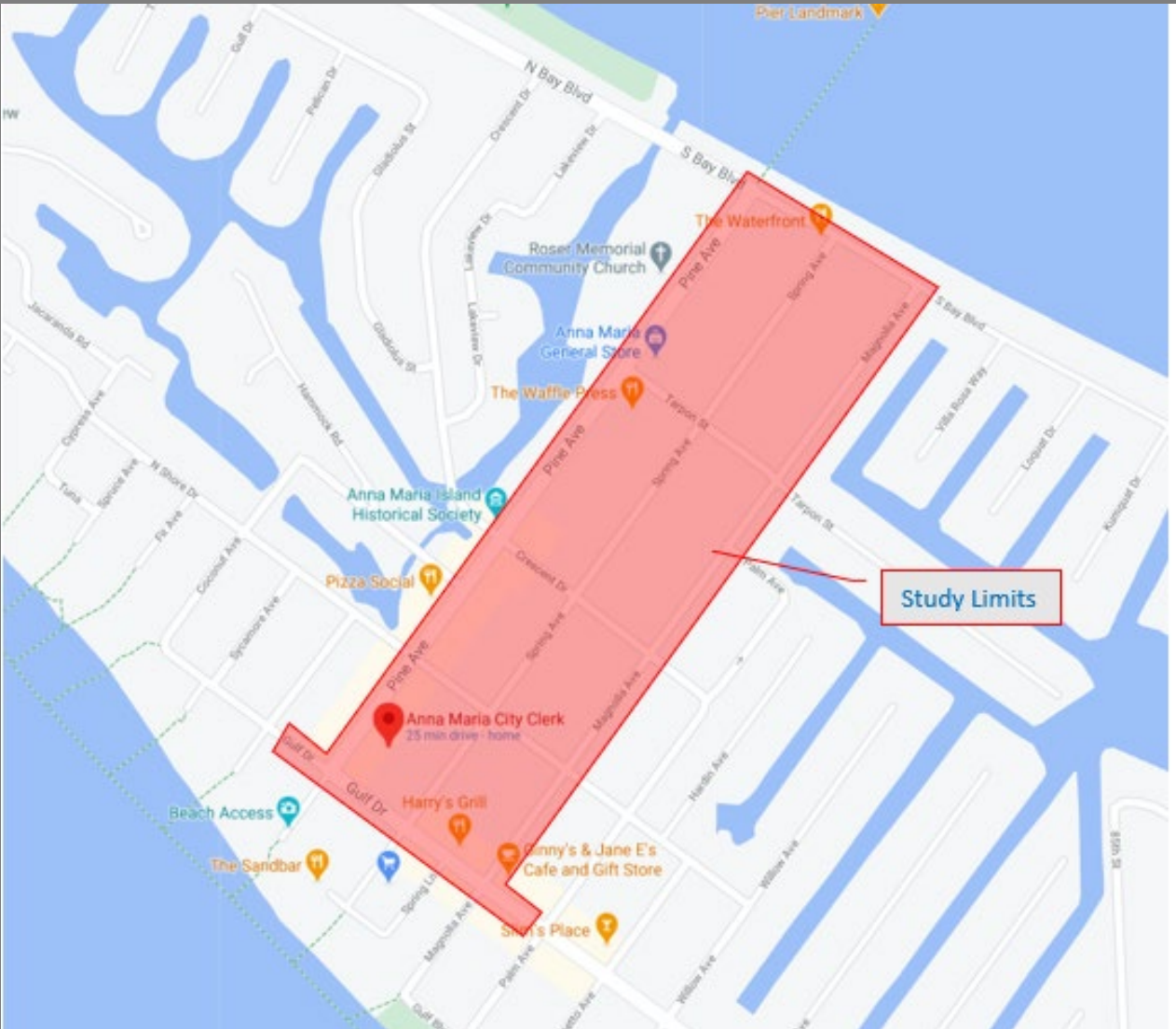


REIMAGINING PINE AVENUE



 **George F. Young, Inc.**
Turning Vision Into Reality

STUDY LIMITS



Pine Avenue, Spring Avenue, Magnolia Ave, Gulf Dr. and S. Bay Blvd.

Scope of Work

SAFETY

- Crash Analysis
- Field Observations
 - Sight Distance
 - Multi-mode interaction

TRAFFIC ANALYSIS

- Traffic and turning movement counts
- Capacity and Level of Service (LOS)

POTENTIAL FUNDING SOURCES

- MPO FDOT SWFWMD

PUBLIC INVOLVMENT

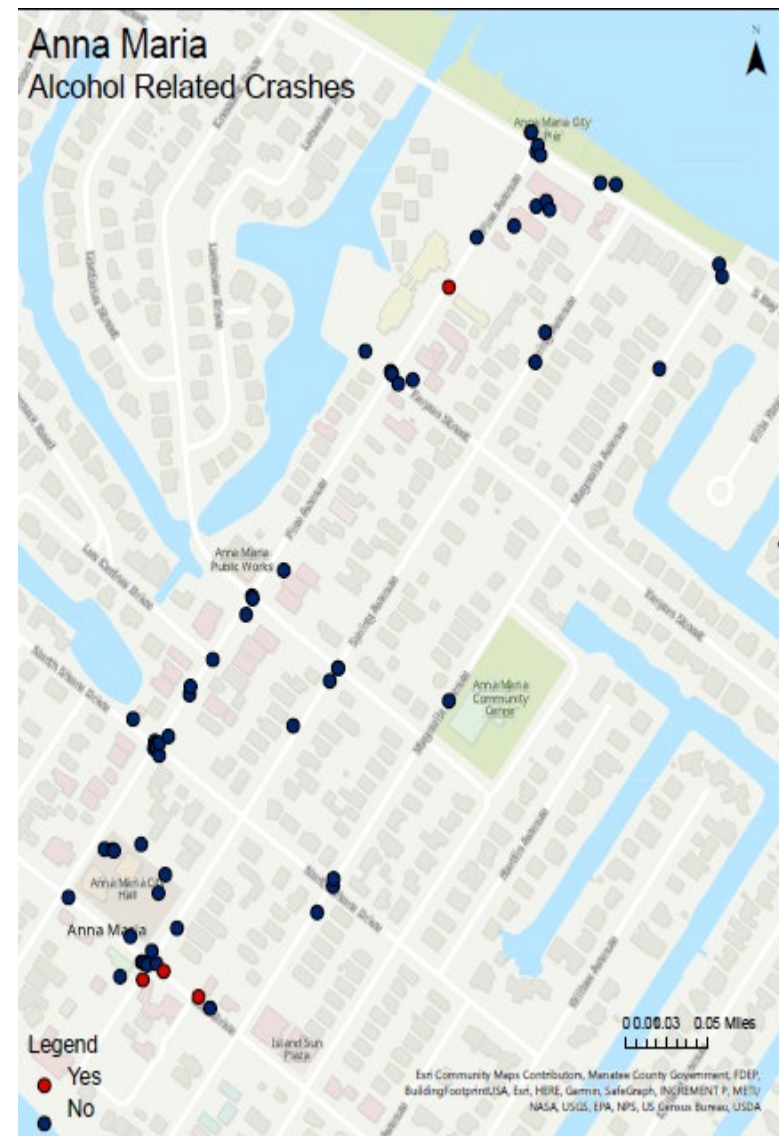
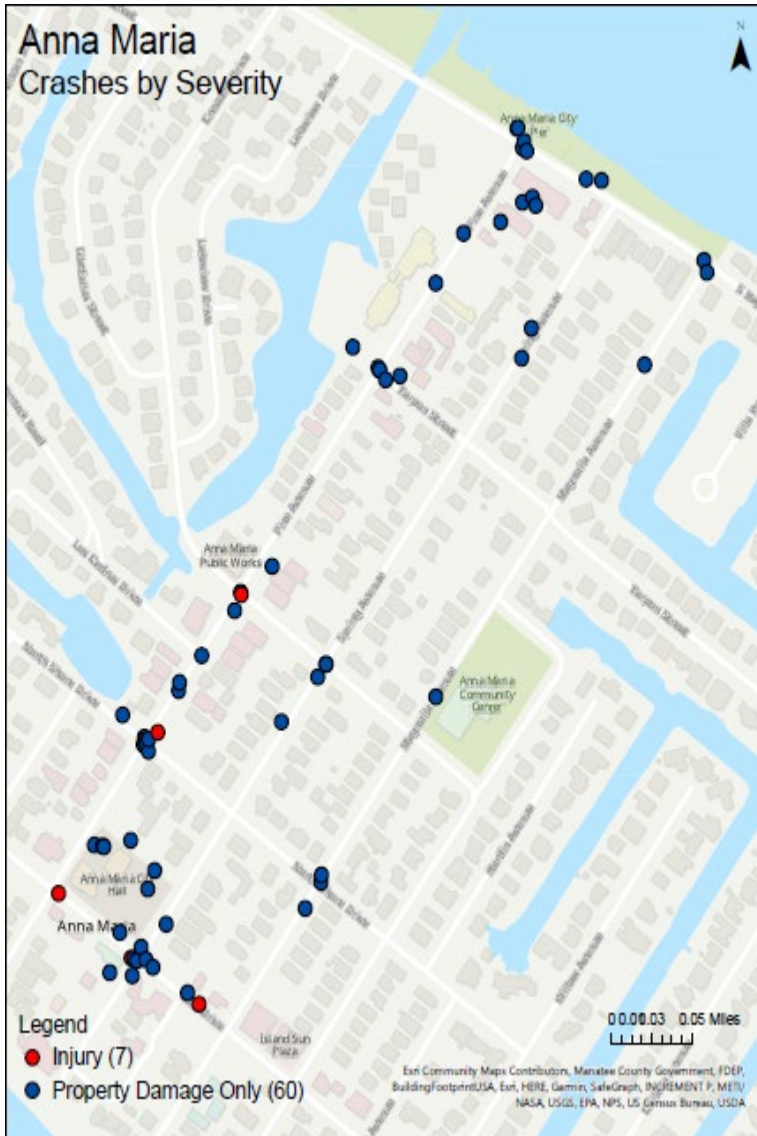
- Public Meetings Input
- Website Responses
- Sample Business Owners Input

ALTERNATIVES

- Different Alternatives
 - Pros and Cons of each one
- Opinion of Probable Cost
- Implementation Schedule

SAFETY

SAFETY – CRASH ANALYSIS





SAFETY – FIELD OBSERVATIONS

- **PEDS JAYWALKING**
 - Lack of Sidewalks
- **GOLF CARTS**
 - Multimodal use



SAFETY – FIELD OBSERVATIONS

- Multiple Modes on same facility
 - Bicycles
 - Gulf Carts
 - Scooters
 - Pedestrians



SAFETY – FIELD OBSERVATIONS

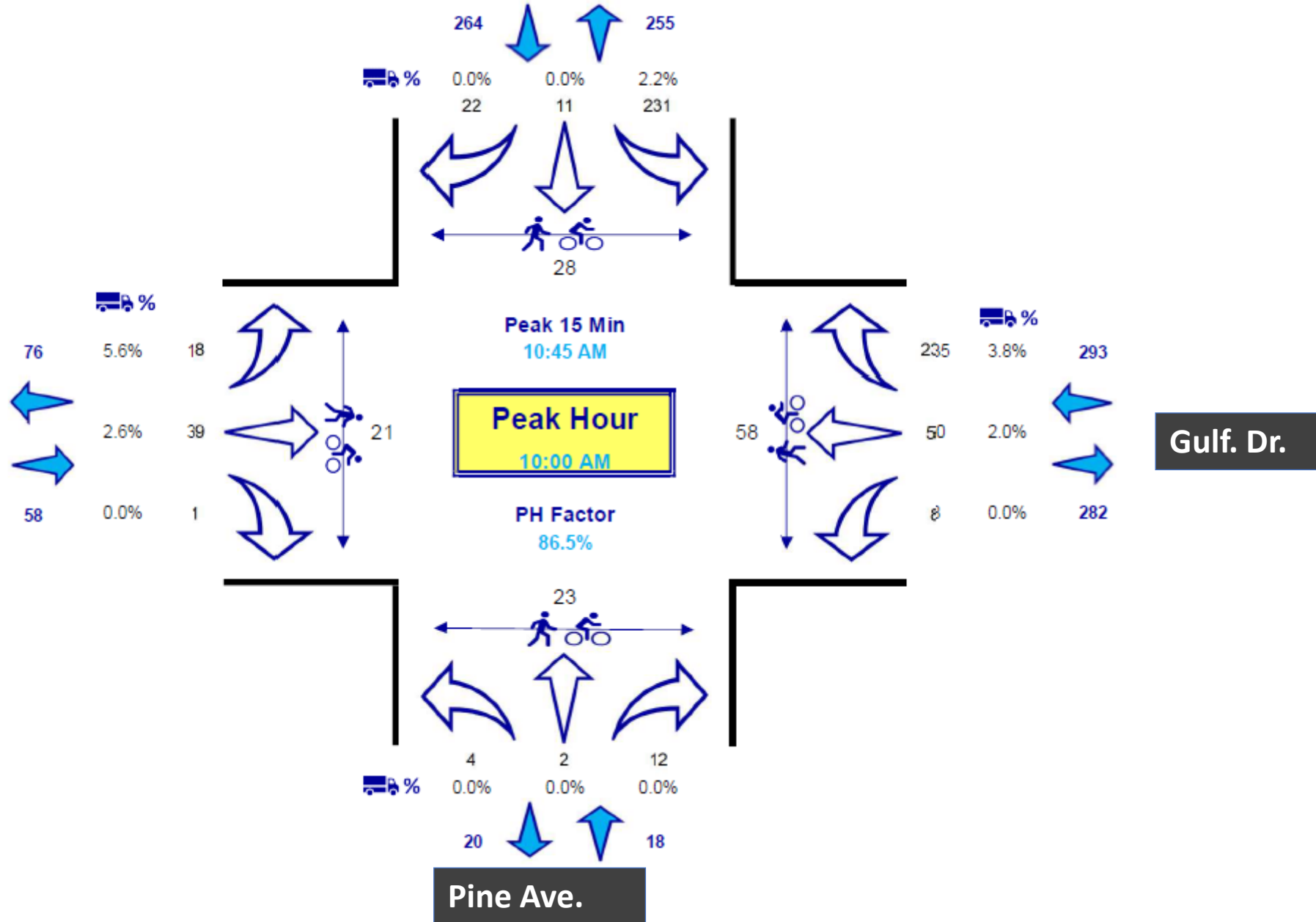
- **Sight Distance Issues**
- **Lack of Sidewalk**
- **No pedestrian Crosswalk**

TRAFFIC ANALYSIS

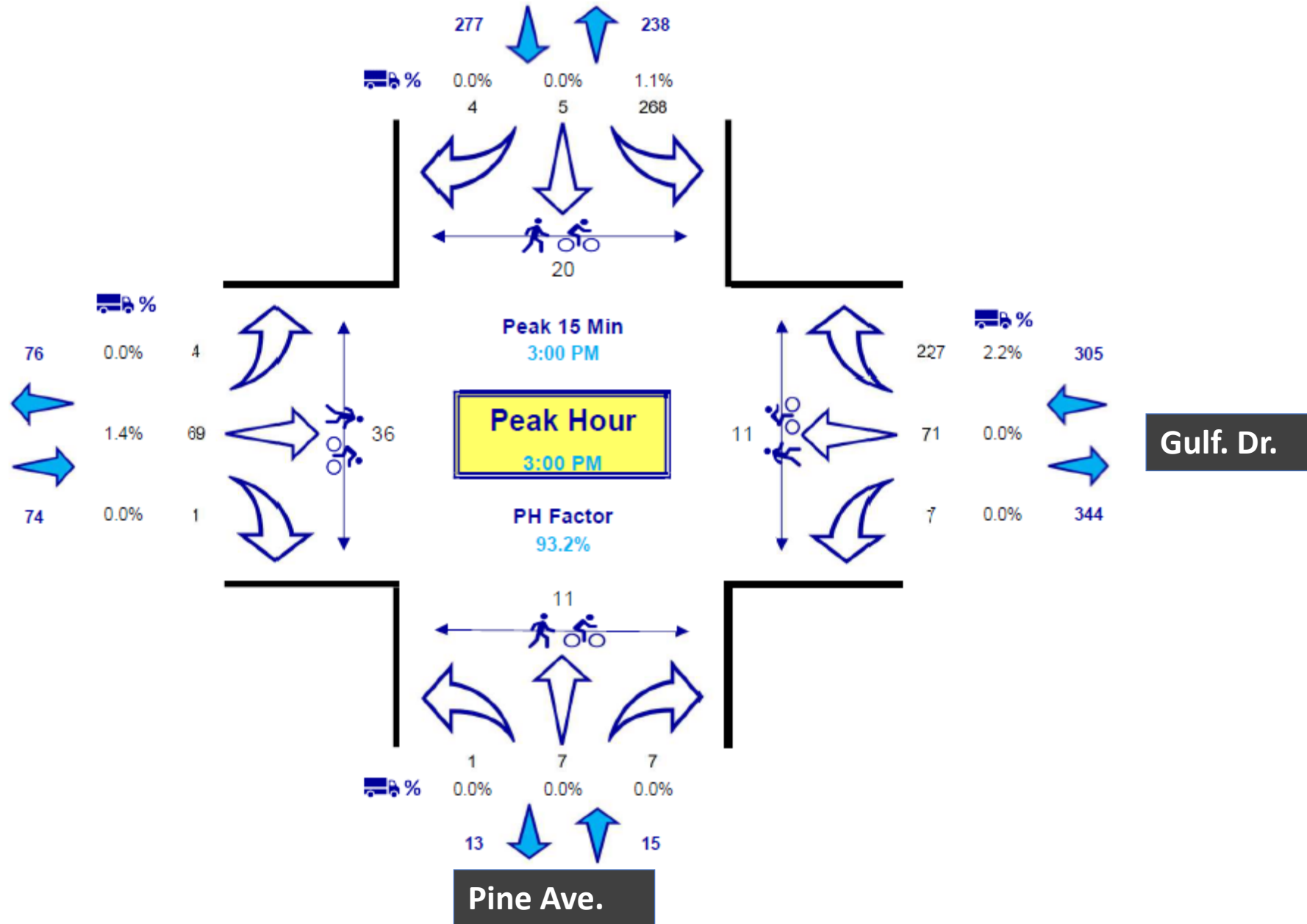
TRAFFIC ANALYSIS – Pine Avenue at Gulf Drive



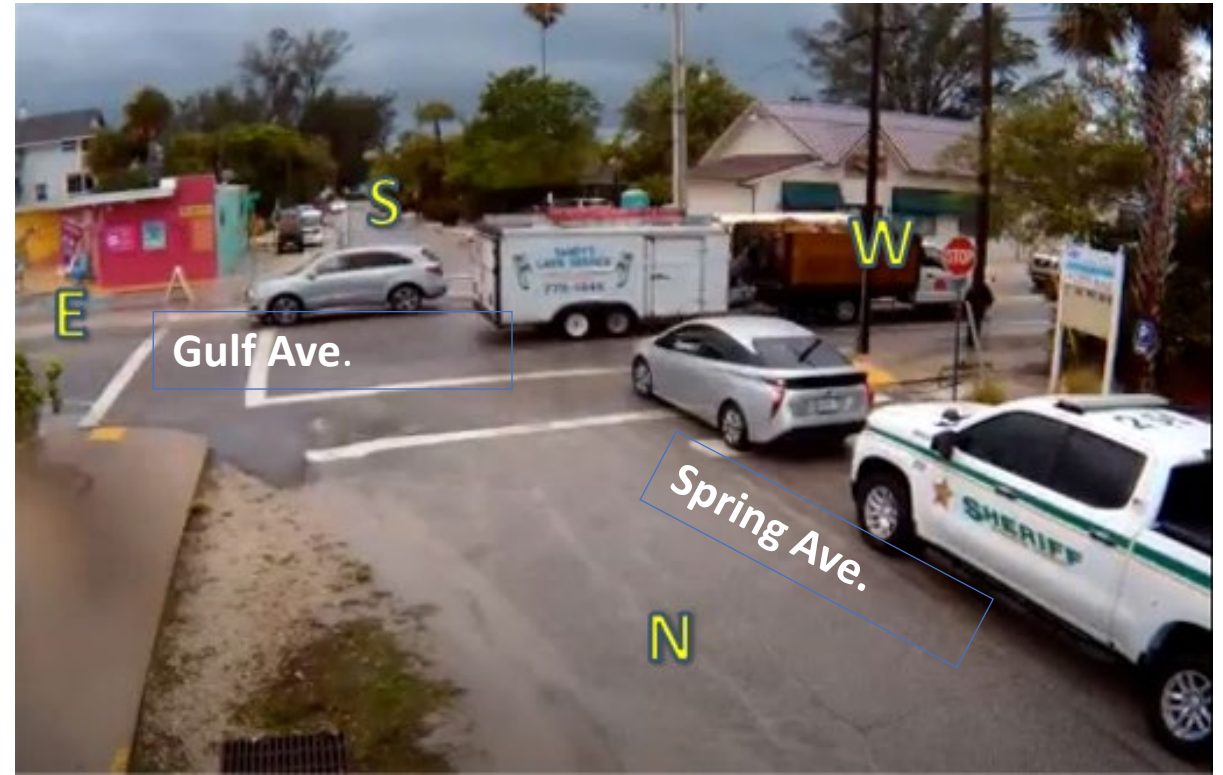
TRAFFIC ANALYSIS – Pine Avenue at Gulf Drive – AM PEAK TRAFFIC



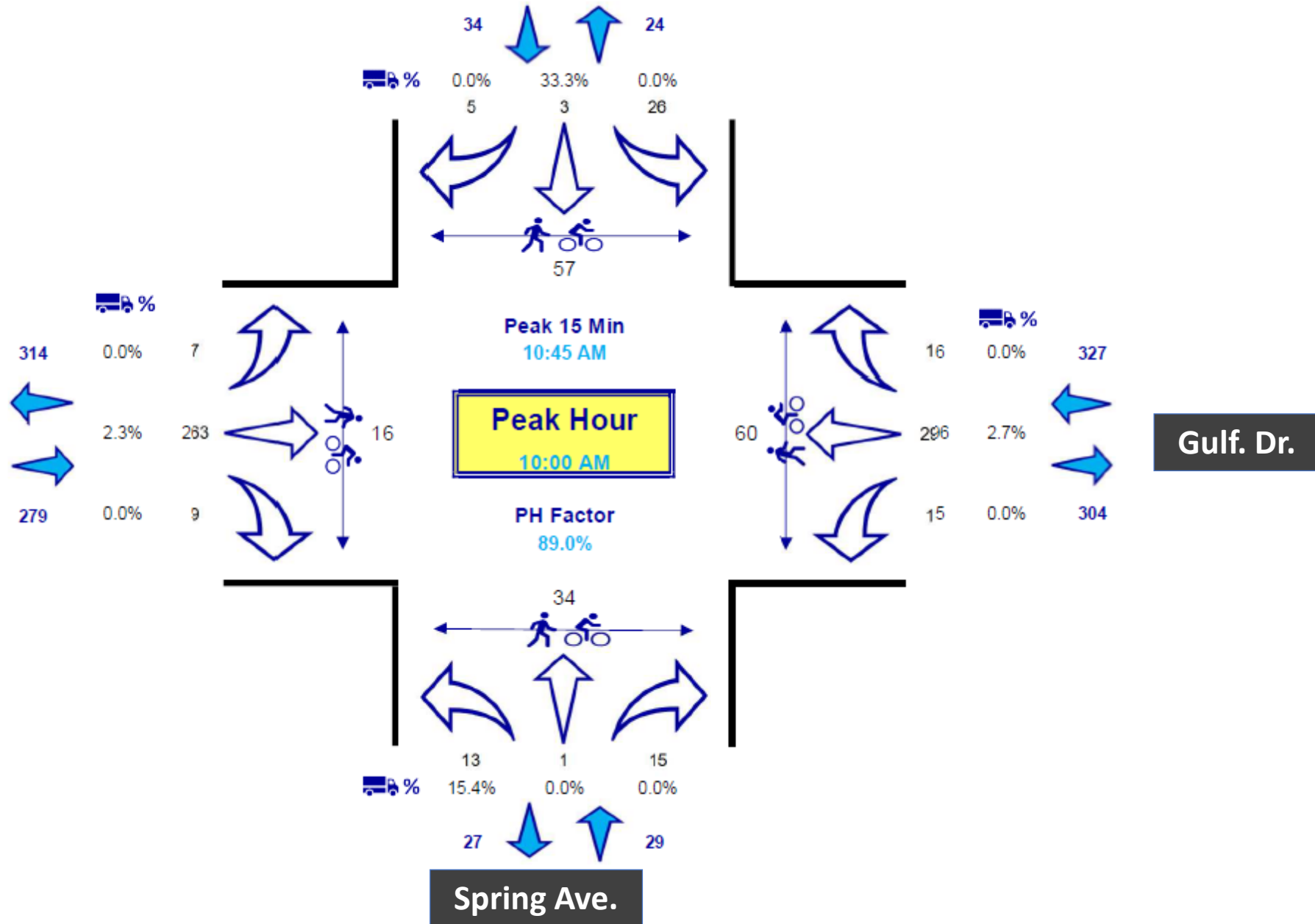
TRAFFIC ANALYSIS – Pine Avenue at Gulf Drive – PM PEAK TRAFFIC



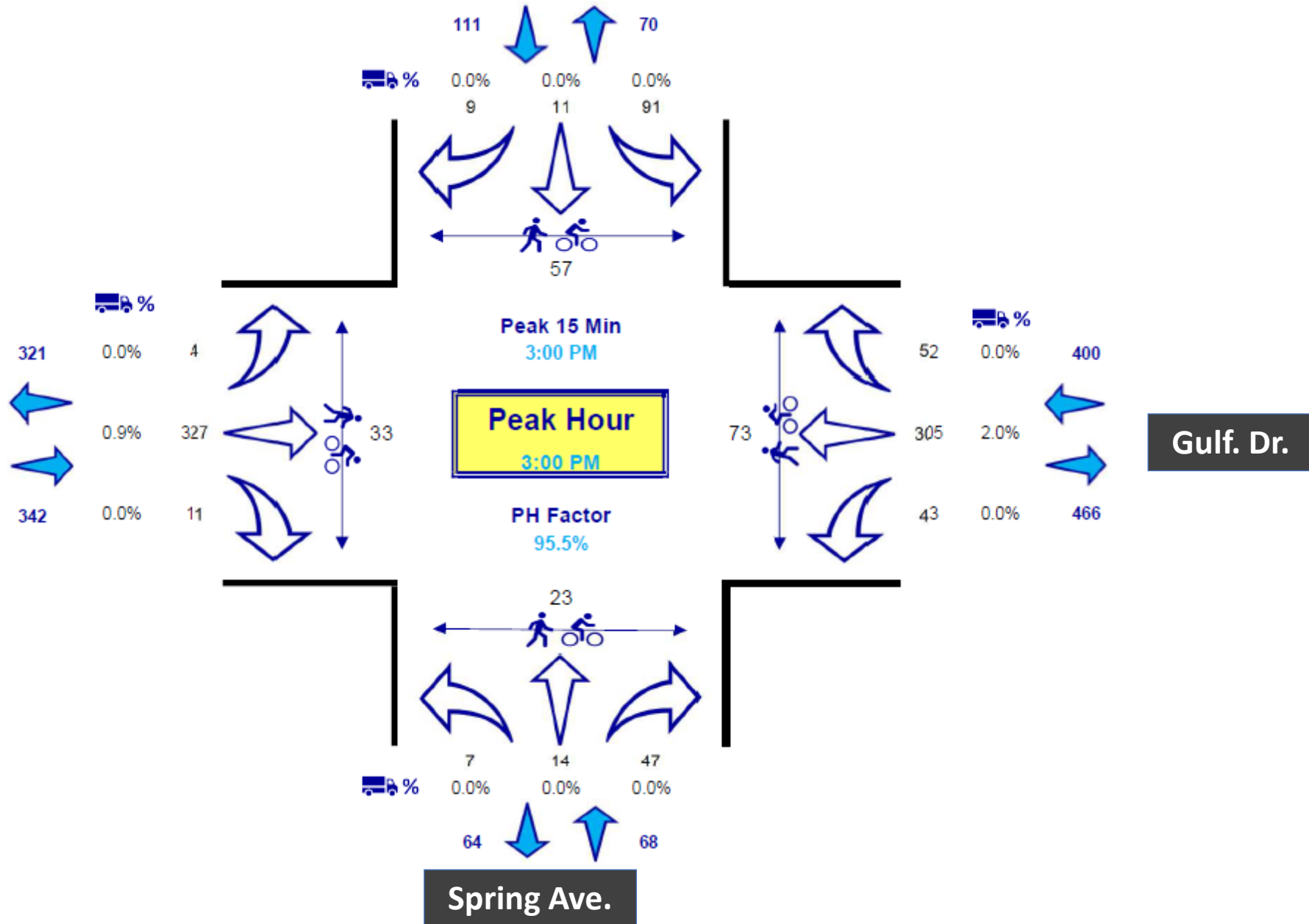
TRAFFIC ANALYSIS – Spring Avenue at Gulf Drive



TRAFFIC ANALYSIS – Spring Avenue at Gulf Drive – AM PEAK TRAFFIC



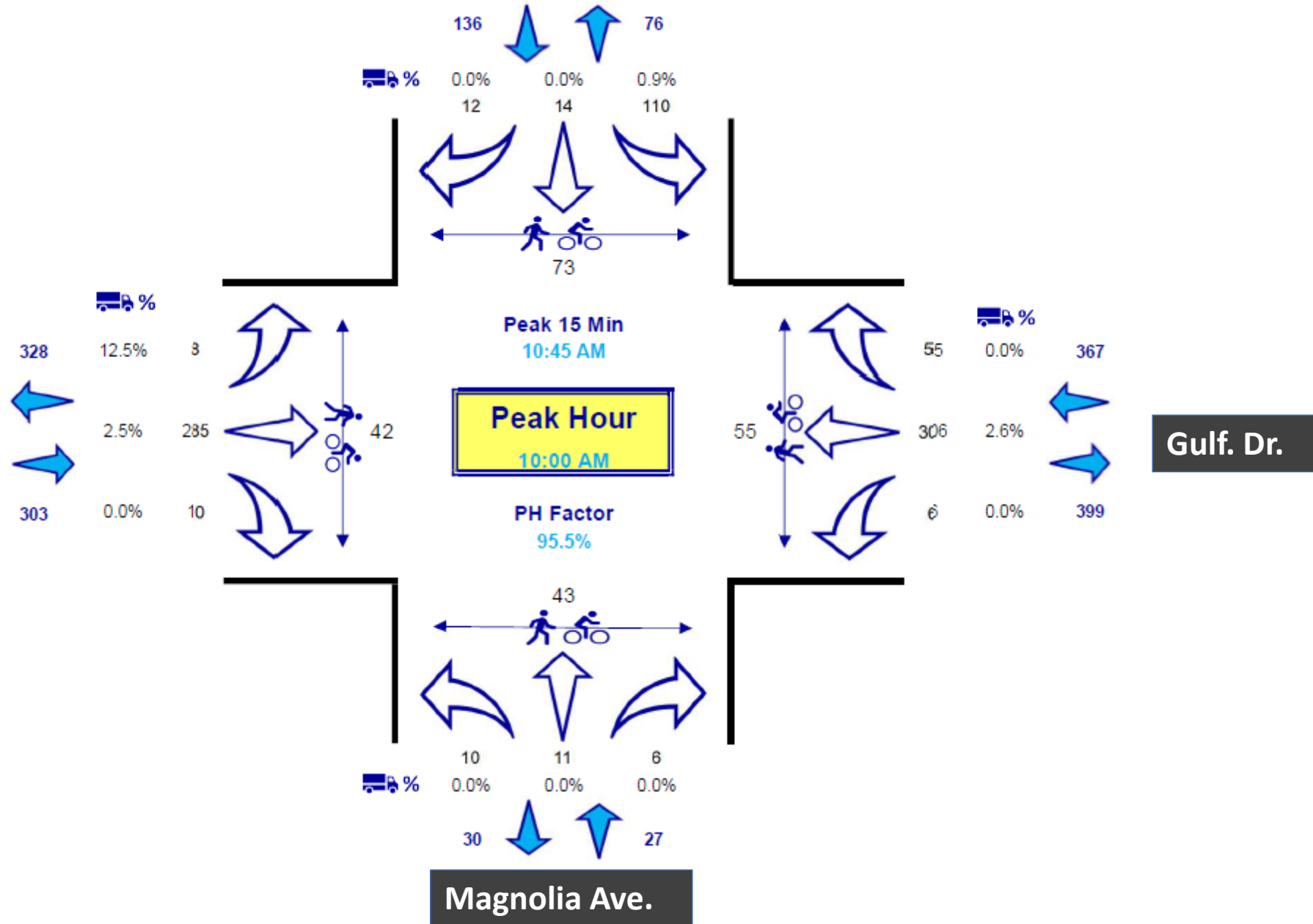
TRAFFIC ANALYSIS – Spring Avenue at Gulf Drive – PM PEAK TRAFFIC



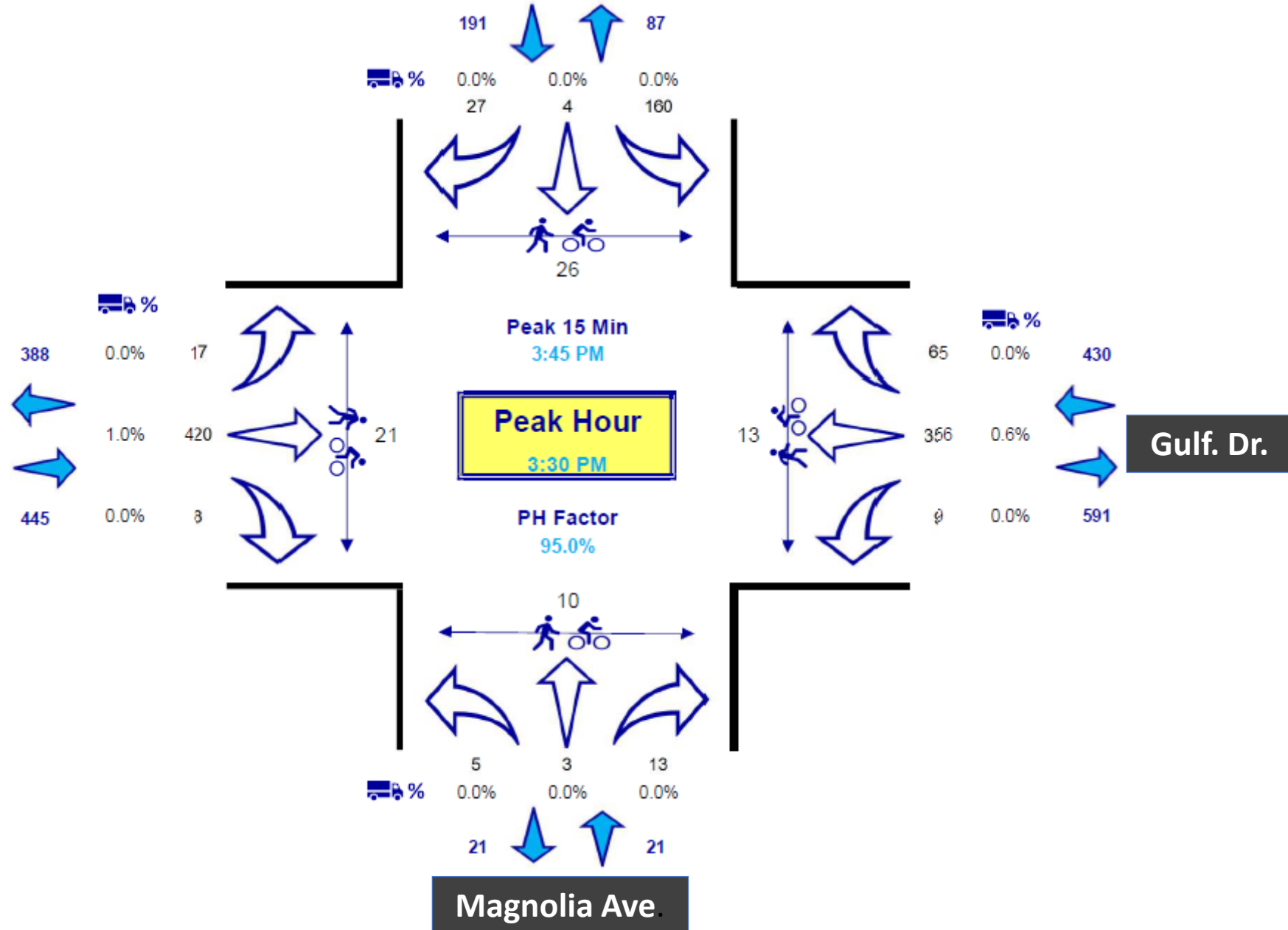
TRAFFIC ANALYSIS – Magnolia Avenue at Gulf Drive



TRAFFIC ANALYSIS – Magnolia Ave at Gulf Drive – AM PEAK TRAFFIC



TRAFFIC ANALYSIS – Magnolia Ave at Gulf Drive – PM PEAK TRAFFIC



- Vehicles trips approaching the intersection
 - $136+303+27+367 = 833$ veh/hr.
- Pedestrian/Bicycle trips approaching the intersection
 - $42+43+55+73 = 213$ peds/hr
- As we can see, 25.6 % of the trips approaching the intersection are pedestrians and/or bikers...this is significant figure!
- For Spring at Gulf the percentage is 25.4%
- For Pine at Gulf the percentage is 33.2%

PUBLIC INVOLVEMENT

PUBLIC INVOLVEMENT

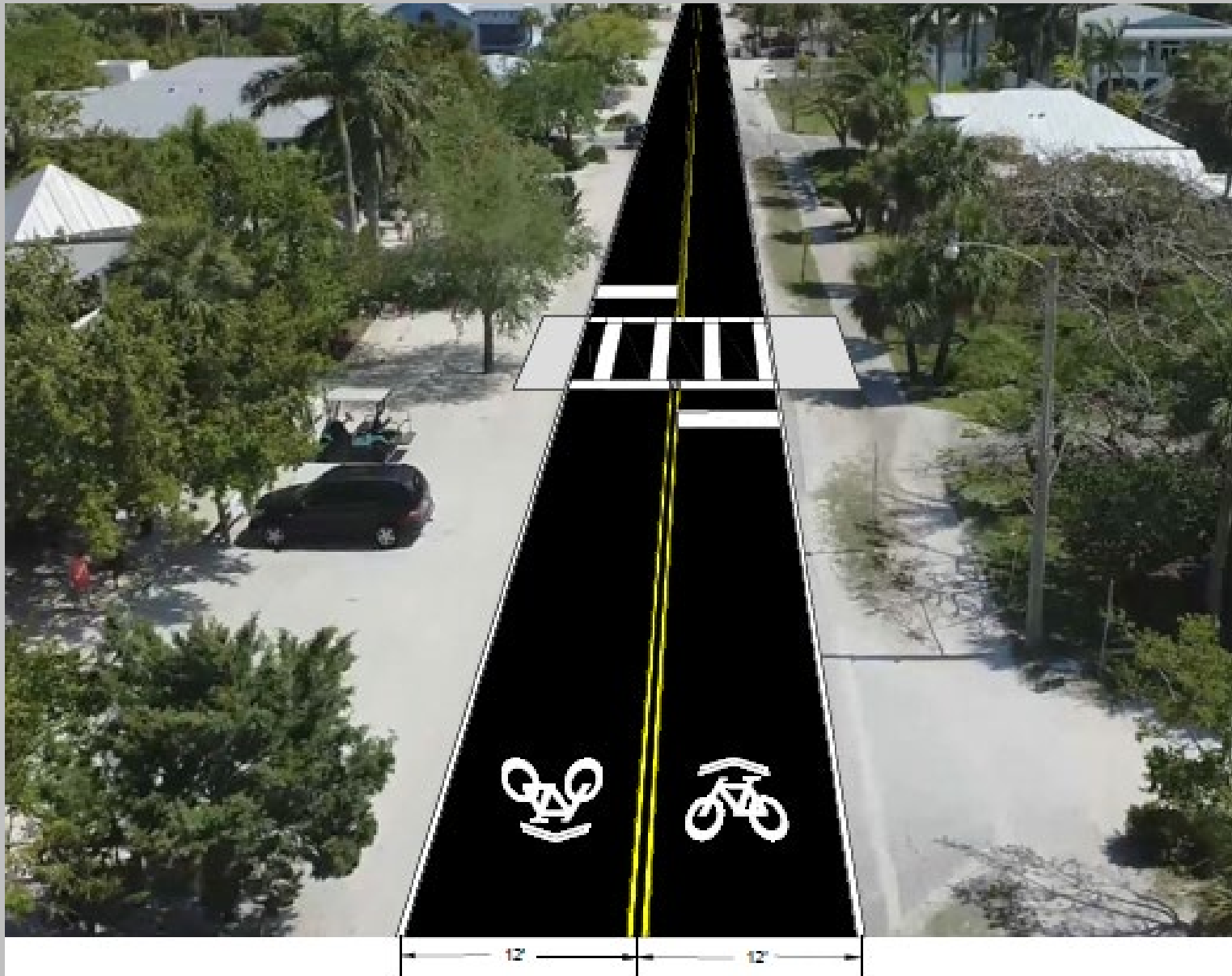
- **Three public hearings (July 1@ 10 am, July 12 @ 2 pm, and July 20 @ 6 pm)**
- **10 meeting with business owners**
- **1 meeting with each commissioner**
- **A Project Specific Website – 7 messages received through the website**

PUBLIC INVOLVMENT

- **COMMENTS FROM PUBLIC MEETINGS, PROJECT WEBSITE AND ONE-ON-ONE MEETINGS WITH BUSINESS OWNERS AND COMMISSIONERS**
 - 1. Pedestrian Safety - Sidewalk Connectivity/Lack of Sidewalks – 70%**
 - 2. Sight Distance at Various Intersections – 50%**
 - 3. Bicycle Facilities/lanes – 55%**
 - 4. Parking – lack of... - 40%**
 - 5. Delivery Trucks Issues – 35%**
 - 6. One-Way Pairs - 45% Against/ 55% no comment or have a positive view**

ALTERNATIVES DEVELOPED

ALTERNATIVE #1



Add Pavement Markings and Pedestrian Crosswalks, Update existing Crosswalks

ALTERNATIVE #1 – Pavement marking and Ped Crosswalks

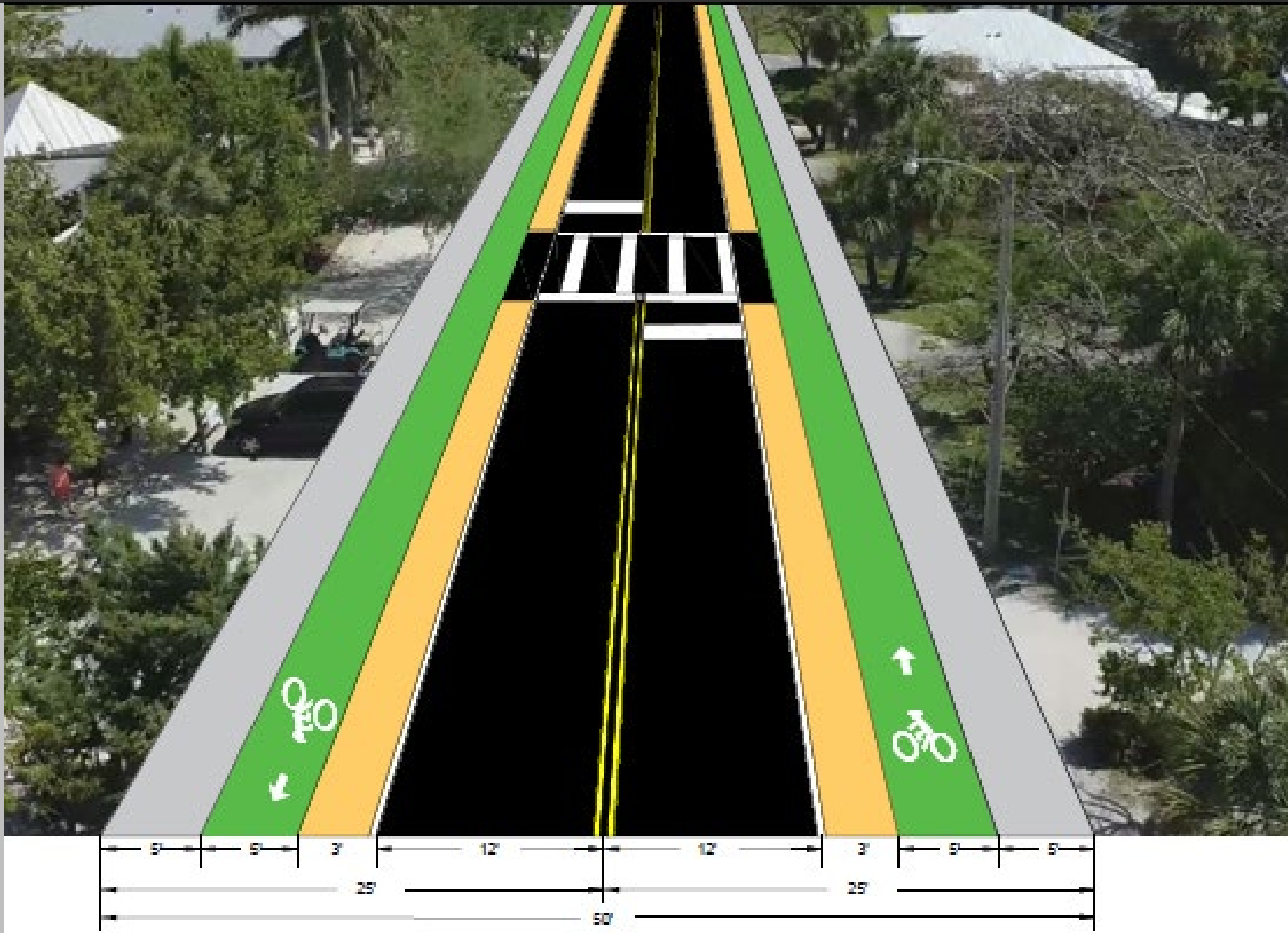
- **PROS**

- 1. Less initial cost**
- 2. Less disruption to businesses**
- 3. Fastest Implementation time**

- **CONS**

- 1. Does not solve the other issues with parking and deliveries**
- 2. No provisions for Pedestrians (Gaps in Sidewalks)**
- 3. Safety Concern for Bicyclist and Motorist**
- 4. Doesn't solve the issue of sight distance at driveways**

ALTERNATIVES #2



Add Buffered Bike Lanes and Sidewalks on Both Sides & Ped Crosswalks

ALTERNATIVES #2



Add Buffered Bike Lanes and Sidewalks on Both Sides & Ped Crosswalks

ALTERNATIVE #2 – Same as #1 plus adding buffered bike lanes and Sidewalks

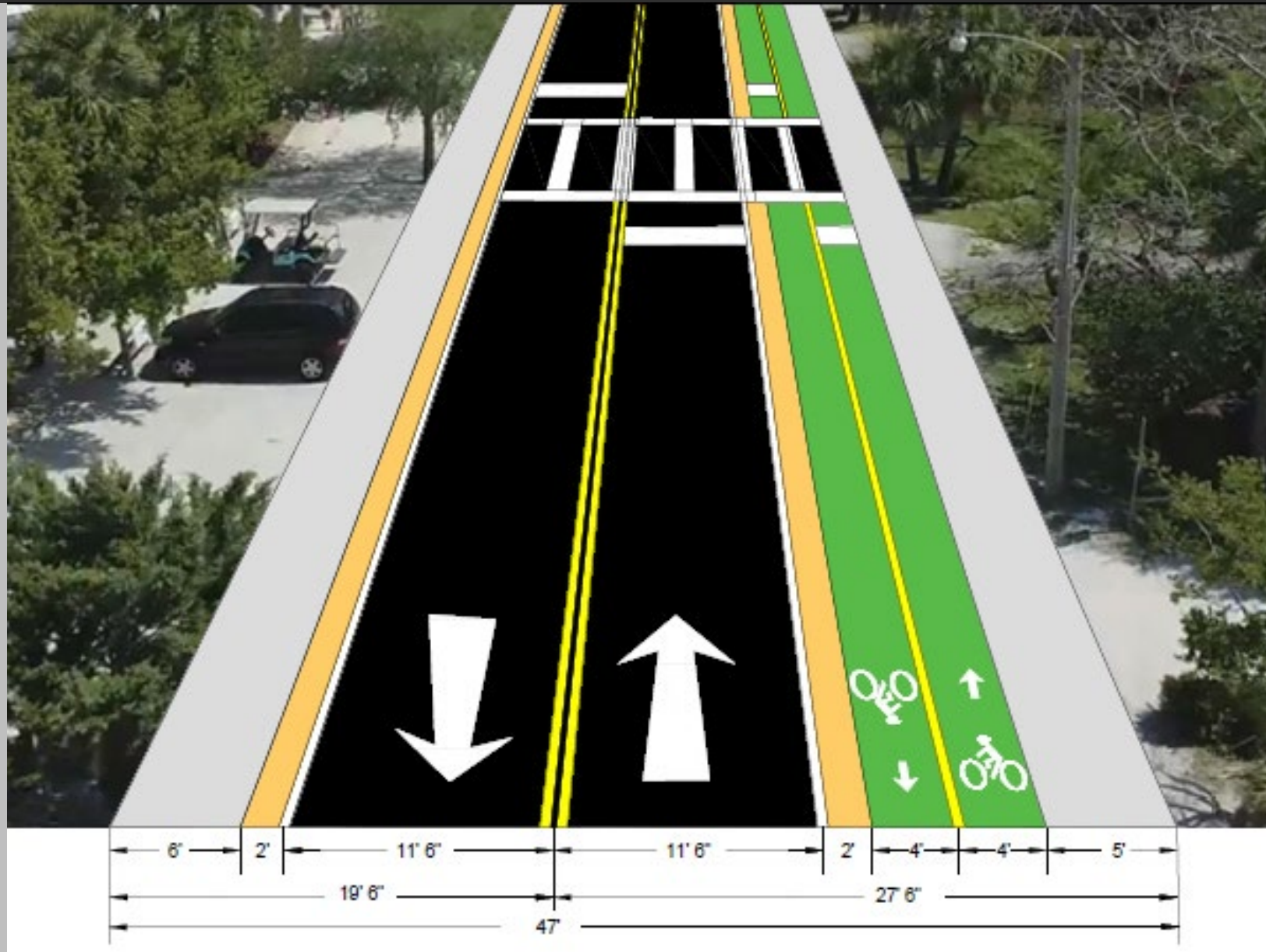
- **PROS**

1. Provides a separate facility for Bicyclists
2. Improved safety for Pedestrians by providing a continuous sidewalk.
3. Improved safety for Bicyclist by providing a buffer between vehicles and bicyclists.
4. Can increase the use of bicycles resulting in less congestion
5. Potential for additional water quality treatment through the use of permeable concrete for bike lane and sidewalk.
6. Can improve sight distance by eliminating parking too close to driveways

- **CONS**

1. Will Eliminate existing on-street parking
2. The use of permeable concrete can increase construction cost by 40 to 60%
3. Conflicts with multiple driveways on both sides of the road.

ALTERNATIVES #3



Add Multi-use Path, Sidewalks on Both Sides & Ped Crosswalks

ALTERNATIVES #3



Add Multi-use Path, Sidewalks on Both Sides & Ped Crosswalks

ALTERNATIVE #2 – Same as #1 plus adding buffered bike lanes and Sidewalks

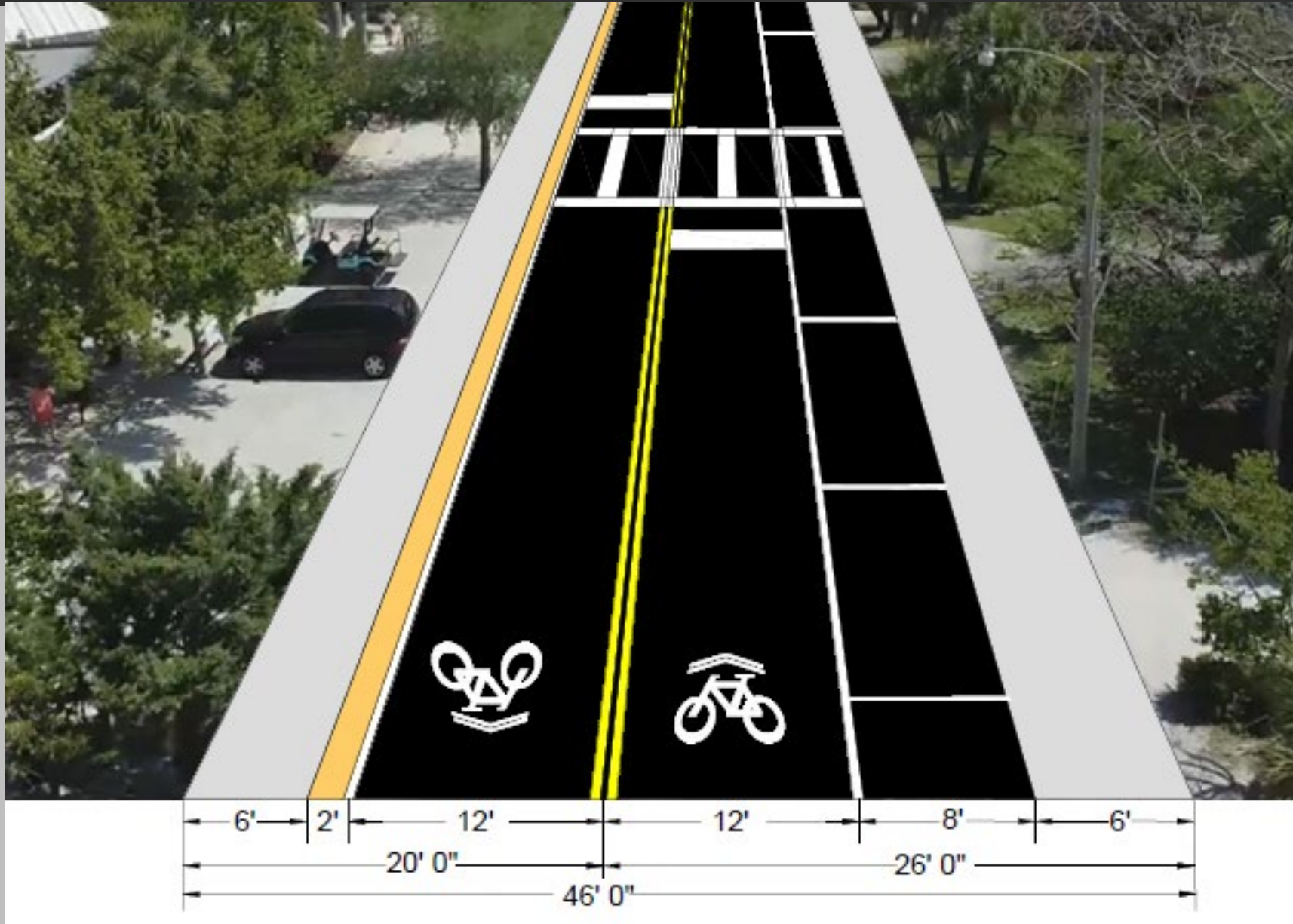
- **PROS**

1. Provides a separate facility for Bicyclists
2. Improved safety for Pedestrians by providing a continuous sidewalk.
3. Improved safety for Bicyclist by providing a buffer between vehicles and bicyclists.
4. Can increase the use of bicycles resulting in less congestion
5. Potential for additional water quality treatment through the use of permeable concrete for bike lane and sidewalk.
6. Reduces conflicts with multiple driveways and helps with sight distance

- **CONS**

1. Will Eliminate existing on-street parking
2. The use of permeable concrete can increase construction cost by 40 to 60%

ALTERNATIVES #4



Add On-Street Parking/Delivery Area, Sidewalks on Both Sides & Ped Crosswalks

ALTERNATIVES #4



Add On-Street Parking/Delivery Area, Sidewalks on Both Sides & Ped Crosswalks

ALTERNATIVE #4 – Add on-street parking/delivery parking, sidewalk and ped crossings

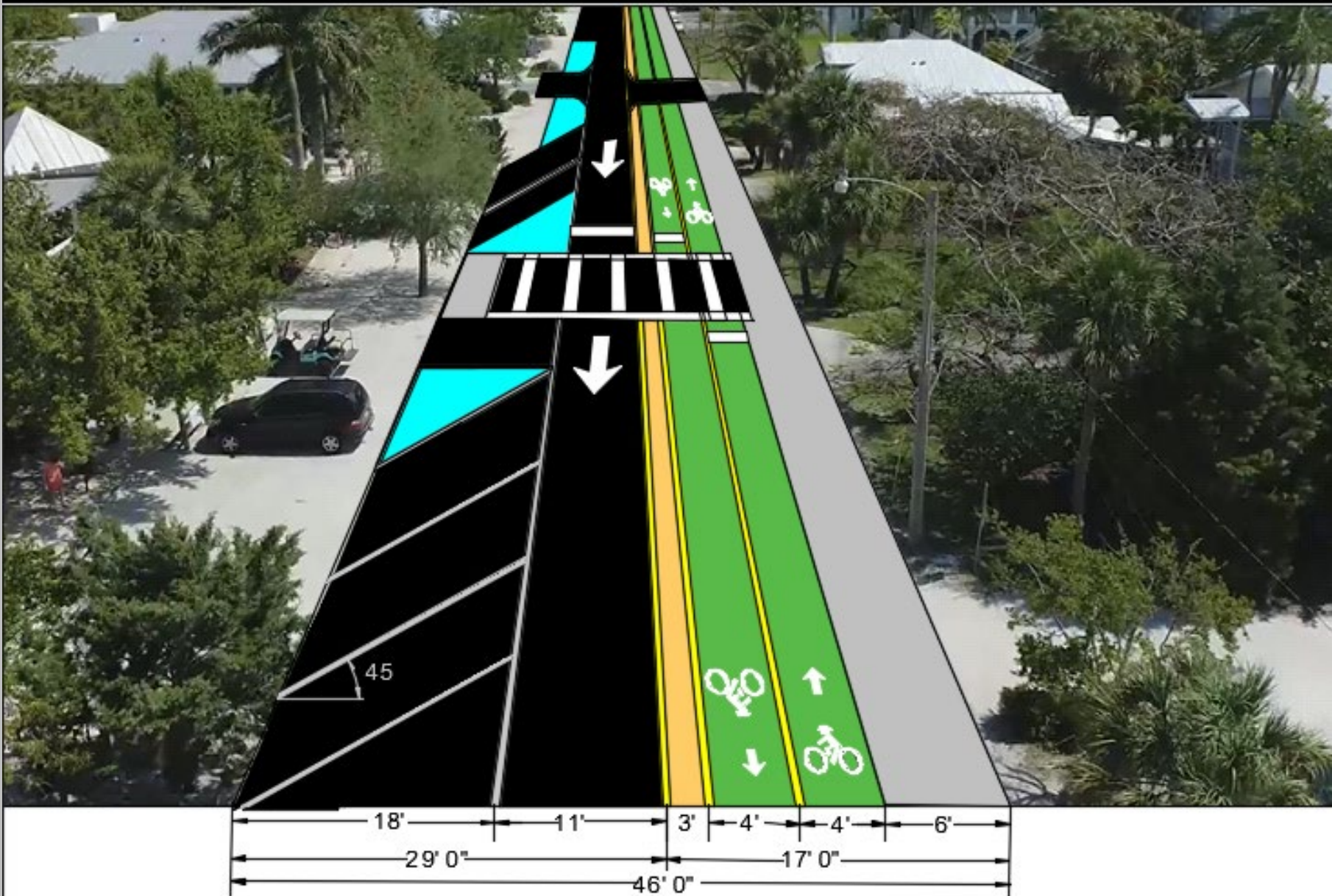
- **PROS**

1. Provides on-street parking
2. Provides area for delivery vehicles to park out of the travel lane.
3. Potential for additional water quality treatment through the use of permeable concrete for bike lane and sidewalk.
4. Improved safety for Pedestrians by providing a continuous sidewalk
5. Improves sight distance by prohibiting parking close to driveways.

- **CONS**

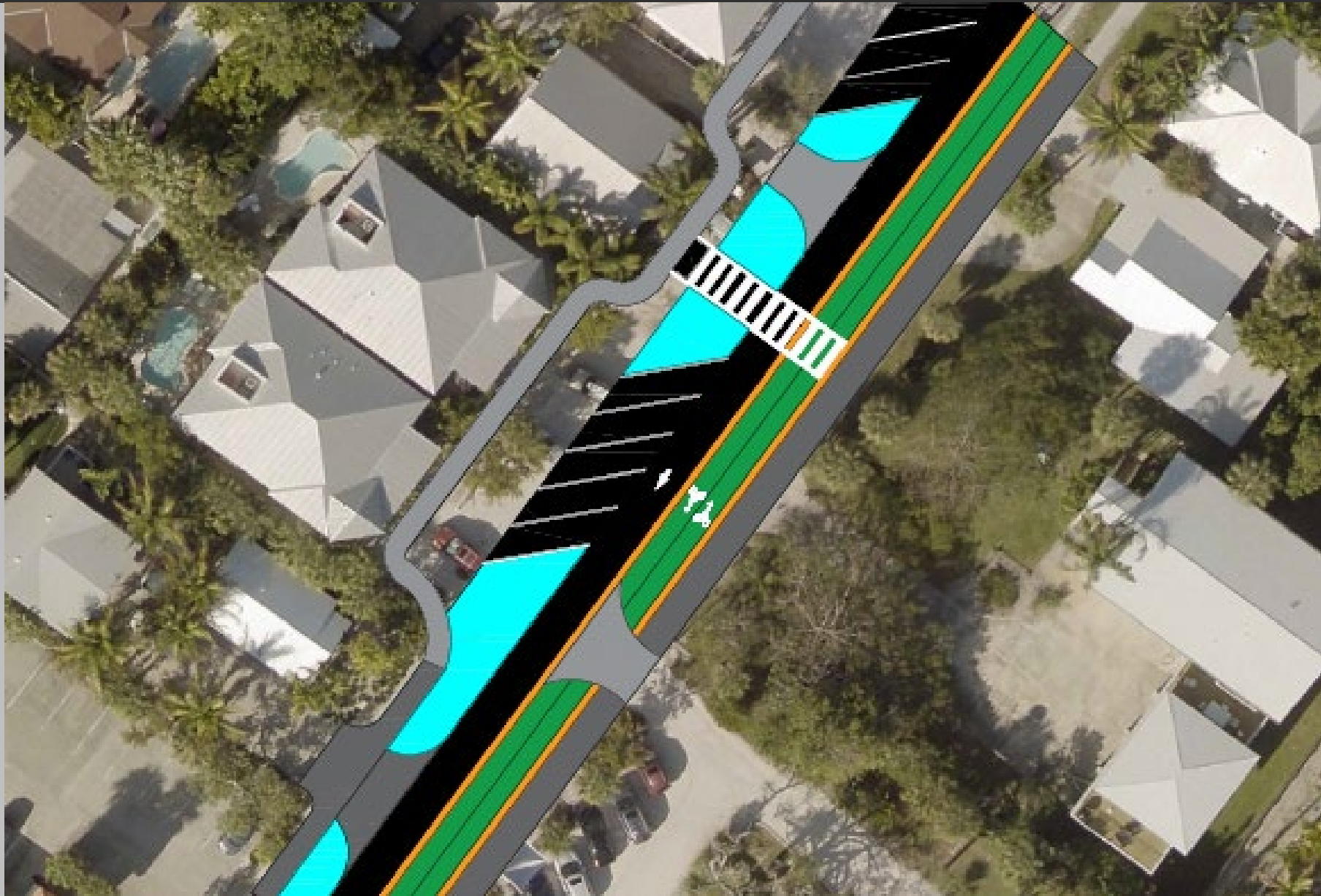
1. Will not provide a separate facility for bicycles
2. May limit the use of bicycles

ALTERNATIVES 5A



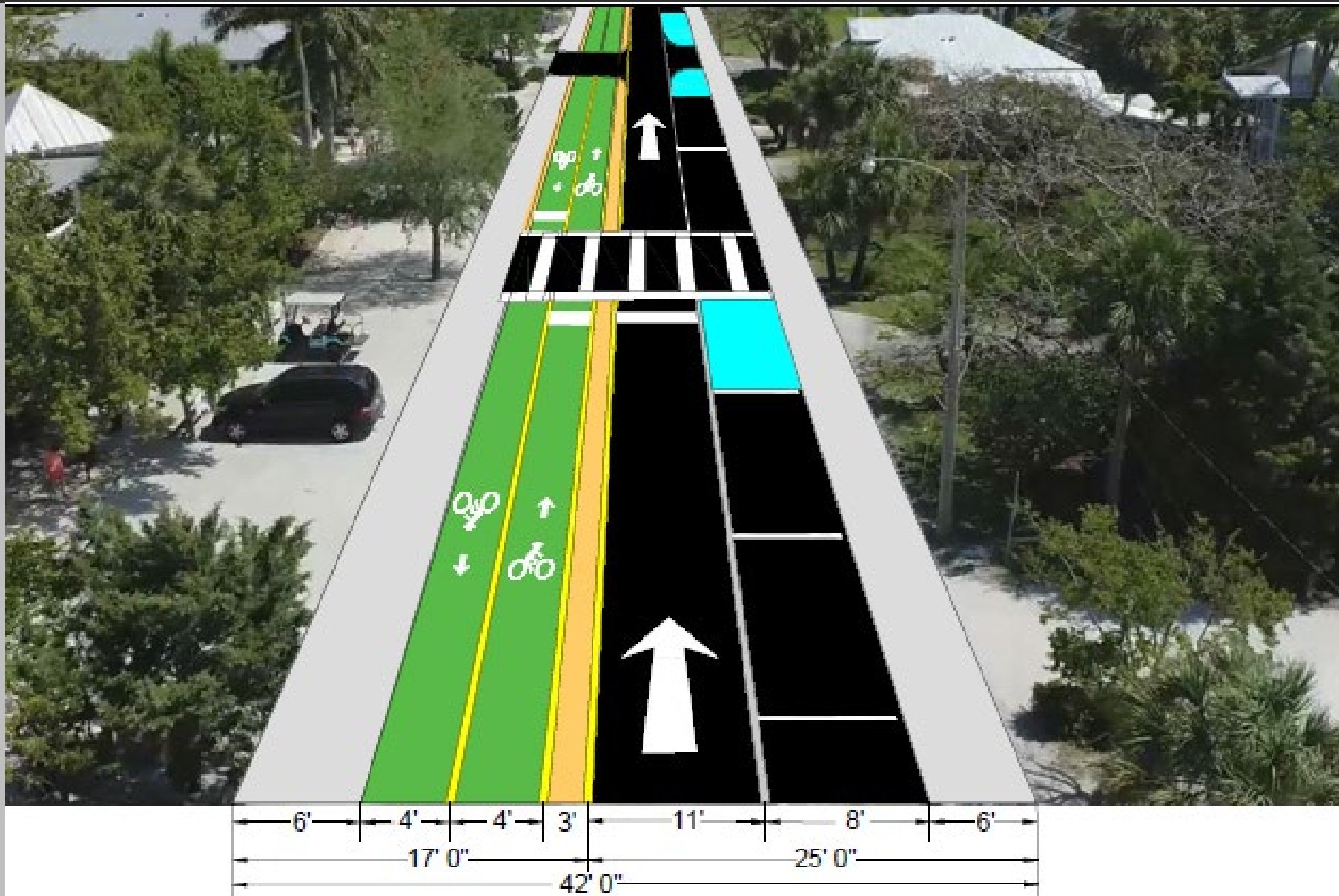
Convert Pine Avenue and Magnolia Avenue as one-way streets, with Sidewalks, On-Street Parking/Delivery, Multi-use Path & Ped Crosswalks

ALTERNATIVES 5A



Convert Pine Avenue and Magnolia Avenue as one-way streets, with Sidewalks, On-Street Parking/Delivery, Multi-use Path & Ped Crosswalks

ALTERNATIVES 5B



Convert Pine Avenue as one-way street, Sidewalks, On-Street Parking/Delivery, Multi-use Path & Ped Crosswalks

ALTERNATIVE #5 – Same as #1 plus adding buffered bike lanes and Sidewalks

- **PROS**

1. Provides a separate facility for Bicyclists
2. Improved safety for Pedestrians by providing a continuous sidewalk.
3. Improved safety for Bicyclist by providing a buffer between vehicles and bicyclists.
4. Can increase the use of bicycles resulting in less congestion
5. Potential for additional water quality treatment through the use of permeable concrete for bike lane and sidewalk.
6. Provides on Street Parking
7. Potential signalization of Magnolia at Gulf Drive

- **CONS**

1. The use of permeable concrete can increase construction cost by 40 to 60%
2. Can increase traffic on other roadway network facilities
3. Can increase the operating speed of the one-way street

OPINION OF PROBABLE COST

OPINION OF PROBABLE COST

Alternative #1; Pavement Marking and Pedestrian Crosswalks

- All new and existing ped crossings at mid-block locations with rectangular rapid flashing beacons (RRFBs)

Pine Avenue – New proposed Crossings – 2, existing crossings – 5	\$85,000.00
Spring Avenue – New proposed Crossings -4 , existing crossing – 1	\$45,000.00
Magnolia Avenue – New proposed Crossings – 4, existing crossing – 1	\$45,000.00

OPINION OF PROBABLE COST

Alternative #2; Add buffered Bike Lanes, Sidewalks and Pedestrian Crosswalks

- For the Bike Lanes and Sidewalk, it was assumed a permeable concrete surface for water quality and infiltration**

Pine Avenue – Bike lanes on both sides, sidewalk gaps	\$524,630
Spring Avenue – Sharrow Markings, Sidewalk gaps	\$152,353
Magnolia Avenue – Bike lanes on both sides, sidewalk gaps	\$832,646
Magnolia Avenue – Sharrow Marking, Sidewalk gaps	\$391,424

OPINION OF PROBABLE COST

Alternative #3; Add Multi-use Path, Sidewalks on Both Sides & Ped Crosswalks

- For the Bike Lanes and Sidewalk, it was assumed a permeable concrete surface for water quality and infiltration**

Pine Avenue – Multi-use trail, sidewalk gaps	\$433,895
Spring Avenue – Sharrow Markings, Sidewalk gaps	\$152,353
Magnolia Avenue – Multi-use trail, sidewalk gaps	\$741,911
Magnolia Avenue – Sharrow Marking, Sidewalk gaps	\$391,424

OPINION OF PROBABLE COST

Alternative #4; Add On-Street Parking/Delivery Area, Sidewalks on Both Sides & Ped Crosswalks

- For the on-street parking, it was assumed a permeable concrete surface for water quality and infiltration**

Pine Avenue – Multi-use trail, sidewalk gaps \$645,610

Spring Avenue – Sharrow Markings, Sidewalk gaps \$152,353

Magnolia Avenue – Multi-use trail, sidewalk gaps \$829,240

Magnolia Avenue – Sharrow Marking, Sidewalk gaps \$391,424

OPINION OF PROBABLE COST

Alternative #5; One-way street, Sidewalks, On-Street Parking/Delivery, Multi-use Path & Ped Crosswalks

- On street parking, multi-use trail, and sidewalks assumed permeable concrete surface for water quality and infiltration**

**Pine Avenue – On Street Parking, Multi-use trail,
sidewalk gaps, Pedestrian Crosswalks** **\$978,305**

**Magnolia Avenue – On Street Parking, Multi-use trail,
sidewalk gaps, Pedestrian Crosswalks** **\$1,286,321**

IMPLEMENTATION SCHEDULE

IMPLEMENTATION SCHEDULE

Alternative #1; Pavement Marking and Pedestrian Crosswalks

- **Design & Permitting - 2 -3 months**
- **Construction – 4 months after design**

Alternative #2; Add buffered Bike Lanes, Sidewalks and Pedestrian Crosswalks

- **Design & Permitting - 6 to 8 months**
- **Construction – 12 to 16 months after design**

IMPLEMENTATION SCHEDULE

Alternative #3; Add Multi-use Path, Sidewalks on Both Sides & Ped Crosswalks

- **Design & Permitting - 8 - 12 months**
- **Construction – 18 - 24 months after design**

Alternative #4; Add On-Street Parking/Delivery Area, Sidewalks on Both Sides & Ped Crosswalks

- **Design & Permitting - 8 - 12 months**
- **Construction – 18 - 24 months after design**

IMPLEMENTATION SCHEDULE

Alternative #5; as one-way street, Sidewalks, On-Street Parking/Delivery, Multi-use Path & Ped Crosswalks

- **Design & Permitting - 8 - 12 months**
- **Construction – 18 - 24 months after design**

POTENTIAL FUNDING SOURCES

POTENTIAL FUNDING SOURCES

SARASOTA-MANATEE METROPOLITAN PLANNING ORGANIZATION (MPO)

- **Safety Grants/Active Transportation Plan Projects**
- **Resiliency**

FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT)

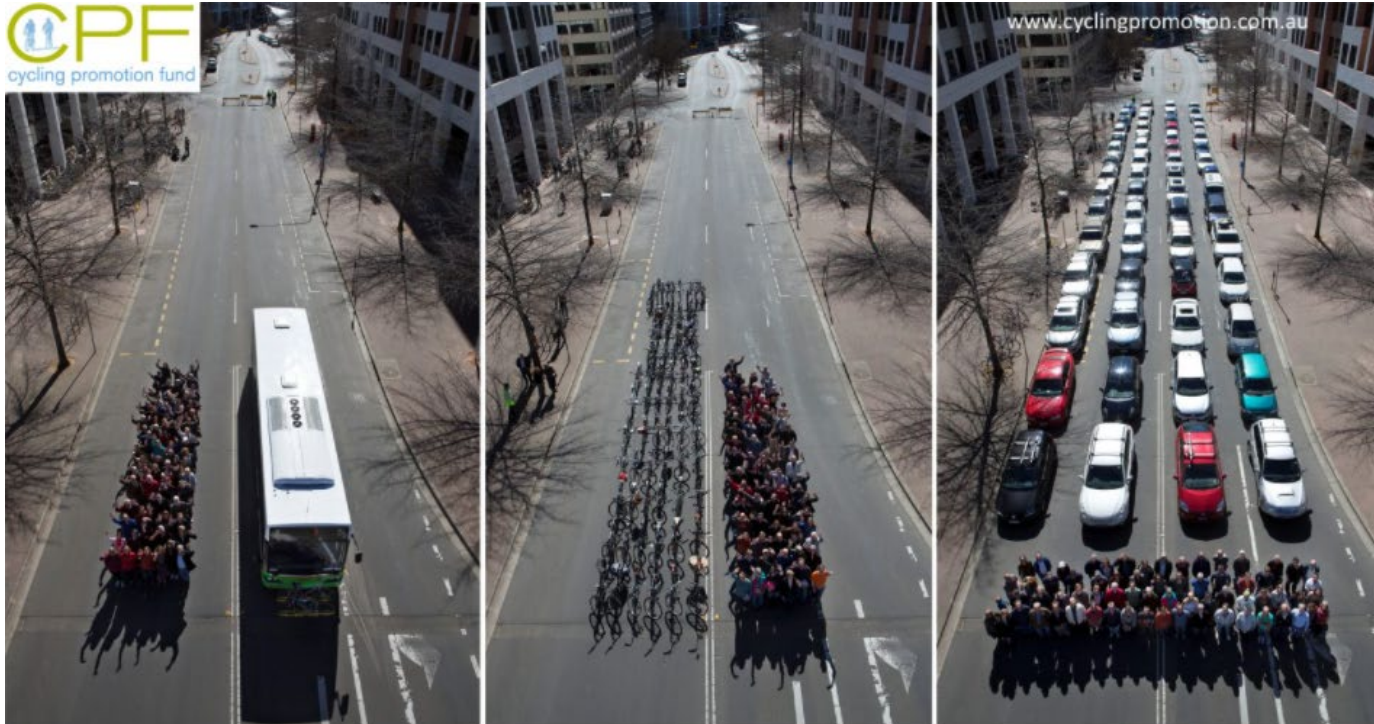
- **Traffic Safety Management and Operations (TSMO)**
- **Safety Improvements**

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD)

- **Water Quality Grants**

FINAL CONSIDERATIONS

- How the City wants to move people and goods?
- Does the City want to be a more walkable community?
- Need to find a balance between mobility, safety and economic development
- There are unique challenges but also unique opportunities to really “Reimagine Pine Avenue”



- Space required to move 48 people with Transit, Bikes and Cars.

Thank You

Gerardo Traverso, PE
VP Engineering / Transportation
Phone: 813.732.1122