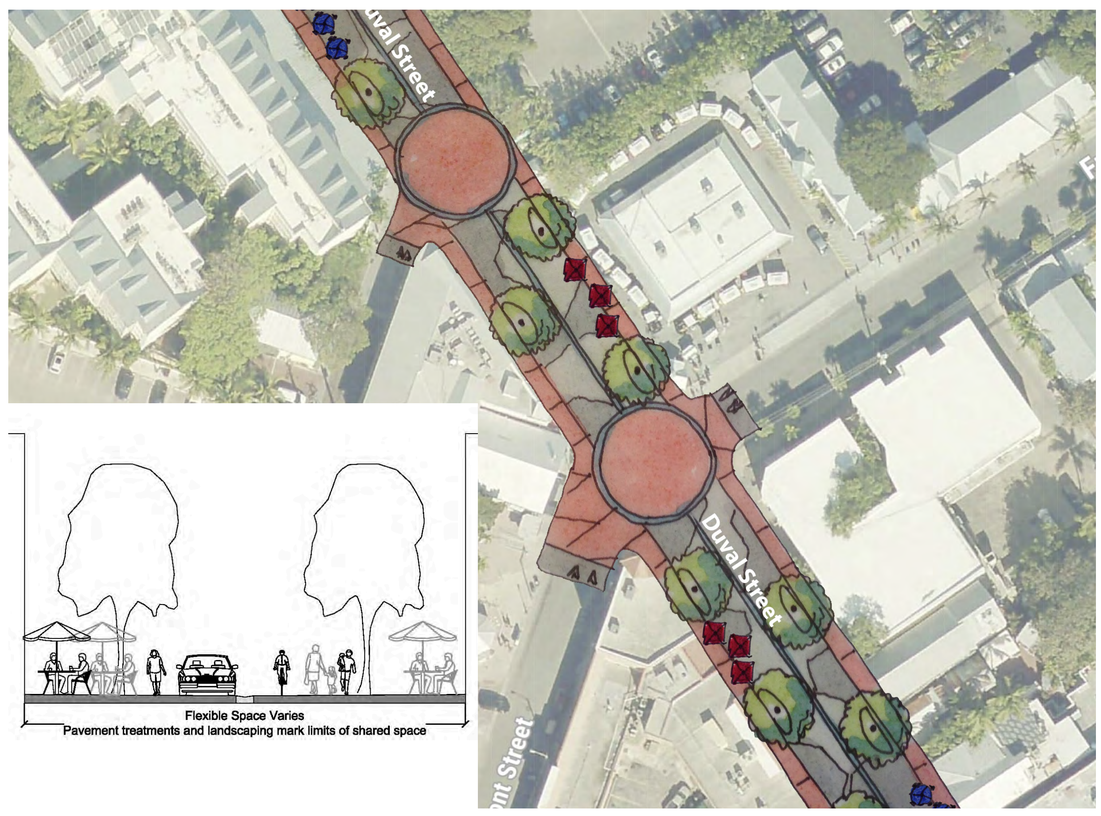
Pedestrian and Bicyclist Priority Streets are designed and operated to maximize access to locations on the street on foot or bicycle. Streets can be closed to motorized vehicles at all times if alleys are available for deliveries. When alleys are not available, pedestrian and bicyclist priority streets can be open to all transportation modes for part of the day (to accommodate deliveries), then closed for the remainder of the day. Sidewalks, gutters and the roadway are typically at the same level, with a modest depression for drainage. Low motor vehicle speeds during times when motor vehicles are allowed make the street comfortable for all users.

Typical context is an urban setting with dense retail or mixed use and existing or expected high numbers of pedestrians and bicyclists, especially where tourism is a major economic driver. This bicycle and pedestrian priority street in Asheville, NC was designed with flexibility in mind.

Scenario Location

Duval Street, just north of Front Street and including intersection at Wall Street





KEY WEST
Bicycle and Pedestrian Master Plan

COMPLETE STREETS SCENARIOS

3 Separated Bike Lanes

Separated Bicycle Lanes enhance safety by adding a physical separation between the bike lane and vehicular traffic. Low cost versions can be easily and economically installed by adding flex-posts in a 2 to 3-foot buffer area between the bicycle lane and adjacent travel lanes. Where on-street parking exists, parked cars can act as the buffer separating the bike lane from the moving vehicular traffic. For added beauty, many cities are using boxes filled with flowering plants which can be maintained by adjacent businesses and residents. Maintenance can be simple if the bike lane width is planned to accommodate the width of street-sweeping vehicles.

Two-way separated bike lanes are a best fit in some locations. Intersection design is especially important to provide clear information on how right and left turns are made for bicyclists traveling in either direction.

Typical context is an urban or suburban neighborhood setting with retail or mixed uses and higher motor vehicle traffic speeds and volumes. Design should accommodate driveways, especially for clear lines of sight for bicyclists and motorists.

Scenario Location

Simonton Street, just south of and including intersection at Fleming Street

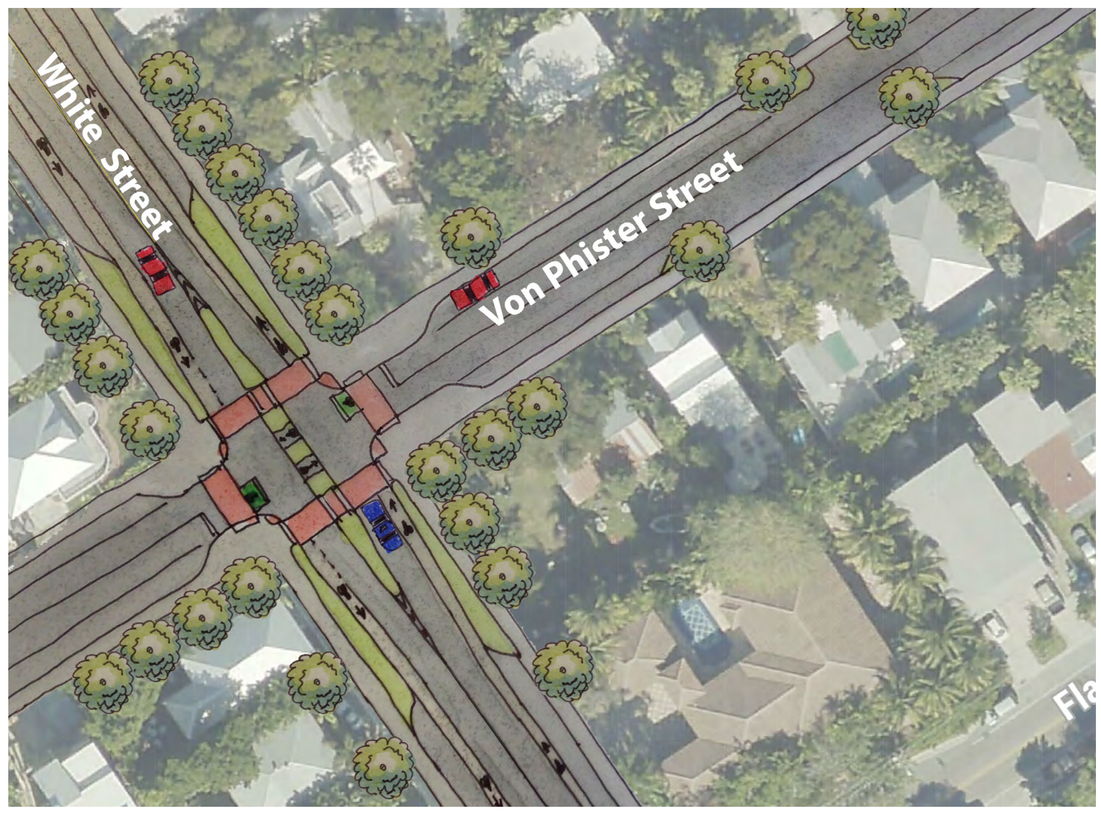
4 Bike Boulevards

Bike Boulevards (also known as Neighborhood Greenways) are established through a series of treatments applied along the street and at intersections with the intent to prioritize bicycle through-travel and reduce both the number of through motor vehicles and motor vehicle speeds. For example, fewer traffic controls at intersections reduce the number of times a bicyclist must stop.

Typical context is a residential neighborhood or an area with low density development and limited motor vehicle through traffic. Bike Boulevards are often used to provide a connection between two major travel routes, shortening the travel distance and time. These connections are usually already established by bicyclists; the treatments formalize them.

Scenario Location

Von Phister Street and White Street intersection



5 Off-Street Path Connections

Off-street path connections provide a direct route for bicyclists and pedestrians through developed parcels and along roads. Often these areas are public facilities, such as schools, parks or government complexes, but they can also be privately-owned multi-family housing.

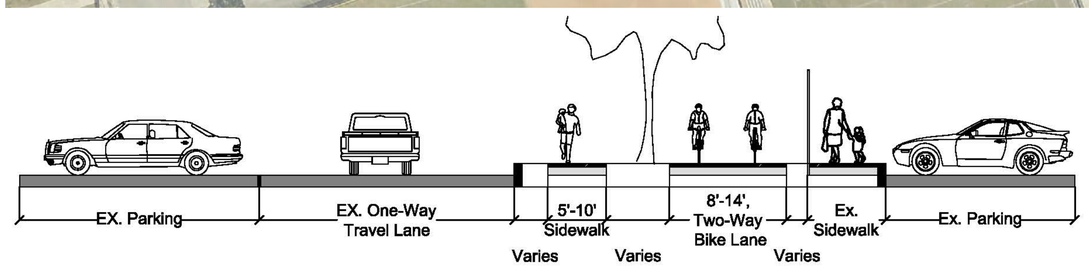
Key design elements include the trail width, a path of travel that avoids conflicts with driveways and parking, the interface with sidewalks along the roadway and roadway crossings, and connections to on-road bicycle facilities.

The ultimate design should do the following:

- Create a intuitive user experience
- Make trails easily accessible via curb cuts and ramps from street
- Let users know where trails go via wayfinding and maps
- Use gateway or trailhead features to make entrances and exits visible from on-street facilities
- Provide continuous, low-stress level of service

Scenario Location

Between 14th Street and Seidenberg Avenue through Wicker Sports Complex

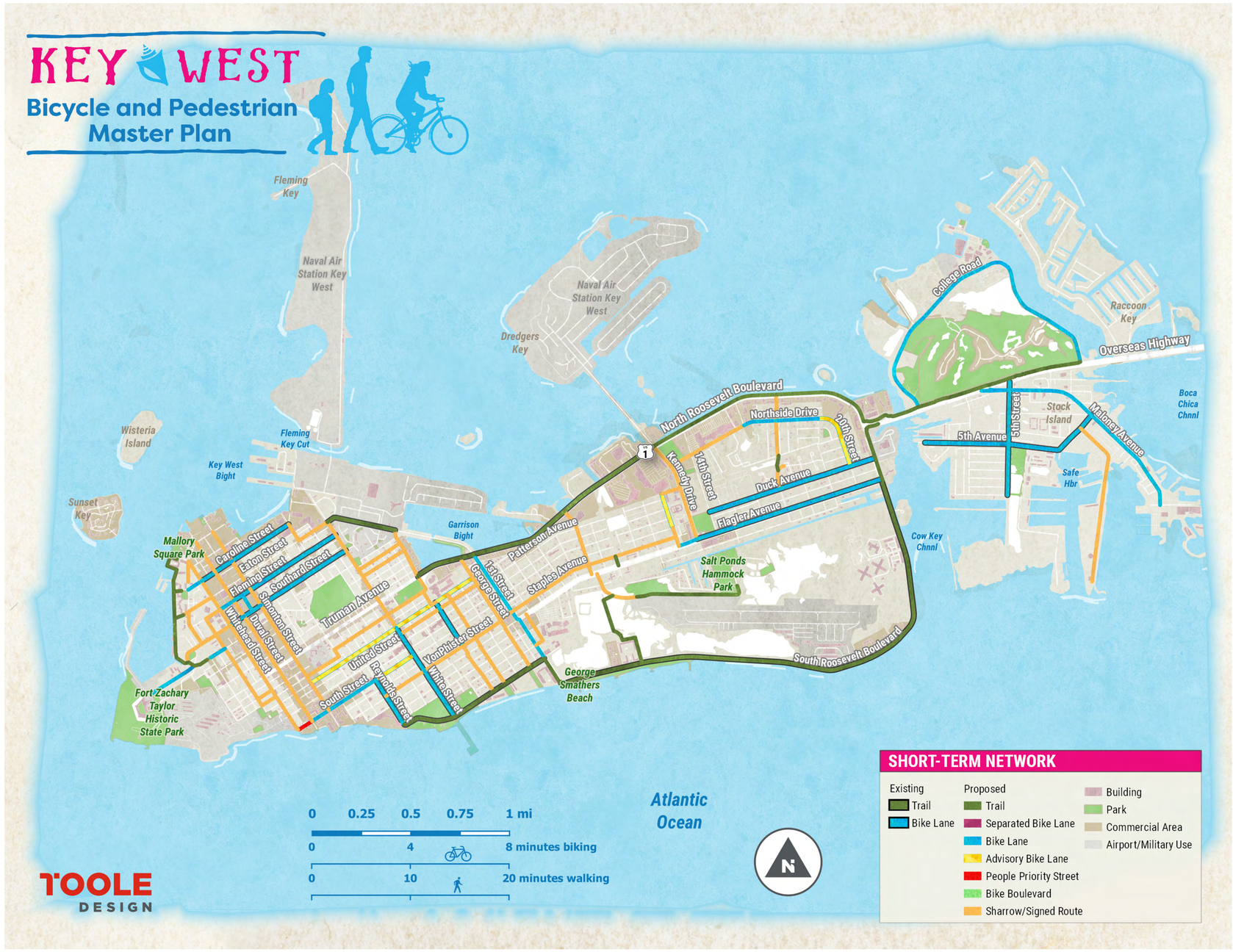


KEY WEST
Bicycle and Pedestrian Master Plan

SHORT-TERM NETWORK

The Short-Term Network includes a limited number of dedicated bicycle facilities, instead relying on existing trails and signed bike routes to complete the network. It maintains on-street parking as it exists today, provides very little separation between modes, and can be implemented with pavement markings and signage for relatively low costs.

FACILITY TYPE	LENGTH (MILES)	COST
Advisory Bike Lane	1.7	$96,000
Signed Route	15.2	$432,600
Bike Lane (Striping only)	5.8	$497,200
Bike Lanes (Lane Diet)	1.2	$166,200
On Street Facility Total	**23.9**	**$1,191,800**
New Trail	8.5	$8,430,000
On- and Off-Street Facility Total	**32.4**	**$9,621,800**



KEY WEST
Bicycle and Pedestrian Master Plan

VISION NETWORK

The Vision Network features several new facility types, including separated bike lanes, people priority streets and bicycle boulevards. Implementing these types of facilities requires moving the curb line, and in some cases, creating off-street parking options. The level of separation between modes is much higher, as are implementation costs.

FACILITY TYPE	LENGTH (MILES)	COST
Advisory Bike Lane	0.6	$35,200
Bike Boulevard (Striping, Signs)	2.8	$240,100
Bike Boulevard (Traffic Calming)	1.9	$682,300
Bike Lane (Lane Diet)	5.9	$804,100
Bike Lanes (Widen Roads)	0.3	$199,800
Widen Trail	2.8	$1,123,000
New Trail	1.7	$1,430,400
New Trail (with curb)	1.1	$1,124,000
Separated Bike Lane (2-way)	9.3	$9,012,000
People Priority Street	0.9	$4,298,700
On- and Off-Street Facility Total	**27.3**	**$18,949,600**

KEY WEST
Bicycle and Pedestrian Master Plan

IMPLEMENTATION PACKAGES

Each package has a distinct name that identifies the route and is presented with a map of the route showing the facility types in the Vision Network is accompanied by a summary of route characteristics and table of intersection recommendations. The matrix at the bottom compares the package to existing conditions with regards to connectivity, comfort, changes to the on-street parking supply, cost, and level of effort required for implementation.

↔ No change / neutral
↑ Increase / high
↓ Decrease / low

- Crosstown Connector
- Marina Connector
- Smathers Beach Connector
- White Street Connector
- Duval Loop
- Old Town Loop
- New Town Loop
- Sunrise Loop
- Island Loop

Crosstown Connector

Length
- 3.5 miles

Facility Types
- Short-Term -Bike Lane, Signed Route
- Vision - Bike Boulevard, Bike Lane, People Priority Street, Trail

Implementation Actions
- Create off-street parking
- Traffic calming
- Construct new trail

Cost Estimate
- $1,496,500

Map ID	Cross Streets	Intersection Recommendations
22	First St/Staples Ave	Install curb ramps, Install curb extensions, Install high visibility crosswalk
25	5th St/Staples Ave	Install crosswalks, Install curb ramps, Install curb extensions to address sight distance issues
35	14th St/Duck Ave	Install pedestrian signals and pedestrian actuators, Install high visibility crosswalk
36	16th St/Duck Ave	Add wayfinding

Connectivity	Comfort	On-Street Parking	Cost	Level of Effort
↔	↑	↓	↑	↑

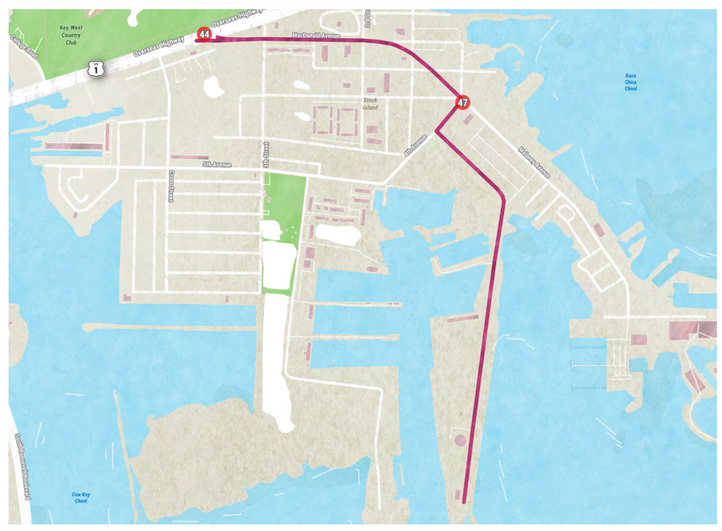
Marina Connector

Length
- 1.5 miles

Facility Types
- Short-Term -Signed Route, Bike Lanes
- Vision - Separated Bike Lanes

Implementation Actions
- Consolidate parking on one side
- New pavement markings
- Widen roadway

Cost Estimate
- $1,538,100



Map ID	Cross Streets	Intersection Recommendations
44	MacDonald Ave/Overseas Hwy	Modify pedestrian signal, Install pedestrian refuge (at least 6 ft. width)
47	1st St/Maloney Ave	Install protected intersection, Install curb ramps, Install curb extensions, Install high visibility crosswalks
44	MacDonald Ave/Overseas Hwy	Modify pedestrian signal, Install pedestrian refuge (at least 6 ft. width)
47	1st St/Maloney Ave	Install protected intersection, Install curb ramps, Install curb extensions, Install high visibility crosswalks

Connectivity	Comfort	On-Street Parking	Cost	Level of Effort
↔	↑	↓	↔	↔

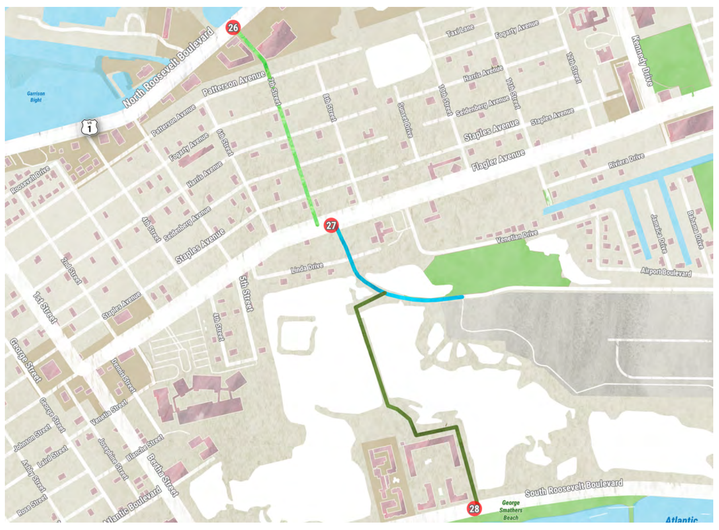
Smathers Beach Connector

Length
- 1.1 miles

Facility Types
- Short-Term -Signed Route, Trail
- Vision - Bike Boulevard, Bike Lanes, Trail

Implementation Actions
- Construct new trail
- New pavement markings
- Widen roadway

Cost Estimate
- $629,600



Map ID	Cross Streets	Intersection Recommendations
26	7th St/N Roosevelt Blvd	Install pedestrian refuge (at least 6 ft. width) Install Rapid Flashing Beacon
27	Government Rd/Flagler Ave	Install pedestrian refuge (at least 6 ft width) using existing median, Install/upgrade crosswalks, Install curb ramps
28	New Trail/ S Roosevelt Blvd	Install crosswalks, Install curb ramps, Install Rapid Flashing Beacon

Connectivity	Comfort	On-Street Parking	Cost	Level of Effort
↑	↑	↔	↑	↑

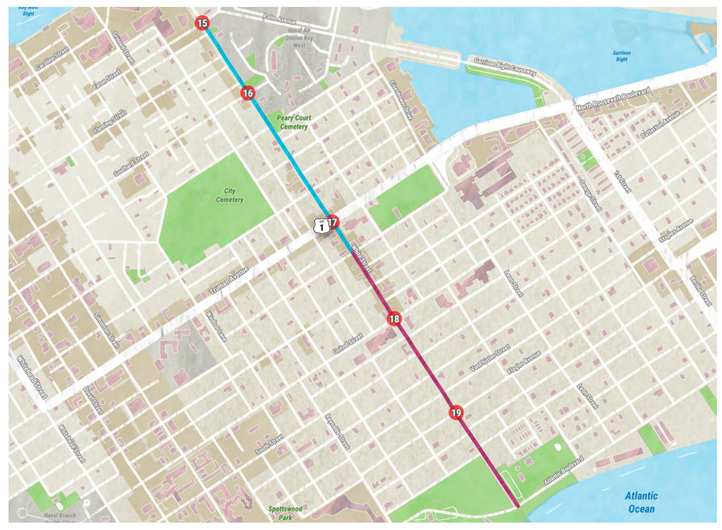
White Street Connector

Length
- 1.2 miles

Facility Types
- Short-Term -Signed Route, Bike Lane
- Vision - Bike Lane, Separated Bike Lane

Implementation Actions
- Create off-street parking
- New pavement markings

Cost Estimate
- $722,000



Map ID	Cross Streets	Intersection Recommendations
15	White St/Eaton St	Install protected intersection, Reconstruct curb ramps, Install curb extensions, Install high visibility crosswalk
16	White St/Southard St	Install pedestrian signal
17	White St/Truman St	Install high visibility crosswalk, Reconstruct curb ramps
18	White St/United St	Install curb ramps, Install pedestrian signals and actuators
19	White St/Flagler Ave	Install curb extensions, Install high visibility crosswalk, Install pedestrian signal, Install protected intersection

Connectivity	Comfort	On-Street Parking	Cost	Level of Effort
↔	↑	↓	↑	↑

KEY WEST
Bicycle and Pedestrian Master Plan

IMPLEMENTATION PACKAGES

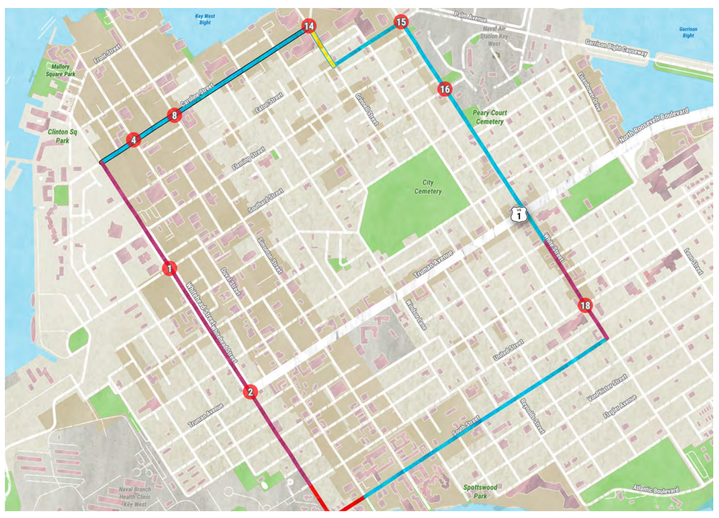
Old Town Loop

Length
- 2.9 miles

Facility Types
- Short-Term -Advisory Bike Lane, Signed Route, Bike Lane, People Priority Street
- Vision - Separated Bike Lane, Bike Lane, People Priority Street

Implementation Actions
- Create off-street parking
- New one-way traffic pattern
- New pavement markings

Cost Estimate
- $2,187,600



Map ID	Cross Streets	Intersection Recommendations
1	Whitehead St/Southard St	Install curb ramps, Install high visibility crosswalk
2	Whitehead St/Truman St	Install curb extensions
4	Duval St/Caroline St	Install curb ramps, Repair crosswalks, Install pedestrian signals
8	Simonton St/Caroline St	Repair/replace crosswalk, Install pedestrian signals, Install curb extensions
14	Grinnell St/Caroline St	Eliminate slip lane and expand plaza on north side of intersection
15	White St/Eaton St	Install protected intersection, Reconstruct curb ramps, Install curb extensions, Install high visibility crosswalk
16	White St/Southard St	Install pedestrian signal
18	White St/United St	Install curb ramps, Install pedestrian signals and actuators

Connectivity	Comfort	On-Street Parking	Cost	Level of Effort
↔	↑	↓	↑	↑

Sunrise Loop

Length
- 6 miles

Facility Types
- Short-Term -Signed Route, Trail, Bike Lane
- Vision - Separated Bike Lane, Trail

Implementation Actions
- Repurpose travel lanes
- New pavement markings
- Widen trail

Cost Estimate
- $4,298,200

Map ID	Cross Streets	Intersection Recommendations
21	First St/N Roosevelt Blvd	Install protected intersection, Add Leading Pedestrian Interval
22	First St/Staples Ave	Install curb ramps, Install curb extensions, Install high visibility crosswalk
23	Bertha St/Atlantic Blvd	Install crosswalks, Install curb ramps, Install protected intersection on west side
24	5th St/N Roosevelt Blvd	Reduce turning radii (to create more waiting space at corner), Replace / upgrade pedestrian actuators, Install pedestrian refuge (at least 6 ft. width)
26	7th St/N Roosevelt Blvd	Install pedestrian refuge (at least 6 ft. width), Install Rapid Flashing Beacon
28	S Roosevelt Blvd	Install crosswalks, Install curb ramps, Install Rapid Flashing Beacon
29	Gulfview Dr/N Roosevelt Blvd	Reconstruct driveway with level sidewalk, Provide one car length of space between level crossing and N Roosevelt Blvd
31	N Roosevelt Boulevard	Corridor-wide access management study
32	Kennedy Dr/N Roosevelt Blvd	Install protected intersection, Add Leading Pedestrian Interval
33	14th St/N Roosevelt Blvd	Install high visibility crosswalk
37	W College Rd/Overseas Hwy	Install curb ramps, Reduce turning radii (to create more waiting space at corner), Install high visibility crosswalk, Install pedestrian refuge (at least 6 ft. width)
38	Roosevelt Blvd/Overseas Hwy	Install crosswalk and curb ramps at southern approach
39	S Roosevelt Blvd/Duck Ave	Install Rapid Flashing Beacon, Install crosswalks, Install/replace curb ramps
40	S Roosevelt Blvd/Flagler Ave	Install crosswalks, Install curb ramps, Install curb extensions to solve sight distance issue at SW corner
41	S Roosevelt Blvd/Seaside Dr	Install high visibility crosswalk, Install pedestrian refuge (at least 6 ft. width)

Connectivity	Comfort	On-Street Parking	Cost	Level of Effort
↑	↑	↔	↑	↑

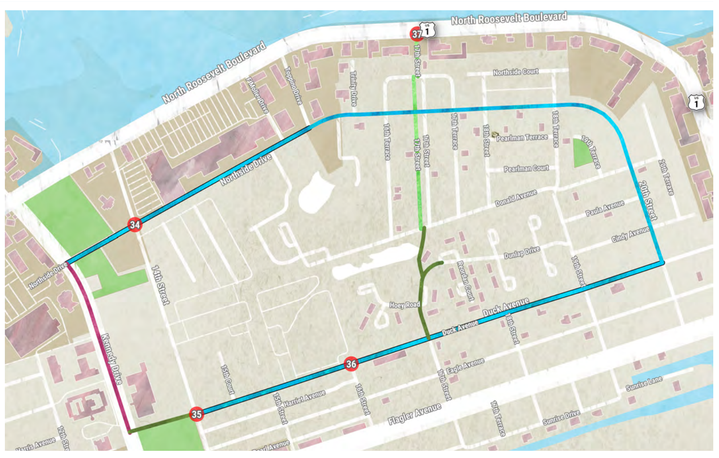
New Town Loop

Length
- 2.3 miles

Facility Types
- Short-Term -Advisory Bike Lane, Signed Route, Bike Lane
- Vision - Separated Bike Lane, Bike Lane

Implementation Actions
- Consolidate parking on one side
- New pavement markings
- Traffic Calming

Cost Estimate
- $1,013,200



Map ID	Cross Streets	Intersection Recommendations
34	14th St/Northside Dr	Install/replace curb ramps, Install pedestrian signals and pedestrian actuators
35	14th St/Duck Ave	Install pedestrian signals and pedestrian actuators Install high visibility crosswalk
36	16th St/Duck Ave	Add wayfinding
37	17th St/N Roosevelt Blvd	Install pedestrian refuge (at least 6 ft. width) Install Rapid Flashing Beacon

Connectivity	Comfort	On-Street Parking	Cost	Level of Effort
↔	↑	↔	↔	↔

Island Loop

Length
- 9.5 miles

Facility Types
- Short-Term -Signed Route, Trail, Bike Lane
- Vision - Trail, Bike Lane, Bike Boulevard, Advisory Bike Lane, Bike Lane, Separated Bike Lane, People Priority Street

Implementation Actions
- Create off-street parking
- New pavement markings
- Intersection redesign
- Widen trail

Cost Estimate
- $9,739,800

Map ID	Cross Streets	Intersection Recommendations
20	Eisenhower Dr/Palm Ave	Reduce turning radii Install high visibility crosswalk
21	First St/N Roosevelt Blvd	Install protected intersection, Add Leading Pedestrian Interval
23	Bertha St/Atlantic Blvd	Install crosswalks, Install curb ramps, Install protected intersection on west side
42	W College Rd/Overseas Hwy	Install curb ramps, Reduce turning radii (to create more waiting space at corner), Install high visibility crosswalk, Install pedestrian refuge (at least 6 ft. width)
43	Cross St/Overseas Hwy	Reduce turning radii (to create more waiting space at corner), Install high visibility crosswalk, Install pedestrian refuge (at least 6 ft. width)
44	MacDonald Ave/Overseas Hwy	Reduce turning radii (to create more waiting space at corner), Install high visibility crosswalk, Install pedestrian refuge (at least 6 ft. width)
45	5th St/5th Ave	Install curb ramps, Repair/replace crosswalk
46	E College Rd/Overseas Hwy	Install curb ramps, Reduce turning radii (to create more waiting space at corner), Install pedestrian signals and actuators, Install high visibility crosswalk
47	4th Ave/Maloney Ave	Install protected intersection, Install curb ramps, Install curb extensions, Install high visibility crosswalks

Connectivity	Comfort	On-Street Parking	Cost	Level of Effort
↑	↑	↓	↑	↑

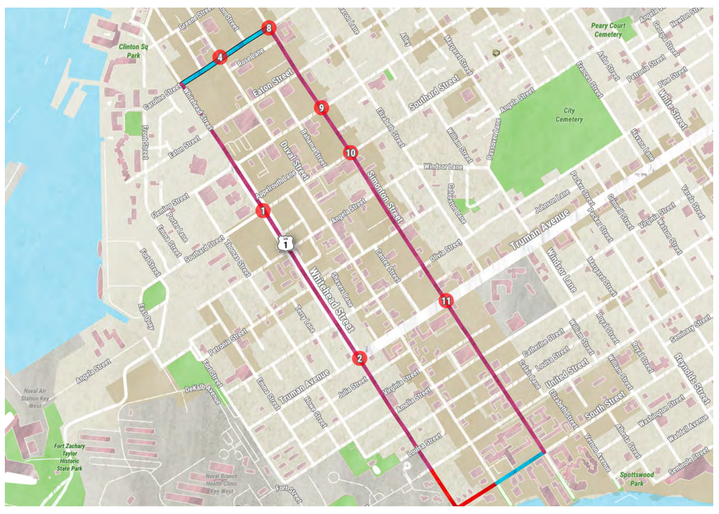
Duval Loop

Length
- 2.1 miles

Facility Types
- Short-Term -Signed Route, Bike Lane, People Priority Street
- Vision - Separated Bike Lane, Bike Lane, People Priority Street

Implementation Actions
- Create off-street parking
- New one-way traffic pattern
- New pavement markings

Cost Estimate
- $2,553,500



Map ID	Cross Streets	Intersection Recommendations
1	Simonton St/Southard St	Repair/replace crosswalk, Install pedestrian signal
2	Whitehead St/Truman St	Install curb extensions
4	Duval St/Caroline	Install curb ramps, Repair crosswalk, Install pedestrian signals
8	Simonton St/Caroline St	Repair/replace crosswalk, Install pedestrian signals, Install curb extensions
9	Simonton St/Fleming St	Repair/replace crosswalk
10	Simonton St/Southard St	Repair/replace crosswalk, Install pedestrian signal
11	Simonton St/Truman St	Upgrade curb ramps, Upgrade crosswalk

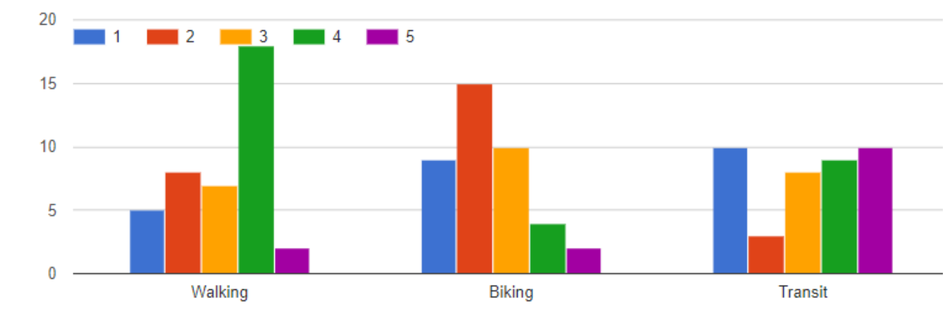
Connectivity	Comfort	On-Street Parking	Cost	Level of Effort
↔	↑	↓	↑	↑

KEY WEST
Bicycle and Pedestrian Master Plan

PEDESTRIAN NETWORK

The existing pedestrian network in Key West is more developed than the existing bicycle network. Many streets in Old Town as well as the collector and arterial roads have sidewalks. Although not all sidewalks meet standards for ADA accessibility and utility poles, parked cars, and other obstructions frequently block them, the difference between the quality of the existing pedestrian network and existing bicycle network is illustrated clearly in the responses to a Common Sense Comment Board question about perceived safety. Fifty percent of respondents felt safe (4 or 5 on the scale below) from crashes and injuries while walking, while only 15 percent felt the same while bicycling.

On your average trip in Key West, rate on a scale of 1 to 5 (5 being the safest), how safe from a crash or injury do you feel?



To improve safety and comfort of pedestrians, the recommendations in this plan are focused on the most complex situations pedestrians encounter during their trips: intersections and mid-block crossings. The fieldwork team reviewed the fifty intersections with the highest number of crashes throughout the city. The most common issues found were lack of lighting, missing accessible curb ramps, lack of marked crossings, and short pedestrian signal timing. The facility types in the toolkit below can help address these deficiencies.

Map of Study Intersections

Intersection Toolkit

Leading Pedestrian Intervals

A leading pedestrian interval is programed into the intersection signalization to provide pedestrians a few seconds of additional crossing time prior to the green signal for motor vehicles. This provides a head start for pedestrians to enter the crosswalk and be more visible to a motorist.

Right Turn On Red Restrictions

Right turn on red restrictions prohibit motorists from turning right until the signal is green. This can reduce the potential conflict between people walking and bicycling on the crosswalk and motorists turning.

Rapid Flashing Beacon

A rapid flashing beacon is a warning device used at non-signalized intersections. The beacon is activated by pedestrians prior to crossing the street and warns drivers that there is a need to yield to a pedestrian.

Raised Crosswalks/Intersections

A raised crosswalk is a crosswalk on top of a speed hump or speed table. This improvement can make the crosswalk more visible to people driving and it requires them to travel at a slower speed when traveling over the crosswalk.

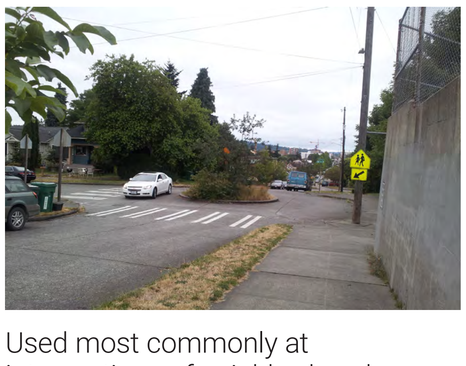
In-Street Pedestrian Warning Signs

In-street pedestrian warning signs are placed in the crosswalk to slow vehicles and warn motorists of potential pedestrians.

Intersection Geometry

By tightening turning radii and changing pavement edges so that intersections become more perpendicular, motor vehicles are unable to coast through intersections or turn at speeds that can be dangerous to pedestrians.

Neighborhood Traffic Circles



Used most commonly at intersections of neighborhood streets, and when installed in a series along a street corridor, traffic circles can be effective at slowing people driving and reducing collisions.

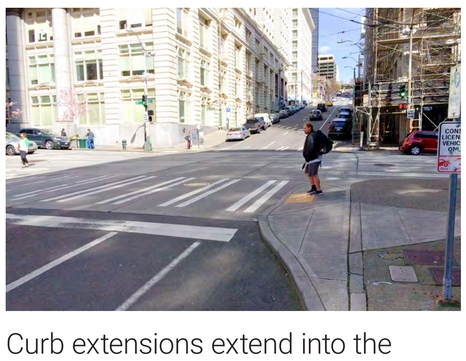
Pedestrian Refuge

A pedestrian refuge is an area in the crosswalk designated for pedestrians and uses a curb to create separation between people and motor vehicles and facilitate two-stage crossings.

Curb Ramps

Curb ramps are sloped areas at corners and crossings that connect the street to the sidewalk. The federal Americans with Disabilities Act (ADA) lays out very specific requirements for them, including level landings and gentle grades.

Curb Extensions



Curb extensions extend into the street, shorten crossing distances, and improve visibility for both drivers and pedestrians. A curb extension creates additional space for curb ramps and landings where existing sidewalk space is narrow.

KEY WEST
Bicycle and Pedestrian Master Plan

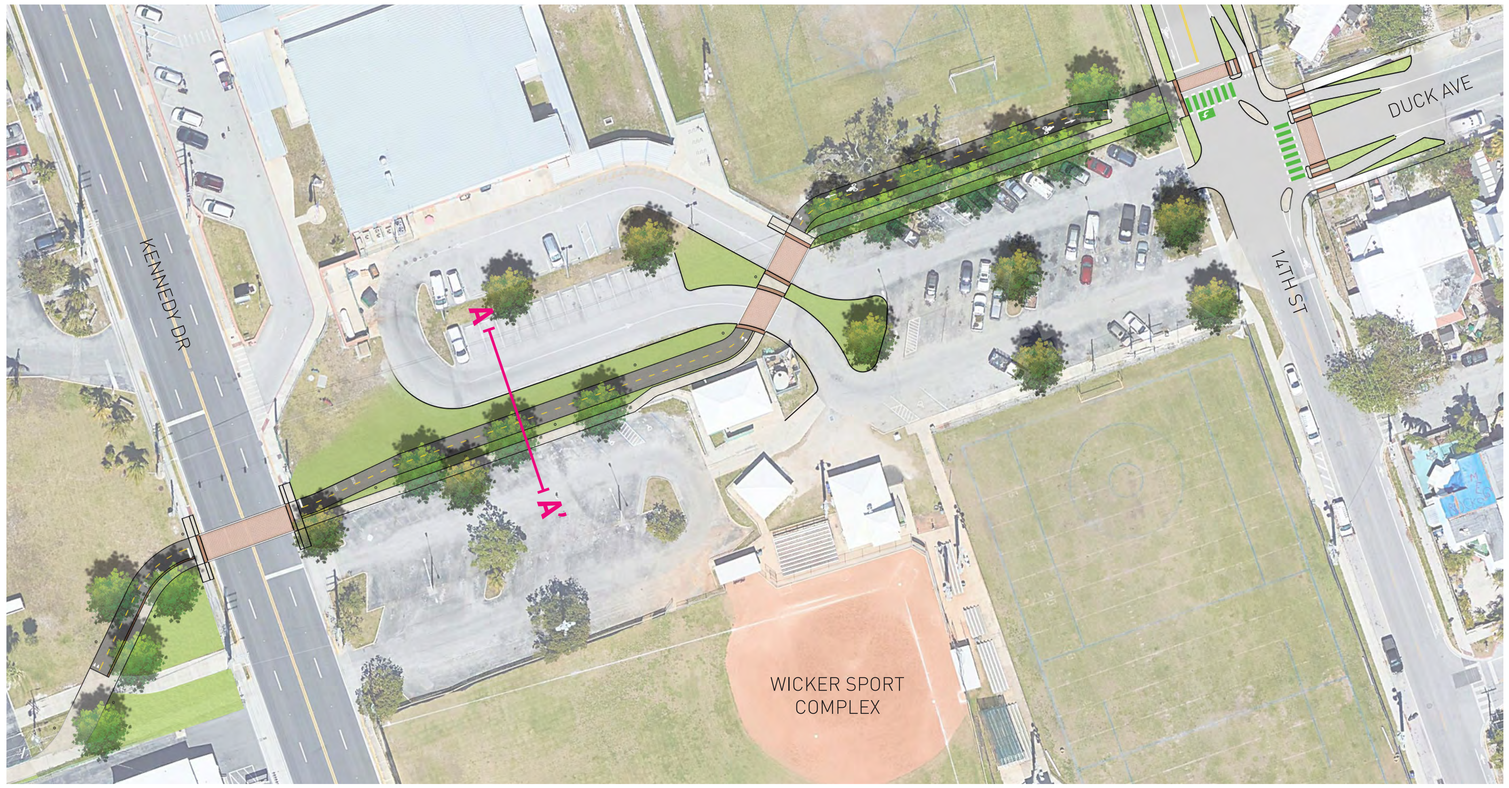
PILOT PROJECT

WICKER SPORTS COMPLEX

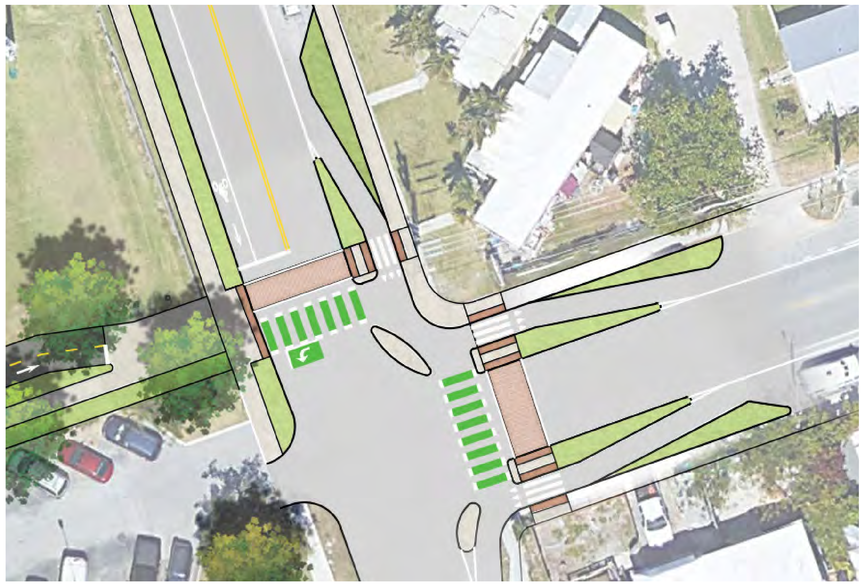
A critical segment of the Crosstown Connector is the route through the Wicker Sports Complex, connecting the bike lanes on Duck Avenue to the bike boulevard on Staples Avenue. Currently, bicyclists must navigate through off-set intersections and parking lots to make the connection. This concept shows how this area can be redesigned to support safer and better connected multimodal travel.

Wicker Sport Complex Concept Design Recommendations:

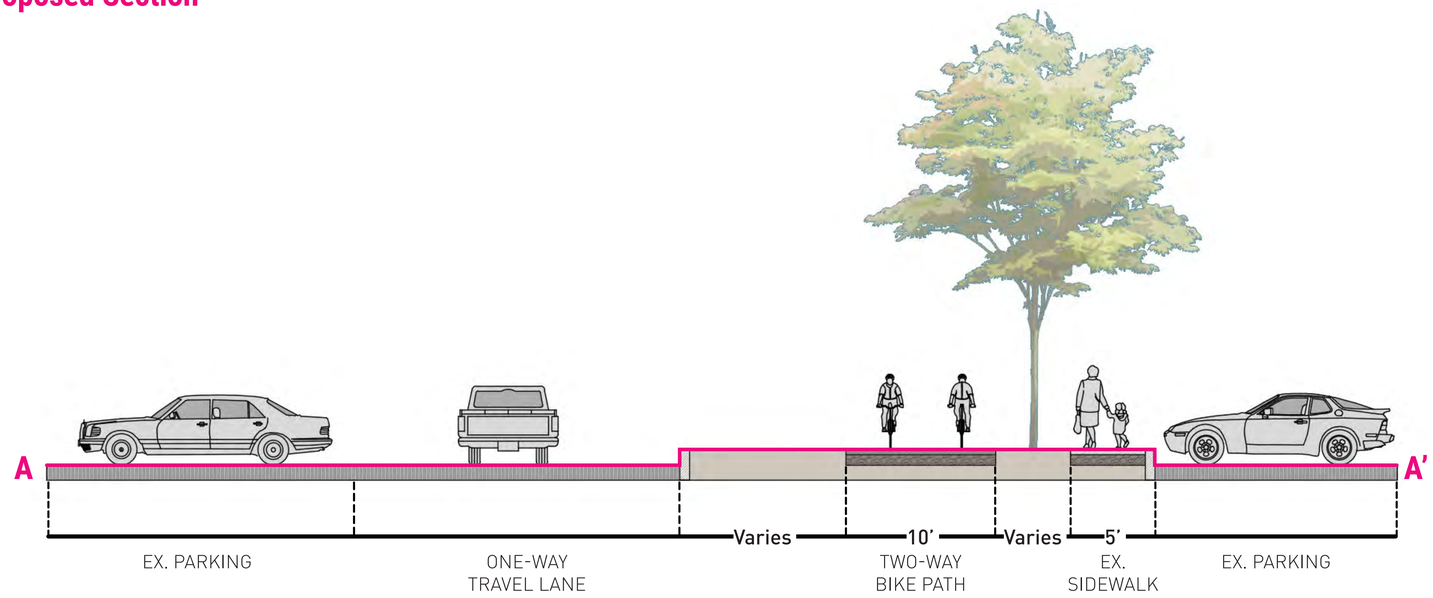
- Create 10-foot wide trail through the Wicker Sports Complex parking lot.
- Create 6-foot wide sidewalk adjacent to the trail.
- Provide a minimum 2-foot paved or planted buffer between the proposed sidewalk and trail through the Wicker Sports Complex parking lot.
- Install 15-foot wide crossings at Kennedy Drive, 14th Street, and Duck Avenue with stamped asphalt to accommodate the trail and sidewalk.
- Connect existing planting islands in the Wicker Sports Complex parking lot to create a more predictable traffic pattern and provide a refuge for crossing pedestrians and bicyclists.
- Utilize refuge islands, curb extensions, stamped asphalt crossings, and bike boxes to create more predictable traffic patterns and shorten



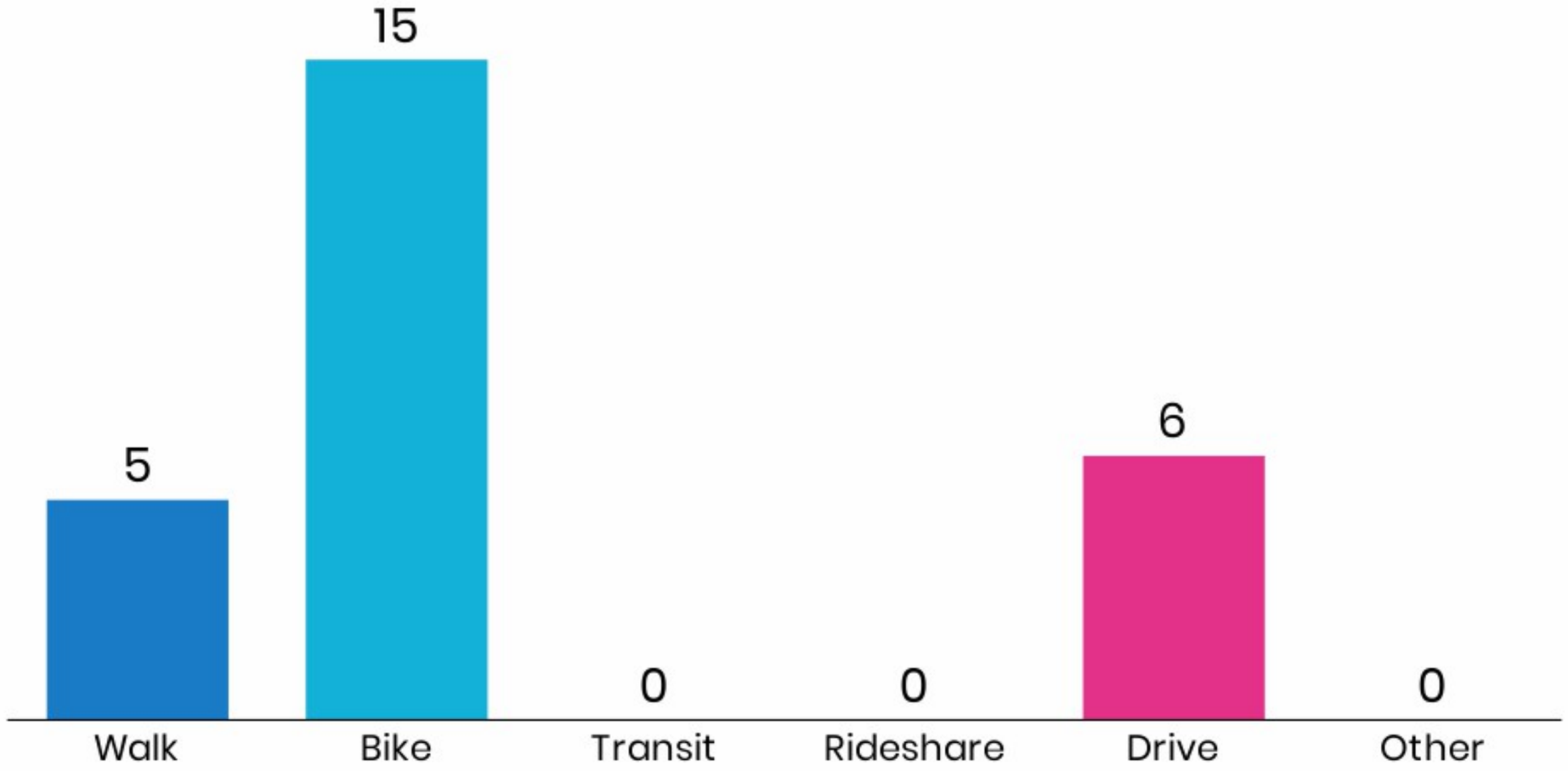
14th & Duck Ave Intersection Detail



Proposed Section



Q1. How did you get to today's meeting?



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Q2. Comments on the Short-Term Network?

Let's do it!

Looks great!

Do it.

Good start

Helpful for network to show bicycle bike racks like at the Key West Tropical Forest & Botanical Garden

Good

Do the low having fruit. Budget the new trail over several years.

My priority is way finding for quick implementation. New trail looks like vision plan to me.

Improving North Roosevelt is critical.

Q2. Comments on the Short-Term Network?

Cross town connector is the highest priority in my mind

Safe routes to school is important to me. Kennedy was just redone but has no bike markings. Flagler Bike lanes desperately need repainting. First St and Staples must be made safe to cross.

Excellent. Makes it seem so easy!

North Roosevelt needs a lot of attention.

Need to improve intersection visibility Maybe move stop line on left hand turns on two lane roads back 4 feet. Would improve both cyclist and drivers viewers.

Seems like a feasible first step towards the overall plan.

I like the proposed trail through the salt ponds (government road to South Roosevelt.

If utilized, ensure sharrows are centered in the lane per FL minimum standards.

A good beginning! Please don't let it end there.

Q3. Comments on the Vision Network?

Need more separated bike facilities

One way advisements would be useful and for overall safety

Too busy. Look would be cluttered.

I love it. If Manhattan can do it. Key West can do it.

Do the first 8. Forget 9. Do 10.

The trails are great; getting across the island through the smathers beach trail seems like a good priority. Of course, the separated lanes should be the HIGHEST priority, but selling the parking compromises will be tricky.

People priority street needs small pilot to demonstrate concept. My concern is shallow gutter and summer multiple inch rain days.

Love Duval as “people priority”

Separated bike lanes on Stock Island - thumbs up!

Q3. Comments on the Vision Network?

I made my main points responding to #2

Like the separated bike lanes

Answered.

I like the idea of going all-in on the master plan, but I would believe there would be a lot of push back based on the parking and driving habits of most people.

People priority streets are great.

If you're talking about signage, yes, we need more. If you're talking about lights on bikes, yes, we need to enforce this.

Q4. Which intersection is the most challenging for bicyclists and pedestrians?

US1 and S Roosevelt and N Roosevelt “Triangle”

Triangle at US HWY1 and all the cross walks , on N & S Roosevelt

Palm and n Roosevelt Fleming and Duval Truman and white Fifth and n Roosevelt Eisenhower and Truman

Eaton & White

Staples & First

Truman ave in both directions.

White & Truman

1st street at staples / von phister

Kennedy and N Roosevelt

Q4. Which intersection is the most challenging for bicyclists and pedestrians?

1st Street and North Roosevelt

Many! But First and North Roosevelt Blvd is one of the worst.

Flagler south roosevelt North roosevelt 1st street

Duck ave and south Roosevelt.

North Roosevelt at Garrison bight

Eaton and William.

the Triangle

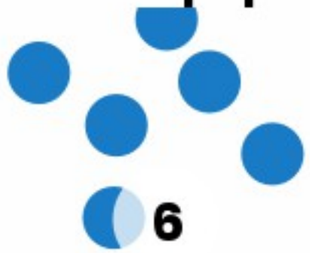
I feel like the worst are intersections which are more oriented towards cars, especially where higher speeds are involved.

Front and Whitehead

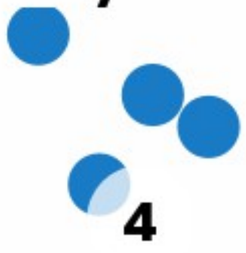
Q4. Which intersection is the most challenging for bicyclists and pedestrians?

Elizabeth and Greene

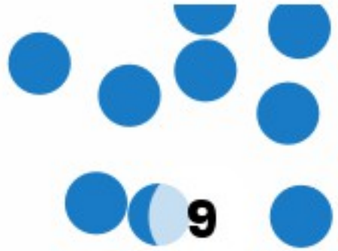
Q5. Which recommended programs would best support the physical network?



Multi-modal station at Airport

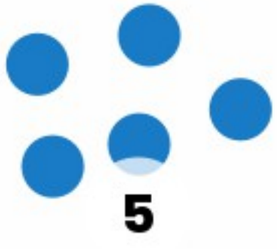


More greenspaces

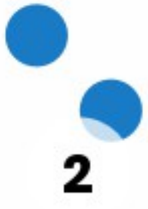


Increased bike parking

Wayfinding



Pilot projects

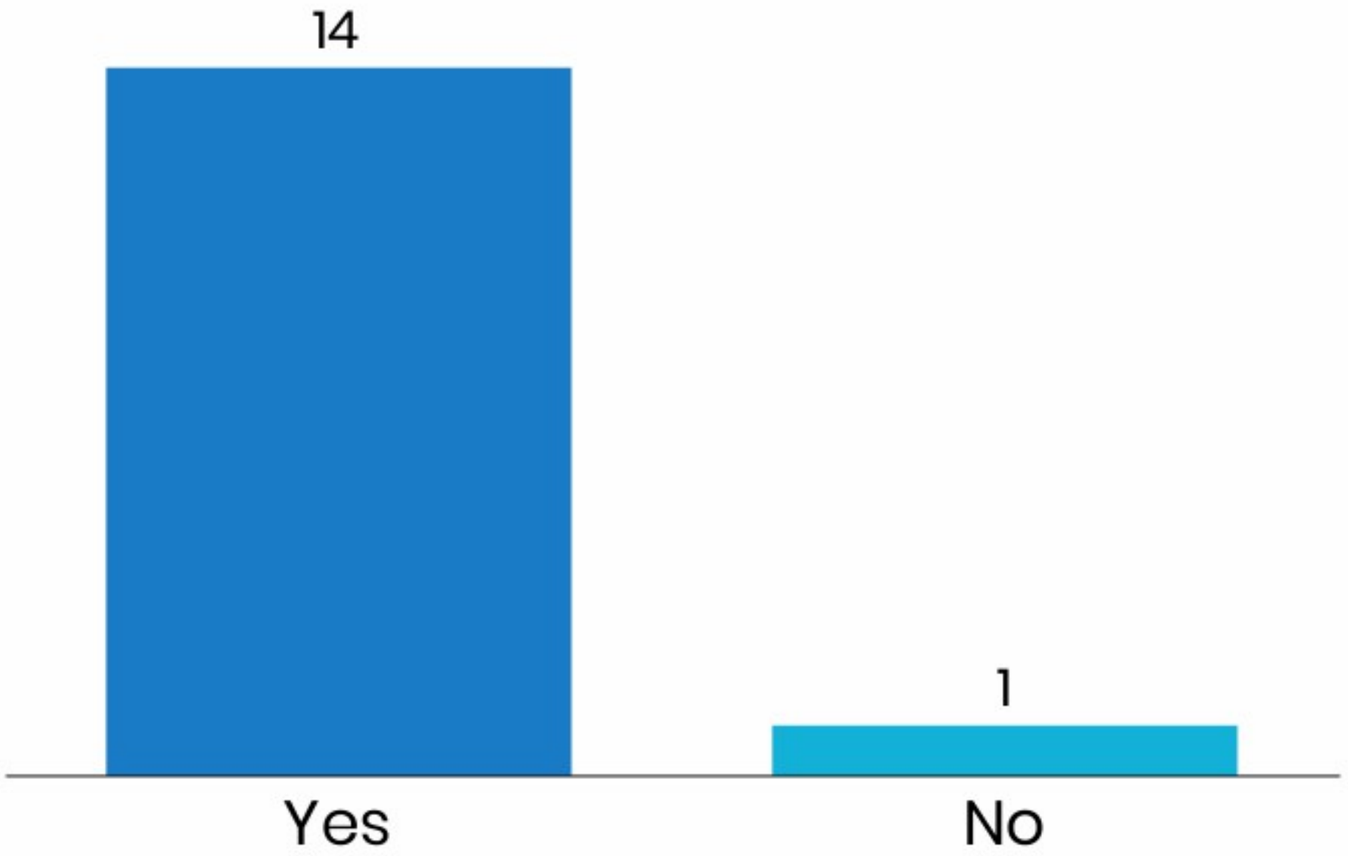


Fix-it stations

Multi-modal station at Stock Island

Bike share/bike lockers at transit stops

Q6. Would you support the adoption of a citywide Complete Streets Policy?



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Q7. Why or why not?

Definitely will make Key West safer for all Transportation users

Simply, it's the wave of the future, and it's ideally up to city leaders to "sell" a complete streets policy.

I want Key West to be the best little biking city in the USA

Safety comes first with those congested intersections and 1 way traffic causing issues for vehicles and other traveler options.

Go big or go home. Don't do this half way.

It's the Future!

Until more people feel safe biking will not be a preferred mode by majority of New town and Stock Island commuters

Looks "busy" - signage clutter. Making Simonton one-way would back up auto traffic & make deliveries even more difficult, especially if Duval is made pedestrian-only. Von Phister would loose much of its residential qality.

I support complete streets because they support more human scale livable communities

Q7. Why or why not?

This seems like an excellent approach in which everyone would be pleased with.

We need better routes and safer riding. Improving North Roosevelt is very importanr.

We need safer areas to ride.

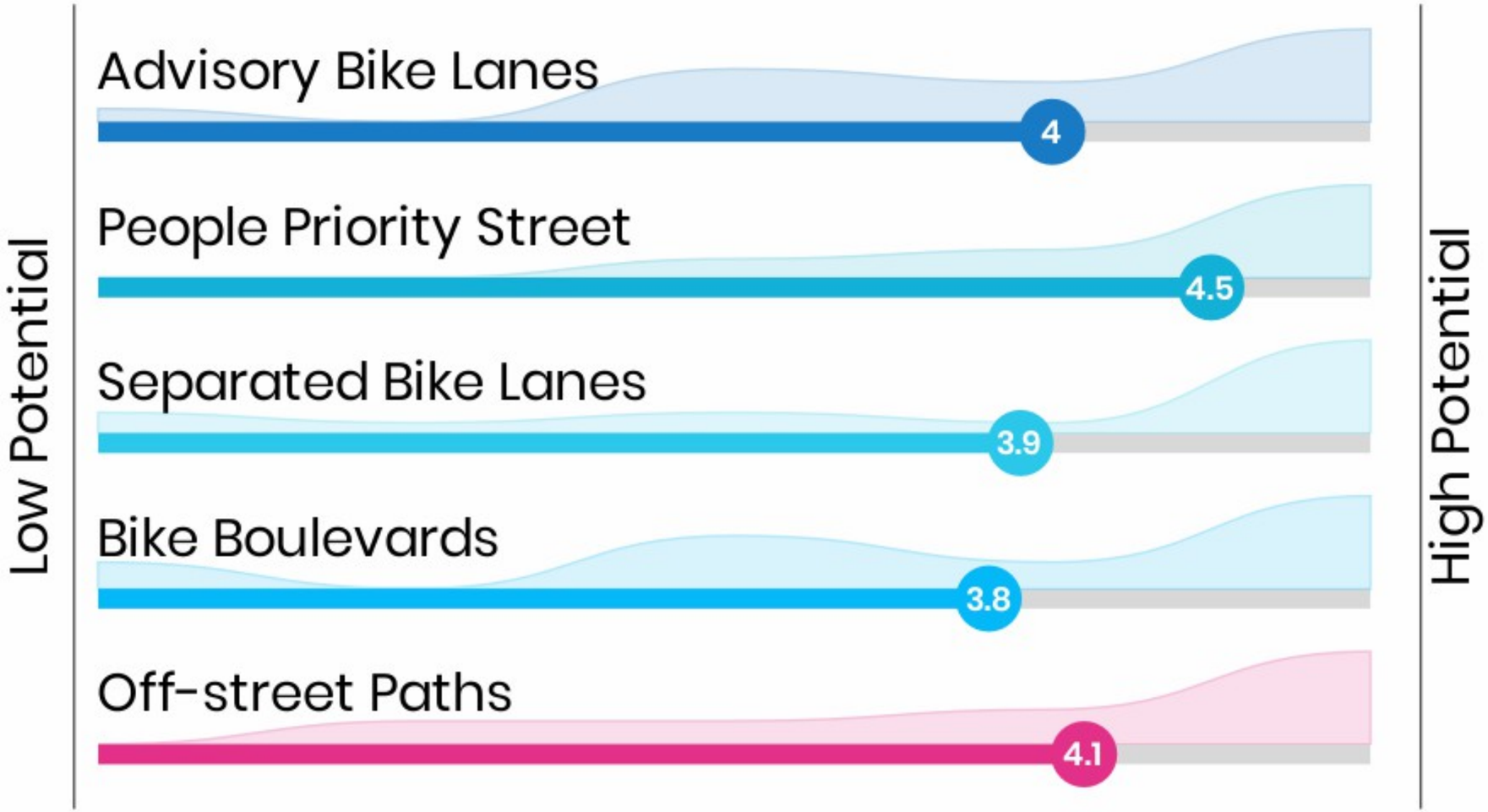
I support it for economic growth

We need a good environment for people using all modes of transportation.

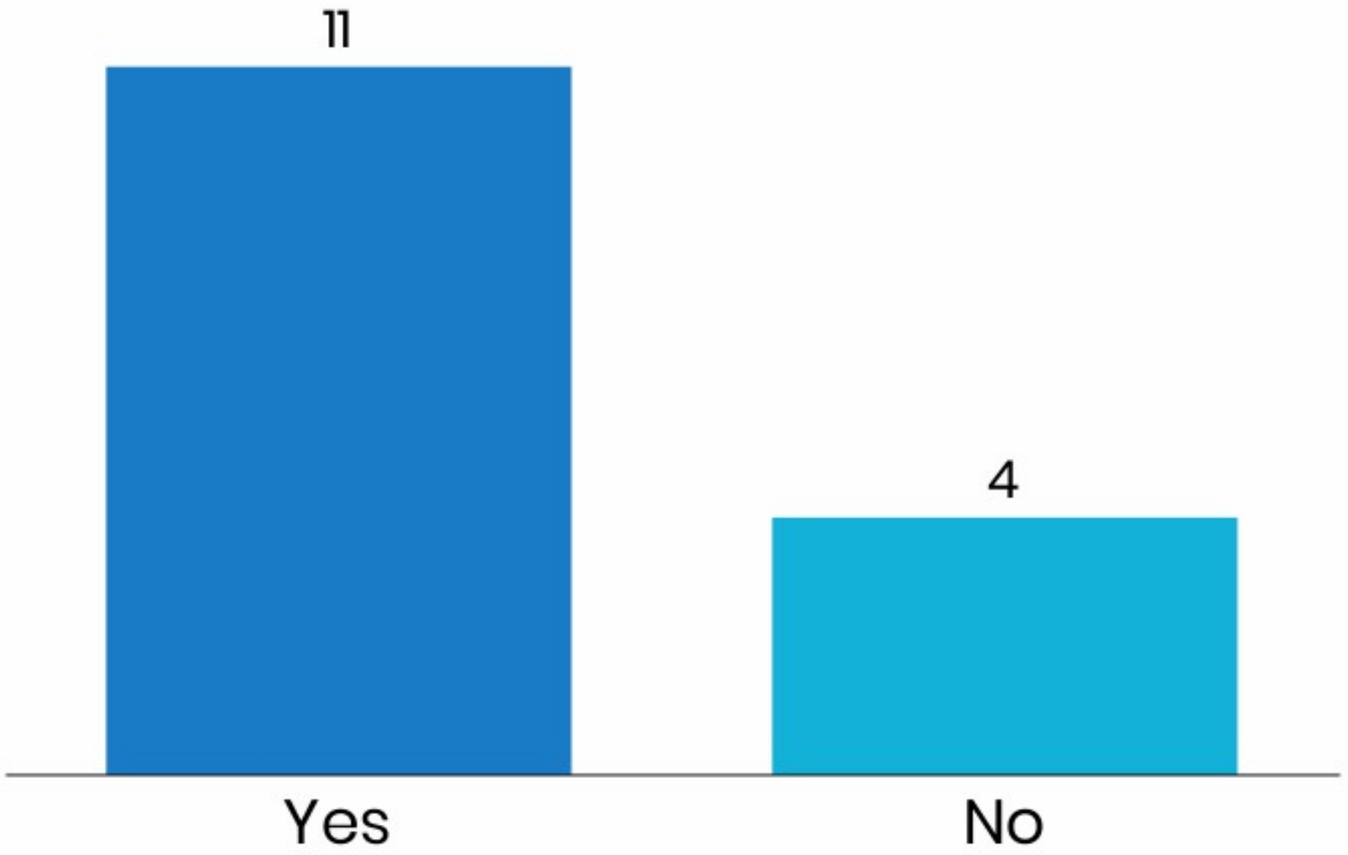
I do support the Future!

If you're talking about multi-use, with clearly marked bike lanes and pedestrian lanes, then yes, of course I support this. One exception: Duval Street should be a pedestrian mall from end to end.

Q8. What is the potential of each scenario, when applied more broadly, to benefit Key West?



Q9. Do you live or work within three blocks of a loop or connector?



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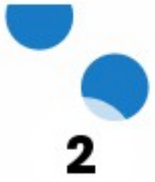
Q10. Which loop or connector do you use most?

5

Crosstown Connector

0

Marina Connector



2

Smathers Beach Connector

8

White Street Connector

5

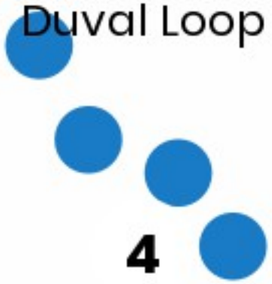
Duval Loop

9

Old Town Loop

1

New Town Loop



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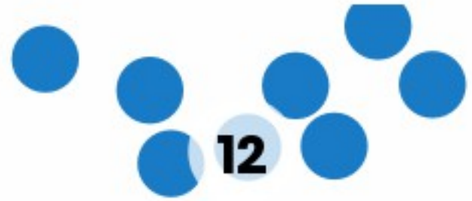
Sunrise Loop

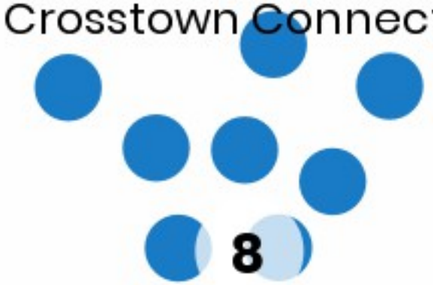
2

Island Loop

Q11. Which loop or connector should be built first?



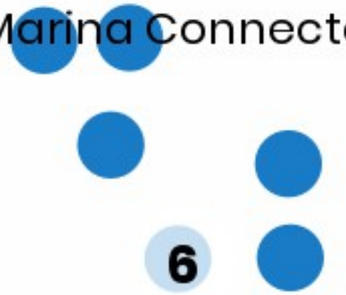
Crosstown Connector



White Street Connector

New Town Loop

Marina Connector



Duval Loop

Sunrise Loop

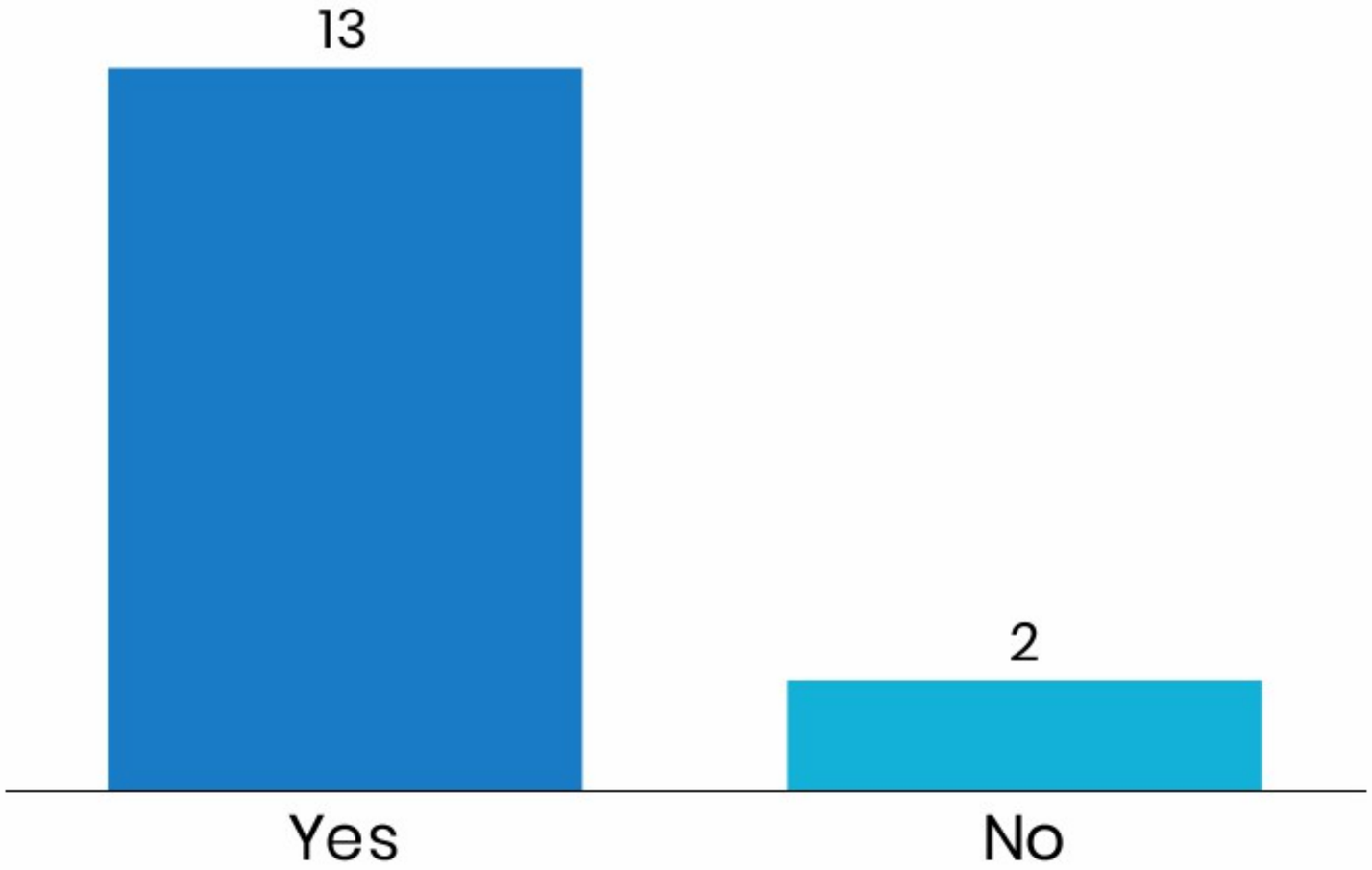
Smathers Beach Connector

Old Town Loop

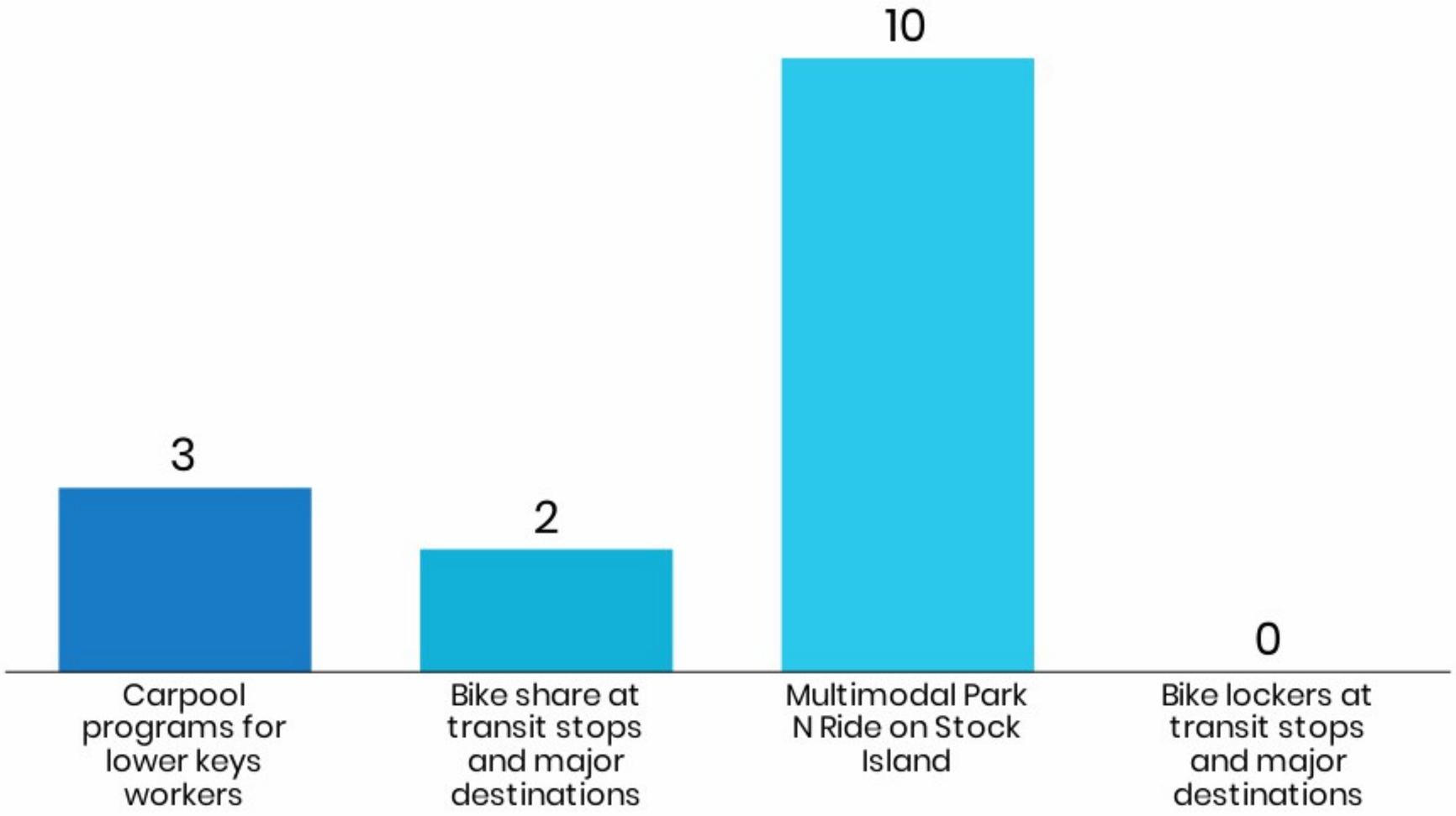
Island Loop

15

Q12. Do you support making the trail through the Wicker Sports Complex one of the first recommendations to be implemented?



Q13. Which alternative will have the biggest effect on congestion during Cow Key Bridge reconstruction?



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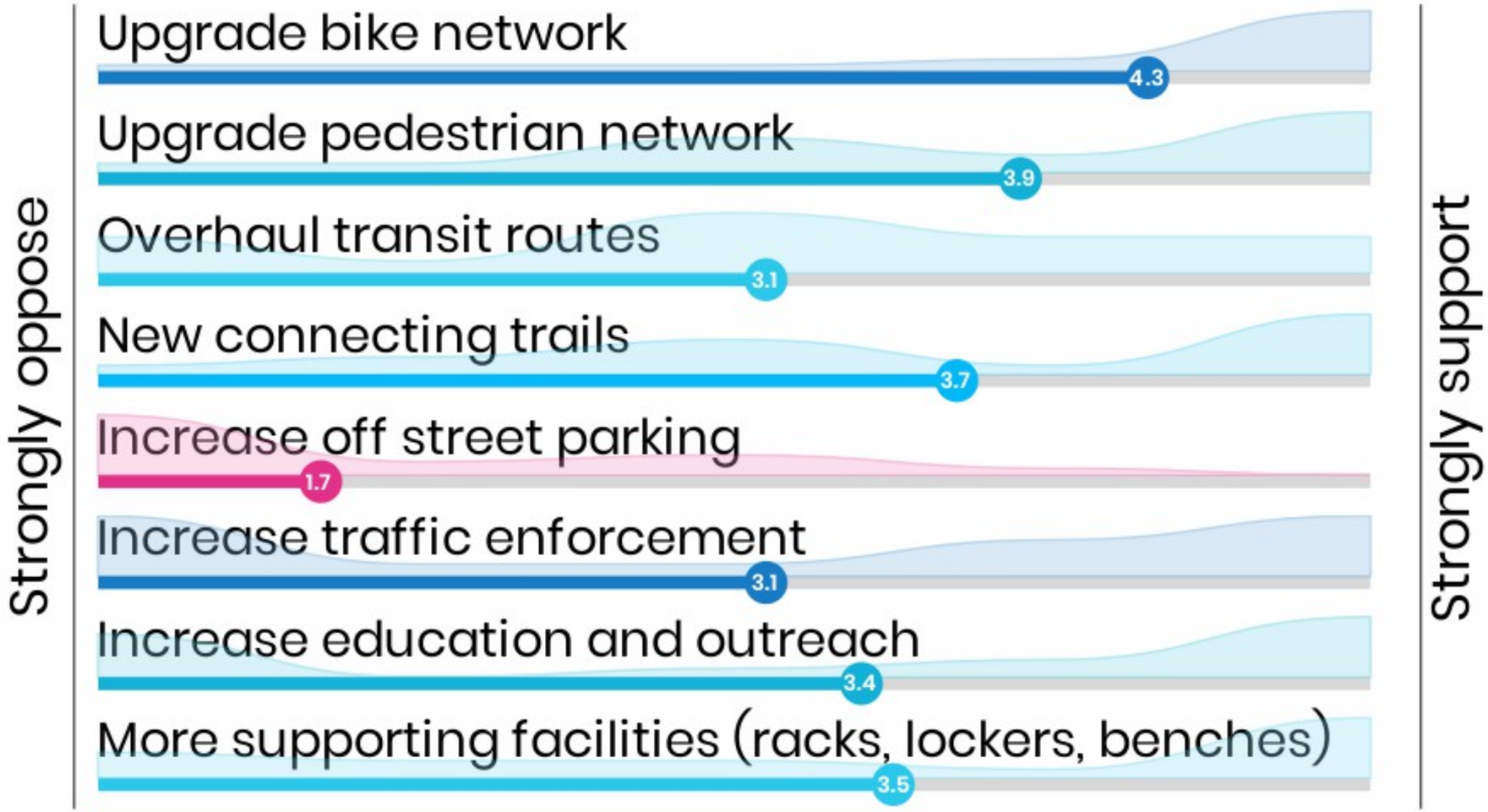
Q14. To what extent would you support or oppose a property tax increase to fund the following:



KEY WEST
Bicycle and Pedestrian Master Plan

Appendix B:
Existing Conditions

Plan Vision	Goals, Policies, and Definitions	Recommendations	Notes
1996 Key West Bicycle and Pedestrian Strategic Plan "The goal of the bicycle element of the City of Key West Comprehensive Plan is to encourage the use of bicycles in order to ease traffic congestion, encourage energy conservation and to encourage bicycling for health and recreation purposes."	**Bike Lane**. The bike lane is a lane within the motorized traffic way that is striped and stenciled with·a standard bike symbol or decal. The suggested width is 5 feet for a lane. **Bike Path.** The bike path is separated from vehicular traffic by landscaping or a curb. The suggested width is 10 to 12 feet for a two-way path. **Bike Route.** Streets designated as bike routes, however, are signed as such and speed limits are reduced to a minimum of 20 m.p.h. Also, all cross streets have stop signs with the streets designated as a Bike Route having right of way. **Intermodal Way**. An intennodal way is a sidewalk shared by pedestrians and bikes, with a white line separating the traffic types. Ideally both the bicyclist and the pedestrian will have a separated, 5 foot wide accessway. **Sidewalks**. Per AASHTO, sidewalks should be a minimum of 6 feet wide if immediately adjacent to the curb and 5 feet wide if a buffer exists between the curb and the sidewalk. **User Groups** 1) Commuters. This is perhaps the user group with the most irrunediate need for safe bike and pedestrian access throughout the community. A housing survey conducted by the City indicated that 22.5% of workers get to work either by bicycle or by foot. 2) Recreational Users. Certain parks, ballfields and other recreational sites have been identified as destinations for bike users and pedestrians of all ages. This plan identifies bike and pedestrian ways that allow these users, and particularly the young people of the corrununity, safer access to these facilities by separating them from vehicular traffic where possible. 3) Students. Similar to the recreational facility user, many school children are able to commute to neighborhood schools everyday by biking or walking. This plan identifies paths, routes, lanes, sidewaUcs and intennodal ways that offer safe alternatives for children who bike and walk to school. 4) Tourists. Key West's compact urban character has for years accommodated the biking and pedestrian populations of citizens and tourists alike. Our community has enjoyed increased popularity as a tourist destination while simultaneously experiencing increased congestion on our crowded streets and increased demand for limited automobile parking opportunities. This plan includes provisions for bike and pedestrian ways that accommodate tourists, thereby relieving some of the demand pressure on our finite and unique roadways.	**Street Network** Bike Routes = Streets with a right-of-way of 50 feet or greater and parking on both sides of the street; Duck Avenue, White Street, United Street, Von Phister Street, Washington Street, First Street, Staples Avenue, Reynolds Street, Patterson Avenue and Northside Drive. Bike Lanes = Streets with a right-of-way of 50 feet or greater with no parking or parking only on one side; Duck Avenue, Bertha Street and White Street Bike Lanes = One way streets with a right-of-way of 50 feet or greater with parking on both sides; Fleming Street and Southard Street. **Trails/Paths** Intermodal ways or bike paths = Streets with sidewalks at least 10 feet wide that can be striped into separate bicycle and pedestrian ways; Palm Avenue and Atlantic Boulevard	"Recent studies conducted by traffic consultants, Tindale-Oliver, Inc. indicate that 14% to 20% of overall roadway traffic is comprised of bicycle users." Missing project list Good definition/policy for bike routes
2010 Key West Bicycle Plan (unadopted) Vision: Key West as a preeminent bicycle friendly community with an international reputation as a safe, convenient place for bicyclists of all skill levels and where bicycling is a major form of transportation and recreation for residents and visitors.	Policy 1.2. The city will blend a safe, convenient bicycle network system into the road system that is comprised of dedicated paths, dedicated lanes, and routes shared with vehicular traffic and identified as a preferred route for bicyclists. Policy 1.3. Bicycle racks will be provided throughout the city in order to provide a secure place for bicycles and to reduce the number of bicycles that lock up to city trees, fire apparatus, utility poles and other public infrastructure. Policy 1.4. Bicycle use throughout the city will be promoted. Goal 2. Establish bicycle recreation as a major attraction and amenity for visitors and residents of Key West. Policy 2.1. The city will seek the assistance from and work with local, state and national bicycle associations. Policy 2.2. The city will accurately promote the Key West bicycle system to prospective visitors to the island. Policy 2.3. Develop marketing materials to be used by the Tourist Development Council, Chamber of Commerce and other entities that are engaged in marketing Key West as a tourist destination. Policy 2.4. The city will promote events that highlight bicycle use. Goal 3. Key West shall be a safe place for bicyclists of all skill levels. Policy 3.1. The city will promote safe bicycling and driving practices to all bicyclists and drivers. Policy 3.2. The city will regularly maintain the bicycle network that reduces conflicts between bicyclists, pedestrians, and automobiles. Goal 4. Key West, the southernmost city in the continental United States, shall achieve a national and international reputation as being a community that accommodates bicycles. Policy 4.1. The city will apply for recognition as a bicycle friendly community by the League of American Bicyclists. Goal 5. The city shall regularly review and advance the Bicycle Master Plan by annually updating a Bicycle Action Plan. Policy 5.1. The city will maintain a process for planning bicycle programs and improvements. Policy 5.2. The city will establish a regular funding source for bicycle programs. These include the city's general fund, gas tax revenues and outside funds from federal, state and nonprofit organizations. Policy 5.3. In order to make appropriate, informed decisions, the City of Key West will maintain statistics about bicycle use within the City and coordinate such data with information about other modes of transportation.	**Street Network** Wayfinding along bike routes Regular maintenance of bike facilities **Trails/Paths** Enhance trail heads for Overseas Heritage Trail and East Coast Greenway **Parking** Require developers to provide bike parking Special event bike parking **Transit** Buses/taxis equipped to carry bikes Multimodal connections from ferry/bus terminal, hotels	Entire plan is goals/objectives; many of them are good Need to determine which have been implemented; a few should be revised Goal 5 - bike coordinator, dedicated funding source, data collection

Plan Vision	Goals, Policies, and Definitions	Recommendations	Notes
2005 Multimodal Plan "The purpose of this report is to explain in detail the current parking situation in Key West and propose solutions. This explanation describes the existing rules governing parking, identifies the different kinds of parking spaces, where they are located, and how many there are, and discusses the demands for parking. This paper concludes with an in-depth analysis of specific stresses on the parking supply and recommends policies and improvements that will help alleviate the stresses on the overall parking supply and for each user group."	**User Groups** 6,000 workers use alternative transportation modes to arrive at work, representing 43% of the workforce. A report by the Planning Department showed that the majority of tourists who arrive in Key West via personal or rented automobiles hardly ever drive these vehicles to reach destinations around town	**Parking** The City requires bicycle parking spaces for certain land uses (see Figure 2). A bicycle space for a private development must be 2 ft. by 6 ft. The Board of Adjustment may allow bicycle parking to be substituted for automobile parking No shared parking	Mostly about parking. See page 5 for sample min. parking requirements; bike seems low? Key West is densely populated with an average density of 5,000 people per square mile and over 10,000 people per square mile in portions of Old Town Parking scarcity may be one of the cornerstones that make Key West a desirable place to live and visit because it is quaint, compact, and bicycle and pedestrian friendly. Parking Permit Policies are being reviewed?
Climate Action Plan 2009 The vision of the Climate Action Plan (CAP) is to guide Key West towards a sustainable future that dramatically reduces greenhouse gas emissions from current levels, while meeting the needs of present and future generations. Strategies presented in the CAP include ncreased energy efficiency, waste diversion, alternative transportation, building efficiencies, and sustainability/carbon sequestration.	Transportation - Key West will reduce green house gas emissions by 12,681 tons by reducing vehicle miles traveled, conservation and increasing alternative transportation use.	**Street Network** 1. Implement the full Bicycle/Pedestrian Plan as approved by the City Commission, along with recommendations listed in the actions section of this plan including curb cuts, safe sidewalks, increase bicycle parking and bike racks at every lower keys shuttle bus stop. **Parking** 6. Require special events receiving permits from the City Commission to include a plan to promote transit, pedestrians, bicycles and shared rides. Such a plan would include alternative modes of travel in event publicity, providing additional bicycle parking, provide satellite locations for people to park and ride transit and adding temporary transit service to meet additional demand. **Transit** 2. Establish sub-committee as an authority to oversea private and public sector assistance in promoting and enabling people to use alternatives to the car; carry out surveys of bus users and non-users and whether commercial interests could assist in promoting public transport such as “free pass to shop” at grocery outlets, employee incentives (the US Navy provides public transit passes to military and civilian employees),and pay not to park programs. 3. Promote “green” and “Smart Fleets” through incentives, driver training, creation of alternative fuel stations. Lead by example through greening of the city bus and vehicle fleet; commission a benefit analysis of using propane for local buses. 4. Promote car pooling, car pool website and electric car stations at all city parking lots; ensure public transit system has bus route timing that encourage commuting to work and back home. 5. Improve bus ridership through minor improvements including a simple to read map and schedule to be posted and maintained at every bus stop, shade, ADA access and weather protection at stops, a marketing campaign and improved bus pass and fare sales. Programs 9.4 Key West Transit Challenge, pg 36; This project will enhance the usability of the City bus system and encourage the use of it over personal motor vehicles. Includes bike/transit connectivity. Expected Outcome: Increase ridership by an average of 100 commuters daily 9.5 Bicycle Pedestrian Challenge, pg 36; This project will promote walking and biking to reduce vehicle miles traveled by enhancing the walk-ability of the island, through programs and improved bike trails, routes and sidewalk infrastructure. 27 components; Expected Outcome: Increase the number of bikes commuting to work and school by 200	Transportation = 28.2% of Key West's GHG emissions, 112,492 tons Sea Level Rise map, page 29 List of Streets Which will have Portions of Roadways Inundated by Salt Water, page 32 Remove Iniative 10.2.8 - bike licensing Consider removing 10.2.6 - "Create interesting bike racks"

Plan Vision	Goals, Policies, and Definitions	Recommendations	Notes
2013 Key West Comprehensive Plan	Policy 1-1.1.4: Affordable Housing and Compact Development Incentives shall include bonuses to achieve the following objectives: reduction on dependence on auto travel…immediate access to/support bicycle path networks..reduce carbon footprints and support sustainability goals Policy 1-1.3.2: Designate Various Types of Mixed Use Commercial Nodes to Accommodate Diverse Commercial Uses. The Land Development Regulations shall address issues surrounding: Off-street parking as well as safe and convenient systems of vehicular, bicycle, and pedestrian circulation. The Land Development Regulations shall include a regulatory framework for public and private partnership in in providing strategically located parking facilities in order to restrict and/or minimize vehicular traffic in the Historic Preservation District. Policy 1-1.9.2: Comprehensive Plan Implementation and Land Development Regulations. The Land Development Regulations shall continue to include a regulatory framework to: (6) Ensure safe and convenient on-site and off-site traffic flow and vehicle parking needs and prohibit development within future rights-of-way; (8) Ensure progress toward community greenhouse gas emissions reduction goals; and (9) Provide safe pedestrian and bicycle connectivity throughout the City and especially on transportation corridors. Policy 1A-1.2.9: Vehicular and Non-Vehicular Traffic Conflicts. The Land Development Regulations in the Historic District shall address the reduction and elimination of conflicts between vehicular and non-vehicular traffic for shared space. The use of buffers, setbacks, slower speed zones, and the use of materials that inherently slow traffic and enhance the historic resources (e.g., brick roads) shall merit consideration. Policy 2-1.1.3: Dense Urban Land Area. The City of Key West is a substantially developed dense urban land area and is thereby exempted from transportation concurrency requirements for roadways. The City recognizes that its development characteristics make substantive expansion of capacity of the roadway system prohibitive. The City will therefore prioritize improving the safety and function of existing roads and multi-modal transportation improvements (i.e. transit, air, boat, bicycles, pedestrianism, mixed-use development) as its primary strategies for addressing current and projected transportation needs. Policy 2-1.1.10: Bicycle Level of Service Standards - The City shall seek to maintain a bicycle Level of Service Standard of B or better on all roadways with designated bicycle lanes Policy 2-1.1.11: Pedestrian Level of Service Standards. The City shall seek to maintain a pedestrian Level of Service Standard of B or better on all roadways with designated pedestrian facilities	OBJECTIVE 7-1.3: ACCESS FACILITIES. To the greatest extent possible, all public recreational facilities shall be made accessible to automobiles, bicycles and pedestrians. Policy 7-1.3.3: Bicycle/Pedestrian Access Ways. All neighborhood parks are provided with bicycle and pedestrian accessways. In planning and designing these accessways, the City shall remove barriers limiting access to the physically handicapped. Policy 7-1.3.4: Parking Areas and Bicycle Accommodations. The City shall continue to provide for the provision of parking spaces and bicycle racks at recreation sites. GOAL 9-1: MANAGEMENT OF CAPITAL IMPROVEMENTS. The City of Key West shall undertake actions necessary to adequately provide and protect public facilities and to develop aesthetically pleasing and desirable public spaces and connectivity generally, important to residents and visitors alike. Policy 9-1.1.5: Priorities in Allocating Capital Improvements. In allocating priorities for scheduling and funding capital improvement needs, the City shall assign highest priority to capital improvement projects in the five-year schedule of improvements which are designed to correct existing deficiencies. OBJECTIVE 9-1.3: FUTURE DEVELOPMENTS TO BEAR COSTS OF THEIR RESPECTIVE INFRASTRUCTURE IMPACTS. The City shall continue to maintain a concurrency management implementation system as part of the Land Development Regulations which shall mandate that applicants for development or redevelopment shall be required to provide a pro rata share of all capital improvements the need for which shall be generated by the respective proposed developments or provide funds in lieu thereof. The concurrency management system shall ensure that such improvements are in place concurrent with the impacts of development and meet adopted minimum level of service standards. (Transportation LOS in this chapter does NOT include bike/ped/transit) 2012 UPDATES TO THE DATA AND ANALYSIS FOR EVALUATION AND APPRAISAL REPORT-BASED COMPREHENSIVE PLAN AMENDMENTS Chapter 5. Level of Service Analysis 5.6 Transportation - The 2005 EAR states that significant progress has been made to accommodate bicycles, city transit, taxi stands, and instituting a traffic impact fee to new development…In order to demonstrate its commitment to multi-modal transportation accessibility, the City is adopting Level of Service standards for bicycles and pedestrians. The City's standards are based on those outlined in the 1994 article "Bicycle and Pedestrian Levels of Service Performance Measures and Standards for Congestion Management Systems" by Linda B. Dixon.	The City's 2010 permanent population is 24,649, and is projected to decrease slightly during the five-, ten-, 15- and 20-year planning periods due to growth limitations and the lack of significant amounts of vacant and developable land. In addition to the permanent population, the City is a world renowned tourist destination and a popular location for second homes. The total number of people on Key West on an average day, including permanent residents, seasonal residents, the maritime population, overnight tourists, day-trippers, cruise ship visitors, commuters, and shoppers, is estimated to be 56,335. Ch 2, Transportation Element - includes bike/ped LOS standards, but only on roads with designated facilities (pg 57-58)
Key West Transit Development Plan Update (2015-2024)	pg 84 Bike Share Program The City of Key West has a high mode share for bicycle use with many people commenting during a recent survey that they do not use transit because they ride bicycles instead. Public comments also indicated that passengers would like bike racks on the Lower Keys shuttles, bike lockers at the bus stops, and bike share programs. When the bike racks on the city routes are full, passengers are unable to bring their bike on the trip and sometimes do not feel comfortable leaving the bicycle at the bus stop, even when secured. A bike share program could provide options for people who need to use bicycles for the first and last mile of their trip but do not want to or are unable to travel with the bike. Through the bike sharing programs, individuals register for membership, find and reserve a bike using the mobile app or the bike keypad, reserve the bike and enter the four digit PIN code on the key pad, and after using the bike return it to one of the hub locations. includes bike parking storage in super stop/bus stop recommendations proposes KWDoT could generate additional revenue through bike locker rentals		

Report on the Activities and Recommendations of the Parking and Alternative Transportation Group ("Group")

June 19, 2018

Introduction

The group was formed by the City Commission via resolution No. 17-215 on August 15, 2017 to establish a temporary advisory board that will make recommendations to the City Commission and Staff for the improvement of parking and alleviation of congestion, especially in the Old Town area of the Island. The mission of the Group shall be to accumulate information, review effective strategies in other communities, formulate suggestions and recommendations to alleviate congestion, encourage public transportation, reduce reliance on personal vehicle use and improve parking availability. The Group shall sunset 180 days after its first meeting.

The seven appointed members have worked diligently under this charter, holding its initial organizational meeting on December 5, 2017 with an expected sunset of June 3, 2018 absent an extension. The Group's sunset was extended on June 5, 2018 under resolution No 18-179 for 60 days to allow time for a final meeting to approve this report. The Group has met eight times and has held two public workshops seeking public input on the many topics and potential recommendations of the Group. We sincerely hope that you find this report useful. We also would like to take this time to thank you for the opportunity to serve the City Commission and the citizens of Key West in tackling one our most important community challenges. We would also like to give special thanks to City Staff, particularly, Sue Harrison, Steve McAlearney, John Wilkins, Rod Delostrinos, Jason Hoegle, and Alison Higgins for their substantial efforts in supporting the work of the Group.

We also would like to thank the City Commission for their prompt action on the two items the Group has already submitted to the City Commission related to Parking Fines and the Multimodal Transportation Coordinator as follows:

Parking Fines: The fine for parking violations shall be increased from $20 to $35 to deter noncompliance. **Enacted by the City Commission 7-0 on January 17, 2018 under ordinance No 18-03.**

Multimodal Transportation Coordinator: Recommending the City Manager expeditiously re-evaluate and amend the compensation, title, and job description of the vacant Bicycle/Pedestrian Coordinator Position to "Multimodal Transportation Coordinator"; Recommending that the City Manager make efforts to hire a qualified person for that position in a timely manner. **Approved by the City Commission 7-0 on March 20, 2018 under resolution No 18-114. No action by City Staff at the writing of this report.**

Report on the Activities and Recommendations of the Parking and Alternative Transportation Group ("Group")

June 19, 2018

Recommendations

The actions and recommendations have been listed below and grouped by short term and long-term based on the Group's judgement of time required to enact or implement. We have also numbered all recommendations for ease in referencing and discussing them.

Short Term

1. **Criteria for Residential Parking Numbers Per Block:** Recommend that all blocks within the Residential Parking Zone have at least 50% marked residential only, that all blocks adjacent to paid parking zones have at least 75% marked residential only, and that all blocks with parking on only one side of the street have at least 75% marked residential only.
2. **Parking Fees:** Recommend raising all parking fees to be a consistent at $4 per hour at all City owned paid parking lots and meters and that the increase in revenues be allocated 50% to the Parking and Alternative Transportation Fund and 50% to the General Fund. The Parking Department estimates that 85% of these fees are paid by tourists and visitors and that this change will produce $2,136,000 in new parking revenues.
3. **Parking Rates for Tour Buses:** The fees for tour bus parking at the designated Caroline Street lot shall be changed to $900 monthly from $1,500 monthly (a reduction in the daily rate from $50 to $30) and to $50 daily from $100 daily to encourage increased participation and less tour bus travel around town.
4. **Speed Limits:** Recommending that the speed limit for all streets within the City of Key West be set at 20 mph, regardless of street ownership, with the following exceptions:
    a. North Roosevelt Blvd 35 mph (no change)
    b. South Roosevelt Blvd 30 mph (no change)
    c. Flagler Ave (from S Roosevelt to Bertha/First) 30 mph (no change)
    d. Flagler Ave (from Bertha/First to Reynolds) 25 mph (no change)
    e. Palm Ave 30 mph (no change)
    f. Eaton St 25 mph (no change)
    g. Truman Avenue (from Eisenhower/Jose Marti to Duval) 25 mph (no change)
    h. College Rd 25 mph (no change)
    i. See attached map
5. **Extend Meter Paid Parking:** Expand the meter paid parking program to the 200 block of Elizabeth St.
6. **30 Minute Parking Reform:** Recommend a three-year phase in of reducing the reserved "30 minute" parking spots to 15 minutes, to reduce hours available to 8 am to 8 pm only, and to require businesses to periodically demonstrate to the City their off-site parking arrangements.

7. **Scooter Parking:** Recommending requiring scooters to use dedicated scooter parking spaces.
8. **Parking Enforcement:** Recommend adding parking enforcement officers to improve compliance with the understanding that new officers will produce sufficient revenues to offset the increase in expenses.
9. **Consolidate Parking Department Personnel:** Recommend relocating parking enforcement officers to City Hall from Department of Transportation.
10. **Funding for Thermoplastic Residential Parking Spots:** Recommend an increase in funding from $5,000 to $20,000 for Thermoplastic Residential Street Markings Per Year.
11. **Courthouse Lot:** Recommend that the City coordinate with the County to reserve the parking lot behind the Courthouse specifically for County and City residents and similar use of the Gato Parking Lot for workforce parking after 5 pm.
12. **Affordable Housing Project proposed by City on College Road:** Recommending that the City should encourage developers to facilitate alternative transportation by waiving minimum parking requirements and substituting additional bicycle and scooter parking, designing carpooling and vanpooling programs, and providing convenient public transit options related to this and any other affordable housing projects.
13. **Speed Limit Enforcement**: Recommending that the City Manager and KWPD apply new resources or reallocate existing resources to execute a regular (daily) traffic enforcement program with an emphasis on speed limits. We believe for new speed limits to be effective, such program should include regular communications and frequent stops and citations to demonstrate the consequences of exceeding speed limits.
14. **Bicycle Parking and Racks**: Recommending that the City Finance Department provide significant annual funding to replace/maintain and increase the number of and availability of bike racks.
15. **Truck Routes:** Recommending that the attached map be adopted as the standard truck route for delivery vehicles 35 feet in length. See attached map.
16. **Continued Emphasis on Alternative Transportation:** Recommend ongoing monitoring and emphasis by the City Commission and City Management and Staff will be critical to alleviating traffic congestion due to the long-term nature of these initiatives. The City should task another existing Citizen appointed Board (i.e. Sustainability Advisory Board) with the responsibility of continuing the effort of the committee and monitoring progress of the City's initiatives to alleviate traffic congestion and parking challenges.

Long-Term

1. **Policy Initiative:** Recommending the adoption of Complete Streets Policies, a transportation design approach that considers streets to be planned, altered, designed,

operated and maintained to enable safe, convenient and comfortable travel and access for users of all ages and abilities regardless of their mode of transportation.

2. **Marketing and Education:** Recommending dedicated funding be used for education and outreach for employers, commuters and the business community and tourist industry including the following:
    a. initiate programs to educate all users
    b. encourage users to bike/walk/transit
    c. provide outreach to employers, commuters, and the business community/tourist industry
    d. promote the bike network, public transit and other transportation modes
    e. promote public transit with a map and schedule at every bus stop
    f. develop and implement initiatives such as employee carpools and vanpools
    g. improve wayfinding (street signage) that more effectively helps users to get to their destination more quickly.
3. **Parking Capacity:** Recommending the City consider opportunities to add paid public parking capacity while simultaneously removing a like amount of street parking to achieve safer streets for all users by improving intersection line of sight and adding dedicated and separated bike lanes to certain streets; to identify and adopt planning policies incentivize private landowners to undertake development of additional paid parking in the Core Commercial District.
4. **Incentivizing Car Share:** Recommend directing City staff to actively recruit to bring Car Share to Key West.
5. **Special Event Transportation Planning**: Recommend modifying the ordinance related to Special Events to require all applicants to include a Transportation Plan, developed with City Staff, to maximize the use of transportation alternatives and alleviate traffic congestion by prominently advertising and encouraging transportation alternatives in all event communications.
6. **Planning and New Development**: Recommend the City to consider adopting zoning changes to require new development to incorporate transportation planning, reduce requirements for parking, and assess impact fees dedicated to alternative transportation modes for all new development.
7. **Street Capacity Considerations**: Recommend identifying business licensing regulations to control and or reduce the number and type of commercial vehicles using City streets alleviating traffic congestion and to consider assessing additional impact fees to commercial road users and restricting such fees to improvement in alternative transportation to the extent permitted by law.

8. **North Roosevelt Loop:** Recommend a free and frequent Duval Loop type service that would run the length of North Roosevelt Blvd to downtown and connect with the Duval Loop.
9. **Public Transit**: Recommend that the City Manager and Public Transit Director evaluate and overhaul the City of Key West Public transit system to achieve significant increases in public transit ridership through increases in frequency, simplicity, communications and reliability and to support the Transit Department's Key West Intermodal Center project.

Respectfully submitted,

Gregory Davila

Dana Day

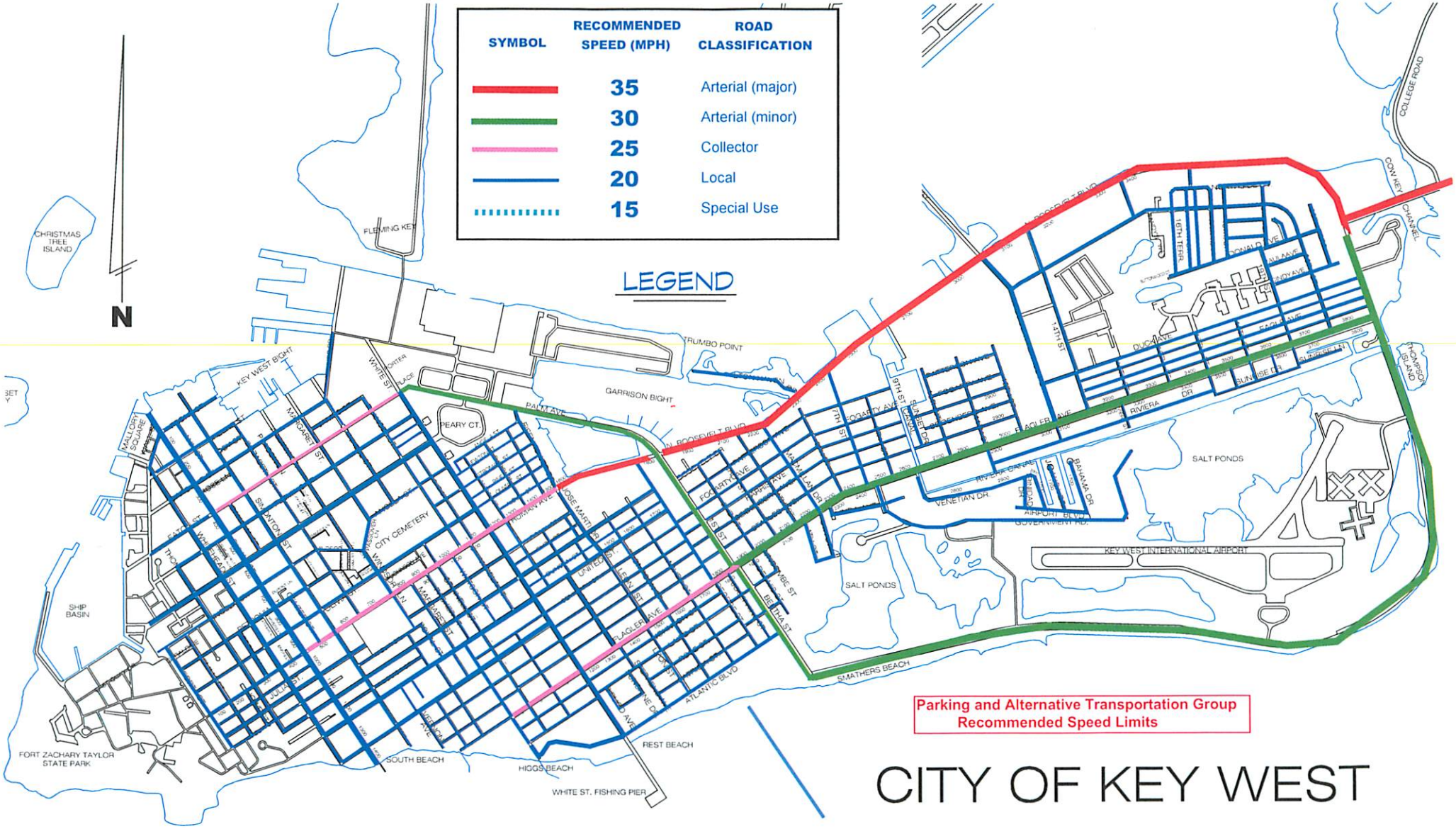
Eric Detwiler

Roger McVeigh

Wallace Reid Moore, Jr.

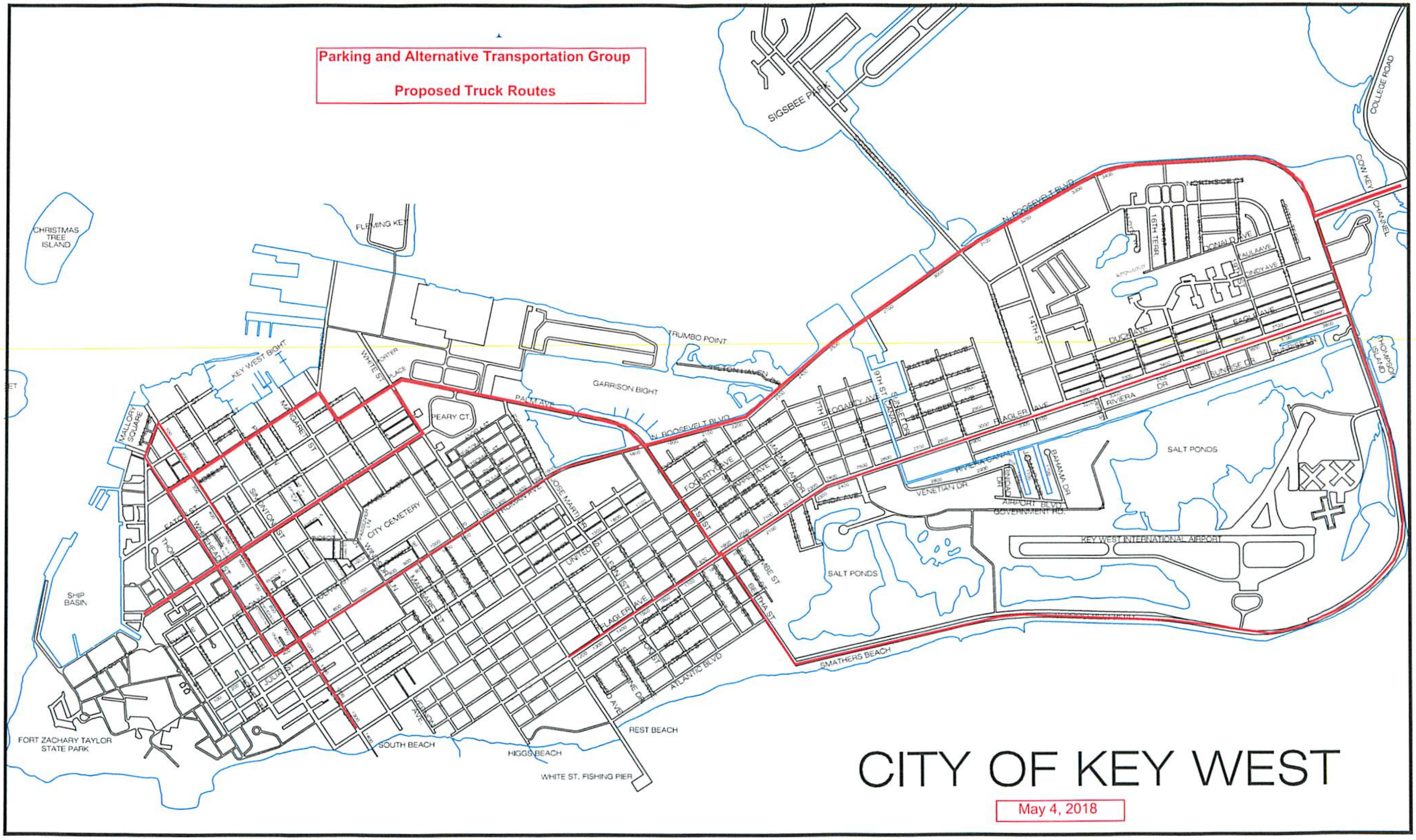
James Sutton

Allan Tidball

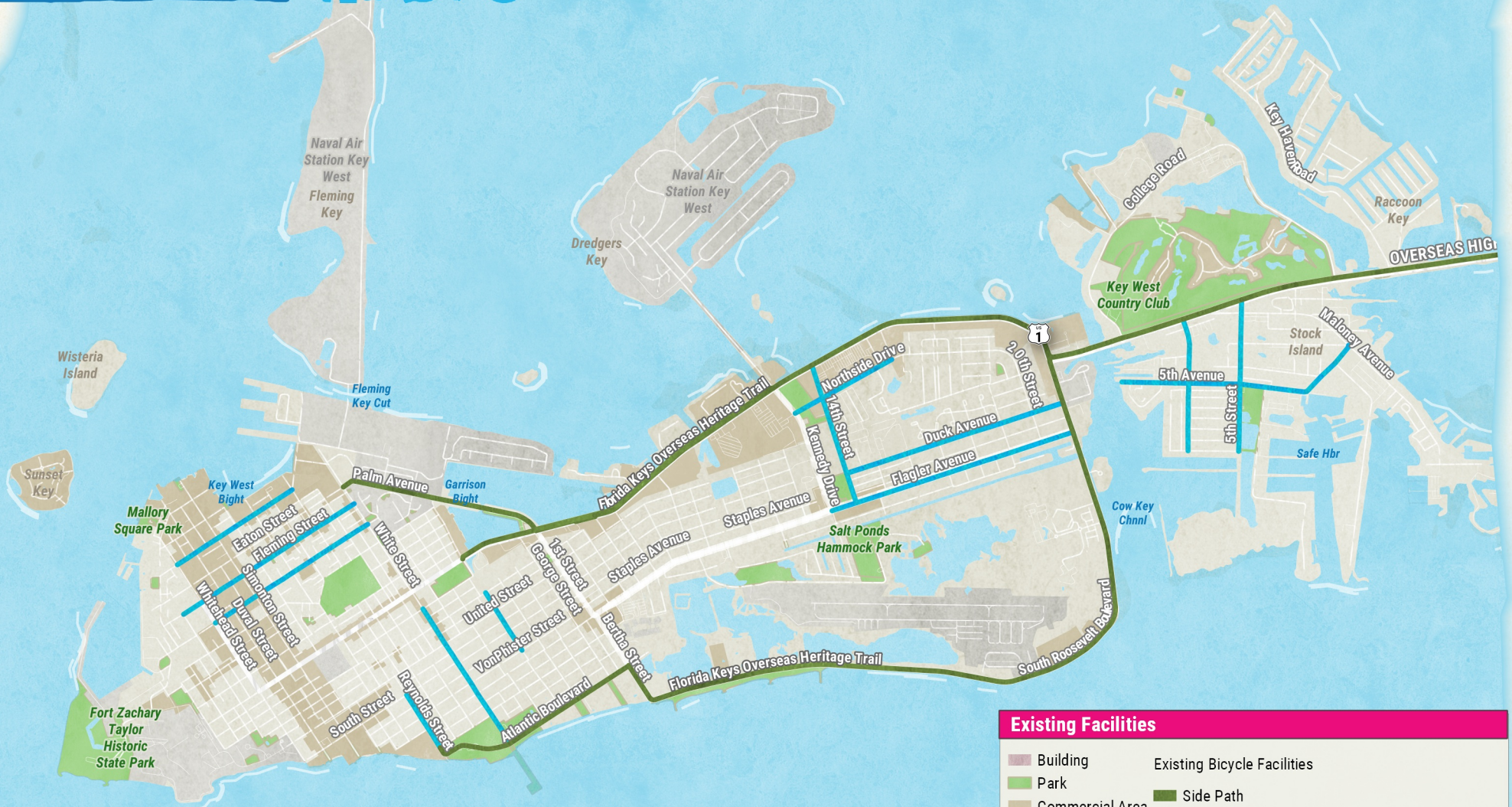


Parking and Alternative Transportation Group
Recommended Speed Limits

CITY OF KEY WEST


Parking and Alternative Transportation Group
Proposed Truck Routes
CITY OF KEY WEST
May 4, 2018
CHRISTMAS TREE ISLAND
FLEMING KEY
SIGSBEE PARK
COLLEGE ROAD
COW KEY CHANNEL
TRUMBO POINT
KEY WEST BIGHT
GARRISON BIGHT
PALM AVE
PEARY CT.
N. ROOSEVELT BLVD
MALLORY SQUARE
CITY CEMETERY
SHIP BASIN
FORT ZACHARY TAYLOR STATE PARK
SOUTH BEACH
HIGGS BEACH
WHITE ST. FISHING PIER
REST BEACH
ATLANTIC BLVD
SMATHERS BEACH
SALT PONDS
SALT PONDS
KEY WEST INTERNATIONAL AIRPORT
FLAGLER AVE
RIVIERA DR
VENETIAN DR.
BAHAMA DR
DONALD AVE
DUCK AVE
EAGLE AVE
SUNRISE DR
14TH ST
16TH TERR
7TH ST
9TH ST
THOMPSON ISLAND

KEY WEST
Bicycle and Pedestrian Master Plan



Existing Facilities

- Building
- Park
- Commercial Area

Existing Bicycle Facilities

- Side Path
- Bike Lane

0 0.25 0.5 0.75 1 mi

0 4 8 minutes biking

0 10 20 minutes walking

N

Toole Design Group

Mauricio Hernandez

H:/5000/5574_Key West Bike and Ped Master Transportation Plan/PRODUCTION/GIS/QGS/201707_July/2017_07_25_5574_KeyWestMap(LETTER).qgs

KEY WEST
Bicycle and Pedestrian Master Plan

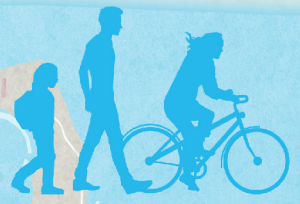
Appendix C:

Maps

KEY WEST

Bicycle and Pedestrian Master Plan

KEY WEST
Bicycle and Pedestrian Master Plan

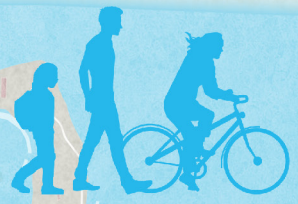


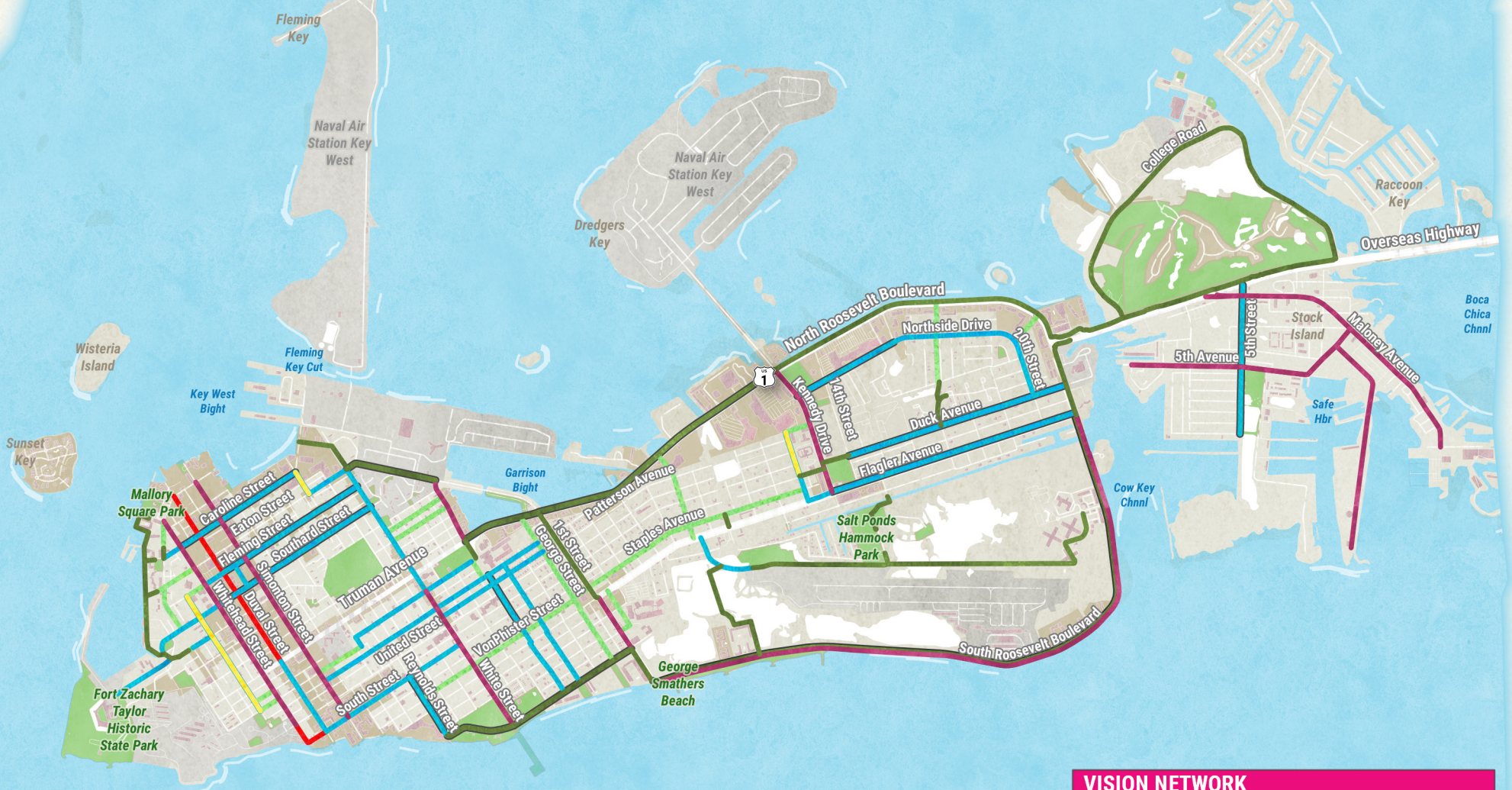
SHORT-TERM NETWORK

Existing	Proposed	
Trail	Trail	Building
Bike Lane	Separated Bike Lane	Park
	Bike Lane	Commercial Area
	Advisory Bike Lane	Airport/Military Use
	People Priority Street	
	Bike Boulevard	
	Sharrow/Signed Route	

TOOLE DESIGN

KEY WEST
Bicycle and Pedestrian Master Plan

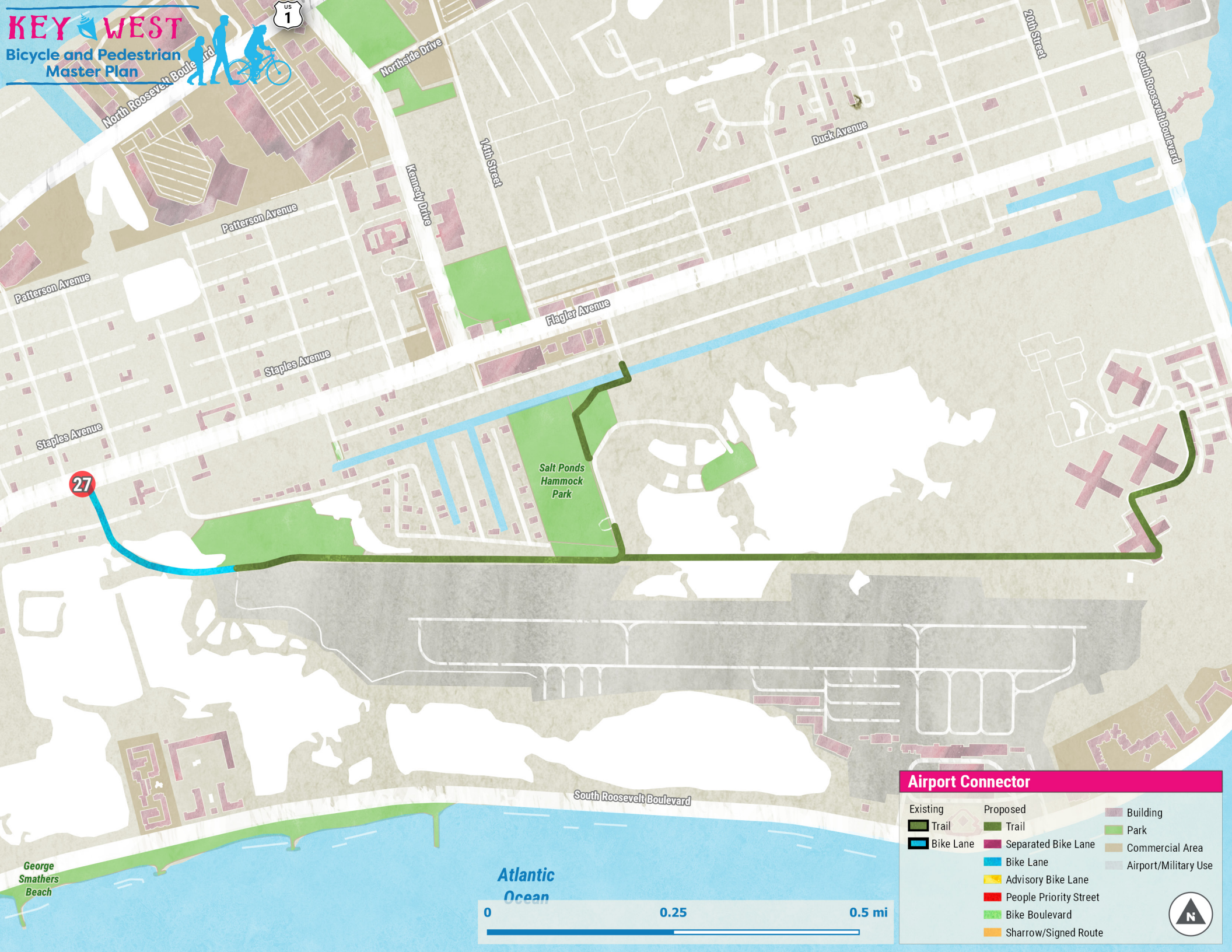




VISION NETWORK

Existing	Proposed	
Trail	Trail	Building
Bike Lane	Separated Bike Lane	Park
	Bike Lane	Commercial Area
	Advisory Bike Lane	Airport/Military Use
	People Priority Street	
	Bike Boulevard	
	Sharrow/Signed Route	

TOOLE DESIGN


KEY WEST
Bicycle and Pedestrian Master Plan
US 1
North Roosevelt Boulevard
Northside Drive
14th Street
Kennedy Drive
Patterson Avenue
Patterson Avenue
Staples Avenue
Staples Avenue
Flagler Avenue
Duck Avenue
20th Street
South Roosevelt Boulevard
27
Salt Ponds Hammock Park
South Roosevelt Boulevard
George Smathers Beach
Atlantic Ocean
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Airport Connector
Existing
Trail
Bike Lane
Proposed
Trail
Separated Bike Lane
Bike Lane
Advisory Bike Lane
People Priority Street
Bike Boulevard
Sharrow/Signed Route
Building
Park
Commercial Area
Airport/Military Use
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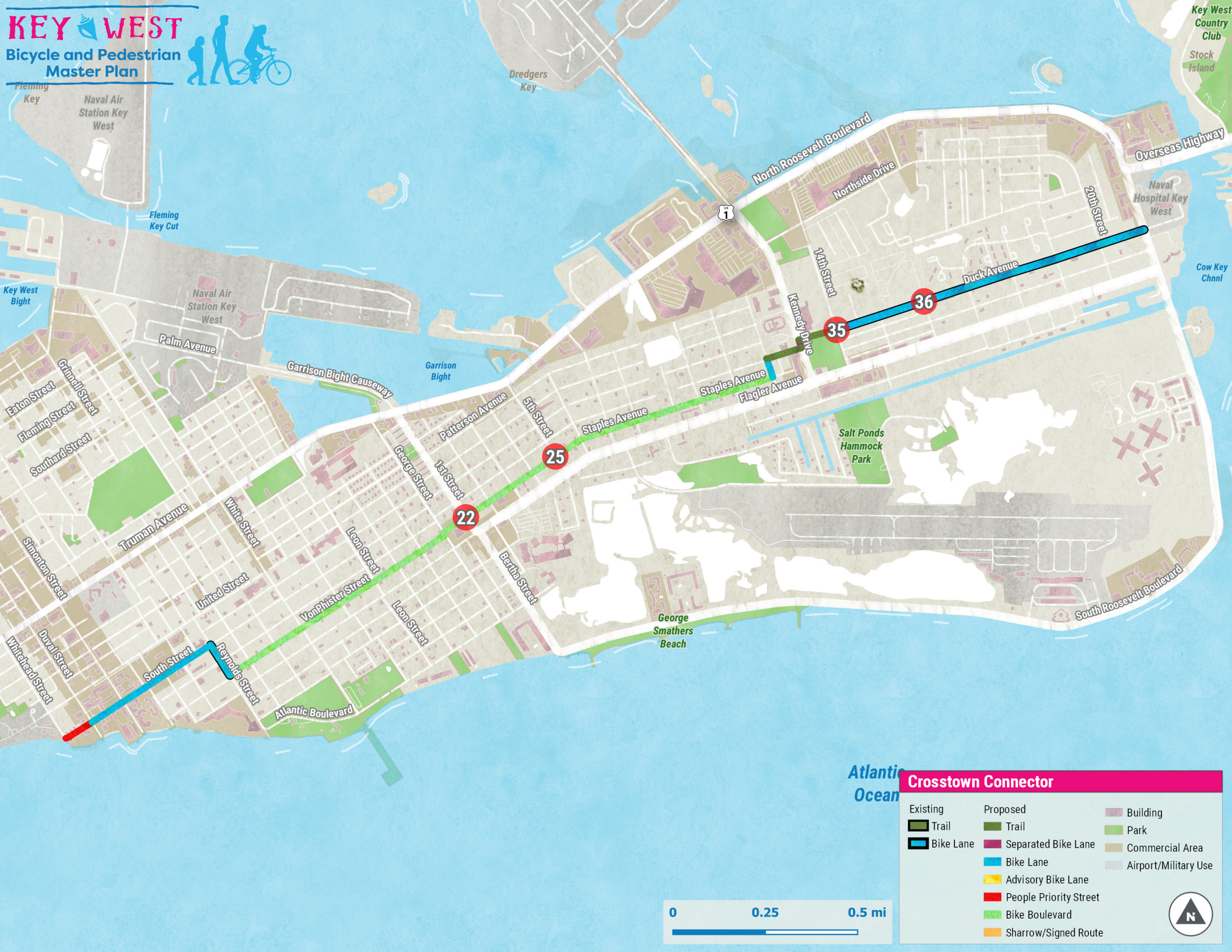
KEY WEST
Bicycle and Pedestrian Master Plan
Fleming Key
Naval Air Station Key West
Dredgers Key
Key West Country Club
Stock Island
Fleming Key Cut
North Roosevelt Boulevard
Northside Drive
Overseas Highway
Naval Hospital Key West
20th Street
14th Street
Duck Avenue
Cow Key Chnnl
Key West Bight
Kennedy Drive
36
35
Palm Avenue
Garrison Bight Causeway
Garrison Bight
Staples Avenue
Flagler Avenue
Grinnell Street
Eaton Street
Fleming Street
Southard Street
Patterson Avenue
5th Street
Staples Avenue
25
George Street
1st Street
Salt Ponds Hammock Park
Truman Avenue
White Street
22
Simonton Street
Leon Street
Bertha Street
United Street
VonPhister Street
Leon Street
George Smathers Beach
South Roosevelt Boulevard
Duval Street
Whitehead Street
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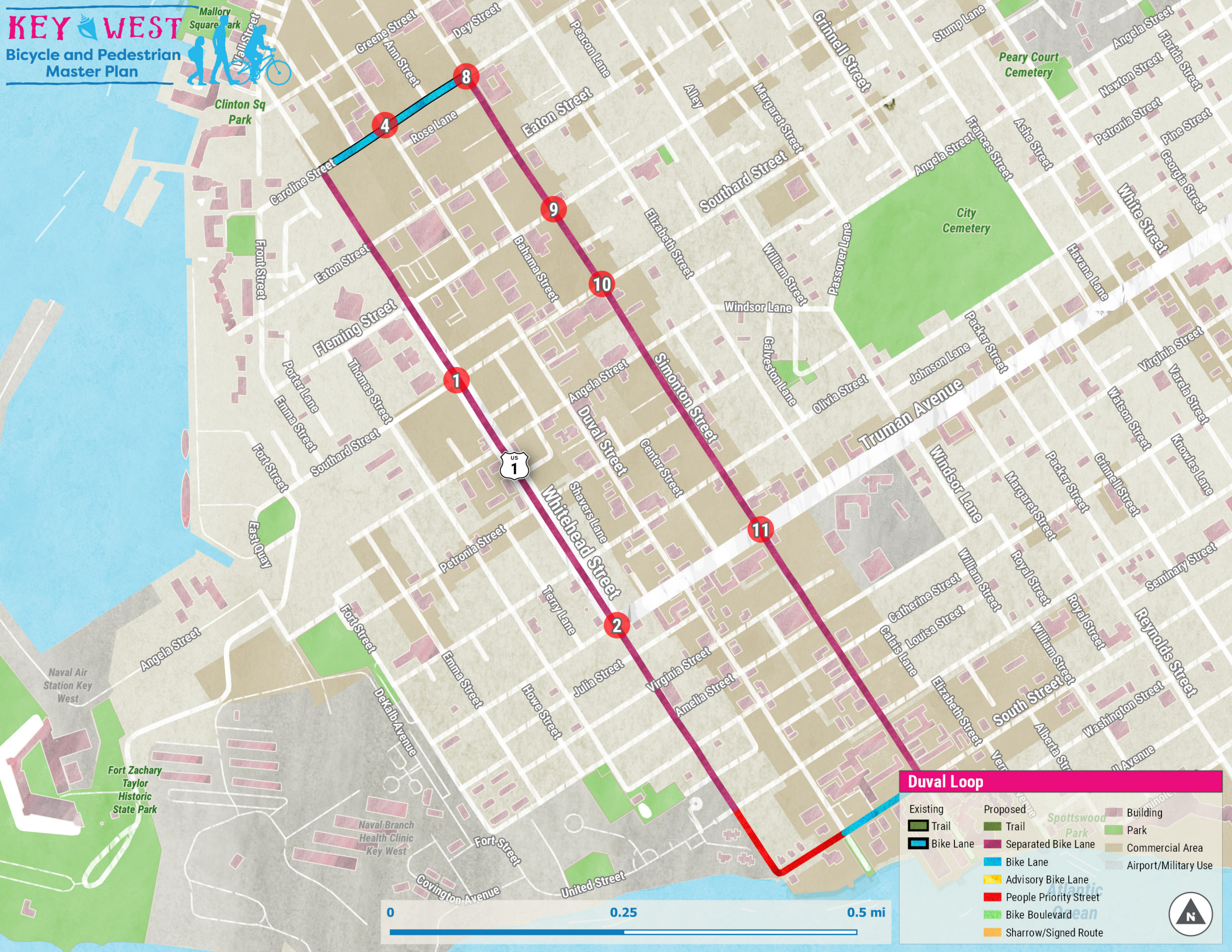
KEY WEST
Bicycle and Pedestrian Master Plan
Duval Loop
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People Priority Street
Bike Boulevard
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Mallory Square Park
Clinton Sq Park
Peary Court Cemetery
City Cemetery
Spottswood Park
Fort Zachary Taylor Historic State Park
Naval Air Station Key West
Naval Branch Health Clinic Key West
Atlantic Ocean
Caroline Street
Eaton Street
Fleming Street
Southard Street
Truman Avenue
Simonton Street
Whitehead Street
Duval Street
Windsor Lane
South Street
Fort Street
Angela Street
Petronia Street
Virginia Street
Julia Street
Amelia Street
Howe Street
Emma Street
Dekalb Avenue
Covington Avenue
United Street
Reynolds Street
Seminary Street
Knowles Lane
Varela Street
Watson Street
Grinnell Street
Packer Street
Margaret Street
Royal Street
William Street
Catherine Street
Louisa Street
Calais Lane
Elizabeth Street
Washington Street
Alberia Street
Olivia Street
Johnson Lane
Galveston Lane
Windsor Lane
Passover Lane
Havana Lane
White Street
Georgia Street
Pine Street
Florida Street
Newton Street
Petronia Street
Ashe Street
Frances Street
Angela Street
Southard Street
Grinnell Street
Stump Lane
Peacon Lane
Dey Street
Greene Street
Ann Street
Rose Lane
Alley
Margaret Street
Elizabeth Street
Bahama Street
William Street
Front Street
Porter Lane
Emma Street
Thomas Street
Center Street
Shavers Lane
Terry Lane
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KEY WEST
Bicycle and Pedestrian Master Plan
Dredgers Key
Naval Air Station Key West
Naval Air Station Key West
College Road
Raccoon Key
Overseas Highway
Key West Country Club
Boca Chica Chnnl
Wisteria Island
Fleming Key Cut
Northside Drive
20th Street
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Stock Island
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Gross Street
Maloney Avenue
14th Street
Kennedy Drive
Duck Avenue
Flagler Avenue
Staples Avenue
Key West Bight
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Mallory Square Park
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Fleming Street
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Reynolds Street
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George Smathers Beach
South Roosevelt Boulevard
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Sharrow/Signed Route
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Commercial Area
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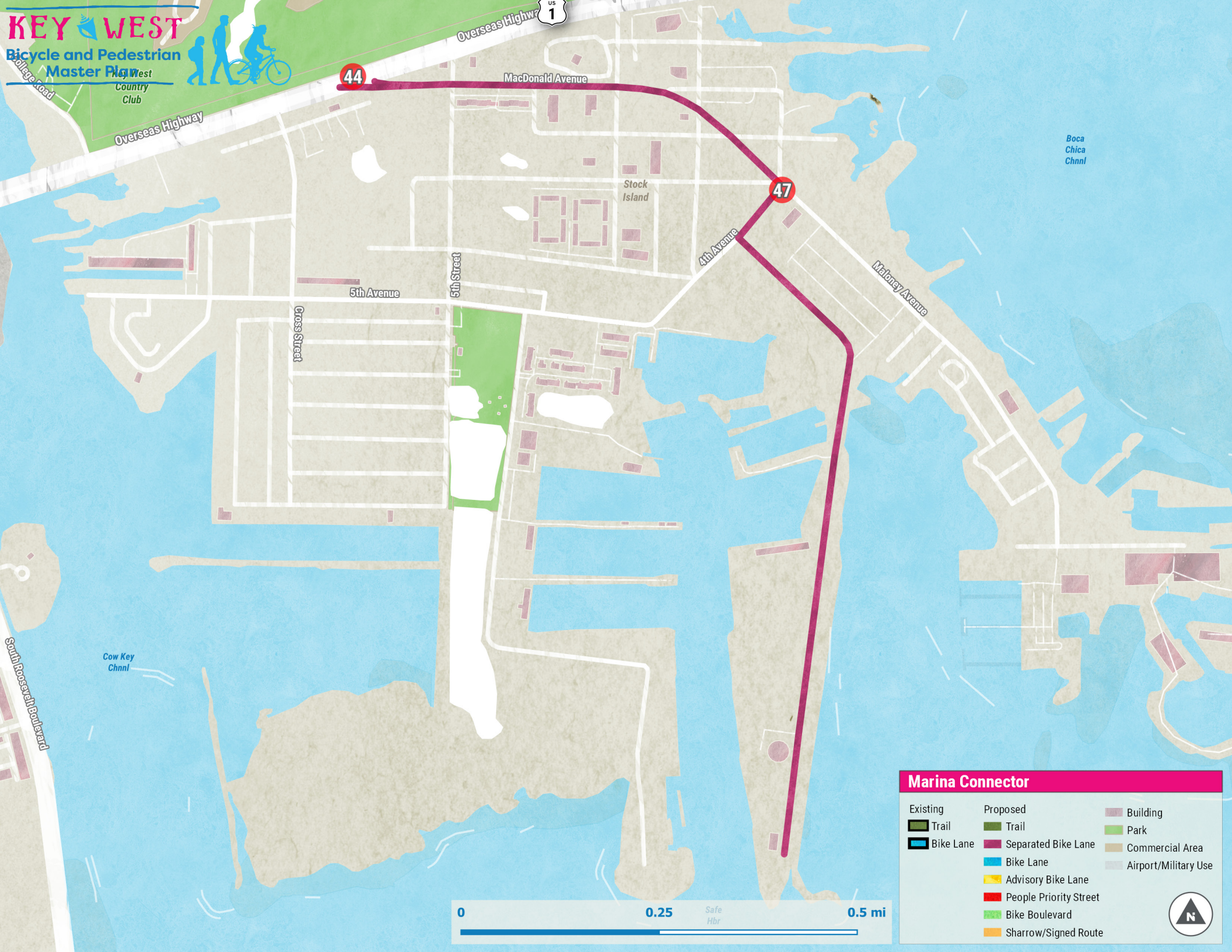
KEY WEST
Bicycle and Pedestrian
Master Plan
Key West
Country
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College Road
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Overseas Highway
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MacDonald Avenue
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Stock
Island
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Cross Street
Cow Key
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Park
Commercial Area
Airport/Military Use
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KEY WEST
Bicycle and Pedestrian Master Plan
North Roosevelt Boulevard
US 1
37
17th Street
Northside Court
Trinity Drive
Toppino Drive
F Moller Drive
16th Terrace
17th Terrace
18th Street
18th Terrace
19th Terrace
20th Terrace
Pearlman Terrace
Pearlman Court
Donald Avenue
Paula Avenue
Cindy Avenue
20th Street
Northside Drive
34
14th Street
Dunlap Drive
Hoey Road
Duck Avenue
19th Street
Kennedy Drive
36
35
15th Court
15th Street
16th Street
Harriet Avenue
Pearl Avenue
Flagler Avenue
Eagle Avenue
17th Street
17th Terrace
18th Street
18th Terrace
Sunrise Lane
Patterson Avenue
Fogarty Avenue
Harris Avenue
11th Street
12th Street
Seidenberg Avenue
Staples Avenue
Riviera Lane
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Bike Boulevard
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Park
Commercial Area
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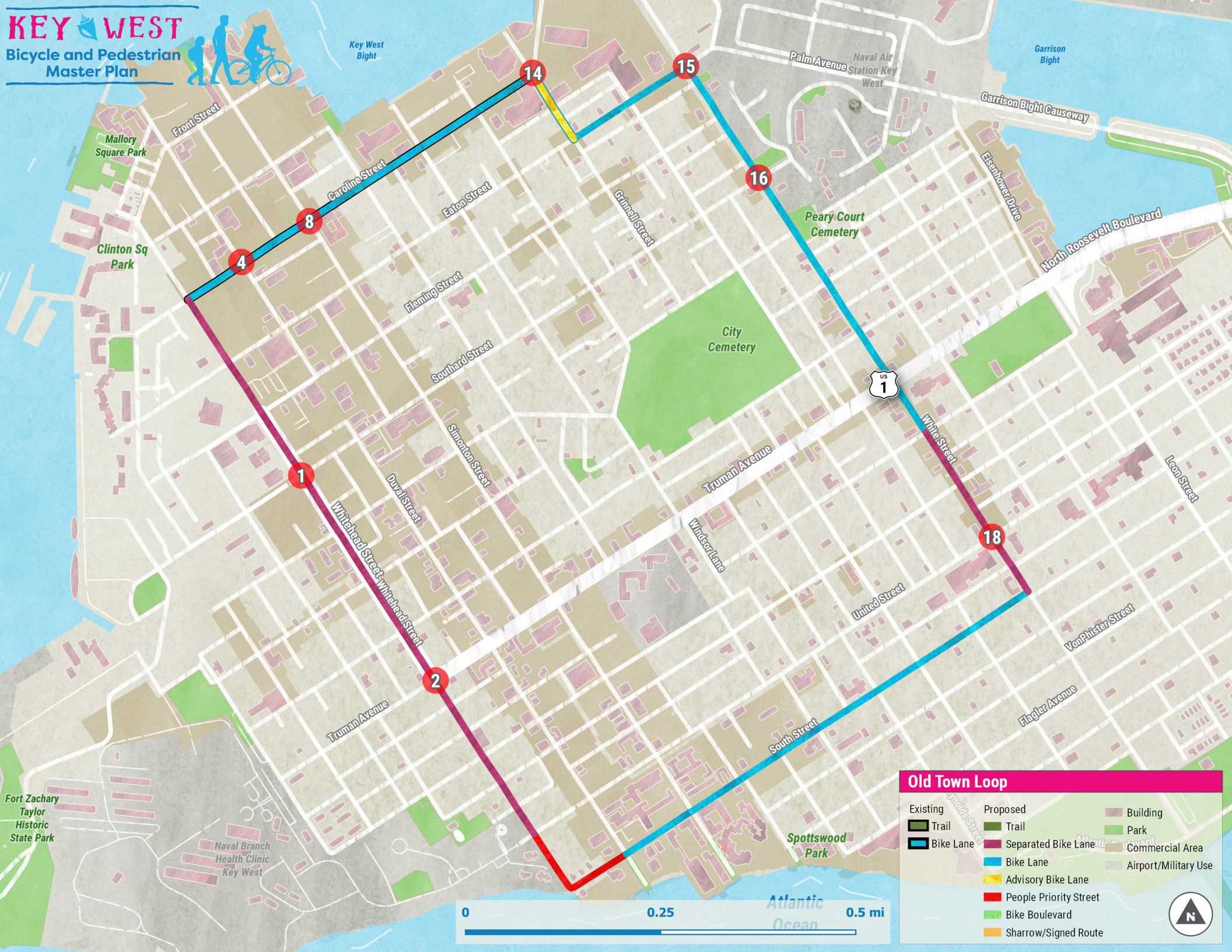
KEY WEST
Bicycle and Pedestrian Master Plan
Old Town Loop
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People Priority Street
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Garrison Bight
Palm Avenue
Naval Air Station Key West
Garrison Bight Causeway
Mallory Square Park
Front Street
Caroline Street
Eaton Street
Grinnell Street
Eisenhower Drive
Peary Court Cemetery
North Roosevelt Boulevard
Clinton Sq Park
Fleming Street
City Cemetery
Southard Street
Simonton Street
Duval Street
Whitehead Street
Truman Avenue
Windsor Lane
White Street
Leon Street
United Street
VonPhister Street
Flagler Avenue
South Street
Fort Zachary Taylor Historic State Park
Naval Branch Health Clinic Key West
Spottswood Park
Atlantic Ocean
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KEY WEST
Bicycle and Pedestrian Master Plan
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North Roosevelt Boulevard
Patterson Avenue
Taxi Lane
Fogarty Avenue
Harris Avenue
Seidenberg Avenue
Staples Avenue
Flagler Avenue
Riviera Drive
Venetian Drive
Linda Drive
Airport Boulevard
Kennedy Drive
14th Street
12th Street
11th Street
10th Street
8th Street
7th Street
6th Street
5th Street
4th Street
3rd Street
2nd Street
1st Street
Sunset Drive
Roosevelt Drive
Garrison Bight
Salt Ponds Hammock Park
Jamaica Drive
Bahama Drive
George Street
Dennis Street
Venetia Street
Josephine Street
Johnson Street
Laird Street
Ashby Street
Rose Street
Patricia Street
Blanche Street
Bertha Street
Atlantic Boulevard
South Roosevelt Boulevard
George Smathers Beach
Atlantic Ocean
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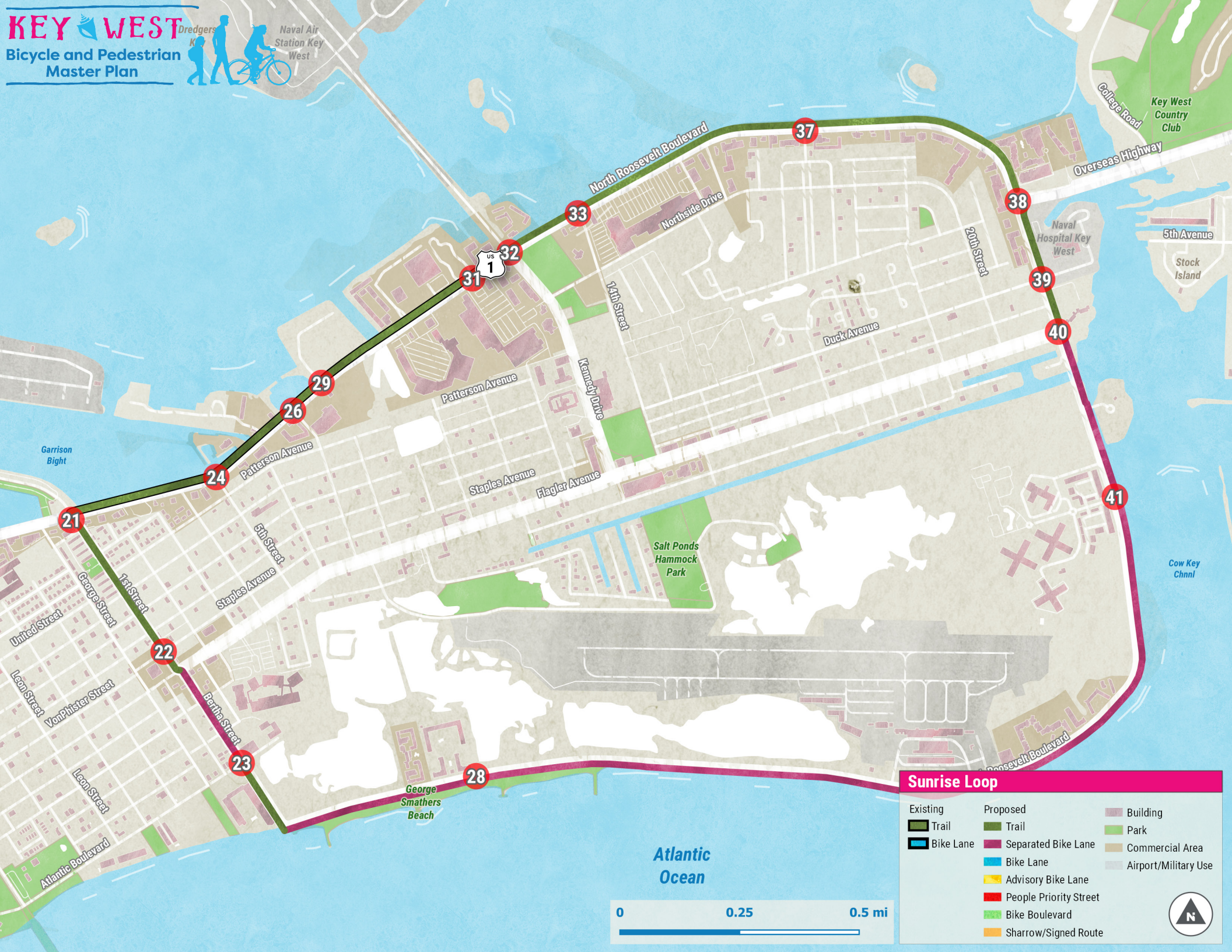
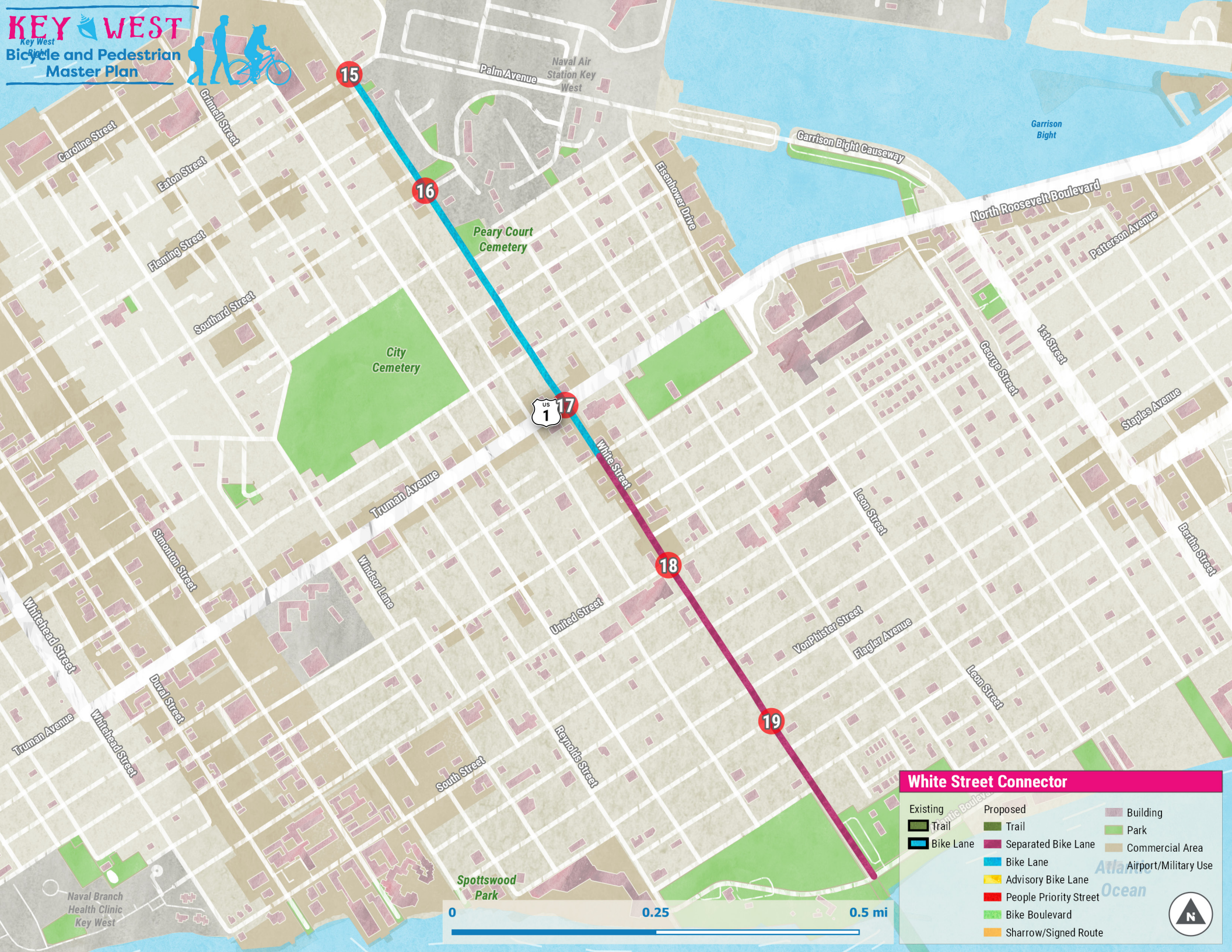
Smathers Connector
Existing
Trail
Bike Lane
Proposed
Trail
Separated Bike Lane
Bike Lane
Advisory Bike Lane
People Priority Street
Bike Boulevard
Sharrow/Signed Route
Building
Park
Commercial Area
Airport/Military Use
N


KEY WEST
Bicycle and Pedestrian Master Plan
Dredgers Key
Naval Air Station Key West
College Road
Key West Country Club
North Roosevelt Boulevard
Overseas Highway
Northside Drive
20th Street
Naval Hospital Key West
5th Avenue
Stock Island
14th Street
Duck Avenue
Patterson Avenue
Kennedy Drive
Garrison Bight
Staples Avenue
Flagler Avenue
Salt Ponds Hammock Park
Cow Key Channl
5th Street
1st Street
George Street
United Street
Leon Street
VonPhister Street
Bertha Street
Atlantic Boulevard
George Smathers Beach
Roosevelt Boulevard
Atlantic Ocean
US 1
21
22
23
24
26
28
29
31
32
33
37
38
39
40
41
0
0.25
0.5 mi
Sunrise Loop
Existing
Trail
Bike Lane
Proposed
Trail
Separated Bike Lane
Bike Lane
Advisory Bike Lane
People Priority Street
Bike Boulevard
Sharrow/Signed Route
Building
Park
Commercial Area
Airport/Military Use
N


KEY WEST
Key West Bight
Bicycle and Pedestrian Master Plan
15
16
17
18
19
Palm Avenue
Naval Air Station Key West
Garrison Bight
Garrison Bight Causeway
North Roosevelt Boulevard
Eisenhower Drive
Patterson Avenue
Caroline Street
Grinnell Street
Eaton Street
Fleming Street
Southard Street
Peary Court Cemetery
City Cemetery
US 1
White Street
Truman Avenue
George Street
1st Street
Staples Avenue
Leon Street
Bertha Street
Simonton Street
Windsor Lane
United Street
VonPhister Street
Flagler Avenue
Whitehead Street
Duval Street
Reynolds Street
South Street
Spottswood Park
Naval Branch Health Clinic Key West
Atlantic Ocean
0
0.25
0.5 mi
White Street Connector
Existing
Trail
Bike Lane
Proposed
Trail
Separated Bike Lane
Bike Lane
Advisory Bike Lane
People Priority Street
Bike Boulevard
Sharrow/Signed Route
Building
Park
Commercial Area
Airport/Military Use
N

KEY WEST
Bicycle and Pedestrian Master Plan

Appendix D:

Projects and Cost Estimate Details

Intersection ID	Cross Streets	Missing Curb Ramps?	Poor Sight Distance?	Traffic Control Type	Marked Crosswalks?	Crosswalk Type	Recommendations
1	14th St/Duck Ave	Yes	Yes	Stop light	No	High visibility	Install pedestrian signals and pedestrian actuators, Install high-visibility crosswalk
2	Duval St/Caroline St	Yes	No	Stop light	Yes	High visibility	Install curb ramps, Repair crosswalks, Install pedestrian signals
3	Duval St/Truman St	No		Stop light	Yes	Double parallel line	Install curb extensions
4	Duval St/United St	Yes	No	4-way stop	Yes	High visibility	Install curb extensions
5	Simonton St/Truman St	No	No	Stop light	Yes	Double parallel line	Upgrade curb ramps, Upgrade crosswalks
6	Simonton St/Fleming St	No	No	Stop light	Yes	High visibility	Repair/replace crosswalk
7	Simonton St/Southard St	No	Yes	Stop light	Yes	High visibility	Repair/replace crosswalk, Install pedestrian signal
8	Windsor Ln/Truman Ave	No	Yes	Stop light	Yes	High visibility	Add No Turn on Red restriction
9	White St/Flagler Ave	Yes	No	Stop light	Yes	Double parallel line	Install curb extensions, Install high-visibility crosswalk, Install pedestrian signal, Install protected intersection
10	White St/United St	Yes	No	Stop light	Yes	High visibility	Install curb ramps Install pedestrian signals and actuators
11	White St/Southard St	No	No	Stop light	Yes	High visibility	Install pedestrian signal
12	White St/Eaton St	Yes	Yes	Stop light	No	None	Install protected intersection, Reconstruct curb ramps, Install curb extensions, Install high-visibility crosswalk
13	Grinnell St/Caroline St	No	No	4-way stop	Yes	Double parallel line	Eliminate slip lane and expand plaza on North side of intersection
14	7th St/N Roosevelt Blvd	Yes		Yield	Yes	High visibility	Install pedestrian refuge (at least 6 ft. width) Install Rapid Flashing Beacon
15	Kennedy Dr/N Roosevelt Blvd	No	No	Stop light	Yes	High visibility	Install protected intersection, Add Leading Pedestrian Interval
16	3618 N Roosevelt Blvd	No	Yes	Yield	Yes	High visibility	Install pedestrian refuge (at least 6 ft. width) Install Rapid Flashing Beacon
17	Roosevelt Blvd/Overseas Hwy	No	No	Stop Light	Yes	High visibility	Install crosswalk and curb ramps at southern approach
18	S Roosevelt Blvd/Duck Ave	Yes	No	Two-way stop	No		Install Rapid Flashing Beacon, Install crosswalks, Install/replace curb ramps
19	S Roosevelt Blvd/Flagler Ave	Yes	Yes	Stop light	Yes	sibility and double para	Install crosswalks, Install curb ramps, Install curb extensions to solve sight distance issue at SW corner
20	11th St/Flagler Ave	Yes	Yes	None	No	None	Install curb ramps, Reduce turning radii (to create more waiting space at corder), Install curb extensions, Install high-visibility crosswalks
21	Government Rd/Flagler Ave	Yes	No	2-way stop	Yes	Double parallel line	Install pedesrtian refuge (at least 6 ft width) using existing median, Install/upgrade crosswalks, Install curb ramps
22	First St/N Roosevelt Blvd	No	No	Stop light	Yes	High visibility	Install protected intersection, Add Leading Pedestrian Interval
23	Bertha St/Atlantic Blvd	Yes	No	2-way stop	No		Install crosswalks, Install curb ramps, Install protected intersection on west side
24	S Roosevelt Blvd/Seaside Dr	Yes	No	None	Yes	None	Install high-visibility crosswalk, Install pedestrian refuge (at least 6 ft. width)
25	MacDonald Ave/Overseas Hwy	No	Yes	Stop light	Yes	High visibility	Modify pedestrian signal, Install pedestrian refuge (at least 6 ft. width)
26	Cross St/Overseas Hwy	No	Yes	Stop light	Yes	Double parallel line	Reduce turning radii (to create more waiting space at corder), Install high-visibility crosswalk, Install pedestrian refuge (at least 6 ft. width)
27	Eisenhower Dr/Palm Ave	Yes	Yes	2-way stop	Yes	Double parallel line	Reduce turning radii (to create more waiting space at corder), Install high-visibility crosswalk
28	William St/Southard St	No	No	2-way stop	No	None	Install crosswalks
29	Duval St/Fleming St	Yes	No	Stop light	Yes	High visibility	Upgrade curb ramps, Upgrade crosswalks

30	Whitehead St/Southard St	Yes	No	Stop light	Yes	Double parallel line	Install curb ramps, Install high-visibility crosswalk
31	Whitehead St/Truman St	No	No	Stop light	Yes	High visibility	Install curb extensions
32	White St/Truman St	No	No	Stop light	Yes	Double parallel line	Install high-visibility crosswalk, Reconstruct curb ramps
33	Duval St/Greene St	Yes	No	Stop light	Yes	High visibility	Install curb ramps, Repair/replace crosswalk
34	16th St/Duck Ave	No	No	4-way stop	Yes	High visibility	Add wayfinding
35	14th St/N Roosevelt Blvd	Yes	Yes	None		Double parallel line	Install high-visibility crosswalk
36	14th St/Northside Dr	Yes	No	Stop light	Yes	High visibility	Install/replace curb ramps, Install pedestrian signals and pedestrian acuators
37	W College Rd/Overseas Hwy	Yes	Yes	Stop light	Yes	Double parallel line	Install curb ramps, Reduce turning radii (to create more waiting space at corner), Install high-visibility crosswalk, Install pedestrian refuge (at least 6 ft. width)
38	E College Rd/Overseas Hwy	Yes	Yes	None	No	None	Install curb ramps, Reduce turning radii (to create more waiting space at corder), Install pedestrian signals and actuators, Install high-visibility crosswalk
39	5th St/5th Ave	Yes	No	4-way stop	No	High visibility	Install curb ramps, Repair/replace crosswalk
40	S Roosevelt Blvd	Yes	No	None	No	None	Install crosswalks, Install curb ramps, Install Rapid Flashing Beacon
41	Simonton St/Caroline St	No	No	Stop light	Yes	High visibility	Repair/replace crosswalk, Install pedestrian signals, Install curb extensions
42	Gulfview Dr/N Roosevelt Blvd	Yes	Yes	2-way stop	No	None	Reconstruct driveway with level sidewalk crossing Provide one car length of space between level crossing and N Roosevelt Blvd
43	N Roosevelt Blvd	Yes	No	Stop light	No	None	Install high-visibility crosswalks, Install curb ramps, Install pedestrian refuge island
44	5th St/N Roosevelt Blvd	No	Yes	Stop light	Yes	High visibility	Reduce turning radii (to create more waiting space at corder), Replace / upgrade pedestrian actuators, Install pedestrian refuge (at least 6 ft. width)
45	5th St/Staples Ave	Yes	Yes	2-way stop	No	None	Install crosswalks, Install curb ramps, Install curb extensions to address sight distance issues
47	First St/Staples Ave	Yes	Yes	2-way stop	No	None	Install curb ramps, Install curb extensions, Install high-visibility crosswalk

5574 Key West Bicycle Plan - Short-Term Facility Costs

Advisory Bike Lane (No Major Action/Add Markings)					
Total Length (ft):	9,000				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Thermoplastic Pavement Marking (6")	LF	18000	$2.00	$36,000	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	72	$380.00	$27,360	Assume 1 Symbol every 250' per side of the road
New Sign	EA	36	$270.00	$9,720	Assume 1 Sign every 500'
Lump Sum Items					
Maintenance of Traffic (5%)	LS	1.00	$3,654	$3,654	
			Subtotal	**$76,734**	
			25% Contingency	$19,184	
			Total Estimated Cost	**$96,000**	

Sharrows (No Major Action/Add Markings)					
Total Length (ft):	80,000				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Thermoplastic Pavement Marking Symbol	EA	640	$380.00	$243,200	Assume 1 Symbol every 250' per side of the road
New Sign	EA	320	$270.00	$86,400	Assume 1 Sign every 500'
Lump Sum Items					
Maintenance of Traffic (5%)	LS	1.00	$16,480	$16,480	
			Subtotal	**$346,080**	
			25% Contingency	$86,520	
			Total Estimated Cost	**$432,600**	

Bike Lanes (No Major Action/Add Striping)					
Total Length (ft):	30,500				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Thermoplastic Pavement Marking (6")	LF	122000	$2.00	$244,000	Assume 4 lines entire length
Thermoplastic Pavement Marking Symbol	EA	244	$380.00	$92,720	Assume 1 Symbol every 250' each side of road
24" Thermoplastic Pavement Marking	LF	1220	$7.50	$9,150	Assume 1 High Vis crossing every 2500'
New Sign	EA	122	$270.00	$32,940	Assume 1 Sign every 500' each side of road
Lump Sum Items					
Maintenance of Traffic (5%)	LS	1.00	$18,941	$18,941	
			Subtotal	**$397,751**	
			25% Contingency	$99,438	
			Total Estimated Cost	**$497,200**	

Bike Lanes (Lane Diet)					
Total Length (ft):	6,200				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Thermoplastic Pavement Marking (6")	LF	24800	$2.00	$49,600	Assume 4 lines entire length (2 white edge)
Thermoplastic Pavement Marking Symbol	EA	50	$380.00	$18,848	Assume 1 Symbol every 250' each side of road
24" Thermoplastic Pavement Marking	LF	248	$7.50	$1,860	Assume 1 High Vis crossing every 2500'
New Sign	EA	25	$270.00	$6,696	Assume 1 Sign every 500'
Eradication	LF	24800	$2.00	$49,600	Assume 4 lines entire length (mixed edge/center lines)
Lump Sum Items					
Maintenance of Traffic (5%)	LS	1.00	$6,330	$6,330	
			Subtotal	**$132,934**	
			25% Contingency	$33,234	
			Total Estimated Cost	**$166,200**	

Shared Use Path (Construct New - 10' asphalt sidepath-construct adjacent curb)					
Total Length (ft):	45,000				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	58667	$30.00	$1,760,000	Assume 16' width and 2' depth plus additional 10% for additional curb/ditch grading
Curb & Gutter	LF	22500	$30.00	$675,000	Assume 50% with curb & gutter entire length
Aggregate Base Course for Pavement	CY	16667	$70.00	$1,166,667	Assume 10' width and 1' depth
Asphalt Surface Course	TON	4229	$75.00	$317,199	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	16917	$75.00	$1,268,797	Assume 10' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$259,383	$259,383	
Drainage and E&S (10%)	LS	1.00	$518,766	$518,766	Does not include enhanced features
Maintenance of Traffic (5%)	LS	1.00	$259,383	$259,383	
Utility Adjustments (10%)	LS	1.00	$518,766	$518,766	
			Subtotal	**$6,743,961**	
			25% Contingency	$1,685,990	
			Total Estimated Cost	**$8,430,000**	

5574 Key West Bicycle Plan - Long-Term Facility Costs

Advisory Bike Lane (No Major Action/Add Markings)					
Total Length (ft):	3,300				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Thermoplastic Pavement Marking (6")	LF	6600	$2.00	$13,200	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	26	$380.00	$10,032	Assume 1 Symbol every 250' per side of the road
New Sign	EA	13	$270.00	$3,564	Assume 1 Sign every 500' per side of the road
Lump Sum Items					
Maintenance of Traffic (5%)	LS	1.00	$1,340	$1,340	
			Subtotal	**$28,136**	
			25% Contingency	$7,034	
			Total Estimated Cost	**$35,200**	

Bike Boulevard (Striping, Signs)					
Total Length (ft):	14,700				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Thermoplastic Pavement Marking (6")	LF	29400	$2.00	$58,800	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	118	$380.00	$44,688	Assume 1 symbol every 250' per side of the road
New Sign	EA	294	$270.00	$79,380	Assume 1 sign every 100' per side of the road
Lump Sum Items					
Maintenance of Traffic (5%)	LS	1.00	$9,143	$9,143	
			Subtotal	**$192,011**	
			25% Contingency	$48,003	
			Total Estimated Cost	**$240,100**	

Bike Boulevard (Construct Curb Extensions, Raised Crosswalks, Mini Circles)					
Total Length (ft):	10,000				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Mini-Circle	EA	4	$18,500.00	$70,076	Assume 2 per mile
Raised Crosswalks	EA	4	$3,500.00	$13,258	Assume 2 per mile
Curb Extension	EA	15	$14,000.00	$212,121	Assume 4 pairs per mile
Thermoplastic Pavement Marking (6")	LF	20000	$2.00	$40,000	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	80	$380.00	$30,400	Assume 1 symbol every 250' per side of the road
New Sign	EA	200	$270.00	$54,000	Assume 1 sign every 100' per side of the road
Lump Sum Items					
Landscaping (5%)	LS	1.00	$20,993	$20,993	
Drainage and E&S (10%)	LS	1.00	$41,985	$41,985	
Maintenance of Traffic (5%)	LS	1.00	$20,993	$20,993	
Utility Adjustments (10%)	LS	1.00	$41,985	$41,985	
			Subtotal	**$545,811**	
			25% Contingency	$136,453	
			Total Estimated Cost	**$682,300**	

BBPS (Construct Curb Extensions, Eradicate Markings, New Pavers)					
Total Length (ft):	4,500				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	10000	$30.00	$300,000	Assume 30' curb to curb; 2' depth
Curb Demo	LF	9000	$15.00	$135,000	
Aggregate Base Course for Pavement	CY	5000	$70.00	$350,000	Assume 1' depth
Concrete Paver	SY	15000	$120.00	$1,800,000	
Eradication	LF	18000	$2.00	$36,000	Assume 4 lines entire length (mixed edge/center lines)
New Sign	EA	90	$270.00	$24,300	Assume 1 sign every 100' per side of the road
Lump Sum Items					
Landscaping (5%)	LS	1.00	$132,265	$132,265	
Drainage and E&S (10%)	LS	1.00	$264,530	$264,530	
Maintenance of Traffic (5%)	LS	1.00	$132,265	$132,265	
Utility Adjustments (10%)	LS	1.00	$264,530	$264,530	
			Subtotal	**$3,438,890**	
			25% Contingency	$859,723	
			Total Estimated Cost	**$4,298,700**	

Bike Lanes (Lane Diet)					
Total Length (ft):	30,000				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Thermoplastic Pavement Marking (6")	LF	120000	$2.00	$240,000	Assume 4 lines entire length (2 white edge)
Thermoplastic Pavement Marking Symbol	EA	240	$380.00	$91,200	Assume 1 Symbol every 250' each side of road
24" Thermoplastic Pavement Marking	LF	1200	$7.50	$9,000	Assume 1 High Vis crossing every 2500'
New Sign	EA	120	$270.00	$32,400	Assume 1 Sign every 500'
Eradication	LF	120000	$2.00	$240,000	Assume 4 lines entire length (mixed edge/center lines)
Lump Sum Items					
Maintenance of Traffic (5%)	LS	1.00	$30,630	$30,630	
			Subtotal	**$643,230**	
			25% Contingency	$160,808	
			Total Estimated Cost	**$804,100**	

Bike Lanes (WIden Road/Construct Shoulders - 5' each side)					
Total Length (ft):	1,400				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	1037	$30.00	$31,111	Assume 10' width and 2' depth
Aggregate Base Course for Pavement	CY	519	$70.00	$36,296	Assume 10' width and 1' depth
Milling	SY	1556	$8.00	$12,444	Assume 10' width
Asphalt Surface Course	TON	132	$75.00	$9,868	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	211	$75.00	$15,789	Assume 4' width and 0.5' depth, 13.3 CF in a TON
Eradication	LF	2800	$2.00	$5,600	Assume 2 lines entire length (2 white edge lines)
Thermoplastic Pavement Marking (6")	LF	2800	$2.00	$5,600	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	11	$380.00	$4,256	Assume 1 Symbol every 250' each side of road (bike lane)
24" Thermoplastic Pavement Marking	LF	56	$7.50	$420	Assume 1 High Vis crossing every 2500'
New Sign	EA	6	$270.00	$1,512	Assume 1 Sign every 500'
Lump Sum Items					
Landscaping (5%)	LS	1.00	$6,145	$6,145	
Drainage and E&S (10%)	LS	1.00	$12,290	$12,290	
Maintenance of Traffic (5%)	LS	1.00	$6,145	$6,145	
Utility Adjustments (10%)	LS	1.00	$12,290	$12,290	
			Subtotal	**$159,768**	
			25% Contingency	$39,942	
			Total Estimated Cost	**$199,800**	

Shared Use Path (Widen Existing- 4' asphalt)					
Total Length (ft):	14,800				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	10963	$30.00	$328,889	Assume 10' width and 2' depth
Aggregate Base Course for Pavement	CY	2193	$70.00	$153,481	Assume 4' width and 1' depth
Asphalt Surface Course	TON	556	$75.00	$41,729	Assume 4' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	2226	$75.00	$166,917	Assume 4' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$34,551	$34,551	
Drainage and E&S (10%)	LS	1.00	$69,102	$69,102	Does not include enhanced features such as
Maintenance of Traffic (5%)	LS	1.00	$34,551	$34,551	
Utility Adjustments (10%)	LS	1.00	$69,102	$69,102	
			Subtotal	**$898,323**	
			25% Contingency	$224,581	
			Total Estimated Cost	**$1,123,000**	

Shared Use Path (Construct New - 10' asphalt)					
Total Length (ft):	9,100				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	10785	$30.00	$323,556	Assume 16' width and 2' depth
Aggregate Base Course for Pavement	CY	3370	$70.00	$235,926	Assume 10' width and 1' depth
Asphalt Surface Course	TON	855	$75.00	$64,145	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	3421	$75.00	$256,579	Assume 10' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$44,010	$44,010	
Drainage and E&S (10%)	LS	1.00	$88,021	$88,021	Does not include enhanced features
Maintenance of Traffic (5%)	LS	1.00	$44,010	$44,010	
Utility Adjustments (10%)	LS	1.00	$88,021	$88,021	
			Subtotal	**$1,144,267**	
			25% Contingency	$286,067	
			Total Estimated Cost	**$1,430,400**	

Shared Use Path (Construct New - 10' asphalt sidepath-construct adjacent curb)					
Total Length (ft):	6,000				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	7822	$30.00	$234,667	Assume 16' width and 2' depth plus additional 10% for additional curb/ditch grading
Curb & Gutter	LF	3000	$30.00	$90,000	Assume 50% with curb & gutter entire length
Aggregate Base Course for Pavement	CY	2222	$70.00	$155,556	Assume 10' width and 1' depth
Asphalt Surface Course	TON	564	$75.00	$42,293	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	2256	$75.00	$169,173	Assume 10' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$34,584	$34,584	
Drainage and E&S (10%)	LS	1.00	$69,169	$69,169	Does not include enhanced features
Maintenance of Traffic (5%)	LS	1.00	$34,584	$34,584	
Utility Adjustments (10%)	LS	1.00	$69,169	$69,169	
			Subtotal	**$899,194**	
			25% Contingency	$224,799	
			Total Estimated Cost	**$1,124,000**	

Two Way Cycletrack (Construct New - 10' with sidewalk improvements)					
Total Length (ft):	49,000				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	58074	$30.00	$1,742,222	Assume 16' width and 2' depth
Aggregate Base Course for Pavement	CY	18148	$70.00	$1,270,370	Assume 10' width and 1' depth
Concrete Sidewalk	SY	54444	$38.00	$2,068,889	Assume 10' width
Thermoplastic Pavement Marking (6")	LF	49000	$2.00	$98,000	Assume 1 dashed center line, yellow
Thermoplastic Pavement Marking (6")	LF	98000	$2.00	$196,000	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	392	$318.00	$124,656	Assume 1 symbol every 250' (bike lanes)
New Sign	EA	196	$233.00	$45,668	Assume 1 sign every 500' each side of Cycletrack
Lump Sum Items					
Landscaping (5%)	LS	1.00	$277,290	$277,290	
Drainage and E&S (10%)	LS	1.00	$554,581	$554,581	
Maintenance of Traffic (5%)	LS	1.00	$277,290	$277,290	
Utility Adjustments (10%)	LS	1.00	$554,581	$554,581	
			Subtotal	**$7,209,547**	
			25% Contingency	$1,802,387	
			Total Estimated Cost	**$9,012,000**	

5574 Key West Bicycle Plan - Short-Term Facility Costs (Shared Use Path)

Smathers Connector					
Total Length (ft):	2,543				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	3315	$30.00	$99,460	Assume 16' width and 2' depth plus additional 10% for additional curb/ditch grading
Curb & Gutter	LF	1272	$30.00	$38,145	Assume 50% with curb & gutter entire length
Aggregate Base Course for Pavement	CY	942	$70.00	$65,930	Assume 10' width and 1' depth
Asphalt Surface Course	TON	239	$75.00	$17,925	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	956	$75.00	$71,701	Assume 10' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$14,658	$14,658	
Drainage and E&S (10%)	LS	1.00	$29,316	$29,316	Does not include enhanced features
Maintenance of Traffic (5%)	LS	1.00	$14,658	$14,658	
Utility Adjustments (10%)	LS	1.00	$29,316	$29,316	
			Subtotal	**$381,109**	
			25% Contingency	$95,277	
			Total Estimated Cost	**$476,400**	

Government Road Trail Extension					
Total Length (ft):	6,694				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	8727	$30.00	$261,810	Assume 16' width and 2' depth plus additional 10% for additional curb/ditch grading
Curb & Gutter	LF	3347	$30.00	$100,410	Assume 50% with curb & gutter entire length
Aggregate Base Course for Pavement	CY	2479	$70.00	$173,548	Assume 10' width and 1' depth
Asphalt Surface Course	TON	629	$75.00	$47,185	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	2517	$75.00	$188,741	Assume 10' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$38,585	$38,585	
Drainage and E&S (10%)	LS	1.00	$77,169	$77,169	Does not include enhanced features
Maintenance of Traffic (5%)	LS	1.00	$38,585	$38,585	
Utility Adjustments (10%)	LS	1.00	$77,169	$77,169	
			Subtotal	**$1,003,202**	
			25% Contingency	$250,800	
			Total Estimated Cost	**$1,254,100**	

Overseas Heritage Trail					
Total Length (ft):	7,709				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	10050	$30.00	$301,508	Assume 16' width and 2' depth plus additional 10% for additional curb/ditch grading
Curb & Gutter	LF	3855	$30.00	$115,635	Assume 50% with curb & gutter entire length
Aggregate Base Course for Pavement	CY	2855	$70.00	$199,863	Assume 10' width and 1' depth
Asphalt Surface Course	TON	725	$75.00	$54,340	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	2898	$75.00	$217,359	Assume 10' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$44,435	$44,435	
Drainage and E&S (10%)	LS	1.00	$88,870	$88,870	Does not include enhanced features
Maintenance of Traffic (5%)	LS	1.00	$44,435	$44,435	
Utility Adjustments (10%)	LS	1.00	$88,870	$88,870	
			Subtotal	**$1,155,314**	
			25% Contingency	$288,829	
			Total Estimated Cost	**$1,444,200**	

Fort Zachary to Mallory Square					
Total Length (ft):	4,114				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	5363	$30.00	$160,903	Assume 16' width and 2' depth plus additional 10% for additional curb/ditch grading
Curb & Gutter	LF	2057	$30.00	$61,710	Assume 50% with curb & gutter entire length
Aggregate Base Course for Pavement	CY	1524	$70.00	$106,659	Assume 10' width and 1' depth
Asphalt Surface Course	TON	387	$75.00	$28,999	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	1547	$75.00	$115,996	Assume 10' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$23,713	$23,713	
Drainage and E&S (10%)	LS	1.00	$47,427	$47,427	Does not include enhanced features
Maintenance of Traffic (5%)	LS	1.00	$23,713	$23,713	
Utility Adjustments (10%)	LS	1.00	$47,427	$47,427	
			Subtotal	**$616,548**	
			25% Contingency	$154,137	
			Total Estimated Cost	**$770,700**	

17th Avenue Connector					
Total Length (ft):	406				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	529	$30.00	$15,879	Assume 16' width and 2' depth plus additional 10% for additional curb/ditch grading
Curb & Gutter	LF	203	$30.00	$6,090	Assume 50% with curb & gutter entire length
Aggregate Base Course for Pavement	CY	150	$70.00	$10,526	Assume 10' width and 1' depth
Asphalt Surface Course	TON	38	$75.00	$2,862	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	153	$75.00	$11,447	Assume 10' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$2,340	$2,340	
Drainage and E&S (10%)	LS	1.00	$4,680	$4,680	Does not include enhanced features
Maintenance of Traffic (5%)	LS	1.00	$2,340	$2,340	
Utility Adjustments (10%)	LS	1.00	$4,680	$4,680	
			Subtotal	**$60,844**	
			25% Contingency	$15,211	
			Total Estimated Cost	**$76,100**	

Venetian Drive					
Total Length (ft):	257				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	335	$30.00	$10,052	Assume 16' width and 2' depth plus additional 10% for additional curb/ditch grading
Curb & Gutter	LF	129	$30.00	$3,855	Assume 50% with curb & gutter entire length
Aggregate Base Course for Pavement	CY	95	$70.00	$6,663	Assume 10' width and 1' depth
Asphalt Surface Course	TON	24	$75.00	$1,812	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	97	$75.00	$7,246	Assume 10' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$1,481	$1,481	
Drainage and E&S (10%)	LS	1.00	$2,963	$2,963	Does not include enhanced features
Maintenance of Traffic (5%)	LS	1.00	$1,481	$1,481	
Utility Adjustments (10%)	LS	1.00	$2,963	$2,963	
			Subtotal	**$38,515**	
			25% Contingency	$9,629	
			Total Estimated Cost	**$48,200**	

5574 Key West Bicycle Plan - Long-Term Airport Costs

Bike Lanes (WIden Road/Construct Shoulders - 5' each side)					
Total Length (ft):	1,402				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	1039	$30.00	$31,156	Assume 10' width and 2' depth
Aggregate Base Course for Pavement	CY	519	$70.00	$36,348	Assume 10' width and 1' depth
Milling	SY	1558	$8.00	$12,462	Assume 10' width
Asphalt Surface Course	TON	132	$75.00	$9,883	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	211	$75.00	$15,812	Assume 4' width and 0.5' depth, 13.3 CF in a TON
Eradication	LF	2804	$2.00	$5,608	Assume 2 lines entire length (2 white edge lines)
Thermoplastic Pavement Marking (6")	LF	2804	$2.00	$5,608	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	11	$380.00	$4,262	Assume 1 Symbol every 250' each side of road (bike lane)
24" Thermoplastic Pavement Marking	LF	56	$7.50	$421	Assume 1 High Vis crossing every 2500'
New Sign	EA	6	$270.00	$1,514	Assume 1 Sign every 500'
Lump Sum Items					
Landscaping (5%)	LS	1.00	$6,154	$6,154	
Drainage and E&S (10%)	LS	1.00	$12,307	$12,307	
Maintenance of Traffic (5%)	LS	1.00	$6,154	$6,154	
Utility Adjustments (10%)	LS	1.00	$12,307	$12,307	
			Subtotal	**$159,995**	
			25% Contingency	$39,999	
			Total Estimated Cost	**$200,000**	

Shared Use Path (Construct New - 10' asphalt)					
Total Length (ft):	3,886				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	4606	$30.00	$138,169	Assume 16' width and 2' depth
Aggregate Base Course for Pavement	CY	1439	$70.00	$100,748	Assume 10' width and 1' depth
Asphalt Surface Course	TON	365	$75.00	$27,392	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	1461	$75.00	$109,568	Assume 10' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$18,794	$18,794	
Drainage and E&S (10%)	LS	1.00	$37,588	$37,588	Does not include enhanced features
Maintenance of Traffic (5%)	LS	1.00	$18,794	$18,794	
Utility Adjustments (10%)	LS	1.00	$37,588	$37,588	
			Subtotal	**$488,641**	
			25% Contingency	$122,160	
			Total Estimated Cost	**$610,900**	

TOTAL ESTIMATED AIRPORT COST	$810,900	

5574 Key West Bicycle Plan - Long-Term Crosstown Costs

Bike Boulevard (Construct Curb Extensions, Raised Crosswalks, Mini Circles)					
Total Length (ft):	8,929				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Mini-Circle	EA	3	$18,500.00	$62,571	Assume 2 per mile
Raised Crosswalks	EA	3	$3,500.00	$11,838	Assume 2 per mile
Curb Extension	EA	14	$14,000.00	$189,403	Assume 4 pairs per mile
Thermoplastic Pavement Marking (6")	LF	17858	$2.00	$35,716	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	71	$380.00	$27,144	Assume 1 symbol every 250' per side of the road
New Sign	EA	179	$270.00	$48,217	Assume 1 sign every 100' per side of the road
Lump Sum Items					
Landscaping (5%)	LS	1.00	$18,744	$18,744	
Drainage and E&S (10%)	LS	1.00	$37,489	$37,489	
Maintenance of Traffic (5%)	LS	1.00	$18,744	$18,744	
Utility Adjustments (10%)	LS	1.00	$37,489	$37,489	
			Subtotal	**$487,354**	
			25% Contingency	$121,839	
			Total Estimated Cost	**$609,200**	

BBPS (Construct Curb Extensions, Eradicate Markings, New Pavers)					
Total Length (ft):	440				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	978	$30.00	$29,333	Assume 30' curb to curb; 2' depth
Curb Demo	LF	880	$15.00	$13,200	
Aggregate Base Course for Pavement	CY	489	$70.00	$34,222	Assume 1' depth
Concrete Paver	SY	1467	$120.00	$176,000	
Eradication	LF	1760	$2.00	$3,520	Assume 4 lines entire length (mixed edge/center lines)
New Sign	EA	9	$270.00	$2,376	Assume 1 sign every 100' per side of the road
Lump Sum Items					
Landscaping (5%)	LS	1.00	$12,933	$12,933	
Drainage and E&S (10%)	LS	1.00	$25,865	$25,865	
Maintenance of Traffic (5%)	LS	1.00	$12,933	$12,933	
Utility Adjustments (10%)	LS	1.00	$25,865	$25,865	
			Subtotal	**$336,248**	
			25% Contingency	$84,062	
			Total Estimated Cost	**$420,400**	

Bike Lanes (Lane Diet)					
Total Length (ft):	12,007				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Thermoplastic Pavement Marking (6")	LF	48028	$2.00	$96,056	Assume 4 lines entire length (2 white edge)
Thermoplastic Pavement Marking Symbol	EA	96	$380.00	$36,501	Assume 1 Symbol every 250' each side of road
24" Thermoplastic Pavement Marking	LF	480	$7.50	$3,602	Assume 1 High Vis crossing every 2500'
New Sign	EA	48	$270.00	$12,968	Assume 1 Sign every 500'
Eradication	LF	48028	$2.00	$96,056	Assume 4 lines entire length (mixed edge/center lines)
Lump Sum Items					
Maintenance of Traffic (5%)	LS	1.00	$12,259	$12,259	
			Subtotal	**$257,442**	
			25% Contingency	$64,360	
			Total Estimated Cost	**$321,900**	

Shared Use Path (Widen Existing- 4' asphalt)					
Total Length (ft):	520				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	385	$30.00	$11,556	Assume 10' width and 2' depth
Aggregate Base Course for Pavement	CY	77	$70.00	$5,393	Assume 4' width and 1' depth
Asphalt Surface Course	TON	20	$75.00	$1,466	Assume 4' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	78	$75.00	$5,865	Assume 4' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$1,214	$1,214	
Drainage and E&S (10%)	LS	1.00	$2,428	$2,428	Does not include enhanced features such as
Maintenance of Traffic (5%)	LS	1.00	$1,214	$1,214	
Utility Adjustments (10%)	LS	1.00	$2,428	$2,428	
			Subtotal	**$31,563**	
			25% Contingency	$7,891	
			Total Estimated Cost	**$39,500**	

Shared Use Path (Construct New - 10' asphalt)					
Total Length (ft):	556				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	659	$30.00	$19,769	Assume 16' width and 2' depth
Aggregate Base Course for Pavement	CY	206	$70.00	$14,415	Assume 10' width and 1' depth
Asphalt Surface Course	TON	52	$75.00	$3,919	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	209	$75.00	$15,677	Assume 10' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$2,689	$2,689	
Drainage and E&S (10%)	LS	1.00	$5,378	$5,378	Does not include enhanced features
Maintenance of Traffic (5%)	LS	1.00	$2,689	$2,689	
Utility Adjustments (10%)	LS	1.00	$5,378	$5,378	
			Subtotal	**$69,914**	
			25% Contingency	$17,478	
			Total Estimated Cost	**$87,400**	

Two Way Cycletrack (Construct New - 10' with sidewalk improvements)					
Total Length (ft):	98				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	116	$30.00	$3,484	Assume 16' width and 2' depth
Aggregate Base Course for Pavement	CY	36	$70.00	$2,541	Assume 10' width and 1' depth
Concrete Sidewalk	SY	109	$38.00	$4,138	Assume 10' width
Thermoplastic Pavement Marking (6")	LF	98	$2.00	$196	Assume 1 dashed center line, yellow
Thermoplastic Pavement Marking (6")	LF	196	$2.00	$392	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	1	$318.00	$249	Assume 1 symbol every 250' (bike lanes)
New Sign	EA	0	$233.00	$91	Assume 1 sign every 500' each side of Cycletrack
Lump Sum Items					
Landscaping (5%)	LS	1.00	$555	$555	
Drainage and E&S (10%)	LS	1.00	$1,109	$1,109	
Maintenance of Traffic (5%)	LS	1.00	$555	$555	
Utility Adjustments (10%)	LS	1.00	$1,109	$1,109	
			Subtotal	**$14,420**	
			25% Contingency	$3,605	
			Total Estimated Cost	**$18,100**	
			TOTAL ESTIMATED CROSSTOWN COST	$1,496,500	

5574 Key West Bicycle Plan - Long-Term Duval Loop Facility Costs

BBPS (Construct Curb Extensions, Eradicate Markings, New Pavers)					
Total Length (ft):	885				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	1967	$30.00	$59,000	Assume 30' curb to curb; 2' depth
Curb Demo	LF	1770	$15.00	$26,550	
Aggregate Base Course for Pavement	CY	983	$70.00	$68,833	Assume 1' depth
Concrete Paver	SY	2950	$120.00	$354,000	
Eradication	LF	3540	$2.00	$7,080	Assume 4 lines entire length (mixed edge/center lines)
New Sign	EA	18	$270.00	$4,779	Assume 1 sign every 100' per side of the road
Lump Sum Items					
Landscaping (5%)	LS	1.00	$26,012	$26,012	
Drainage and E&S (10%)	LS	1.00	$52,024	$52,024	
Maintenance of Traffic (5%)	LS	1.00	$26,012	$26,012	
Utility Adjustments (10%)	LS	1.00	$52,024	$52,024	
			Subtotal	**$676,314**	
			25% Contingency	$169,079	
			Total Estimated Cost	**$845,400**	

Bike Lanes (Lane Diet)					
Total Length (ft):	1,509				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Thermoplastic Pavement Marking (6")	LF	6036	$2.00	$12,072	Assume 4 lines entire length (2 white edge)
Thermoplastic Pavement Marking Symbol	EA	12	$380.00	$4,587	Assume 1 Symbol every 250' each side of road
24" Thermoplastic Pavement Marking	LF	60	$7.50	$453	Assume 1 High Vis crossing every 2500'
New Sign	EA	6	$270.00	$1,630	Assume 1 Sign every 500'
Eradication	LF	6036	$2.00	$12,072	Assume 4 lines entire length (mixed edge/center lines)
Lump Sum Items					
Maintenance of Traffic (5%)	LS	1.00	$1,541	$1,541	
			Subtotal	**$32,355**	
			25% Contingency	$8,089	
			Total Estimated Cost	**$40,500**	

Two Way Cycletrack (Construct New - 10' with sidewalk improvements)					
Total Length (ft):	9,067				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	10746	$30.00	$322,382	Assume 16' width and 2' depth
Aggregate Base Course for Pavement	CY	3358	$70.00	$235,070	Assume 10' width and 1' depth
Concrete Sidewalk	SY	10074	$38.00	$382,829	Assume 10' width
Thermoplastic Pavement Marking (6")	LF	9067	$2.00	$18,134	Assume 1 dashed center line, yellow
Thermoplastic Pavement Marking (6")	LF	18134	$2.00	$36,268	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	73	$318.00	$23,066	Assume 1 symbol every 250' (bike lanes)
New Sign	EA	36	$233.00	$8,450	Assume 1 sign every 500' each side of Cycletrack
Lump Sum Items					
Landscaping (5%)	LS	1.00	$51,310	$51,310	
Drainage and E&S (10%)	LS	1.00	$102,620	$102,620	
Maintenance of Traffic (5%)	LS	1.00	$51,310	$51,310	
Utility Adjustments (10%)	LS	1.00	$102,620	$102,620	
			Subtotal	**$1,334,060**	
			25% Contingency	$333,515	
			Total Estimated Cost	**$1,667,600**	

TOTAL ESTIMATED DUVAL LOOP COST	$2,553,500	

5574 Key West Bicycle Plan - Long-Term Island Costs

Advisory Bike Lane (No Major Action/Add Markings)					
Total Length (ft):	3,281				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Thermoplastic Pavement Marking (6")	LF	6562	$2.00	$13,124	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	26	$380.00	$9,974	Assume 1 Symbol every 250' per side of the road
New Sign	EA	13	$270.00	$3,543	Assume 1 Sign every 500' per side of the road
Lump Sum Items					
Maintenance of Traffic (5%)	LS	1.00	$1,332	$1,332	
			Subtotal	**$27,974**	
			25% Contingency	$6,993	
			Total Estimated Cost	**$35,000**	

Bike Boulevard (Striping, Signs)					
Total Length (ft):	882				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Thermoplastic Pavement Marking (6")	LF	1764	$2.00	$3,528	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	7	$380.00	$2,681	Assume 1 symbol every 250' per side of the road
New Sign	EA	18	$270.00	$4,763	Assume 1 sign every 100' per side of the road
Lump Sum Items					
Maintenance of Traffic (5%)	LS	1.00	$549	$549	
			Subtotal	**$11,521**	
			25% Contingency	$2,880	
			Total Estimated Cost	**$14,500**	

BBPS (Construct Curb Extensions, Eradicate Markings, New Pavers)					
Total Length (ft):	885				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	1967	$30.00	$59,000	Assume 30' curb to curb; 2' depth
Curb Demo	LF	1770	$15.00	$26,550	
Aggregate Base Course for Pavement	CY	983	$70.00	$68,833	Assume 1' depth
Concrete Paver	SY	2950	$120.00	$354,000	
Eradication	LF	3540	$2.00	$7,080	Assume 4 lines entire length (mixed edge/center lines)
New Sign	EA	18	$270.00	$4,779	Assume 1 sign every 100' per side of the road
Lump Sum Items					
Landscaping (5%)	LS	1.00	$26,012	$26,012	
Drainage and E&S (10%)	LS	1.00	$52,024	$52,024	
Maintenance of Traffic (5%)	LS	1.00	$26,012	$26,012	
Utility Adjustments (10%)	LS	1.00	$52,024	$52,024	
			Subtotal	**$676,314**	
			25% Contingency	$169,079	
			Total Estimated Cost	**$845,400**	

Bike Lanes (Lane Diet)					
Total Length (ft):	7,063				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Thermoplastic Pavement Marking (6")	LF	28252	$2.00	$56,504	Assume 4 lines entire length (2 white edge)
Thermoplastic Pavement Marking Symbol	EA	57	$380.00	$21,472	Assume 1 Symbol every 250' each side of road
24" Thermoplastic Pavement Marking	LF	283	$7.50	$2,119	Assume 1 High Vis crossing every 2500'
New Sign	EA	28	$270.00	$7,628	Assume 1 Sign every 500'
Eradication	LF	28252	$2.00	$56,504	Assume 4 lines entire length (mixed edge/center lines)
Lump Sum Items					
Maintenance of Traffic (5%)	LS	1.00	$7,211	$7,211	
			Subtotal	**$151,437**	
			25% Contingency	$37,859	
			Total Estimated Cost	**$189,300**	

Bike Lanes (WIden Road/Construct Shoulders - 5' each side)					
Total Length (ft):	2,968				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	2199	$30.00	$65,956	Assume 10' width and 2' depth
Aggregate Base Course for Pavement	CY	1099	$70.00	$76,948	Assume 10' width and 1' depth
Milling	SY	3298	$8.00	$26,382	Assume 10' width
Asphalt Surface Course	TON	279	$75.00	$20,921	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	446	$75.00	$33,474	Assume 4' width and 0.5' depth, 13.3 CF in a TON
Eradication	LF	5936	$2.00	$11,872	Assume 2 lines entire length (2 white edge lines)
Thermoplastic Pavement Marking (6")	LF	5936	$2.00	$11,872	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	24	$380.00	$9,023	Assume 1 Symbol every 250' each side of road (bike lane)
24" Thermoplastic Pavement Marking	LF	119	$7.50	$890	Assume 1 High Vis crossing every 2500'
New Sign	EA	12	$270.00	$3,205	Assume 1 Sign every 500'
Lump Sum Items					
Landscaping (5%)	LS	1.00	$13,027	$13,027	
Drainage and E&S (10%)	LS	1.00	$26,054	$26,054	
Maintenance of Traffic (5%)	LS	1.00	$13,027	$13,027	
Utility Adjustments (10%)	LS	1.00	$26,054	$26,054	
			Subtotal	**$338,705**	
			25% Contingency	$84,676	
			Total Estimated Cost	**$423,400**	

Shared Use Path (Widen Existing- 4' asphalt)					
Total Length (ft):	10,292				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	7624	$30.00	$228,711	Assume 10' width and 2' depth
Aggregate Base Course for Pavement	CY	1525	$70.00	$106,732	Assume 4' width and 1' depth
Asphalt Surface Course	TON	387	$75.00	$29,019	Assume 4' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	1548	$75.00	$116,075	Assume 4' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$24,027	$24,027	
Drainage and E&S (10%)	LS	1.00	$48,054	$48,054	Does not include enhanced features such as
Maintenance of Traffic (5%)	LS	1.00	$24,027	$24,027	
Utility Adjustments (10%)	LS	1.00	$48,054	$48,054	
			Subtotal	**$624,699**	
			25% Contingency	$156,175	
			Total Estimated Cost	**$780,900**	

Shared Use Path (Construct New - 10' asphalt)					
Total Length (ft):	17,828				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	21129	$30.00	$633,884	Assume 16' width and 2' depth
Aggregate Base Course for Pavement	CY	6603	$70.00	$462,207	Assume 10' width and 1' depth
Asphalt Surface Course	TON	1676	$75.00	$125,667	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	6702	$75.00	$502,669	Assume 10' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$86,221	$86,221	
Drainage and E&S (10%)	LS	1.00	$172,443	$172,443	Does not include enhanced features
Maintenance of Traffic (5%)	LS	1.00	$86,221	$86,221	
Utility Adjustments (10%)	LS	1.00	$172,443	$172,443	
			Subtotal	**$2,241,756**	
			25% Contingency	$560,439	
			Total Estimated Cost	**$2,802,200**	

Two Way Cycletrack (Construct New - 10' with sidewalk improvements)					
Total Length (ft):	25,278				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	29959	$30.00	$898,773	Assume 16' width and 2' depth
Aggregate Base Course for Pavement	CY	9362	$70.00	$655,356	Assume 10' width and 1' depth
Concrete Sidewalk	SY	28087	$38.00	$1,067,293	Assume 10' width
Thermoplastic Pavement Marking (6")	LF	25278	$2.00	$50,556	Assume 1 dashed center line, yellow
Thermoplastic Pavement Marking (6")	LF	50556	$2.00	$101,112	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	202	$318.00	$64,307	Assume 1 symbol every 250' (bike lanes)
New Sign	EA	101	$233.00	$23,559	Assume 1 sign every 500' each side of Cycletrack
Lump Sum Items					
Landscaping (5%)	LS	1.00	$143,048	$143,048	
Drainage and E&S (10%)	LS	1.00	$286,096	$286,096	
Maintenance of Traffic (5%)	LS	1.00	$143,048	$143,048	
Utility Adjustments (10%)	LS	1.00	$286,096	$286,096	
			Subtotal	**$3,719,245**	
			25% Contingency	$929,811	
			Total Estimated Cost	**$4,649,100**	

TOTAL ESTIMATED ISLAND COST	$9,739,800	

5574 Key West Bicycle Plan - Long-Term Marina Costs

Two Way Cycletrack (Construct New - 10' with sidewalk improvements)					
Total Length (ft):	8,363				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	9912	$30.00	$297,351	Assume 16' width and 2' depth
Aggregate Base Course for Pavement	CY	3097	$70.00	$216,819	Assume 10' width and 1' depth
Concrete Sidewalk	SY	9292	$38.00	$353,104	Assume 10' width
Thermoplastic Pavement Marking (6")	LF	8363	$2.00	$16,726	Assume 1 dashed center line, yellow
Thermoplastic Pavement Marking (6")	LF	16726	$2.00	$33,452	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	67	$318.00	$21,275	Assume 1 symbol every 250' (bike lanes)
New Sign	EA	33	$233.00	$7,794	Assume 1 sign every 500' each side of Cycletrack
Lump Sum Items					
Landscaping (5%)	LS	1.00	$47,326	$47,326	
Drainage and E&S (10%)	LS	1.00	$94,652	$94,652	
Maintenance of Traffic (5%)	LS	1.00	$47,326	$47,326	
Utility Adjustments (10%)	LS	1.00	$94,652	$94,652	
			Subtotal	**$1,230,478**	
			25% Contingency	$307,619	
			Total Estimated Cost	**$1,538,100**	
			TOTAL ESTIMATED MARINA COST	$1,538,100	

5574 Key West Bicycle Plan - Long-Term New Town Costs

Bike Boulevard (Construct Curb Extensions, Raised Crosswalks, Mini Circles)					
Total Length (ft):	1,592				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Mini-Circle	EA	1	$18,500.00	$11,156	Assume 2 per mile
Raised Crosswalks	EA	1	$3,500.00	$2,111	Assume 2 per mile
Curb Extension	EA	2	$14,000.00	$33,770	Assume 4 pairs per mile
Thermoplastic Pavement Marking (6")	LF	3184	$2.00	$6,368	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	13	$380.00	$4,840	Assume 1 symbol every 250' per side of the road
New Sign	EA	32	$270.00	$8,597	Assume 1 sign every 100' per side of the road
Lump Sum Items					
Landscaping (5%)	LS	1.00	$3,342	$3,342	
Drainage and E&S (10%)	LS	1.00	$6,684	$6,684	
Maintenance of Traffic (5%)	LS	1.00	$3,342	$3,342	
Utility Adjustments (10%)	LS	1.00	$6,684	$6,684	
			Subtotal	**$86,893**	
			25% Contingency	$21,723	
			Total Estimated Cost	**$108,700**	

Bike Lanes (Lane Diet)					
Total Length (ft):	13,883				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Thermoplastic Pavement Marking (6")	LF	55532	$2.00	$111,064	Assume 4 lines entire length (2 white edge)
Thermoplastic Pavement Marking Symbol	EA	111	$380.00	$42,204	Assume 1 Symbol every 250' each side of road
24" Thermoplastic Pavement Marking	LF	555	$7.50	$4,165	Assume 1 High Vis crossing every 2500'
New Sign	EA	56	$270.00	$14,994	Assume 1 Sign every 500'
Eradication	LF	55532	$2.00	$111,064	Assume 4 lines entire length (mixed edge/center lines)
Lump Sum Items					
Maintenance of Traffic (5%)	LS	1.00	$14,175	$14,175	
			Subtotal	**$297,666**	
			25% Contingency	$74,416	
			Total Estimated Cost	**$372,100**	

Shared Use Path (Construct New - 10' asphalt)					
Total Length (ft):	1,671				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	1980	$30.00	$59,413	Assume 16' width and 2' depth
Aggregate Base Course for Pavement	CY	619	$70.00	$43,322	Assume 10' width and 1' depth
Asphalt Surface Course	TON	157	$75.00	$11,779	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	628	$75.00	$47,115	Assume 10' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$8,081	$8,081	
Drainage and E&S (10%)	LS	1.00	$16,163	$16,163	Does not include enhanced features
Maintenance of Traffic (5%)	LS	1.00	$8,081	$8,081	
Utility Adjustments (10%)	LS	1.00	$16,163	$16,163	
			Subtotal	**$210,117**	
			25% Contingency	$52,529	
			Total Estimated Cost	**$262,700**	

Two Way Cycletrack (Construct New - 10' with sidewalk improvements)					
Total Length (ft):	1,466				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	1737	$30.00	$52,124	Assume 16' width and 2' depth
Aggregate Base Course for Pavement	CY	543	$70.00	$38,007	Assume 10' width and 1' depth
Concrete Sidewalk	SY	1629	$38.00	$61,898	Assume 10' width
Thermoplastic Pavement Marking (6")	LF	1466	$2.00	$2,932	Assume 1 dashed center line, yellow
Thermoplastic Pavement Marking (6")	LF	2932	$2.00	$5,864	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	12	$318.00	$3,730	Assume 1 symbol every 250' (bike lanes)
New Sign	EA	6	$233.00	$1,366	Assume 1 sign every 500' each side of Cycletrack
Lump Sum Items					
Landscaping (5%)	LS	1.00	$8,296	$8,296	
Drainage and E&S (10%)	LS	1.00	$16,592	$16,592	
Maintenance of Traffic (5%)	LS	1.00	$8,296	$8,296	
Utility Adjustments (10%)	LS	1.00	$16,592	$16,592	
			Subtotal	**$215,697**	
			25% Contingency	$53,924	
			Total Estimated Cost	**$269,700**	

TOTAL ESTIMATED NEW TOWN COST	$1,013,200	

5574 Key West Bicycle Plan - Long-Term Old Town Loop Costs

Advisory Bike Lane (No Major Action/Add Markings)					
Total Length (ft):	518				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Thermoplastic Pavement Marking (6")	LF	1036	$2.00	$2,072	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	4	$380.00	$1,575	Assume 1 Symbol every 250' per side of the road
New Sign	EA	2	$270.00	$559	Assume 1 Sign every 500' per side of the road
Lump Sum Items					
Maintenance of Traffic (5%)	LS	1.00	$210	$210	
			Subtotal	**$4,416**	
			25% Contingency	$1,104	
			Total Estimated Cost	**$5,600**	

BBPS (Construct Curb Extensions, Eradicate Markings, New Pavers)					
Total Length (ft):	885				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	1967	$30.00	$59,000	Assume 30' curb to curb; 2' depth
Curb Demo	LF	1770	$15.00	$26,550	
Aggregate Base Course for Pavement	CY	983	$70.00	$68,833	Assume 1' depth
Concrete Paver	SY	2950	$120.00	$354,000	
Eradication	LF	3540	$2.00	$7,080	Assume 4 lines entire length (mixed edge/center lines)
New Sign	EA	18	$270.00	$4,779	Assume 1 sign every 100' per side of the road
Lump Sum Items					
Landscaping (5%)	LS	1.00	$26,012	$26,012	
Drainage and E&S (10%)	LS	1.00	$52,024	$52,024	
Maintenance of Traffic (5%)	LS	1.00	$26,012	$26,012	
Utility Adjustments (10%)	LS	1.00	$52,024	$52,024	
			Subtotal	**$676,314**	
			25% Contingency	$169,079	
			Total Estimated Cost	**$845,400**	

Bike Lanes (Lane Diet)					
Total Length (ft):	11,541				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Thermoplastic Pavement Marking (6")	LF	46164	$2.00	$92,328	Assume 4 lines entire length (2 white edge)
Thermoplastic Pavement Marking Symbol	EA	92	$380.00	$35,085	Assume 1 Symbol every 250' each side of road
24" Thermoplastic Pavement Marking	LF	462	$7.50	$3,462	Assume 1 High Vis crossing every 2500'
New Sign	EA	46	$270.00	$12,464	Assume 1 Sign every 500'
Eradication	LF	46164	$2.00	$92,328	Assume 4 lines entire length (mixed edge/center lines)
Lump Sum Items					
Maintenance of Traffic (5%)	LS	1.00	$11,783	$11,783	
			Subtotal	**$247,450**	
			25% Contingency	$61,863	
			Total Estimated Cost	**$309,400**	

Two Way Cycletrack (Construct New - 10' with sidewalk improvements)					
Total Length (ft):	5,585				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	6619	$30.00	$198,578	Assume 16' width and 2' depth
Aggregate Base Course for Pavement	CY	2069	$70.00	$144,796	Assume 10' width and 1' depth
Concrete Sidewalk	SY	6206	$38.00	$235,811	Assume 10' width
Thermoplastic Pavement Marking (6")	LF	5585	$2.00	$11,170	Assume 1 dashed center line, yellow
Thermoplastic Pavement Marking (6")	LF	11170	$2.00	$22,340	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	45	$318.00	$14,208	Assume 1 symbol every 250' (bike lanes)
New Sign	EA	22	$233.00	$5,205	Assume 1 sign every 500' each side of Cycletrack
Lump Sum Items					
Landscaping (5%)	LS	1.00	$31,605	$31,605	
Drainage and E&S (10%)	LS	1.00	$63,211	$63,211	
Maintenance of Traffic (5%)	LS	1.00	$31,605	$31,605	
Utility Adjustments (10%)	LS	1.00	$63,211	$63,211	
			Subtotal	**$821,741**	
			25% Contingency	$205,435	
			Total Estimated Cost	**$1,027,200**	

TOTAL ESTIMATED OLD TOWN LOOP COST	$2,187,600	

5574 Key West Bicycle Plan - Long-Term Smathers Connector Costs

Bike Boulevard (Striping, Signs)					
Total Length (ft):	1,822				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Thermoplastic Pavement Marking (6")	LF	3644	$2.00	$7,288	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	15	$380.00	$5,539	Assume 1 symbol every 250' per side of the road
New Sign	EA	36	$270.00	$9,839	Assume 1 sign every 100' per side of the road
Lump Sum Items					
Maintenance of Traffic (5%)	LS	1.00	$1,133	$1,133	
			Subtotal	**$23,799**	
			25% Contingency	$5,950	
			Total Estimated Cost	**$29,800**	

Bike Lanes (WIden Road/Construct Shoulders - 5' each side)					
Total Length (ft):	1,402				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	1039	$30.00	$31,156	Assume 10' width and 2' depth
Aggregate Base Course for Pavement	CY	519	$70.00	$36,348	Assume 10' width and 1' depth
Milling	SY	1558	$8.00	$12,462	Assume 10' width
Asphalt Surface Course	TON	132	$75.00	$9,883	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	211	$75.00	$15,812	Assume 4' width and 0.5' depth, 13.3 CF in a TON
Eradication	LF	2804	$2.00	$5,608	Assume 2 lines entire length (2 white edge lines)
Thermoplastic Pavement Marking (6")	LF	2804	$2.00	$5,608	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	11	$380.00	$4,262	Assume 1 Symbol every 250' each side of road (bike lane)
24" Thermoplastic Pavement Marking	LF	56	$7.50	$421	Assume 1 High Vis crossing every 2500'
New Sign	EA	6	$270.00	$1,514	Assume 1 Sign every 500'
Lump Sum Items					
Landscaping (5%)	LS	1.00	$6,154	$6,154	
Drainage and E&S (10%)	LS	1.00	$12,307	$12,307	
Maintenance of Traffic (5%)	LS	1.00	$6,154	$6,154	
Utility Adjustments (10%)	LS	1.00	$12,307	$12,307	
			Subtotal	**$159,995**	
			25% Contingency	$39,999	
			Total Estimated Cost	**$200,000**	

Shared Use Path (Construct New - 10' asphalt)					
Total Length (ft):	2,543				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	3014	$30.00	$90,418	Assume 16' width and 2' depth
Aggregate Base Course for Pavement	CY	942	$70.00	$65,930	Assume 10' width and 1' depth
Asphalt Surface Course	TON	239	$75.00	$17,925	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	956	$75.00	$71,701	Assume 10' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$12,299	$12,299	
Drainage and E&S (10%)	LS	1.00	$24,597	$24,597	Does not include enhanced features
Maintenance of Traffic (5%)	LS	1.00	$12,299	$12,299	
Utility Adjustments (10%)	LS	1.00	$24,597	$24,597	
			Subtotal	**$319,766**	
			25% Contingency	$79,941	
			Total Estimated Cost	**$399,800**	
TOTAL ESTIMATED SMATHERS CONNECTOR COST				$629,600	

5574 Key West Bicycle Plan - Long-Term Sunrise Costs

Shared Use Path (Widen Existing- 4' asphalt)					
Total Length (ft):	2,320				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	1719	$30.00	$51,556	Assume 10' width and 2' depth
Aggregate Base Course for Pavement	CY	344	$70.00	$24,059	Assume 4' width and 1' depth
Asphalt Surface Course	TON	87	$75.00	$6,541	Assume 4' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	349	$75.00	$26,165	Assume 4' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$5,416	$5,416	
Drainage and E&S (10%)	LS	1.00	$10,832	$10,832	Does not include enhanced features such as
Maintenance of Traffic (5%)	LS	1.00	$5,416	$5,416	
Utility Adjustments (10%)	LS	1.00	$10,832	$10,832	
			Subtotal	**$140,818**	
			25% Contingency	$35,204	
			Total Estimated Cost	**$176,100**	

Shared Use Path (Construct New - 10' asphalt)					
Total Length (ft):	8,425				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	9985	$30.00	$299,556	Assume 16' width and 2' depth
Aggregate Base Course for Pavement	CY	3120	$70.00	$218,426	Assume 10' width and 1' depth
Asphalt Surface Course	TON	792	$75.00	$59,387	Assume 10' width and 0.125' depth, 13.3 CF in a TON
Asphalt Base Course	TON	3167	$75.00	$237,547	Assume 10' width and 0.5' depth, 13.3 CF in a TON
Lump Sum Items					
Landscaping (5%)	LS	1.00	$40,746	$40,746	
Drainage and E&S (10%)	LS	1.00	$81,492	$81,492	Does not include enhanced features
Maintenance of Traffic (5%)	LS	1.00	$40,746	$40,746	
Utility Adjustments (10%)	LS	1.00	$81,492	$81,492	
			Subtotal	**$1,059,391**	
			25% Contingency	$264,848	
			Total Estimated Cost	**$1,324,300**	

Two Way Cycletrack (Construct New - 10' with sidewalk improvements)					
Total Length (ft):	15,212				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	18029	$30.00	$540,871	Assume 16' width and 2' depth
Aggregate Base Course for Pavement	CY	5634	$70.00	$394,385	Assume 10' width and 1' depth
Concrete Sidewalk	SY	16902	$38.00	$642,284	Assume 10' width
Thermoplastic Pavement Marking (6")	LF	15212	$2.00	$30,424	Assume 1 dashed center line, yellow
Thermoplastic Pavement Marking (6")	LF	30424	$2.00	$60,848	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	122	$318.00	$38,699	Assume 1 symbol every 250' (bike lanes)
New Sign	EA	61	$233.00	$14,178	Assume 1 sign every 500' each side of Cycletrack
Lump Sum Items					
Landscaping (5%)	LS	1.00	$86,084	$86,084	
Drainage and E&S (10%)	LS	1.00	$172,169	$172,169	
Maintenance of Traffic (5%)	LS	1.00	$86,084	$86,084	
Utility Adjustments (10%)	LS	1.00	$172,169	$172,169	
			Subtotal	**$2,238,196**	
			25% Contingency	$559,549	
			Total Estimated Cost	**$2,797,800**	
			TOTAL ESTIMATED SUNRISE COST	**$4,298,200**	

5574 Key West Bicycle Plan - Long-Term White Connector Costs

Bike Lanes (Lane Diet)					
Total Length (ft):	4,599				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Thermoplastic Pavement Marking (6")	LF	18396	$2.00	$36,792	Assume 4 lines entire length (2 white edge)
Thermoplastic Pavement Marking Symbol	EA	37	$380.00	$13,981	Assume 1 Symbol every 250' each side of road
24" Thermoplastic Pavement Marking	LF	184	$7.50	$1,380	Assume 1 High Vis crossing every 2500'
New Sign	EA	18	$270.00	$4,967	Assume 1 Sign every 500'
Eradication	LF	18396	$2.00	$36,792	Assume 4 lines entire length (mixed edge/center lines)
Lump Sum Items					
Maintenance of Traffic (5%)	LS	1.00	$4,696	$4,696	
			Subtotal	**$98,608**	
			25% Contingency	$24,652	
			Total Estimated Cost	**$123,300**	

Two Way Cycletrack (Construct New - 10' with sidewalk improvements)					
Total Length (ft):	3,255				
Item	**Unit**	**Quant.**	**2018 Est. Unit Cost**	**2018 Total Cost**	**Comment**
Earthwork, Excavation, Grading	CY	3858	$30.00	$115,733	Assume 16' width and 2' depth
Aggregate Base Course for Pavement	CY	1206	$70.00	$84,389	Assume 10' width and 1' depth
Concrete Sidewalk	SY	3617	$38.00	$137,433	Assume 10' width
Thermoplastic Pavement Marking (6")	LF	3255	$2.00	$6,510	Assume 1 dashed center line, yellow
Thermoplastic Pavement Marking (6")	LF	6510	$2.00	$13,020	Assume 2 lines entire length
Thermoplastic Pavement Marking Symbol	EA	26	$318.00	$8,281	Assume 1 symbol every 250' (bike lanes)
New Sign	EA	13	$233.00	$3,034	Assume 1 sign every 500' each side of Cycletrack
Lump Sum Items					
Landscaping (5%)	LS	1.00	$18,420	$18,420	
Drainage and E&S (10%)	LS	1.00	$36,840	$36,840	
Maintenance of Traffic (5%)	LS	1.00	$18,420	$18,420	
Utility Adjustments (10%)	LS	1.00	$36,840	$36,840	
			Subtotal	**$478,920**	
			25% Contingency	$119,730	
			Total Estimated Cost	**$598,700**	

TOTAL ESTIMATED WHITE CONNECTOR COST	$722,000	

Wicker Sport Complex Concept Design Cost Estimate

Item	Quantity	Unit	Unit Cost	Total Cost	Comment
Demolition & Earthwork					
Curb Demolition	106	LF	$15.00	$1,590.00	
Earthwork, Excavation, Grading	637	CY	$30.00	$19,102.22	Assume 2' depth
Removal of Existing Pavement	347	CY	$30.00	$10,424.44	Assume 2' Removal
Pavement					
Asphalt Surface Course	62	TN	$75.00	$4,639.57	Assume 0.125 feet depth, 13.3 CF in a TON
Asphalt Base Course	247	TN	$75.00	$18,558.27	Assume 0.5 feet depth, 13.3 CF in a TON
Aggregate Base Course for Pavement	291	CY	$70.00	$20,380.37	Assume 1' depth for asphalt, 6" for concrete sidewalk
Concrete Sidewalk (4")	284	SY	$38.00	$10,800.44	FDOT
Stamped Asphalt	1436	SF	$18.00	$25,848.00	City of Cocoa Beach CE
Curb Ramps with Detectable Warning Surface	18	EA	$1,200.00	$21,600.00	DDOT
Curb & Gutter	1052	LF	$30.00	$31,560.00	FDOT, TYPE D
Amenities					
Lighting	15	EA	$10,000.00	$150,000.00	
Landscaping					
Trees	14	EA	$350.00	$4,900.00	
Marking					
Signs	10	EA	$270.00	$2,700.00	
Bike Box	1	EA		$0.00	
Thermoplastic Pavement Marking (up to 24")	647	LF	$2.00	$1,294.00	
Thermoplastic Pavement Marking (24")	150	LF	$7.50	$1,125.00	
Thermoplastic Pavement Marking Symbol	18	EA	$380.00	$6,840.00	
Total Construction Cost				**$331,362.32**	
Lump Sums					
Landscaping (10%)	1	LS		$33,136.23	
Drainage (10%)	1	LS		$33,136.23	
Maintenance of Traffic (10%)	1	LS		$33,136.23	
Utility Adjustments (10%)	1	LS		$33,136.23	
Signal Relocation	1	LS		$200,000.00	
Total Cost				**$663,907.25**	
Contigency (25%)					
Total Cost + Contingency				**$829,884.06**	

KEY WEST
Bicycle and Pedestrian Master Plan

Appendix E:

Other Recommendations

What is Wayfinding?

Wayfinding encompasses all the ways in which people orient themselves in physical space and navigate from place to place. A wayfinding system can help bicyclists and pedestrians easily and successfully navigate through a network of on-street facilities or trails. The main purpose of a wayfinding system is to connect people to the places they want to go. Wayfinding can be directional signage, mile markers, trail heads, informational signs, map kiosks, and pavement markings to reinforce signage.

Benefits of Bicycle Wayfinding

The benefits of establishing a bicycle wayfinding sign network include:

- Enhances the value of a bicycle network
- Helps people identify and navigate desirable routes between destinations
- Encouragement for the Interested but Concerned Users
- Reminds Drivers of Bicyclists' Presence
- Promotes Active Travel
- Easy-to-Implement
- Low-Cost Project

Destinations and Route Selection

Connecting places is the first core principle of bicycle wayfinding system design. Determining where bicyclists are trying to go will ultimately inform their desired route, which is why destination selection typically comes prior to route selection.

Destinations

Types of destinations typically considered for wayfinding signs include:

- Parks
- Business Districts
- Major Sports Venues
- Major Bikeways
- Well-Known Landmarks
- Schools & Universities
- Libraries
- Trails

Wayfinding Process

The basic process of wayfinding involves four steps:

1. Orientation refers to determining one's location relative to nearby landmarks and the destination. To improve orientation, use landmarks, which provide strong orientation cues.

2. Route Decision refers to choosing a route to get to the destination. To improve route decision making, minimize the number of navigational choices and provide signs or prompts at decision points. Maps can help improve route decision making.

3. Route Monitoring refers to checking the chosen route to confirm that it is leading to the destination. To improve route monitoring, "breadcrumbs"— visual cues highlighting the path taken—can aid route monitoring, particularly when a wayfinding mistake has been made and backtracking is necessary.

4. Destination Recognition refers to recognizing the destination. To improve destination recognition, give destinations clear and consistent identities.

-- William Lidwell, Kristina Holden & Jill Butler
Universal Principals of Design (2003)

Routes

Things to consider when selecting bicycle wayfinding routes include:

Level of Comfort

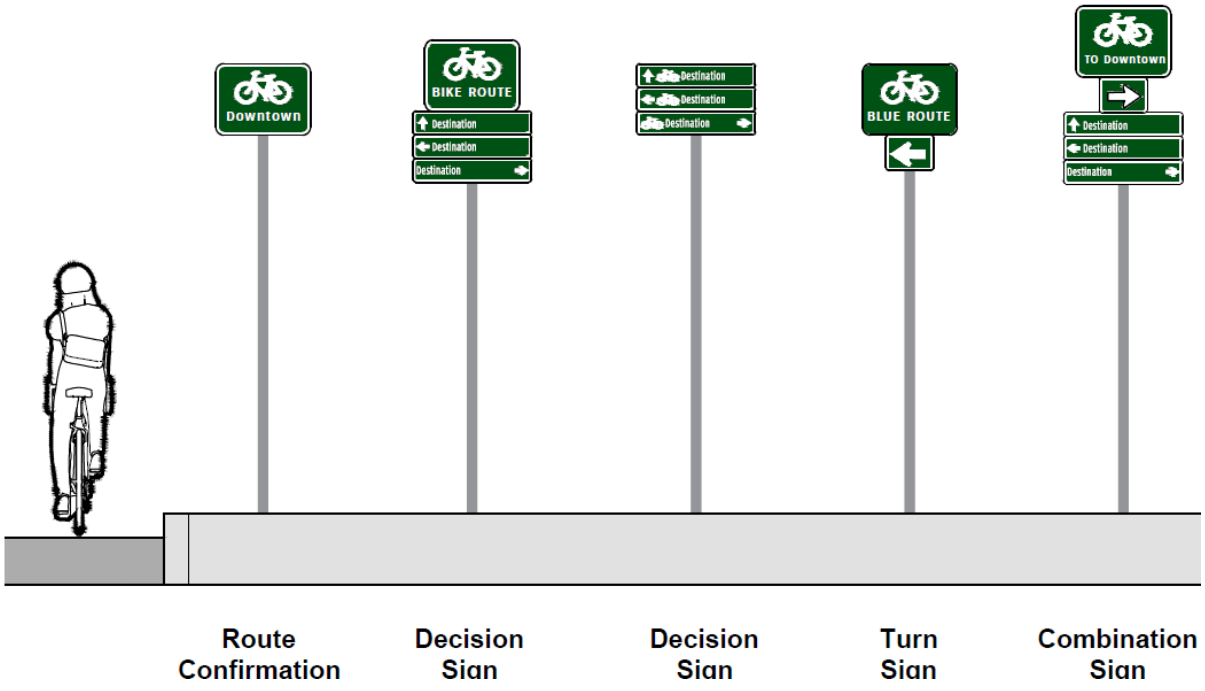
Bicycle wayfinding routes should be located on streets and shared use paths with favorable conditions for safe and comfortable bicycling, including those with dedicated bicycle facilities, low motor vehicle volumes, low traffic speeds, or enough width for shoulders or appropriate lane sharing. High- stress routes for bicyclists that include difficult crossings of highways and arterial roadways should be avoided.

Bicycle Volumes

Existing facilities with high volumes of bicyclists are often ready for wayfinding application, as they often act as primary routes that connect to existing bike facilities and are near destinations. Expected use should also be considered, as low-stress routes identified during the routing process can increase bicyclist volumes with the addition of wayfinding signs.

Types of Wayfinding Signs

The fundamental family of sign assemblies include route confirmation, decision, turn, and combination, and supplemental information signs. The function, content, and placement of each are described below:



Route Confirmation Sign

Route confirmation sign assemblies let bicyclists know they are on a designated bikeway and alert motorists to the likely presence of bicyclists. They are placed after a turn or intersection to reassure cyclists that they are on the correct route and every 3-4 blocks or every quarter to half mile to reassure bicyclists they are still on the designated bikeway.

Decision Sign

A decision sign assembly is used to inform bicyclists of route choices at a junction. Decision sign assemblies are often used where two or more bicycle routes cross. Placement of a decision sign from a turn or transition is determined by bicycle design speed, site lines, and roadway slope. Decision signs should be placed in advance of a turn or decision point based on context.

Turn Sign

Turn signs are used to indicate a change in route or path direction when the main spine of a route turns. Turn signs should be placed at points prior to the turn to give notice of a change in route direction.

Supplemental Signs

Supplemental signage is often used along shared use paths, and may include trail Mile Markers, Informational Kiosks, Emergency Location Markers, and Regulatory, Warning, or Etiquette Signs.

Additional Resources

AASHTO Guide for the Design of Bicycle Facilities (2012)

AASHTO Task Force on Geometric Design. "AASHTO Guide for the Development of Bicycle Facilities." American Association of State Highway and Transportation Officials, Washington, DC: 2012.

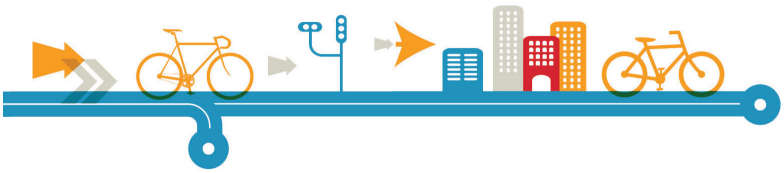
FHWA Manual on Uniform Traffic Control Devices (MUTCD)

Federal Highway Administration. "Manual on Uniform Traffic Control Devices." Federal Highway Administration, U.S. Department of Transportation, Washington, DC: 2009.

NACTO Urban Bikeway Design Guide

NACTO. "NACTO Urban Bikeway Design Guide." National Association of City Transportation Officials, New York, NY: 2013.

ATTRIBUTES OF A BICYCLE FRIENDLY COMMUNITY



bikeleague.org/content/communities

ENGINEERING

There's a local Complete Streets policy with implementation guidance, staff training, policy checklist, compliance procedure, and compliance performance measures.

There are standards for bicycle facility design and implementation that meet or exceed the AASHTO Guide for the Development of Bicycle Facilities and NACTO Urban Bikeway Design Guide, as well as regular training opportunities on best practices and funding bicycle projects for engineering and planning staff.

There are various types of on- and off-street bicycle facilities that best fit the context of density, automobile speeds and congestion, to improve safety and encourage more people of all ages and abilities to bicycle.

The on- and off-street bicycle network is well-maintained to ensure usability and safety.

There are convenient ways for the public to comment on maintenance, safety and other issues impeding bicycle accessibility.

High-speed and/or high-volume streets have designated bicycle facilities such as bike lanes, buffered bike lanes and cycle tracks to enable bicyclists of various skill levels to reach their destinations quickly and safely.

Non-arterial and collector streets have a speed limit of 25 miles per hour or lower.

The street network is well connected.

Intersections are safe and convenient for bicyclists.

There is an ordinance ensuring high-quality, safe and convenient bike parking options at destinations throughout the community.

People can easily combine bike and public transit trips.

There is a Smart Growth land use policy that encourages bicycling, pedestrian and transit trips.

There is access to suitable public lands for off-road bicyclists.

The bicycling network is enhanced by a network of bicycle boulevards, a bicycle wayfinding system, and solutions to improve accessibility across barriers like highways, bodies of water and disconnected streets.

EDUCATION

There is a local Safe Routes to School program. Bicycle-safety education is a routine part of primary and secondary school education and the surrounding neighborhoods are safe and convenient for biking.

There are bicycle education opportunities for children and youth outside of school through bike rodeos, youth recreation programs, helmet fit seminars or a Safety Town program.

There is a public awareness campaign using Public Service Announcements and other media to make both motorists and cyclists aware of their rights and responsibilities.

There are regular opportunities for adults to develop their bicycling skills, from videos for self-teaching to in-depth training like the League's Traffic Skills 101, and local League Cycling Instructors are available for training.

There's a motorist education program for professional drivers.

ENCOURAGEMENT

There is an active, engaged bicycle advocacy group representing the interests of bicyclists and potential bicyclists.

Bike Month, Bike to Work Day, and Bike to School Day are promoted in partnership with local bicycle advocacy groups.

Individualized marketing and bike challenges promote bicycling.

The mayor and/or local council host or participate in bike rides, and support community bicycling events.

There's a bike club, and the community hosts a variety of regular bicycling rides and events that appeal to cyclists of all ages and abilities.

Learn more at bikeleague.org/content/communities

There is a Ciclovia or Open Streets type event, closing off a major corridor to auto traffic ad offering the space to cyclists, pedestrians and group exercise events.

There are bicycle-themed community celebrations or social rides each time a new bicycle-related project is completed, showing off the community's good efforts and introducing new users to the improvements.

The tourism board or local chamber of commerce promotes bicycling in the area to boost the local economy.

Residents and visitors have access to rental bikes and automated public bike sharing systems in larger communities.

Local public agencies, businesses and organizations promote bicycling to work and seek recognition through the League's free Bicycle Friendly Business program.

Local colleges and universities promote bicycling and seek recognition through the League's Bicycle Friendly University program.

There are numerous bike shops offering a variety of bikes and accessories, a co-op or community bike shop, and opportunities to rent or loan a bike in the community.

There are empowering youth bicycling programs such as Earn a Bike programs.

There is a local bike map printed and online that addresses diverse needs and skill levels.

Recreational bicycling is promoted through amenities like a mountain bike skills parks, cyclocross courses, or BMX parks.

There are short themed-loop routes around the community with appropriate way-finding signage.

ENFORCEMENT

There's a law requiring a safe passing distance of at least three feet.

There are increased penalties for harassing, injuring or killing vulnerable road users, including cyclists.

Speed limits can be 20 mph or lower in some neighborhoods and near schools.

Bicyclists are not required to use a sidepath or bike lane and have discretion on where to ride on the road.

It's illegal for drivers to drive distracted, use a handheld cell phone or text while driving.

Data is collected — and publicly available — on traffic citations issued, prosecutions, and convictions of incidents related to bicycles.

There's a police bike patrol, and designated law-enforcement point person who interacts with the bike community.

Law enforcement officers are offered regular education on the rights and responsibilities of bicyclists and traffic law as it applies to bicyclists and motorists.

Law enforcement officers distribute helmets, bike lights and bike locks (or coupons to local bike shop) to encourage cyclists to ride more safely and discourage bike theft.

Law enforcement officers use targeted enforcement and information-sharing to encourage motorists and cyclists to share the road safely.

Law enforcement officers report cyclist crash data and potential hazards to the public works department, traffic engineers and transportation planners.

Most streets and key shared-use paths are well lit at night.

Volunteer trail patrols ensure safety of remote trails.

EVALUATION/PLANNING

There's a Bicycle Advisory Committee or Bicycle & Pedestrian Advisory Committee that meets at least several times a year to make policy and program recommendations and ensure the bicycle program is held accountable to citizens.

In larger communities, designated agency staff members lead and coordinate the community bicycle program in close cooperation with the Bicycle Advisory Committee.

There is a current, comprehensive bike master plan with dedicated funding, specific targets for ridership and safety, and tools for evaluation and monitoring progress.

Bicycle use is researched beyond the U.S. Census' American Community Survey report (i.e. through participation in the National Bicycle and Pedestrian Documentation Project) to more efficiently distribute resources according to demand.

Bicycle crashes are studied and a plan is in place to reduce the number of crashes in the community.

There is a mechanism that ensures that bicycle facilities and programs serve the entire community equitably.

And, of course, lots of people are riding bikes!

Learn more at bikeleague.org/content/communities