



# AGENDA BPAC

**Bicycle Pedestrian Advisory Committee**  
**Collier County Growth Management Department**  
**Conference Rooms 609/610**  
**2800 North Horseshoe Drive**  
**Naples, FL 34104**  
**February 20, 2018**  
**9:00 a.m.**

1. **Call to Order**
2. **Roll Call**
3. **Approval of Agenda**
4. **Approval of the December 19, 2017 Meeting Minutes**
5. **Open to the Public for Comment on Items not on the Agenda**
6. **Agency Updates**
  - A. FDOT
  - B. MPO
  - C. Collier County
  - D. City of Naples
  - E. City of Marco Island
7. **Committee Action**
  - A. Election of Chair and Vice-Chair
8. **Reports & Presentations (May Require Committee Action)**
  - A. Update on the Bicycle & Pedestrian Master Plan
9. **Member Comments**
10. **Distribution Items**
  - A. FDOT Safety Performance Measures Targets
  - B. FDOT US41 Road Safety Audit (RSA)
  - C. Update on CAT Fare Analysis Study
  - D. Update on the FY2019 – FY2020 UPWP
11. **Next Meeting Date**

March 20, 2018 – 9:00 a.m. – Collier County Growth Management Department Conference Rooms 609/610
12. **Adjournment**

**PLEASE NOTE:**

*This meeting of the Bicycle & Pathways Advisory Committee (BPAC) to the Collier Metropolitan Planning Organization (MPO) is open to the public and citizen input is encouraged. Any person wishing to speak on any scheduled item may do so upon recognition by the Chairperson. Any person desiring to have an item placed on the agenda shall make a request in writing, with a description and summary of the item, to the MPO Executive Director 14 days prior to the date of the next scheduled meeting of the BPAC. Any person who decides to appeal a decision of this Committee will need a record of the proceedings pertaining thereto, and therefore may need to ensure that a verbatim record of the proceeding is made, which record includes the testimony and evidence upon which the appeal is to be based. In accordance with the Americans with Disabilities Act, any person requiring special accommodations to participate in this meeting should contact the Collier Metropolitan Planning Organization 72 hours prior to the meeting by calling (239) 252-5804. The MPO's planning process is conducted in accordance with Title VI of the Civil Rights Act of 1964 and Related Statutes. Any person or beneficiary who believes that within the MPO's planning process they have been discriminated against because of race, color, religion, sex, age, national origin, disability, or familial status may file a complaint with the Collier MPO by calling Ms. Anne McLaughlin at (239) 252-5884 or by writing to her at 2885 South Horseshoe Dr., Naples, FL 34104.*

**PATHWAYS ADVISORY COMMITTEE  
of the  
COLLIER METROPOLITAN PLANNING ORGANIZATION  
Collier County Growth Management Division  
Conference Rooms 609 & 610  
2800 North Horseshoe Drive  
Naples, FL 34104  
9:00 a.m.**

**December 19, 2017 Meeting Minutes**

**1. Call to Order**

Mr. Bonness called the meeting to order at approximately 9 a.m.

**2. Roll Call**

Ms. Gonzalez called the roll and confirmed that a quorum was present. Mr. Bonness asked that members introduce themselves, as there were several new members on the committee.

**Members Present**

Joe Bonness, At-Large  
Andrea Halman, At-Large  
Joe Adams, At-Large  
Wendy Olson, At-Large  
Jane Cheffy, At-Large  
Dayna Fendrick, At-Large  
Alan Musico, At-Large  
Dr. Mort Friedman, At-Large  
Reginald Wilson, At-Large

**Members Absent**

Victor Ordija, At-Large

**MPO Staff**

Eric Ortman, MPO Senior Planner  
Gabielle Gonzalez, MPO Admin. Secretary

**Others Present**

David Agacinski, FDOT  
Claudia Keeler  
Mr. Keeler  
Lorraine Lantz, CCTP

**3. Approval of Agenda**

Mr. Bonness requested that item 10A be moved up in the agenda as there was a member of the public present that wanted to speak under that item.

**Ms. Fendrick:** **I move to approve the agenda as amended; moving item 10A up.**

**Mr. Musico:** **I second the motion.**

**THE MOTION CARRIED UNANIMOUSLY.**

**4. Approval of the August 15, 2017 Meeting Minutes**

Ms. Fendrick stated that she wanted to clarify a few of her comments from the last meeting as presented in the minutes. She quoted the top paragraph of page five in the August minutes: "Ms. Fendrick stated that privous MPO staff had informed the committee that the crash data available during the development of the 2012 plan was not usable so the Committee discussed where each of them rode and saw safety issues." Ms. Fendrick stated that she wanted to make it clear that the crash data was not available and an earlier comment made by Ms. McLaughlin implied that the safety data was rejected by the committee and over ridden with their own opinions (last paragraph of page 4).

Mr. Ortman stated that Ms. Fendrick could not change someone else's statements in the minutes. Ms. Fendrick stated that she wanted to clarify that the crash data was determined to be lacking by staff and not by the committee. She stated that the committee did not have good crash data to work with.

Mr. Musico also wanted to clarify some of his comments. He stated that his comment was not that crash data was secondary but that looking at the location of the crash does not necessarily identify an area where problems lied. However, to understand the remedial action necessary, each crash needed to be analyzed separately and then solutions could be looked at. Mr. Musico reiterated that his point was not that safety was secondary but that crashes needed to be drilled down upon in order to identify corrective actions.

Ms. Gonzalez stated that she was uncomfortable with members making changes to explain what they meant to say when the minutes reflected what they actually said. She deferred to Mr. Ortman for how to proceed with this.

Mr. Ortman stated that minutes are not verbatim and they simply capture the essence of the conversation. He stated that lately there has been an uneasiness between certain staff and committee members, and disagreements on the 2012 Comprehensive Pathways Plan. Mr. Ortman stated that everyone involved could likely admit that there are some weaknesses with the 2012 plan. He encouraged the committee to try to move forward with the new plan being developed. Mr. Ortman went on stating that though the minutes may not capture exactly what the members were currently saying he believed that the speaker's intent had been captured.

Mr. Musico stated that he was objecting to the word "secondary."

Discussion ensued amongst committee members and staff. Mr. Adams stated that perhaps the comments made should be captured in this meetings minutes. He stated that moving forward the committee should decide on how to act on data presented for the development of the master plan. Mr. Adams also stated that he understood the committee members' frustration as they had put in a lot of work to develop the old plan however, he did not think the past could be changed. Mr. Ortman stated that staff is spending a lot of time looking at the data for the development of the new plan. He stated that considering each individual crash report takes up many hours and that this plan would identify the number of crashes at a particular location which would then require further consideration.

Ms. Cheffy stated that the committee had done an in-depth study of the Airport Pulling Road area and she wanted to know if that report would be part of the new plan. Mr. Ortman stated that there is roughly \$600,000 of safety funds being used as a result of that safety audit. He stated that exact treatments for the area have yet to be decided but the report was being used and would also be included by reference into the new Bicycle & Pedestrian Master Plan.

Mr. Bonness stated that the minutes still needed approval. He suggested adding the comments as a footnote. Mr. Ortman stated that the corrections would be made to the previous minutes. Mr. Bonness entertained a motion to approve the minutes with the additions.

**Dr. Friedman:**                      **I move to approve.**

**Ms. Halman:**                      **I second the motion.**

**THE MOTION CARRIED UNANIMOUSLY.**

Mr. Ortman stated that the revised minutes would be sent out by email to all members.

**5.      Open to the Public for Comment on Items not on the Agenda**

Ms. Lantz stated that Collier County was submitting one Safe Routes to School (SRTS) application for Shadowlawn Elementary. She stated that an application was put in last year for this project however, it was not awarded. Ms. Lantz stated that the application was redone and would be submitted in January.

Mr. Musico asked if there was a list of school safety teams in place that would be involved in the process. Ms. Lantz responded stating that for the previous application staff attended a Science, Technology, Engineering, Arts, and Mathematics (STEAM) meeting at the school which was not well attended. She stated that this year staff attended the school's Fall Family Festival where they were able to give a presentation and speak with parents, students, and faculty members about the project. Ms. Lantz stated that staff have also attended Student Advisory Council meetings where they were able to speak on the details of the project. Ms. Lantz stated that the project's cost has increased because the school's principle has requested additional crosswalks and flashing beacons. She added that a survey was also conducted at the Fall Family Festival and about 200 surveys were completed.

Ms. Fendrick asked if the project limits included the area where a young boy was recently hit by a car and died. Ms. Lantz stated that the area where the boy was hit is part of another school nearby.

Item 10A was moved up to this point in the agenda and public comment was taken for that item.

Ms. Claudia Keeler, Palm River Estates, stated that the community has approximately 1,900 doors and many children. Lacking sidewalks, everyone must either walk across peoples' lawn or in the street. Ms. Keeler asked what sidewalks were included in the TIP project for North Naples sidewalks at various locations #4351171. Mr. Ortman stated that he would find out the exact streets and reply to Ms. Keeler. Ms. Keeler stated that she was aware that there were some planned storm water improvements planned in the neighborhood and that this might be a good time to also install sidewalks. Ms. Keeler thanked the committee for letting her speak.

There was a discussion amongst committee members on how the MPO funds sidewalk projects. Committee members recommended several different options to Ms. Keeler including starting a Municipal Service Taxing Unit (MSTU) within the community and speaking with the Community Traffic Safety Team (CTST) to see if any fixes could be done. Committee members also encouraged Ms. Keeler to keep attending MPO committee meetings and speaking on this issue.

**6. Agency Updates**

A. FDOT

Mr. Agacinski stated that the Suntrail application entry closed the Friday before the BPAC meeting. He stated that there was an upcoming Florida Greenways and Trails Council in January to approve the priority and opportunity trails map.

B. MPO

Mr. Ortman stated that he would be the staff liaison for the committee. He stated that the committee's name has been changed to Bicycle Pedestrian Advisory Committee and the Comprehensive Pathways Plan's name was also changed to the Bicycle & Pedestrian Master Plan. These changes were made to make clarify the committee's and plan's purpose.

C. Collier County

D. City of Naples

E. City of Marco Island

No updates were provided from Collier County, City of Naples, or the City of Marco Island.

**7. Committee Action**

None.

**8. Reports and Presentations (May Require Committee Action)**

A. Update on the Development of the Collier MPO Bicycle & Pedestrian Master Plan

Mr. Ortman stated that a kickoff meeting was held on October 30<sup>th</sup> with the stakeholder group and all MPO committee members who wished to join. Mr. Ortman stated that there was a lot of good input received and the consultant was in the process of compiling the input. He stated that there is a page on the CollierMPO.com website dedicated to the Master Plan with a survey and interactive map along with other documents pertaining the Master Plan. Mr. Ortman stated that there would be a public meeting on January 17<sup>th</sup> at Veterans Community Park from 5-7 p.m. Mr. Ortman informed the committee that their normally scheduled January meeting would be cancelled as the MPO had yet to receive much product from the consultant. He stated that the next meeting would be held on their normal date in February where they'd discuss the outcomes of the public meeting and next steps in the development of the master plan.

There was a discussion amongst members and staff concerning various ways to reach out to the public and get their input. Topics discussed included social media, MSTUs, and attending farmer's markets and other locations where the public can be reached. Mr. Ortman stated that staff was filtering the information through the County's Facebook sight. He added that he was distributing information to the MSTUs and that staff planned on getting out to various locations and public meetings throughout the county to disseminate information and receive the public's input.

Ms. Fendrick asked if the committee would be seeing the RSA report that was done for the Airport/41 area. Mr. Ortman stated that there was an updated draft being developed with potential recommendations to improve safety in the corridor. He stated that the draft report should be available in January.

Ms. Lantz asked if the interactive map on the website was based on the existing facilities map that was recently approved. She also asked if MPO staff was looking for comments on where facilities can be added or corrections to existing facilities on the map. Mr. Ortman stated that the interactive map was in fact a rendition of the facilities map. He stated that folks can leave any sort of comment they'd like and gave the committee a brief overview of how to use the interactive map. Ms. Lantz pointed out that the facilities map does not include any of the local roads so people may leave comments on the interactive map pertaining to facilities that are already in existence but not shown on the interactive map. Mr. Ortman stated that the map became too cluttered when local roads were included; that the study was focused on collectors and arterials; and that any comments on local roads would be included as part of the public comment.

Committee members further discussed various ways to reach out to the public. Mr. Musico stated that he was in favor of a more face-to-face forum to receive comments from the public. Mr. Ortman stated that the online tools were in addition to other forms of public outreach including face-to-face appearances. Mr. Ortman stated that it would be difficult to manage it all but staff would work through it. Committee members suggested that they can go out and attend farmers markets to assist the MPO staff in this endeavor. They discussed various forums that they could attend and how this could be done. Mr. Wilson stated that he understood that different communities had different needs and would respond to different forms of public involvement. He stated that he believed it was important for committee members to be involved with the planning and outreach of this plan especially as it related to their areas of expertise.

Ms. Lantz stated that perhaps the new Public Involvement Plan (PIP) should look at various forms of public involvement for different areas. She added that perhaps this can become a task in the UPWP to study demographics and needs of various areas throughout the county to come up with what works best for different areas. Ms. Lantz reiterated that she was concerned that the MPO would be receiving many comments that would not be useful as the map did not include local roads.

Mr. Ortman stated that he would discuss the committee's idea of members conducting public outreach with Ms. McLaughlin and bring back further information to the committee. He stated that there may be a potential sunshine law issue so staff would need to consult with the attorney as well.

#### B. Update on Tasks for the FY2018/19 – 2019/20 Unified Planning Work Program (UPWP)

Mr. Ortman stated that the MPO was working on the next UPWP and a draft would be completed in January. He stated that staff was looking for recommendations for other projects/studies that could be included. He stated that there would not be much funding leftover as the Long Range Transportation Plan would consume much of the budget. Mr. Ortman briefed the committee on what was already in the next UPWP which included:

- Transit Development Plan Major Update
- 2045 Long Range Transportation Plan (LRTP)
- Development of Systems Performance Report identified in the new Congestion Management Plan

Mr. Ortman opened the floor for comments adding that he'd note Ms. Lantz's previous comments on adding in a tailored public involvement plan.

Ms. Halman asked about doing a walkability study in Immokalee. Mr. Ortman stated that the MPO has previously done a walkability study in Immokalee and that he believed that should a walkability study be added to the UPWP it probably be done in a location that has not had a study done. Ms. Halman stated that conditions have changed in Immokalee and she thought this called for another walkability study in the area. She asked what the average cost for a walkability study was. Mr. Ortman stated that some of the previous studies were done by the County so he could not give a number for those. He stated that he believed the current one being done in Golden Gate City was around \$75,000. Mr. Bonness stated that perhaps an update to the Immokalee study could be done and that wouldn't be as expensive.

## **9. Member Comments**

Ms. Fendrick asked Mr. Wilson if he was involved with the Healthy Communities Coalition. Mr. Wilson stated that the Coalition has been rolled into the Blue Zones Built Environment Committee which focuses on policies and promoting education. He stated that anyone that was involved with the Healthy Communities Coalition can get involved with other things going on in the Health Department. Ms. Fendrick asked if Mr. Wilson was still using the email distribution list for the Coalition. Mr. Wilson responded stating that the list is no longer in use.

Ms. Fendrick asked when minutes are put up on the website. Mr. Ortman stated that they must be produced a week before the next meeting and they are just a draft until they are approved by the committee and then put up on the website. Ms. Gonzalez stated that beginning in January all meeting recordings would be uploaded to the website as well.

Ms. Fendrick stated that she had sent an email pertaining to the available strava data. Mr. Ortman stated that the consultant is using this data in the development of the master plan.

Ms. Fendrick also asked if there was any MPO funding available for resurfacing in Everglades City as their roads took a hard hit during the hurricane. Mr. Ortman stated that the current draft tentative allocates \$850,000 for sidewalks at various locations in Everglades City. He stated that the MPO was working with the Everglades City Council on where their needs are. Ms. Lantz stated that existing road maintenance was done through the County and not the MPO. She stated that there is a road maintenance schedule and she was unsure if the schedule had changed due to the hurricane.

The committee had a brief discussion on what can be done to reach out to individuals that were affected by Hurricane Irma such as a distribution list to generate information. Mr. Bonness stated that this would mostly be done through FEMA or the home owners insurance.

## **10. Distribution Items**

The items below were briefly overviewed by Mr. Ortman during the meeting. All information was included in the committee's packets.

### **A. FDOT FY19 – 23 Draft Tentative Work Program – Revised Additions, Rescheduling's, Deletions**

Mr. Ortman stated that the committee has seen this item before and this was simply a revised list. He stated that there were six pathways projects advanced from FY 2022 or 23 to FY 2019. He stated that other typo corrections were made and that the design for part of the SR-29 project was also advanced. Mr. Ortman stated that the MPO would begin development of the TIP based on the Tentative Work Program.

Ms. Fendrick asked if there would be a call for projects due to the advancement of the six pathways projects. Mr. Ortman stated that there would be no money to fund other pathways projects due to the 100% split voted on earlier in the year by the MPO Board. The split is as follows:

- 100% Pathways
- 100% CMS
- 100% Bridges
- 100% Pathways
- 100% CMS

Ms. Halman asked Ms. Lantz if the Eden Park elementary project could include 8-ft sidewalks instead of 6-ft. Ms. Lantz stated that the County could not use the SRTS funds to purchase right of way so they would be constrained. She stated that widening to 8-ft would be looked at during the design phase.

#### B. Current BPAC Membership

Mr. Musico pointed out that his new email address was not on the roster. Mr. Ortman noted the change.

#### C. 2018 MPO Meeting Schedule

#### D. Administrative Modification to the FY2018 – 22 TIP

Mr. Ortman stated that the modification was requested by FDOT to change the work summary mix. He stated that there no change to project's cost, schedule or location, and stated that there was no action to be taken on this.

#### E. Golden Gate Walkable Community Study Flyer

Mr. Ortman stated that there would be two all day events and public meetings at night at the Golden Gate Community Center on Golden Gate Parkway.

Mr. Musico stated that he believed Marco Island would be ready for a walkability study in the upcoming year as most of their master plan has been implemented. Mr. Ortman stated that if a walkability study was entertained there would be discussion as to where would be the next best location.

### 11. Next Meeting Date

February 20, 2018 at 9:00 a.m.

There was a brief discussion amongst committee members concerning the SU fund split. Mr. Musico stated that the committee should re-asses how SU funds are used.

### 12. Adjournment

With no further comments Mr. Bonness entertained a motion to adjourn the meeting at 10:57 a.m.

**Dr. Friedman:** I move to adjourn.

**Ms. Fendrick:** I second the motion.  
**THE MOTION CARRIED UNANIMOUSLY.**



**COMMITTEE ACTION**  
**ITEM 7A**

**Election of Chair and Vice-Chair**

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**OBJECTIVE:** For the Committee to elect a Chair and Vice-Chair for calendar year 2018

**CONSIDERATIONS:** The BPAC by-laws (adopted December 12, 2014) state that the Committee shall elect a Chair and Vice-Chair at the first regularly scheduled meeting of each year when a quorum is attained.

Any committee member may nominate or be nominated as Chair/Vice-Chair. Elections shall be decided by the majority vote of committee members present. The Chair and Vice-Chair shall serve a one-year term or until a successor is elected. Joe Bonness is the current Chair and Joe Adams is the current Vice-Chair.

**STAFF RECOMMENDATION:** That the Committee elect a Chair and Vice-Chair for calendar year 2018

Prepared By: Eric Ortman, MPO Senior Planner

**REPORTS AND PRESENTATIONS**  
**ITEM 8 A**

**Update on the Bicycle and Pedestrian Master Plan**

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**OBJECTIVE:** For the Committee to receive an update on, and discuss the work completed to date for the Bicycle and Pedestrian Master Plan.

**CONSIDERATIONS:** Tindale Oliver Associates will be making a presentation on the work to date. A power point of the presentation is included as **Attachment 1**.

The MPO has widened its approach to public outreach for this plan. There is an online interactive map, and surveys in English, Spanish and Creole. The map and surveys as well as all information related to the plan are available at <http://colliermmpo.com/index.aspx?page=45>. (The Creole survey is only available in hard copy.) The MPO is also presenting the plan at the Bayshore and Immokalee CRAs, visiting farmers' markets, and with the help of the Immokalee CRA, presenting the plan and surveys to the Farm Workers and Unmet Needs Coalitions. To date, more than 400 comments have been received. A majority of the comments fall into two categories; the need for increased safety and more connections. The table below lists the public outreach activities for the plan.

Event	Location	Date
Stakeholder Group Kick-off	2800 N Horseshoe Dr.	Monday, October 30
Community Open House #1	Veterans Park, Naples	Wednesday, January 17
VBR Farmers Market	Intersection of Airport & VBR	Saturday, January 27
Golden Gate Farmers Market	11725 Collier Blvd.	Sunday, February 4
Bayshore CRA	3570 Bayshore Dr.	Tuesday, February 6
Marco Island Farmers Market	Veterans Park, Marco Island	Wednesday, February 21
NCH Farmers Market	311 9 <sup>th</sup> St N, Naples	Thursday, February 22
Farm Workers Coalition	TBD in Immokalee	TBD
Unmet Needs Coalition	TBD in Immokalee	TBD
Immokalee CRA/Master Plan	TBD in Immokalee	TBD
Community Open House #1	TBD	TBD

Input from the MPO Board and committees, the Stakeholder Group, and the public as well as the current Comprehensive Pathways Plan have been used to shape a draft Vision statement, goals and objectives as shown in **Attachment 2** which also includes a comparison of the goals of the 2018, 2012 and 2006 plans.

The next major steps in the Plan development are:

1. refining and narrowing the plan's broad themes,
2. working on the plan's policy element,
3. begin working on performance measures for the plan (see **Attachment 2**), and
4. beginning work on investment focus areas and criteria for project selection.

**STAFF RECOMMENDATION:** For the Committee to receive the update on, and discuss the work completed thus far for the Bicycle and Pedestrian Master Plan.

**ATTACHMENTS:**

1. Power Point
2. Goals and Objectives

Prepared By: Eric Ortman, MPO Senior Planner



# MPO Board Update

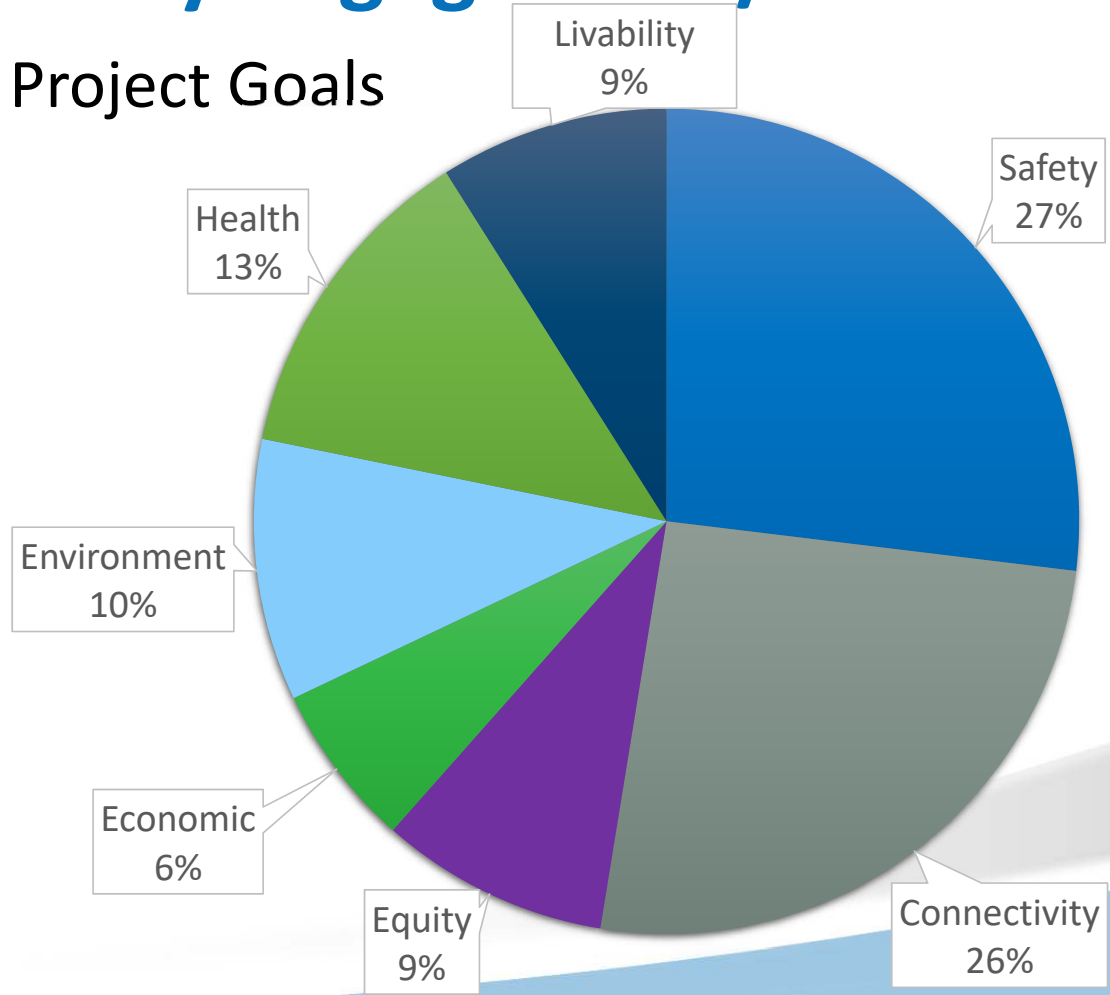
February 9, 2018

# Agenda

- Community Engagement/Public Input Review
  - WikiMap, On-line survey, Workshop, Mobile workshops
- Vision Statement Review
- Goals and objectives
- Performance Measures
- Broad Themes

# Community Engagement/Public Input Review

## Input on Project Goals



- Safety
- Connectivity
- Health
- Environment
- Equity
- Livability
- Economic

# Community Engagement/Public Input Review

## Connections:

Connect the greenways!

More east-west connections to and from the Beach  
Immokalee to the rest of the County

## Safety:

Reduce bicycle and pedestrian fatalities and injuries

# Community Engagement/Public Input Review

## Plan success?

- 5 year building plan
- Cost feasible plan
- Developers held responsible for impact on congestion and traffic
- Developers provide more pathways
- More pathways for non-motorized transportation
- Extend current greenways (Rich King)
- Boardwalks/ bikepaths to ride by the beach
- Provide more greenways
- Encourage more businesses to provide bike racks
- Allow bike access through gated communities to connect elsewhere
- Safer access for biking/walking
- More greenways and trails
- Safer areas to ride bikes with dedicated trails (i.e. rails to trails)
- Advocate for more green space (less development) so more greenways are possible
- More connected roadways, fewer huge intersections with multiple lanes to cross

## Comment topics:

Greenways

Safer Access

Developer responsibility

Connectivity

5-year plan

# Community Engagement/Public Input Review

## Plan concerns?

- Enforce traffic crossing at King Trail - people will not stop
- Build more bike paths, extend King Trail
- Extend 951/Collier Trail
- Sidepaths with all new road construction
- Map out available roadway ROW, SWFLWMD, FPL
- Put arterials in a road diet- reduce lane widths, [add] on-street parking, give up lane for bike ped
- Need policy - Complete Streets, Greenway easements, transportation enhancements
- 6-lane roads are too dangerous to cross
- On LRTP, quit starting with the assumption that all roads will end up 6-lanes
- Recreation trails very important
- Safe road crossings everywhere

### **Comment topics:**

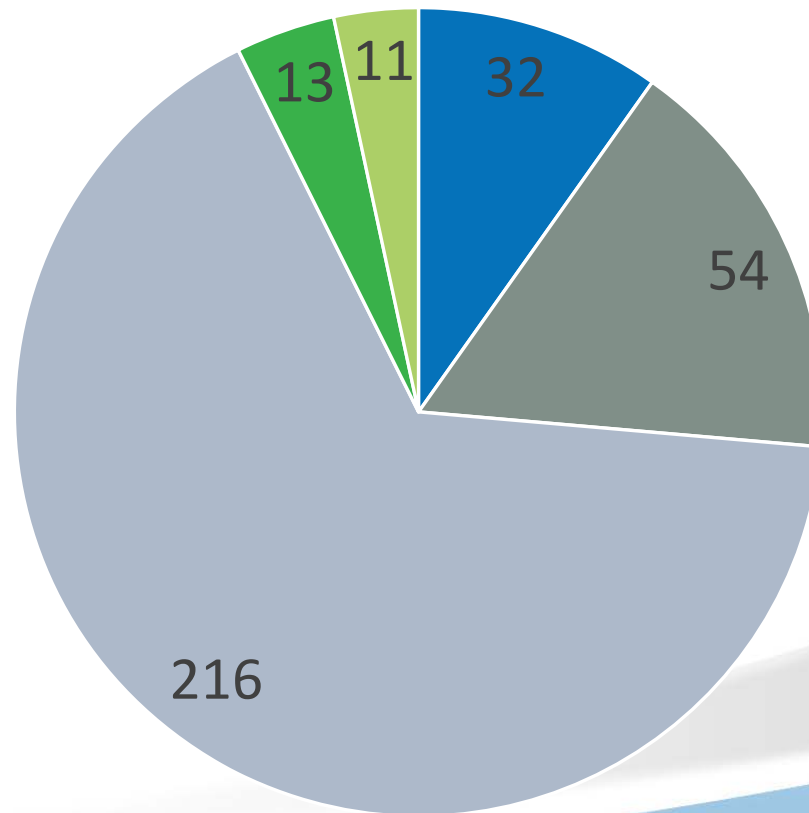
Trail/traffic crossings  
Development standards  
Roadway danger  
Greenway options  
Policy



# Community Engagement/Public Input Review

## WikiMap Comments

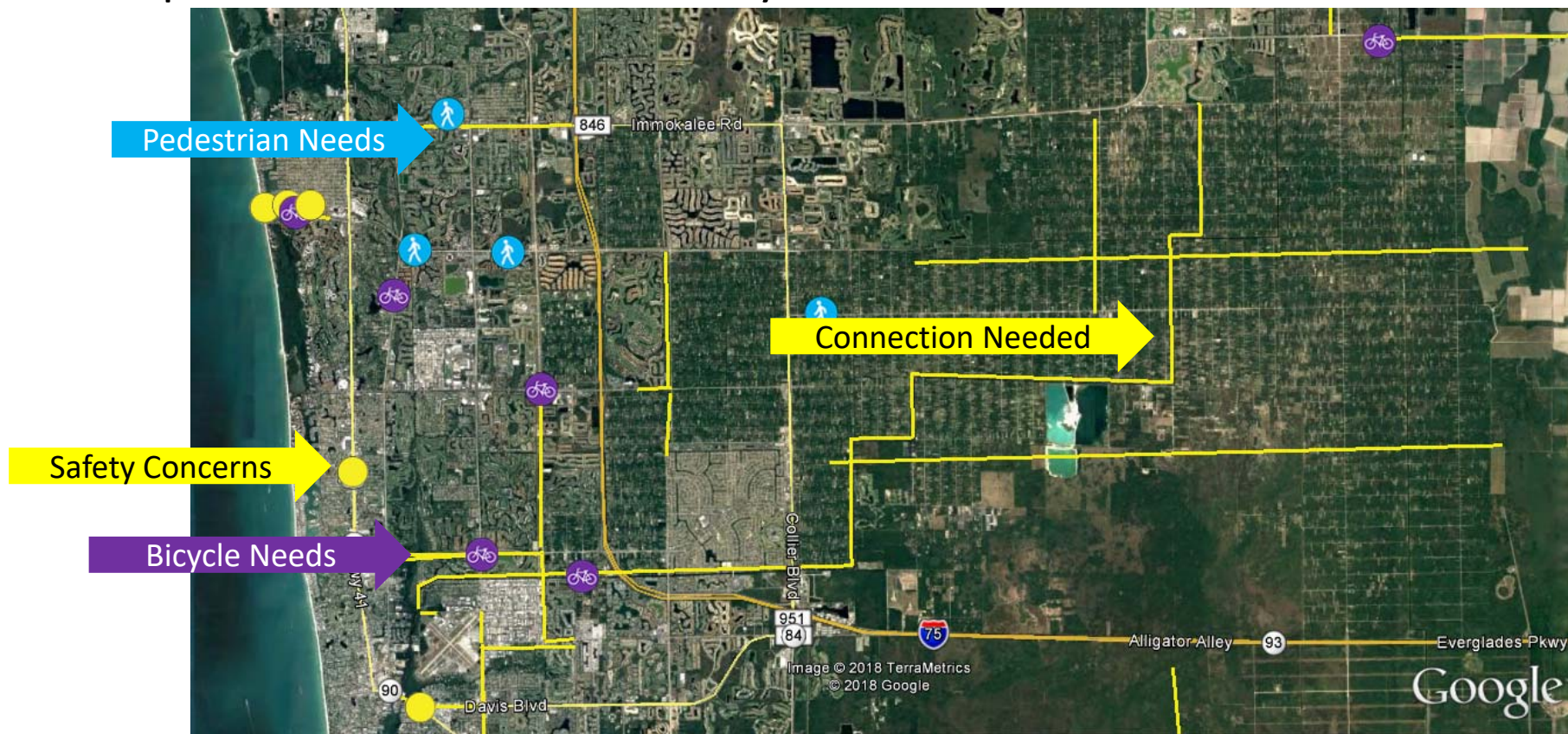
360 comments



- Bicycle Need
- Destination
- Line (i.e Connection needed)
- Pedestrian Need
- Safety Concern

# Community Engagement/Public Input Review

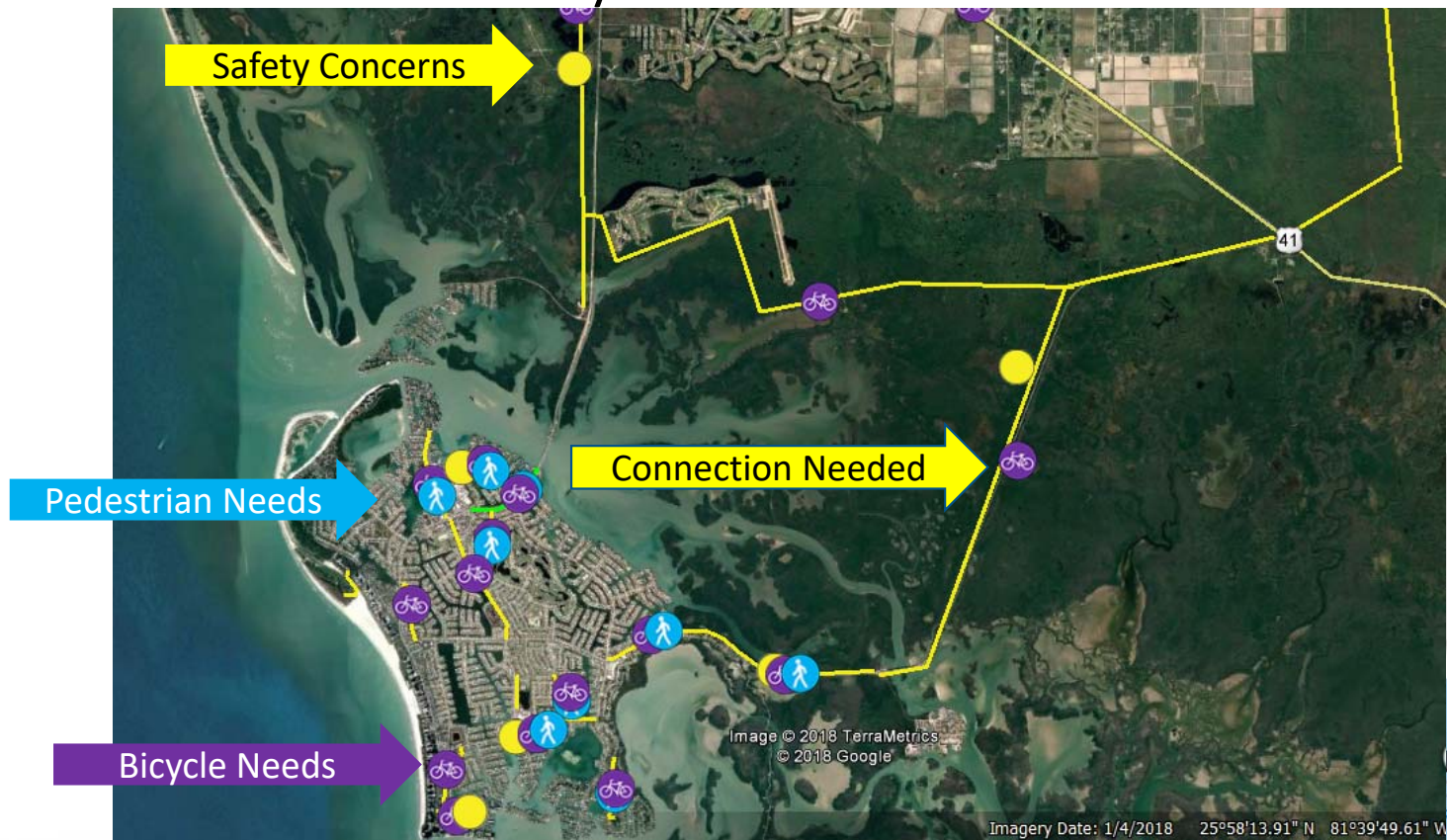
## WikiMap Comments – North County





# Community Engagement/Public Input Review

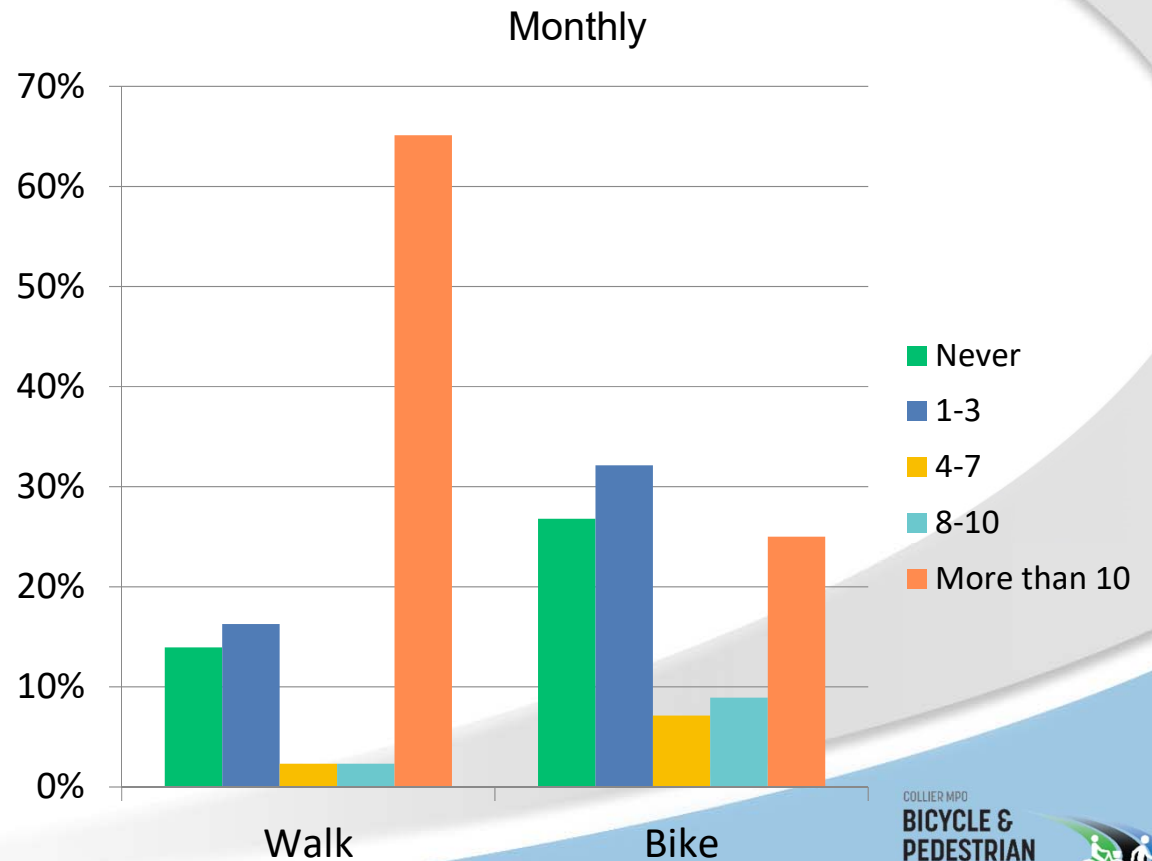
## WikiMap Comments – South County



# Community Engagement/Public Input Review

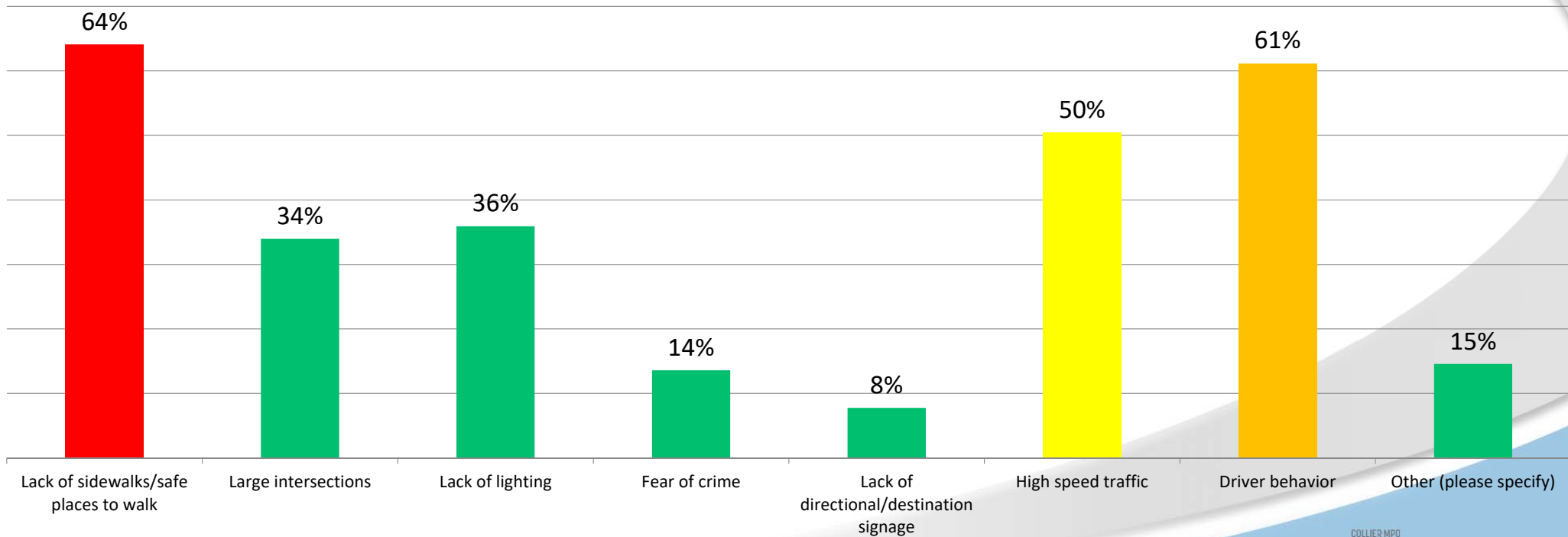
## Survey

150 responses (as of 1/19),  
including 10 from the workshop  
Open until Jan 31



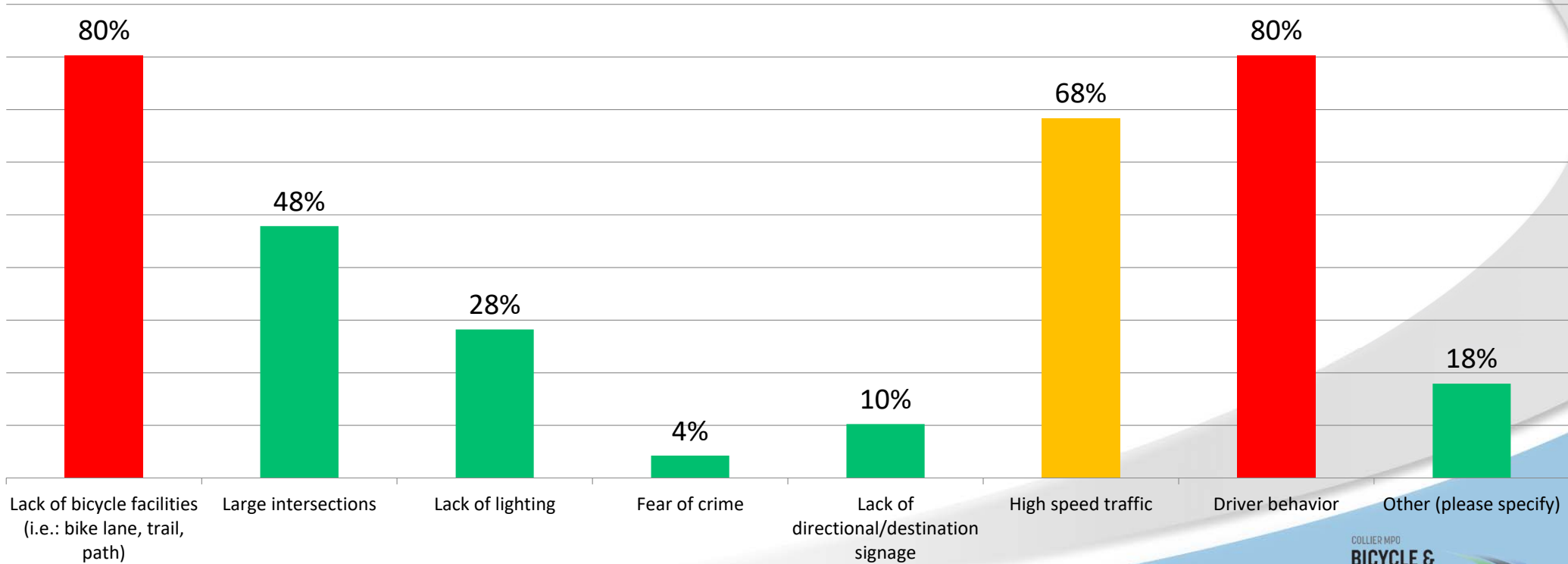
# Community Engagement/Public Input Review

If walking, what makes you feel unsafe? (Check all that apply)



# Community Engagement/Public Input Review

If biking, what makes you feel unsafe? (Check all that apply)



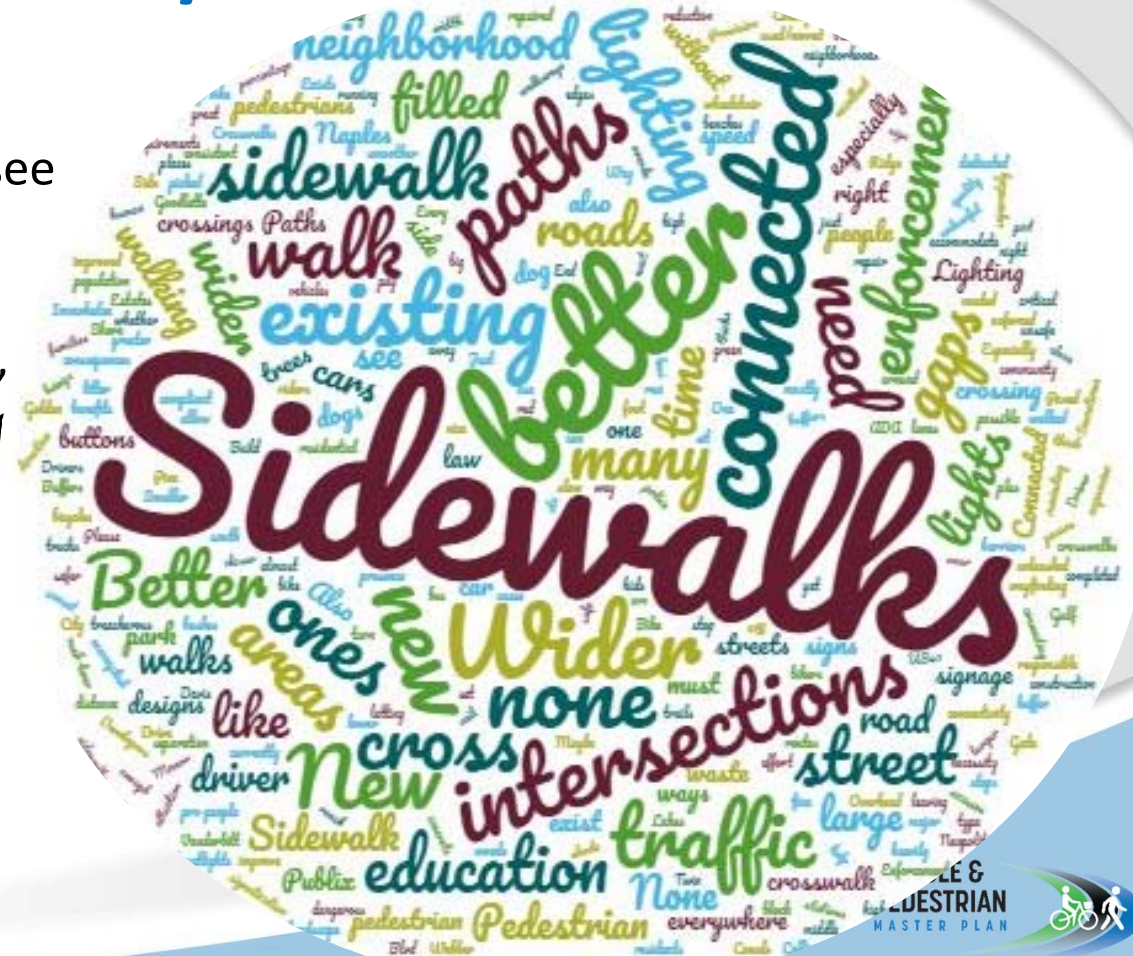




# Community Engagement/Public Input Review

What **walking support** would you like to see more of in Collier County?

(i.e.: wider sidewalks, sidewalk gaps filled, new sidewalks where there are no existing ones, more time to cross at intersections, better connected sidewalks, walker and driver education, enforcement)





# Summary of Public Comments

**safe**

**comprehensive**

**interconnected network**

**encourages and inspires**

**throughout Collier County**

**increase opportunities**

**all ages and abilities**

**enjoy**

# Vision Statement

**To provide a safe and comprehensive bicycle and pedestrian network that promotes and encourages community use and enjoyment.**

# Goals and Objectives (proposed and previous)

Proposed 2018 Plan Goals	2012 Goals	2006 Goals
<b>Safety</b> - Increase safety for people who walk and bicycle in Collier County.	Goal 2: <u>safety</u>	Goal 4: <b>safety</b>
<b>Connectivity</b> - Create a network of efficient, convenient bicycle and pedestrian facilities in Collier County.	Goal 1: <u>safe, inviting and convenient</u>	Goal 2: <b>safe, connected, and convenient</b>
	Goal 5: <u>network of off-road greenways</u>	Goal 3: <b>off-street network</b>
<b>Health</b> - Encourage health and fitness by providing a safe, convenient network of facilities for walking and biking.	Goal 4: <u>recreational and leisure</u>	Goal 1: <b>Health and Fitness</b>
<b>Environment</b> - Protect the environment by supporting mode choice		
<b>Equity/Livability</b> - Increase transportation choice and community livability through the development of an integrated multi-modal system.	Goal 6: <u>transportation efficiency and community livability</u>	Goal 5: Improve transportation <b>efficiency</b>
<b>Economy</b> - Promote tourism and economic opportunities by developing a safe, connected network of biking and walking facilities.	Goal 3: <u>tourism and economy</u>	

## Next Steps

- Complete summarization of public comment
- Coordination with local agency staff on policies
- Complete performance measures
- Finalize project evaluation criteria
- Review project identification and prioritization with committees
- Begin to identify project needs

**Thank you**

**Questions?**

## Goals, Objectives and Evaluation Criteria

Some objectives appear more than once – projects should satisfy more than one objective.

**1. Safety** Increase safety for people who walk and bicycle in Collier County

### Objectives:

- Reduce the number and severity of bicycle crashes
- Reduce the number and severity of pedestrian crashes

**2. Connectivity** Create a network of efficient, convenient bicycle and pedestrian facilities in Collier County

### Objectives:

- Provide a variety of bikeways and pedestrian facilities connected to transit
- Provide a variety of bikeways and pedestrian facilities connected to destinations (need to define)
- Fill in gaps in existing bicycle and pedestrian network

**3. Equity/livability** Increase transportation choice and community livability through the development of an integrated multi-modal system

### Objectives:

- Provide safe biking and walking conditions in areas of Collier County that are underserved/transit dependent (use EJ methodology)
- Provide a variety of bikeways and pedestrian facilities connected to destinations
- Provide a variety of bikeways and pedestrian facilities connected to transit (use TDP/TDSP data)

**4. Health** Encourage health and fitness by providing a safe, convenient network of facilities for walking and biking

Related to Connectivity

**5. Economy** Promote tourism and economic opportunities by developing a safe, connected network of biking and walking facilities

### Objectives:

- Develop bikable destinations
- Supports access to jobs
- Connections to lively pedestrian environments

**6. Environment** Protect the environment by supporting mode choice

### Objectives:

- Provided an accessible, connected network

## Comparison of Goals for 2018, 2012, 2006 Plans

Proposed 2018 Plan Goals	2012 Goals	2006 Goals
<b>Safety</b> - Increase safety for people who walk and bicycle in Collier County.	Goal 2: <u>safety</u>	Goal 4: <b>safety</b>
<b>Connectivity</b> - Create a network of efficient, convenient bicycle and pedestrian facilities in Collier County.	Goal 1: <u>safe, inviting and convenient</u>	Goal 2: <b>safe, connected, and convenient</b>
	Goal 5: <u>network of off-road greenways</u>	Goal 3: <b>off-street network</b>
<b>Health</b> - Encourage health and fitness by providing a safe, convenient network of facilities for walking and biking.	Goal 4: <u>recreational and leisure</u>	Goal 1: <b>Health and Fitness</b>
<b>Environment</b> - Protect the environment by supporting mode choice		
<b>Equity/Livability</b> - Increase transportation choice and community livability through the development of an integrated multi-modal system.	Goal 6: <u>transportation efficiency and community livability</u>	Goal 5: Improve transportation <b>efficiency</b>
<b>Economy</b> - Promote tourism and economic opportunities by developing a safe, connected network of biking and walking facilities.	Goal 3: <u>tourism and economy</u>	

### Plan Performance Measures (PM)

#### Connectivity

- PM: Miles of Shared Use Path (SUP) studied
- PM: Studied...Road Safety Audit (RSA), Bike, Sidewalks
- PM: Miles of SUP built
- PM: Bike Lane Miles built
- PM: Length of Sidewalk gaps filed that are meaningful (schools)?
- PM: Miles of sidewalk built

#### Safety

- PM: Number of areas of high bicycle crashes studied (high crash = #)
- PM: Number of recommendations from studies in high crash areas funded
- Number of projects with accepted crash reduction factors
- Reduction in number (or growth rate) of B/P crashes, injuries, fatalities

**DISTRIBUTION**  
**ITEM 10A**

**FDOT Safety Performance Measures and Targets**

---

**OBJECTIVE:** For the Committee to receive distribution of the MPO Board's February 9, 2018 adoption of the Florida Department of Transportation (FDOT) Safety Performance Measure Targets

**CONSIDERATIONS:** Safety is the first national goal identified in the Fixing America's Surface Transportation (FAST) Act. Under the Highway Safety Improvement Program and Safety Performance Management Measures Rule (Federal Register, March 2016), all Metropolitan Planning Organizations (MPOs) are required to adopt Safety Performance Targets by the end of February 2018.

FDOT has adopted "Vision Zero" targets to meet its goal of no fatalities or serious injuries for the State. MPOs have the option of adopting the State's targets or developing and adopting their own targets based on a defensible method of analysis. By adopting FDOT Vision Zero safety targets, the MPO is able to rely upon FDOT's annual reporting to the Federal Highway Administration (FHWA) on safety performance in the Statewide Transportation Improvement Program (STIP), which greatly simplifies the reporting requirements associated with the MPO's Transportation Improvement Program (TIP) and Long Range Transportation Plan (LRTP).

FDOT's Safety Performance Measures are listed below. FDOT's target for each performance measure is zero.

1. Number of Fatalities
2. Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT)
3. Number of Serious Injuries
4. Rate of Serious Injuries per 100 million VMT
5. Number of Non-motorized Fatalities and Serious Injuries

**STAFF RECOMMENDATIONS:** That the Committee receive distribution of the MPO Board's February 9, 2018 adoption of the Florida Department of Transportation (FDOT) Safety Performance Measure Targets

Prepared by: Eric Ortman, MPO Senior Planner



**DISTRIBUTION**  
**ITEM 10B**

**FDOT Draft Arterial Safety Study for US41**

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**OBJECTIVE:** For the Committee to receive the Draft FDOT Arterial Safety Study on US41.

**CONSIDERATIONS:** MPO committees and Board reviewed and commented on the original US41 Road Safety Audit (RSA) which was completed in June 2015. In response to concerns from Collier County, FDOT did a further analysis of US41 between Commercial Street and Guilford Road.

The RSA and the further analysis of US41 have resulted in FDOT programming approximately \$1,500,000 in safety funds (HSP) to implement various safety improvements on US41 between Courthouse Shadows and Davis Boulevard when the road is resurfaced. Design on the project is beginning this winter and construction is slated for FY2021.

The recommendations include adjustment of certain intersection turning radii, adjustment on median cones at certain locations, changing sidewalk geometry, additional sidewalks and additional signage. The exact changes to be made as a result of the recommendations will be finalized during the design process, e.g., the slip lane from Bayshore Dr. onto US41.

The Draft Arterial Safety Study, including the first appendix detailing existing conditions, is included as an attachment. The full 206-page report is available on the MPO website ([colliermmpo.com](http://colliermmpo.com)) or by calling the office at 239-252-5804.

**STAFF RECOMMENDATIONS:** That the Committee receive the Draft FDOT Arterial Safety Study on US41

**ATTACHMENTS:**

1. FDOT Draft Arterial Safety Study for US41 from Commercial Drive to Guilford Road

Prepared by: Eric Ortman, MPO Senior Planner



## **DRAFT ARTERIAL SAFETY STUDY**

**S.R. 90 (U.S. 41/TAMIAMI TRAIL E) FROM  
COMMERCIAL DRIVE/PALM STREET TO  
GUILFORD ROAD**

**COLLIER COUNTY  
SECTION NO.: 03010000  
MILEPOST: 13.208 - 14.974**

FM No. 409224-1-32-91  
Contract No. C9M86

November 2017

PREPARED FOR  
**Florida Department of Transportation, District 1**  
Project Manager: Michael Kautz  
801 N. Broadway Street  
Bartow, Florida 33830

# **DRAFT ARTERIAL SAFETY STUDY**

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## INTRODUCTION

The Florida Department of Transportation (FDOT) – District One Safety Office has retained HNTB Corporation as part of a District-Wide Traffic Safety Project to perform an Arterial Safety Study for the segment of S.R. 90 (U.S. 41/Tamiami Trail E) from Commercial Drive/Palm Street to Guilford Road in the city of Naples in Collier County, Florida.

## EXISTING CONDITIONS

This section of the report describes the existing physical and operational conditions of S.R. 90 (U.S. 41/Tamiami Trail E) from Commercial Drive/Palm Street to Guilford Road.

S.R. 90 (U.S. 41/Tamiami Trail E) within the study limits is classified as an urban principal arterial roadway, which serves as an east-west corridor. Within the study area, S.R. 90 (U.S. 41/Tamiami Trail E) is characterized by two different typical sections. S.R. 90 (U.S. 41/Tamiami Trail E) from Commercial Drive/Palm Street to Espinal Boulevard/Courthouse Shadows has a six-lane divided, urban typical section with three 12-foot lanes westbound and three 11-foot lanes eastbound separated by a 25 to 27-foot wide raised, landscaped median and four-foot paved outside shoulders. S.R. 90 (U.S. 41/Tamiami Trail E) from Espinal Boulevard/Courthouse Shadows has a six-lane divided, suburban typical section with three 12-foot lanes in each direction, four to six-foot paved shoulders and a 32-foot wide raised, landscaped median. There is five-foot sidewalk and street lighting along both sides of S.R. 90 (U.S. 41/Tamiami Trail E) within the study corridor. However, there are no designated bicycle lanes provided.

**Figure 1** shows the segment location in relation to the adjacent roadway system. This segment of S.R. 90 (U.S. 41/Tamiami Trail E) is approximately 1.766 miles long. The posted speed limit for S.R. 90 (U.S. 41/Tamiami Trail E) within the study limits is 45 mph. Land uses along this segment consist of commercial development frontage surrounded by residential development.

Within the study corridor, there are six signalized intersections, which are located at Commercial Drive/Palm Street, Shadowlawn Drive/Bayshore Drive, Airport Pulling Road/Peters Avenue (C.R. 31), Espinal Boulevard/Courthouse Shadows, Palm Drive, and Guilford Road. These intersections have pedestrian features, including crosswalks, pedestrian activated detectors, and countdown pedestrian signals. The intersection of S.R. 90 (U.S. 41 / Tamiami Trail E) and Shadowlawn Drive/Bayshore Drive is a designated school crossing for Shadowlawn Elementary School, which includes high emphasis crosswalks, advanced warning pavement markings, and school crossing signage.

Public transit along the study corridor is operated by Collier Area Transit (CAT), with nine bus stops that are served by one or more of the six routes (11, 13, 14, 17, 18 and 24) that provide service along the



study corridor. In addition, there is a CAT Transfer Center located at 3555 East Tamiami Trail in the Collier County Government Center, which allows passengers the opportunity to transfer from one route to another. **Appendix A** includes a condition diagram of the study area.

**FIGURE 1 - STUDY LOCATION MAP**





## DATA COLLECTION

This section of the report presents the data that was obtained for this study. For the purposes of this study, it was determined that the following information would be required:

- Crash data from January 2011 through December 2015.
- Field observations of the segment operations during an average weekday.
- Vehicle count data from count station located within the study limits.
- Eight-hour turning movement counts at Commercial Drive/Palm Street, Shadowlawn Drive/Bayshore Drive, Airport Pulling Road/Peters Avenue (C.R. 31), Espinal Boulevard/Courthouse Shadows, Palm Drive and Guilford Road.
- *Pedestrian/Bicycle Safety Audit*, conducted by Cardno, Inc, in June 2015.
- Recently completed or future planned projects within the study limits.

### **Crash Data**

Crash data was provided by the FDOT CARS Database and Signal 4 Analytics for the period extending between January 2011 and December 2015. Crash summaries for the period are presented in **Table 1**. Areas of concern are discussed in the Crash Analysis section of this report.

### **Traffic Volume Data**

Traffic volume data on S.R. 90 (U.S. 41/Tamiami Trail E) was obtained from the Florida Department of Transportation's Florida Traffic Online 2016 Annual Average Daily Traffic Report. This website contains recent count data from the Department's count stations throughout the state. Within the project limits, there was one telemetered traffic monitoring site (Site 030094) identified. Site 030094 is located on S.R. 90 (U.S. 41/Tamiami Trail E) east of Espinal Boulevard/Courthouse Shadows and is reported to have an AADT of 42,286 with 2.9% truck traffic.

In addition, turning movement counts were performed at Commercial Drive/Palm Street, Shadowlawn Drive/Bayshore Drive, Airport Pulling Road/Peters Avenue (C.R. 31), Espinal Boulevard/Courthouse Shadows, Palm Drive and Guilford Road with the study limits. Pedestrian and bicycle count data was also collected at each of the six signalized intersections. This data was collected over a period of two average weekdays from Tuesday, June 6, 2017 to Wednesday, June 7, 2017, from 7:00 am to 10:00 am, 11:00 am to 1:00 pm, and 3:00 pm to 6:00 pm. The count data is summarized in **Appendix B** of this report.

At the Department's direction, the pedestrian and bicycle count data from the *Pedestrian/Bicyclist Safety Audit* was utilized in conjunction with our pedestrian and bicycle count data at the signalized intersections to understand the overall pedestrian and bicycle traffic volumes along the study corridor. Refer to





**Appendix C** for this report. The pedestrian and bicycle count data from the *Pedestrian/Bicyclist Safety Audit* was obtained over 11 consecutive hours in January 2015 on a weekday from 7:00 am to 6:00 pm. The January counts revealed that the following corridor segments had at least four hours of 15 or more crossings per hour (pedestrian and bicycle combined) across US 41:

- Between Pelton Avenue and Pineland Avenue
- Between McDonald's and Shadowlawn Drive
- Between Shadowlawn Drive and Bayside Street
- Between River Drive and Andrew Drive
- Between Andrew Drive and Palm Lake Mobile Home Park
- Between Palm Drive and Seminole Avenue
- Between Seminole Avenue and Enchantment Boulevard

Additional pedestrian and bicycle counts were conducted over a two-day period in March 2015 for the same 11-hour time period at the following locations:

- Between Pelton Avenue and Pineland Avenue
- Between River Drive and Andrew Drive
- Between Seminole Avenue and Enchantment Boulevard

### ***Pavement Condition Surveys***

The Department has an extensive program to measure the pavement conditions along each state road. The program consists of a yearly review of each roadway that measures the cracking of the roadway surface and the ride-ability of the roadway. A rating between 0 and 10 is assigned for each of these characteristics, and when a roadway falls below 6 in any category, then the roadway is added to the Department's/District's resurfacing needs list. The segments on the needs list are prioritized annually and added to the Department's work program, usually with scheduling occurring in the 3rd or 4th year of the five-year work program.

The Crack/Ride values along S.R. 90 (U.S. 41/Tamiami Trail E) for Section 03010000 are as follows:

- Milepost 13.039 - 14.385 were reported as 8.5 for the cracking and 7.8 for the ride
- Milepost 14.385 - 15.795 were reported as 10.0 for the cracking and 7.9 for the ride

These reviews were conducted in 2017, and the results indicate that the roadway surface was in good condition.

The Department's Materials and Research Laboratory conducts skid tests on each state roadway on a regular basis to measure the pavement's surface resistance. Each year, between 25-35 percent of the state roadways are tested, so that each roadway is tested a minimum of once every four years.



Skid Test results are reported as a Skid Number (SN), and if the SN is less than 31, then the roadway's wet weather crashes are reviewed and any necessary remedial actions, such as a skid hazard elimination or resurfacing project, are identified.

The most recent skid tests for S.R. 90 (U.S. 41/Tamiami Trail E) within the study limits were conducted for Section 03010000, Milepost 13.037 - 16.224 on 05/10/2016 for the westbound and eastbound lanes. The SN was found to be above the threshold at 34 and 35, respectively.

### ***Recently Completed/Future Projects***

An investigation of the FDOT Work Program identified two projects occurred within the study limits. The first project was the ITS Surveillance System (FPID 430872-1), which involved the installation of arterial monitoring cameras along the section of S.R. 90 (U.S. 41/Tamiami Trail E) from MP 14.113 – 15.797, which was completed in May 2015. The other project (FPID 438059-1) involves resurfacing S.R. 90 (U.S. 41/Tamiami Trail E) from west of Frederick Street (MP 13.039) to east of Espinal Boulevard/Courthouse Shadows (MP 14.385). Pre-construction phase is currently underway for this project. There are no future planned projects identified in the FDOT Work Program for this segment.





## CRASH ANALYSIS

Crash data was obtained from the Florida Department of Transportation for the period extending between January 2011 and December 2015. The collision data is summarized in **Table 1**.

According to the collision data, there have been 560 collisions reported along the corridor during this time period with the majority (82%) of the crashes occurring at the signalized intersections. A significant number of these crashes were rear ends, with 329 (59%) during the study period, followed by 71 (13%) sideswipes, 31 (6%) left turns, 30 (5%) angle, and 14 (3%) single vehicle crashes. Of the total crashes, 365 (65%) resulted in personal injury. Also, 168 (30%) occurred during wet road conditions and 99 (18%) occurred at night. There were three fatalities within this time period.

In addition, there were a total of 55 crashes involving pedestrians and bicyclists within the study limits with bicycle crashes being the prominent type. The distribution of the crash locations was relatively equal with 16 (29%) occurring at a signalized intersection, 14 (25%) occurring at a stop controlled side street, 13 (24%) occurring at a driveway and 12 (22%) occurring at midblock locations. Only five crashes did not result in an injury, and each of these crashes involved a bicyclist. Of the 50 total crashes that involved an injury, 41 (82%) crashes involved a bicyclist and 9 (18%) involved a pedestrian. In 2013, there was one fatality involving a bicyclist. Also, two (4%) crashes occurred during wet road conditions whereas 13 (24%) crashes occurred at night.

The average crash rate at the intersection was calculated to be 4.11 crashes/MVM, which is lower than the statewide average of 5.840 crashes/MVM for similar locations. However, it should be noted that the total number of crashes has increased every year since 2011 with the total number of crashes in 2015 being approximately 3.5 times those in 2011. Specifically, 22 crashes were identified (with four crashes involving a bicyclist) at the intersection of Shadowlawn Drive/Bayshore Drive, which occurred within the limits of the free flow right turn lane. The section of S.R. 90 (U.S. 41/Tamiami Trail) between Andrew Drive and Palm Lake Mobile Home Park had the highest concentration of pedestrian and bicycle crashes with 14, which accounts for 26% of the total pedestrian and bicycle crashes for this time period. Similarly, the section of S.R. 90 (U.S. 41/Tamiami Trail) between Spruce Street and Pine Street had 10 pedestrian and bicycle crashes for this same time period, representing an additional 18% of the total pedestrian and bicycle related crashes. The crash data is summarized in **Appendix D** of this report.



**TABLE 1 – CRASH SUMMARY**  
**S.R. 90 (U.S. 41/TAMIAMI TRAIL E) FROM COMMERCIAL DRIVE/PALM STREET**  
**TO GUILFORD ROAD**  
**JANUARY 2011 – DECEMBER 2015**

<b>COLLISION TYPE</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>TOTAL</b>
Rear End	23	40	88	86	92	329
Left Turn	2	0	5	10	14	31
Angle	3	5	5	6	11	30
Sideswipe	0	7	18	22	24	71
Right Turn	1	2	3	2	1	9
Head On	1	0	0	0	1	2
Run Off Road	0	0	1	1	1	3
Median Crossover	0	1	0	0	0	1
Overtaken	0	0	3	1	0	4
Backed Into	0	0	1	0	0	1
Collision w/ Tree	2	1	3	0	0	6
Collision w/ Pole	2	0	0	0	0	2
Collision w/ Sign	0	0	0	0	1	1
Collision w/ Object	0	0	0	2	0	2
Fell From Vehicle	0	1	0	0	0	1
Pedestrian/Bicycle	13	11	11	10	10	55
Other	0	2	0	2	8	12
<b>Total</b>	<b>47</b>	<b>70</b>	<b>138</b>	<b>142</b>	<b>163</b>	<b>560</b>
Fatal	0	0	1	0	2	3
Injury	32	31	40	45	44	192
Property Damage Only	15	39	97	97	117	365
Day	32	53	119	123	134	461
Night	15	17	19	19	29	99
Wet	5	9	123	17	14	168
Dry	42	61	15	125	149	392
Segment Crash Rate	1.72	2.57	5.06	5.21	5.98	4.11
Statewide Avg Crash Rate	4.538	4.857	6.004	6.267	7.536	5.840



## QUALITATIVE ASSESSMENT

The segment of S.R. 90 (U.S. 41/Tamiami Trail E) from Commercial Drive/Palm Street to Guilford Road was observed by a qualified engineer during a typical weekday to assess existing operating conditions. Refer to the Condition Diagrams (**Appendix A**), which illustrates the existing features along the study corridor.

Conflicts were observed along S.R. 90 (U.S. 41/Tamiami Trail E) when vehicles failed to yield to pedestrians and bicyclists in the crosswalks and at driveways. This type of conflict is especially a concern along this corridor because of its high level of pedestrian and bicycle activity, which appeared to be comprised of local residents utilizing these modes of travel for transportation instead of recreational purposes. The majority of the pedestrians and bicyclists were utilizing the sidewalk and paved shoulder, respectively. However, some bicyclists were observed traveling against the direction of traffic. Pedestrians and bicyclists were also observed crossing S.R. 90 (U.S. 41/Tamiami Trail E) at various locations throughout the study corridor typically at undesignated, mid-block crossings, especially at the directional median openings. Additional findings are illustrated in the pictures and described in the captions below.

- Vehicles failing to stop at the stop bar and blocking the crosswalk, and crosswalks not properly aligned with pedestrian curb ramps.





- A pedestrian crossing S.R. 90 (U.S. 41/Tamiami Trail E) at a directional median opening.



- Signal heads missing retro-reflective backplates.







- Yellow skip, guide stripe was documented at the intersection of Commercial Drive/Palm Street.



- Worn pavement markings were documented at Pineland Street.





- Substandard pedestrian curb ramp was identified at Espinal Boulevard/Courthouse Shadows.



- During the field review, flooded sidewalk was observed on the north side of the roadway between Espinal Boulevard/Courthouse Shadows and the Wal-Mart driveway.







- At Osceola Avenue, detectable warning surfaces and crosswalk pavement markings were observed missing.



- Right turn lanes missing pavement arrows were observed on the north side of the roadway between east of Palm Drive to Guilford Road.





## OPERATIONAL ANALYSIS

Traffic operations for existing conditions were determined using the peak hour volumes along with Synchro (Version 8.0). The peak hour volumes and the intersection geometry were input into the software. Existing signal phasing and timing sheets obtained from Collier County were also entered into the Synchro software.

Intersection operational analyses were conducted for all intersections in the study area under existing and build conditions. The build condition reflects the geometry in the conceptual plans located in Appendix F. The signalized intersection analysis was conducted using the Synchro software (version 8.0) applying the procedures from the HCM.

### Existing Conditions

**Tables 2 and 3** summarize the results of the signalized intersection analyses for AM and PM peak hours under existing conditions. The results include approach delay, approach LOS, intersection delay and overall LOS for signalized intersections.

In addition, S.R. 90 (U.S. 41/Tamiami Trail E) corridor operational analysis were conducted using Synchro to identify the total travel time, arterial speed and arterial LOS for each of the segments between the intersections for the entire study area.

**Tables 4 and 5** summarize the arterial LOS for S.R. 90 (U.S. 41/Tamiami Trail E) along the northbound and southbound directions for the AM and PM peak hours under existing conditions.

The following segments are operating at LOS E or F during the AM and PM peak hours:

- Between Espinal Boulevard and Airport Pulling Road (AM & PM)
- Between Guilford Road and Palm Drive (PM)

Based on the queuing analysis, queues from the through lanes extend past the left-turn storage lengths currently available along US 41 at the intersection Guilford Road causing starvation and storage blockage for the left-turn lanes.

Detailed Synchro output for the intersections analyses and arterial analyses are provided in **Appendix E**.





**Table 2 – Existing Conditions Intersection Analysis (AM Peak)**

Existing (AM)											
Corridor	Intersection	EB		WB		NB (US 41)		SB (US 41)		Overall Intersection	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
S.R. 90 (U.S. 41/ Tamiami Trail E)	Commercial Drive	47.8	D	46.7	D	18.8	B	14.6	B	21.5	C
	Bayshore Drive	60.3	E	62.8	E	28.0	C	30.6	C	36.1	C
	Airport Pulling Road	70.1	E	58.0	E	8.7	A	27.5	C	23.1	C
	Espinal Boulevard	57.3	E	55.7	E	6.2	A	9.3	A	8.7	A
	Palm Drive	51.4	D	52.2	D	8.3	A	9.8	A	9.8	A
	Guilford Road	69.9	E	66.3	E	7.5	A	5.6	A	8.1	A

**Table 3 – Existing Condition Intersection Analysis (PM Peak)**

Existing (PM)											
Corridor	Intersection	EB		WB		NB (US 41)		SB (US 41)		Overall Intersection	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
S.R. 90 (U.S. 41/ Tamiami Trail E)	Commercial Drive	75.4	E	82.9	F	15.0	B	15.5	B	22.8	C
	Bayshore Drive	63.6	E	74.7	E	31.8	C	32.7	C	39.8	D
	Airport Pulling Road	67.2	E	54.9	D	24.6	C	24.8	C	31.9	C
	Espinal Boulevard	54.3	D	62.5	E	7.3	A	7.1	A	11.4	B
	Palm Drive	37.8	D	39.1	D	40.2	D	14.7	B	24.7	C
	Guilford Road	52.5	D	69.8	E	14.9	B	4.4	A	11.6	B

**Table 4 - Existing Conditions Arterial Operational Analyses (AM Peak)**

Existing (AM)				
Corridor (Direction)	Cross Street	Travel Time (sec)	Arterial Speed (mph)	Arterial LOS
S.R. 90 (U.S. 41/ Tamiami Trail E) (NB)	Palm Drive	59.1	22/7	C
	Espinal Boulevard	32.9	25.8	C
	Airport Pulling Road	32.6	23.2	C
	Bayshore Drive	53.3	21.7	D
	Commercial Drive	66.7	33.3	B
S.R. 90 (U.S. 41/ Tamiami Trail E) (SB)	Bayshore Drive	77.4	28.7	B
	Airport Pulling Road	45.1	25.7	C
	Espinal Boulevard	31.9	23.7	C
	Palm Drive	29.4	28.9	B
	Guilford Road	40.5	33.1	B



**Table 5 - Existing Conditions Arterial Operational Analyses (PM Peak)**

Existing (PM)				
Corridor (Direction)	Cross Street	Travel Time (sec)	Arterial Speed (mph)	Arterial LOS
S.R. 90 (U.S. 41/ Tamiami Trail E) (NB)	Palm Drive	70.9	18.9	D
	Espinal Boulevard	32.3	26.3	C
	Airport Pulling Road	40.9	18.5	D
	Bayshore Drive	62.1	18.6	D
	Commercial Drive	63.9	34.8	B
S.R. 90 (U.S. 41/ Tamiami Trail E) (SB)	Bayshore Drive	82.4	27.0	C
	Airport Pulling Road	44.5	26.0	C
	Espinal Boulevard	30.4	24.9	C
	Palm Drive	34.1	24.9	C
	Guilford Road	39.0	34.4	B

**Build Conditions**

**Tables 6 and 7** summarize the results of the signalized intersection analyses for AM and PM peak hours under build conditions. The results include approach delay, approach LOS, intersection delay and overall LOS for signalized intersections.

In addition, S.R. 90 (U.S. 41/Tamiami Trail E) corridor operational analysis were conducted using Synchro to identify the total travel time, arterial speed and arterial LOS for each of the segments between the intersections for the entire study area.

**Tables 8 and 9** summarize the arterial LOS for S.R. 90 (U.S. 41/Tamiami Trail E) along the northbound and southbound directions for the AM and PM peak hours under build conditions.

Based on the queuing analysis, queues from the through lanes extend past the left-turn storage lengths currently available along US 41 at the intersection Guilford Road causing starvation and storage blockage for the left-turn lanes.

Detailed Synchro output for the intersections analyses and arterial analyses are provided in **Appendix E**.



**Table 6 – Build Conditions Intersection Analysis (AM Peak)**

Build (AM)											
Corridor	Intersection	EB		WB		NB (US 41)		SB (US 41)		Overall Intersection	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
S.R. 90 (U.S. 41/ Tamiami Trail E)	Commercial Drive	47.8	D	46.7	D	18.8	B	14.6	B	21.5	C
	Bayshore Drive	60.3	E	62.8	E	28.4	C	30.6	C	36.3	D
	Airport Pulling Road	70.1	E	58.0	E	12.9	B	27.5	C	25.4	C
	Espinal Boulevard	57.3	E	55.7	E	9.6	A	9.3	A	11.0	B
	Palm Drive	63.2	E	65.1	E	13.9	B	7.5	A	13.1	B
	Guilford Road	69.9	E	66.3	E	7.5	A	2.9	A	7.4	A

**Table 7 – Build Condition Intersection Analysis (PM Peak)**

Build (PM)											
Corridor	Intersection	EB		WB		NB (US 41)		SB (US 41)		Overall Intersection	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
S.R. 90 (U.S. 41/ Tamiami Trail E)	Commercial Drive	75.4	E	82.9	F	15.0	B	15.5	B	22.8	C
	Bayshore Drive	63.6	E	74.7	E	31.8	C	32.7	C	39.8	D
	Airport Pulling Road	67.2	E	54.9	D	24.6	C	24.8	C	31.9	C
	Espinal Boulevard	54.3	D	62.5	E	7.3	A	7.1	A	11.4	B
	Palm Drive	37.8	D	39.1	D	40.2	D	14.7	B	24.7	C
	Guilford Road	52.5	D	69.8	E	14.9	B	4.4	A	11.6	B

**Table 8 - Build Conditions Arterial Operational Analyses (AM Peak)**

Build (AM)				
Corridor (Direction)	Cross Street	Travel Time (sec)	Arterial Speed (mph)	Arterial LOS
S.R. 90 (U.S. 41/ Tamiami Trail E) (NB)	Palm Drive	50.4	26.6	C
	Espinal Boulevard	37.4	22.7	C
	Airport Pulling Road	34.7	21.8	D
	Bayshore Drive	54.6	21.2	D
	Commercial Drive	66.7	33.3	B
S.R. 90 (U.S. 41/ Tamiami Trail E) (SB)	Bayshore Drive	77.4	28.7	B
	Airport Pulling Road	45.1	25.7	C
	Espinal Boulevard	31.9	23.7	C
	Palm Drive	27.7	30.6	B
	Guilford Road	37.7	35.6	A



**Table 9 - Build Conditions Arterial Operational Analyses (PM Peak)**

Build (PM)				
Corridor (Direction)	Cross Street	Travel Time (sec)	Arterial Speed (mph)	Arterial LOS
S.R. 90 (U.S. 41/ Tamiami Trail E) (NB)	Palm Drive	70.9	18.9	D
	Espinal Boulevard	32.3	26.3	C
	Airport Pulling Road	40.9	18.5	D
	Bayshore Drive	62.1	18.6	D
	Commercial Drive	63.9	34.8	B
S.R. 90 (U.S. 41/ Tamiami Trail E) (SB)	Bayshore Drive	82.4	27.0	C
	Airport Pulling Road	44.5	26.0	C
	Espinal Boulevard	30.4	24.9	C
	Palm Drive	34.1	24.9	C
	Guilford Road	39.0	34.4	B

The operational analysis of the existing and build conditions demonstrates that the changes in LOS, delay, and arterial speeds are negligible between each condition. Additionally, the build condition results in acceptable LOS for all intersections and roadway segment links.

### NET PRESENT VALUE ANALYSIS

A net present value (NPV) analysis was performed for the recommended improvements of installing three pedestrian hybrid beacons, removing a slip ramp, adding reflective back plates to all signal heads at each of the signalized intersections within the study limits, and adding signing and pavement markings as shown in the recommendations. The procedures outlined in the Department’s *Highway Safety Improvement Program Guide* were used to determine the net present value. The average cost per crash of \$117,867 was used, as reported in the FDOT Plans Preparation Manual, Volume 1, Table 23.6.1, for a 6+ lane urban divided roadway and 6+ lane suburban divided roadway. A crash reduction factor of 15% was applied to all crashes that occurred at the intersections for the improvement of adding reflective back plates. A crash reduction factor of 59% was applied to all crashes that occurred at Bayshore Drive for the improvement of removing the slip ramp. A crash reduction factor of 29% was applied to all crashes that occurred at the intersections for the improvement of installing a pedestrian hybrid beacon for a midblock crosswalk at Pelton Street, Bamboo Drive and near Spruce Street.

The cost for the proposed upgrades is \$2,211,194.74 or \$162,743.93 annually. This estimate also includes contingency, design, construction support, maintenance of traffic, and mobilization costs.



The proposed improvements provide the following net present value results:

- Number of crashes potentially reduced: total 560 over 5 years (152.18 annually)
- Annual Monetary Value of Benefits: \$9,934,689
- Annual Monetary Value of Cost: \$162,743.93
- **Benefit/Cost Ratio: 61.04**
- **Net Present Value: \$132,808,861.97**

The *Highway Safety Improvement Program Guide* states that a project can qualify for HSP funds provided that it addresses a key highway safety problem area from the Florida Strategic Highway Safety Plan and a net present value (NPV) greater than zero. The benefit/cost analysis and net present values are summarized in **Appendix H** of this report.



## RECOMMENDATIONS

Based on the results of the data collection, crash analysis, qualitative assessment, operational assessment and engineering judgment, the following recommendations were developed:

### Roadway

- Consider eliminating the free-flow right turn lane and reconstructing the return radius on the southeast corner of Shadowlawn Drive/Bayshore Drive.
- Consider eliminating the “slip ramp” associated with Peters Avenue and reconstructing the return radius on the southwest corner of the intersection. The “slip ramp” will be replaced with an 8-foot sidewalk.
- Consider reconstructing the return radius on the northwest (to eliminate the merge lane) and southeast corners of Espinal Boulevard/Courthouse Shadows.
- Consider installing a 7-foot buffered bicycle lane with 11-foot through lanes in accordance with Design Bulletin 14-17 where it can be accommodated or a 5-foot bicycle lane.
- Consider constructing a HAWK beacon and two-stage pedestrian crossing with pedestrian detector assemblies in the median, west of Spruce Street.
- Consider constructing a HAWK beacon and two-stage pedestrian crossing with pedestrian detector assemblies in the median on east side of Pelton Avenue.
- Consider constructing a HAWK beacon and two-stage pedestrian crossing with pedestrian detector assemblies in the median on west side of Bamboo Drive.
- Consider reconstructing pedestrian curb ramps to meet ADA standards at Commercial Drive/Palm Street, Shadowlawn Drive/Bayshore Drive, Airport Pulling Road/Peters Avenue, Espinal Boulevard/Courthouse Shadows, Palm Drive and Guilford Road along with the traffic separators where impacted to realign the crosswalks. Additional consideration for reconstructing the pedestrian curb ramps at Commercial Drive/Palm Street is to eliminate water ponding during heavy rain and to properly align with the crosswalks.
- Consider reconstructing sidewalk on the north side of the roadway from Espinal Boulevard/Courthouse Shadows to the Wal-Mart driveway where the sidewalk is flooded during a heavy rain.
- Consider placing or replacing all detectable warning surfaces at the pedestrian curb ramps within the study corridor.
- Consider constructing a concrete pad at the back of the sidewalk at each of the transit stops that do not have shelters to accommodate an accessible bench.



### Signing and Pavement Marking

- Consider installing “RIGHT TURN ONLY” (R3-5R) signs on the following side streets where they are currently not provided: Spruce Street, Pine Street, Pelton Avenue, Andrew Drive, Bamboo Drive and Seminole Avenue.
- Consider installing “SCHOOL CROSSING” (S1-1) and “AHEAD” (W16-9) sign assembly, west of Bayside Street in the median and on the north side of the roadway.
- Consider installing “SCHOOL CROSSING” (S1-1), “AHEAD” (W16-9) and “ARROW SYMBOL” (W16-7P) sign assembly, west and east of Shadowlawn Drive/Bayshore Drive in the median and on the north side (westbound) and south side (eastbound) of the S.R. 90 (U.S. 41/Tamiami Trail E) as well as on the west (southbound) and east (northbound) sides Shadowlawn Drive/Bayshore Drive.
- Consider installing the traffic signal sign, “STOP HERE ON RED” (R10-6) at the following locations: Commercial Drive/Palm Street (north and south legs), Shadowlawn Drive/Bayshore Drive (north and south legs), Airport Pulling Road/Peters Avenue (north and south legs), Espinal Boulevard/Courthouse Shadows, Palm Drive (north leg) and Guilford Road (north and south legs).
- Consider installing the “KEEP RIGHT” (R4-7) and “OBJECT MARKER” (OM1-1) sign assembly within the median of S.R. 90 (U.S. 41/Tamiami Trail E) at all six of the signalized intersections.
- “RIDE WITH TRAFFIC” (R9-3CP) and “BIKE LANE” (R3-17) sign assembly with “BICYCLE WRONG WAY” (R5-1b) sign on the opposite side of the sign post (opposite direction of travel) at five intermediate locations on both the north and south side of the roadway within the study corridor, between signalized intersections.
- Consider installing the pedestrian warning signs, “TURNING VEHICLES YIELD TO PEDESTRIANS” (R10-15), on all approaches to the six signalized intersections with the exception of the east leg of Airport Pulling Road/Peters Avenue (where this sign is already provided).
- Consider replacing the yellow skip guide stripe with the white skip guide stripe at Commercial Drive/Palm Street.
- Consider replacing worn pavement markings at Spruce Street, Pelton Avenue, Pineland Street, and Bayside Street.
- Consider providing crosswalk markings at Osceola Avenue, where they are currently not provided.
- Consider replacing all standard crosswalks at the signalized intersections within the study corridor with high emphasis crosswalks per *FDOT Memo 01-12 for High Emphasis Crosswalk Markings*.
- Consider installing pavement markings for the right turn lanes between Palm Drive and Enchanting Boulevard (eastbound) as well as between east of Palm Drive to Guilford Road (westbound).





- Consider installing pavement markings (arrows) for the left turn lane at Seminole Avenue.
- Consider installing bicycle lane pavement markings per FDOT's *Standard Index 17347*.

### **Signal**

- Consider removing the mast arm signal poles on the NE and SW corners of Shadowlawn Drive/Bayshore Drive, and replacing it with a new longer mast arm signal pole on the SW corner.
- Consider implementing a Leading Pedestrian Interval (LPI) at all six signalized intersections.
- Implement Rest in Walk and Pedestrian Recall on minor side street pedestrian phases (concurrent with major street traffic).
- Consider adjusting the signal timings (as necessary) to account for the modified intersection configurations.
- Consider separating pedestrian signals at the six signalized intersections where they are currently on shared poles.
- Consider switching the orientation of the pedestrian pushbuttons and signs so that they are properly oriented to the corresponding crosswalk as specified in FDOT's *Standard Index 17784*.
- Consider adding one signal head for every lane at the intersections of Commercial Drive/Palm Street, Airport Pulling Road/Peters Avenue, Palm Drive and Guilford Road.
- Consider installing retro-reflective backplates for each of the signal heads where they are currently not provided at the following signalized intersections: Commercial Drive/Palm Street, Airport Pulling Road/Peters Avenue, Espinal Boulevard/Courthouse Shadows, Palm Drive and Guilford Road.

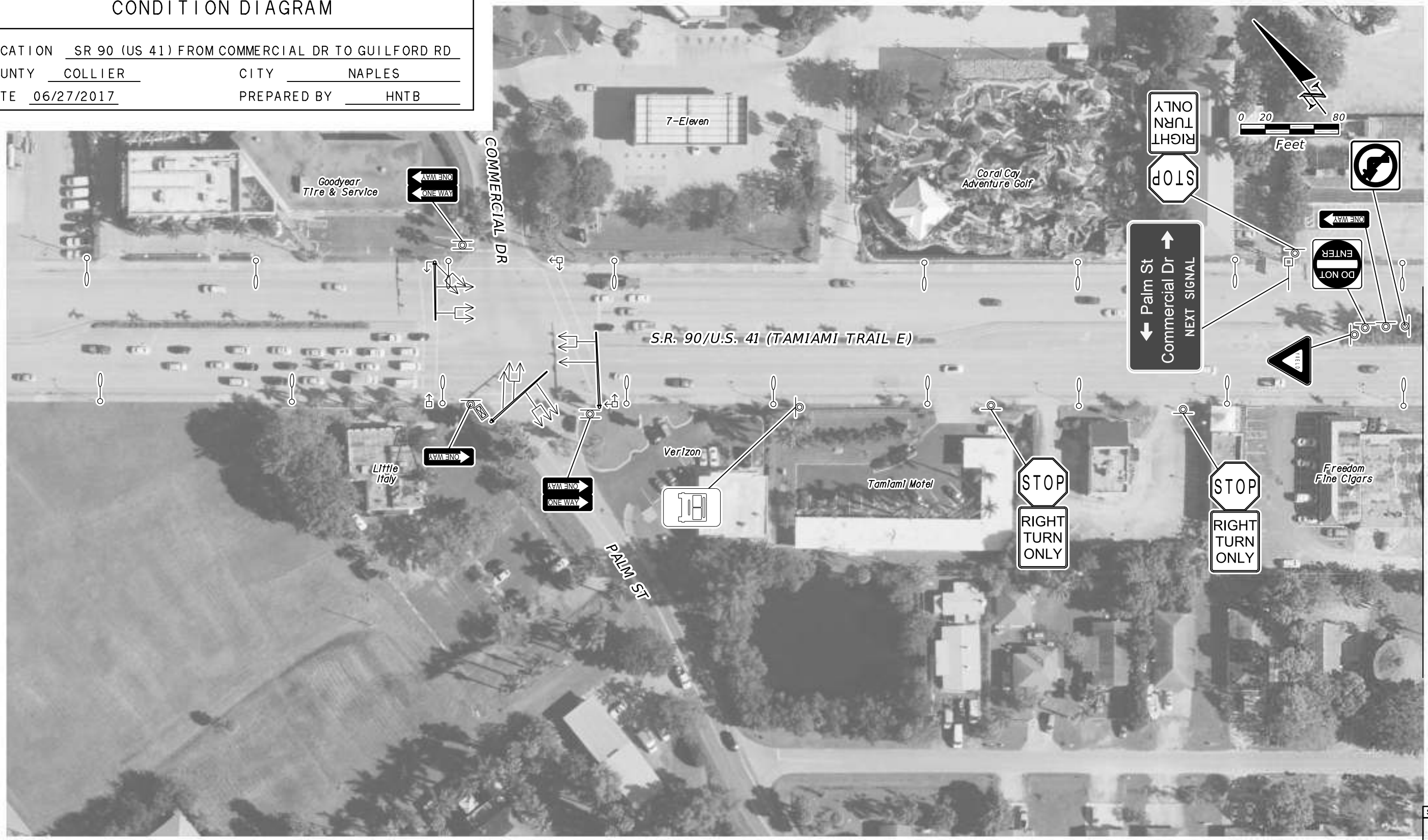


# **APPENDIX A**

## **CONDITION DIAGRAM**

# CONDITION DIAGRAM

LOCATION SR 90 (US 41) FROM COMMERCIAL DR TO GUILFORD RD  
 COUNTY COLLIER CITY NAPLES  
 DATE 06/27/2017 PREPARED BY HNTB



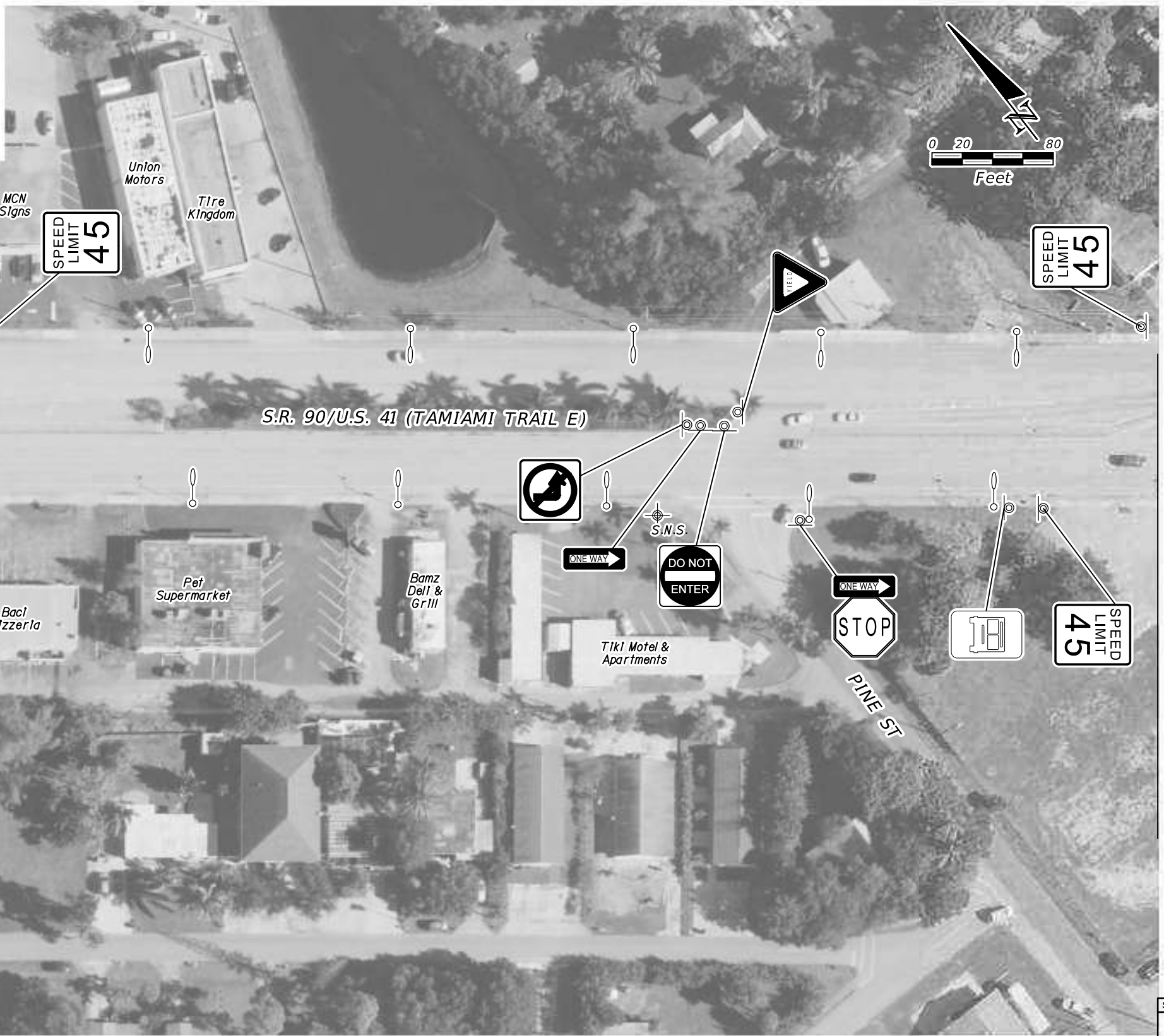
MATCHLINE - SEE SHEET 2

## SYMBOLS

	FENCE		BUS STOP BENCH		CONTROLLER CABINET		SIGNAL STRAIN POLE		POWER POLE		SINGLE POST SIGN
	GUARDRAIL		HYDRANT		PED. SIGNAL PEDESTAL		SIGNAL MAST ARM		COMBINATION POLE		MULTI-POST SIGN
	BUILDING		STREET NAME SIGN		TRAFFIC SIGNAL PEDESTAL		SIGNAL HEAD		LIGHT POLE		OVERHEAD SIGN

# CONDITION DIAGRAM

LOCATION SR 90 (US 41) FROM COMMERCIAL DR TO GUILFORD RD  
 COUNTY COLLIER CITY NAPLES  
 DATE 06/27/2017 PREPARED BY HNTB



MATCHLINE - SEE SHEET 1

MATCHLINE - SEE SHEET 3

SHEET  
2

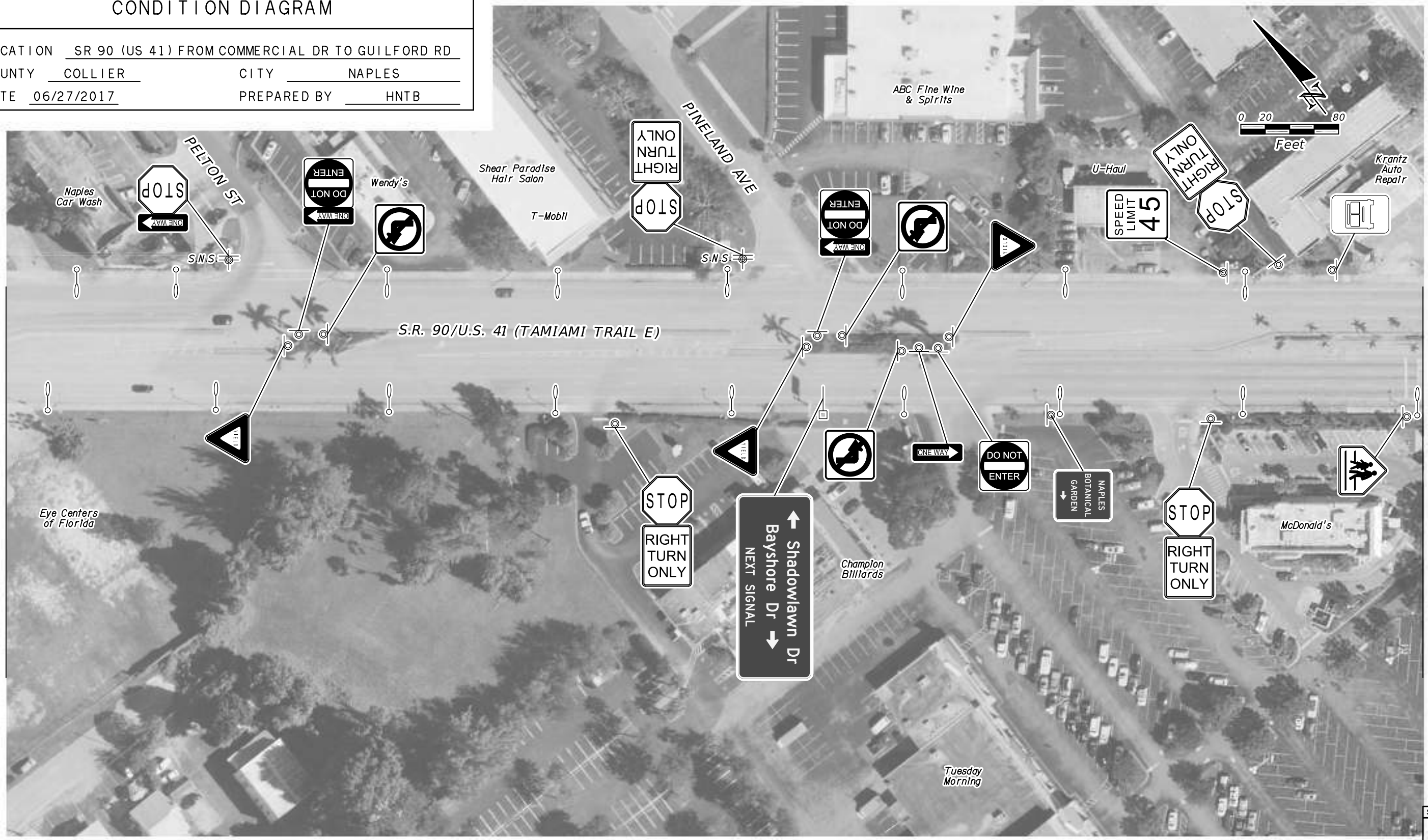
## SYMBOLS

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	GUARDRAIL		HYDRANT		PED. SIGNAL PEDESTAL		SIGNAL MAST ARM		COMBINATION POLE		MULTI-POST SIGN
	BUILDING		STREET NAME SIGN		TRAFFIC SIGNAL PEDESTAL		SIGNAL HEAD		LIGHT POLE		OVERHEAD SIGN



# CONDITION DIAGRAM

LOCATION SR 90 (US 41) FROM COMMERCIAL DR TO GUILFORD RD  
 COUNTY COLLIER CITY NAPLES  
 DATE 06/27/2017 PREPARED BY HNTB



MATCHLINE - SEE SHEET 2

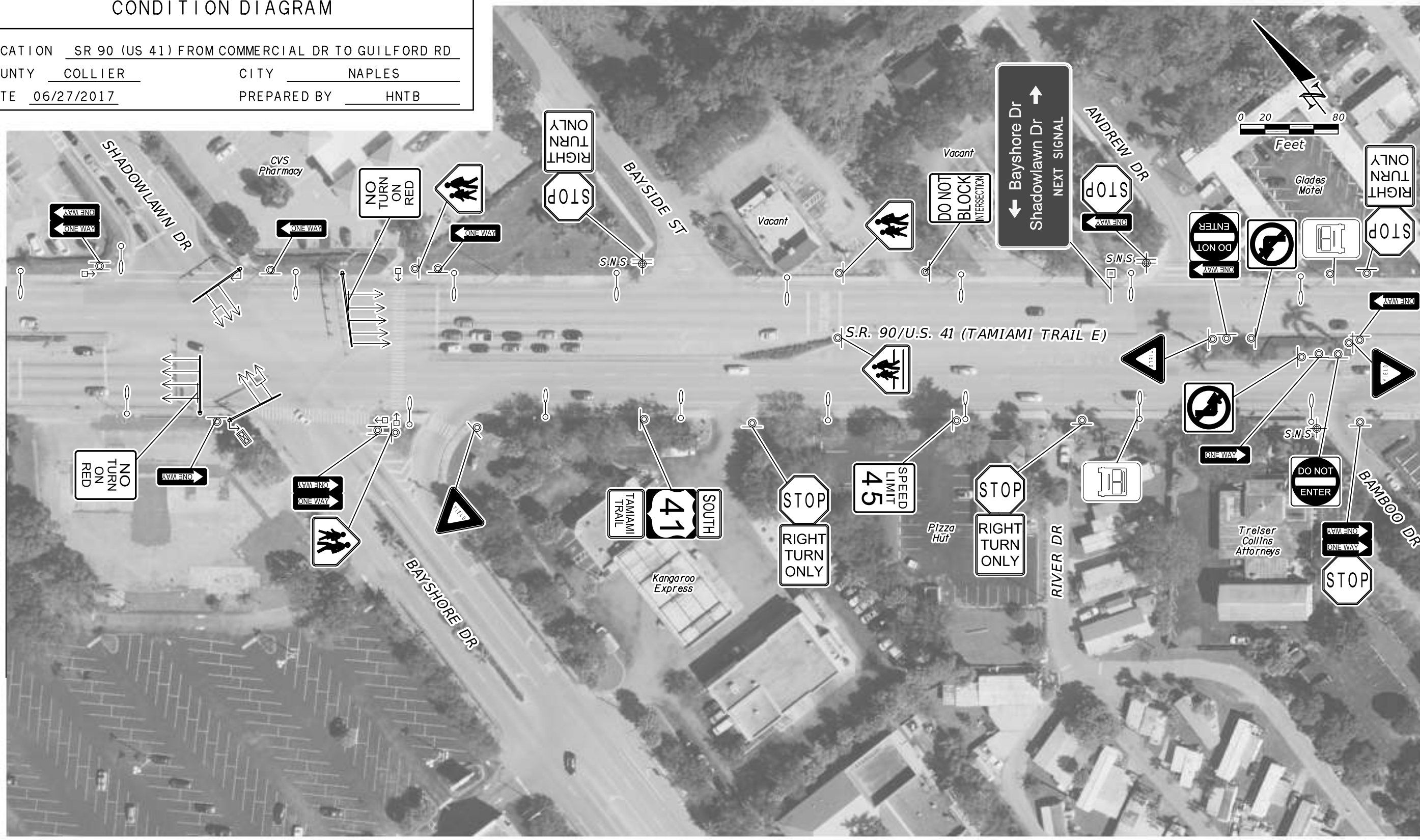
MATCHLINE - SEE SHEET 4

## SYMBOLS

	FENCE		BUS STOP BENCH		CONTROLLER CABINET		SIGNAL STRAIN POLE		POWER POLE		SINGLE POST SIGN
	GUARDRAIL		HYDRANT		PED. SIGNAL PEDESTAL		SIGNAL MAST ARM		COMBINATION POLE		MULTI-POST SIGN
	BUILDING		STREET NAME SIGN		TRAFFIC SIGNAL PEDESTAL		SIGNAL HEAD		LIGHT POLE		OVERHEAD SIGN

# CONDITION DIAGRAM

LOCATION SR 90 (US 41) FROM COMMERCIAL DR TO GUILFORD RD  
 COUNTY COLLIER CITY NAPLES  
 DATE 06/27/2017 PREPARED BY HNTB



MATCHLINE - SEE SHEET 3

MATCHLINE - SEE SHEET 5

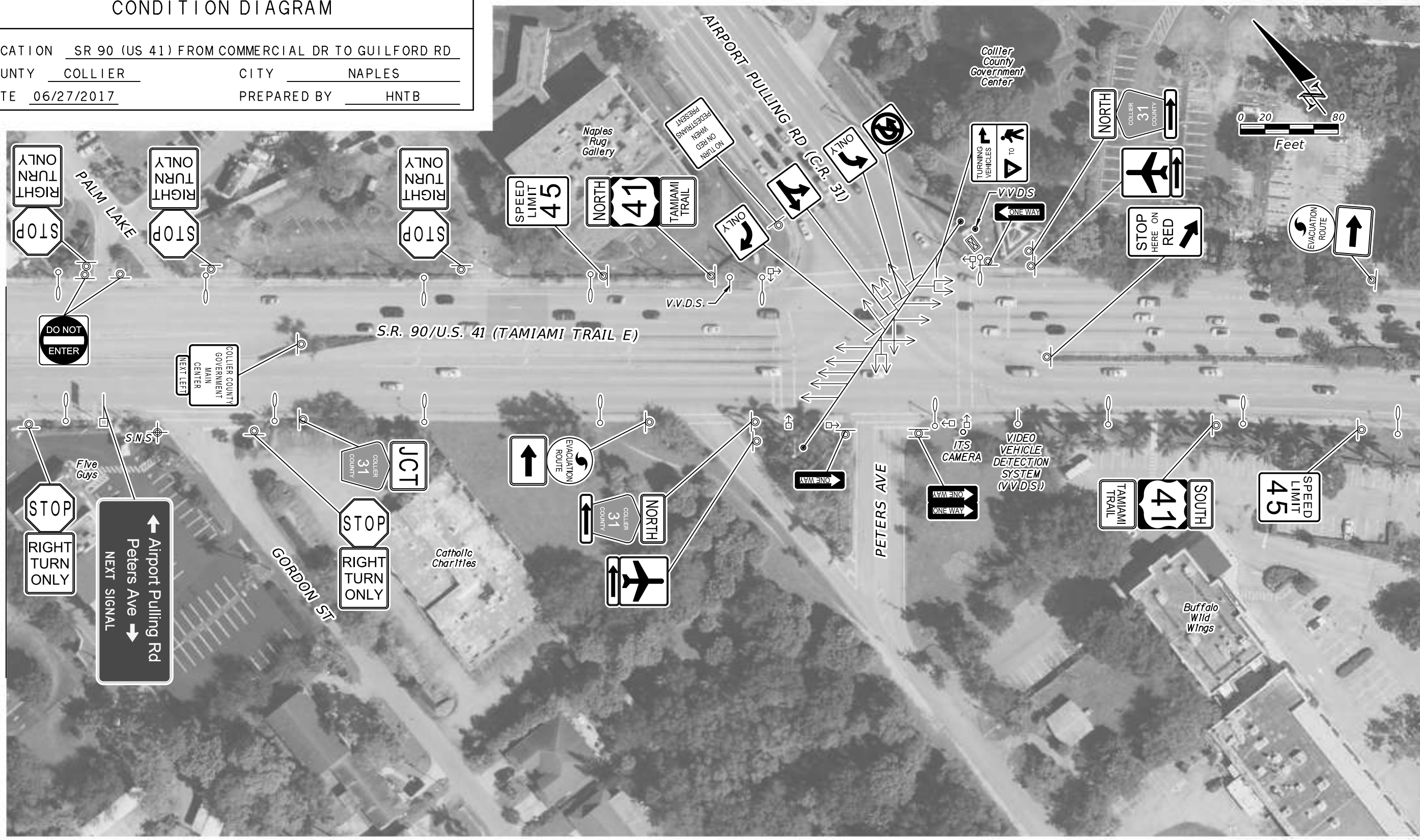
## SYMBOLS

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	GUARDRAIL		HYDRANT		PED. SIGNAL PEDESTAL		SIGNAL MAST ARM		COMBINATION POLE		MULTI-POST SIGN
	BUILDING		STREET NAME SIGN		TRAFFIC SIGNAL PEDESTAL		SIGNAL HEAD		LIGHT POLE		OVERHEAD SIGN



# CONDITION DIAGRAM

LOCATION SR 90 (US 41) FROM COMMERCIAL DR TO GUILFORD RD  
 COUNTY COLLIER CITY NAPLES  
 DATE 06/27/2017 PREPARED BY HNTB



MATCHLINE - SEE SHEET 4

MATCHLINE - SEE SHEET 6

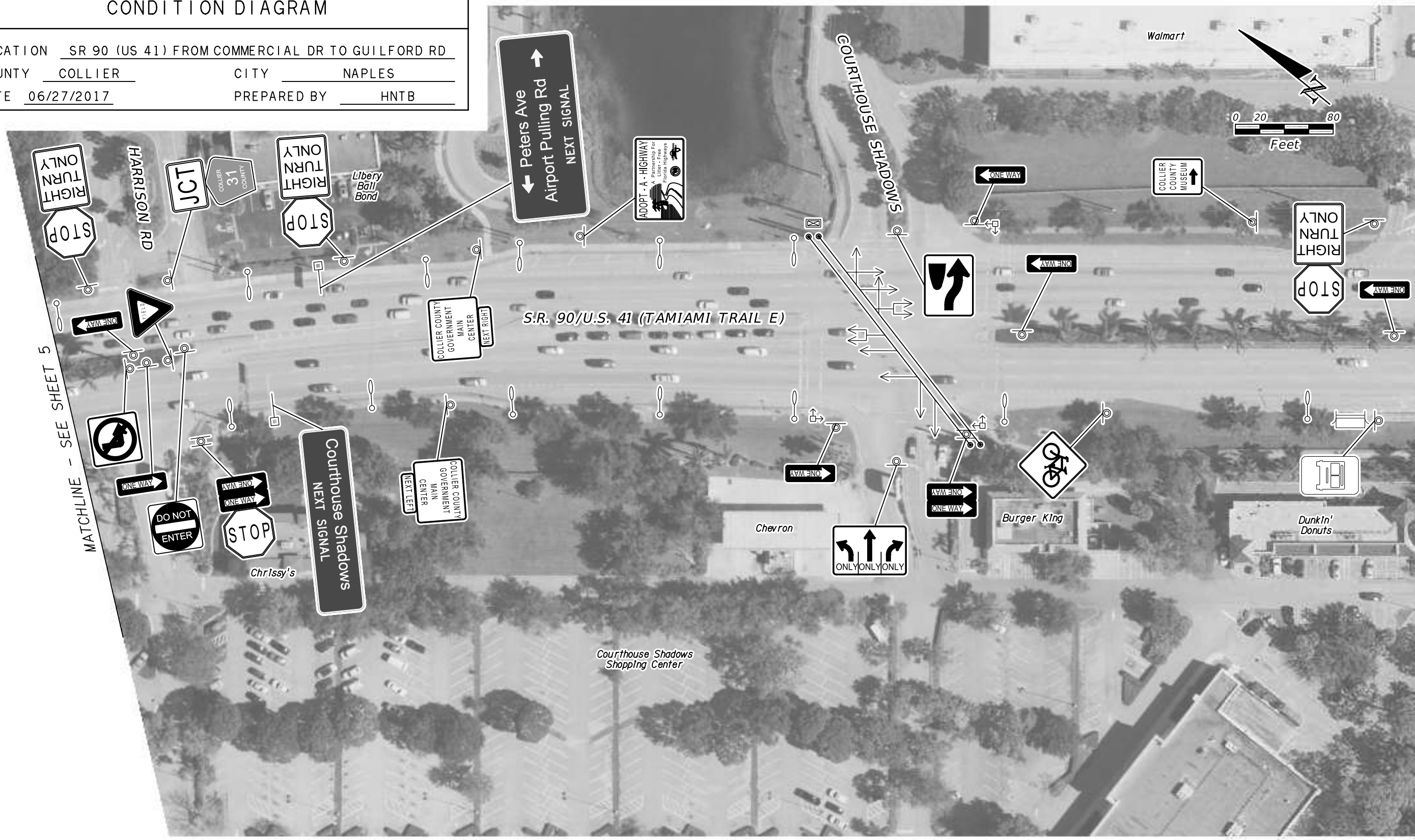
## SYMBOLS

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	GUARDRAIL		HYDRANT		PED. SIGNAL PEDESTAL		SIGNAL MAST ARM		COMBINATION POLE		MULTI-POST SIGN
	BUILDING		STREET NAME SIGN		TRAFFIC SIGNAL PEDESTAL		SIGNAL HEAD		LIGHT POLE		OVERHEAD SIGN



# CONDITION DIAGRAM

LOCATION SR 90 (US 41) FROM COMMERCIAL DR TO GUILFORD RD  
 COUNTY COLLIER CITY NAPLES  
 DATE 06/27/2017 PREPARED BY HNTB

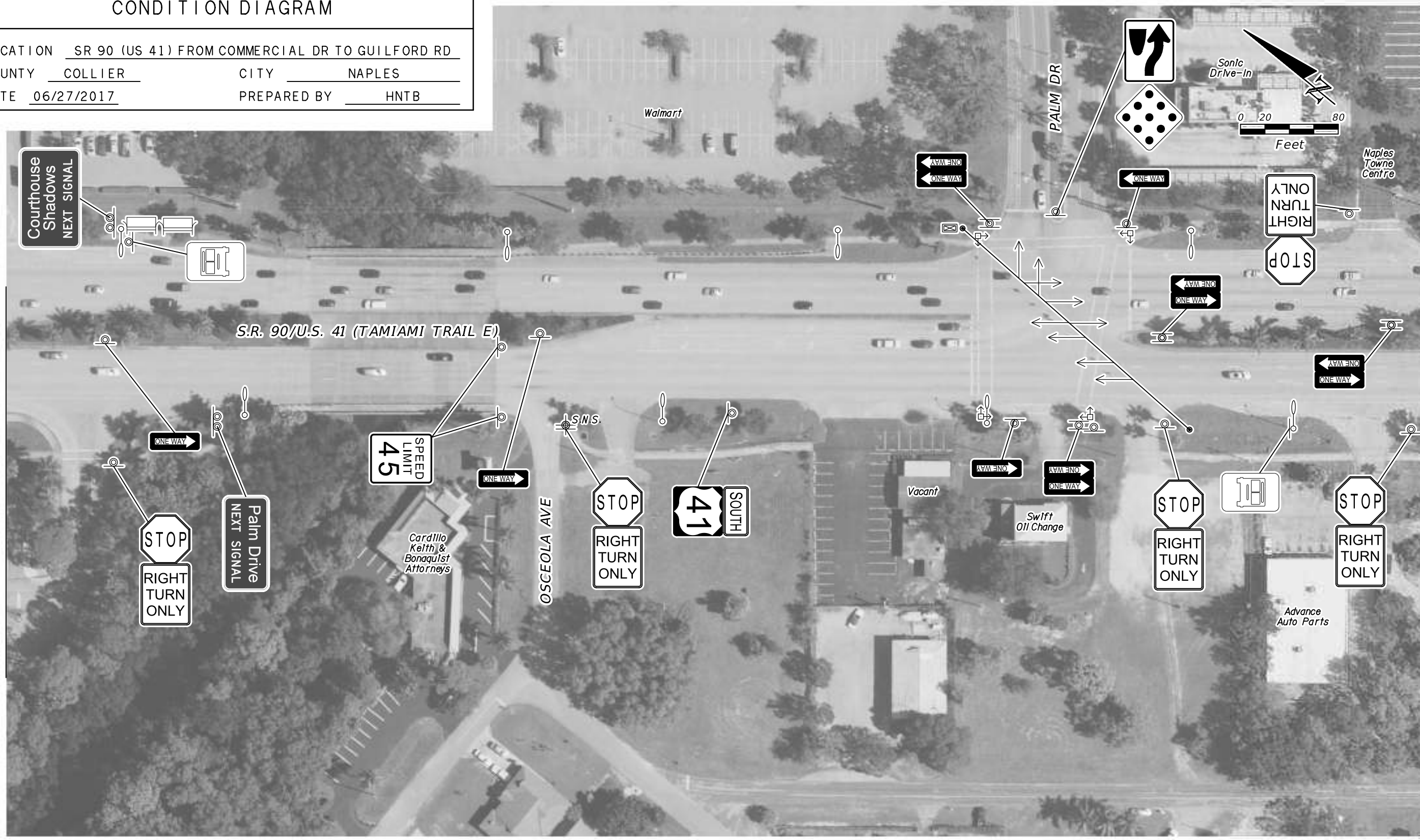


## SYMBOLS

	FENCE		BUS STOP BENCH		CONTROLLER CABINET		SIGNAL STRAIN POLE		POWER POLE		SINGLE POST SIGN
	GUARDRAIL		HYDRANT		PED. SIGNAL PEDESTAL		SIGNAL MAST ARM		COMBINATION POLE		MULTI-POST SIGN
	BUILDING		STREET NAME SIGN		TRAFFIC SIGNAL PEDESTAL		SIGNAL HEAD		LIGHT POLE		OVERHEAD SIGN

# CONDITION DIAGRAM

LOCATION SR 90 (US 41) FROM COMMERCIAL DR TO GUILFORD RD  
 COUNTY COLLIER CITY NAPLES  
 DATE 06/27/2017 PREPARED BY HNTB



MATCHLINE - SEE SHEET 6

MATCHLINE - SEE SHEET 8

SHEET  
7

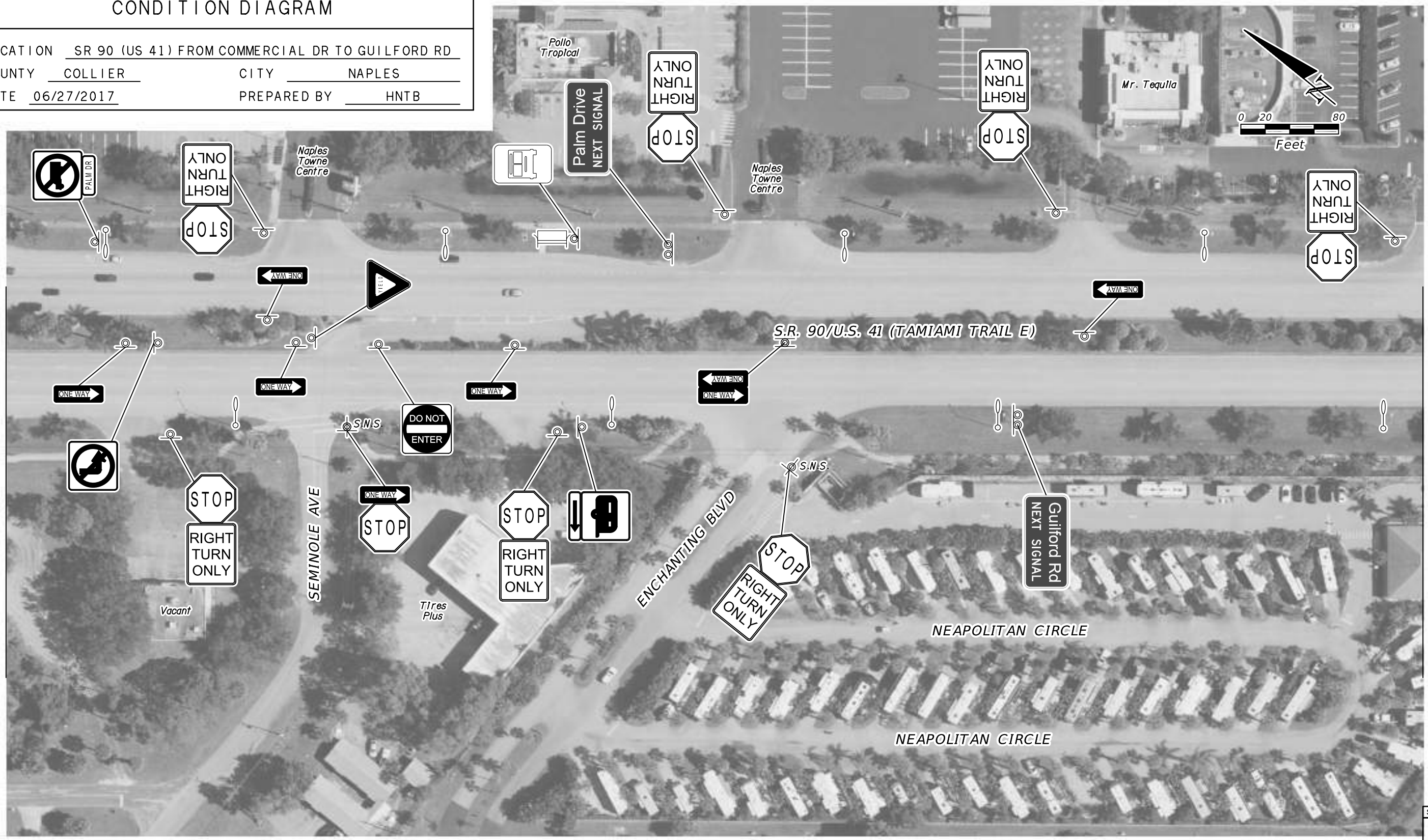
## SYMBOLS

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	GUARDRAIL		HYDRANT		PED. SIGNAL PEDESTAL		SIGNAL MAST ARM		COMBINATION POLE		MULTI-POST SIGN
	BUILDING		STREET NAME SIGN		TRAFFIC SIGNAL PEDESTAL		SIGNAL HEAD		LIGHT POLE		OVERHEAD SIGN



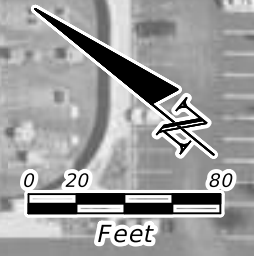
# CONDITION DIAGRAM

LOCATION SR 90 (US 41) FROM COMMERCIAL DR TO GUILFORD RD  
 COUNTY COLLIER CITY NAPLES  
 DATE 06/27/2017 PREPARED BY HNTB



MATCHLINE - SEE SHEET 7

MATCHLINE - SEE SHEET 9

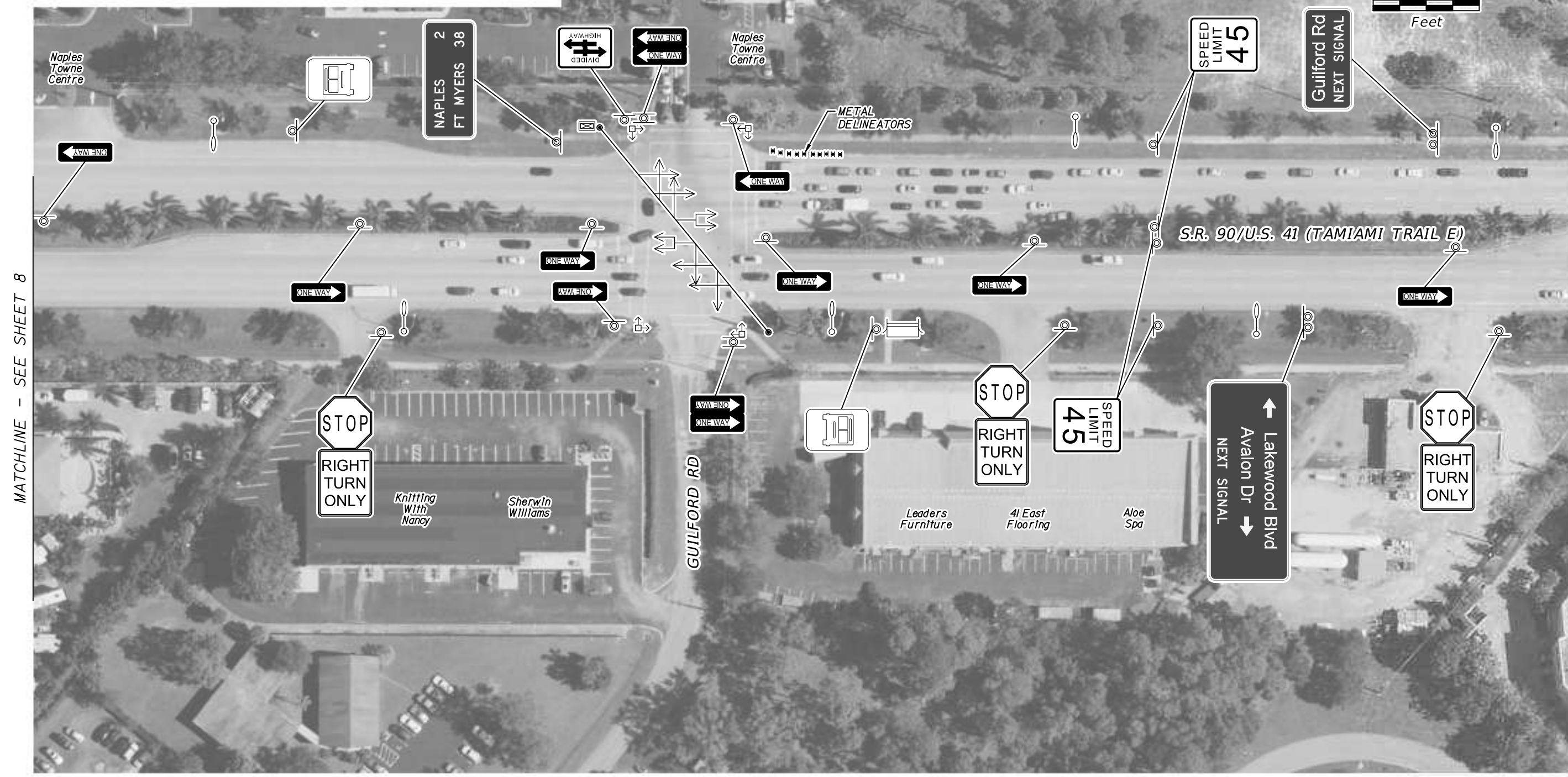


## SYMBOLS

FENCE	BUS STOP BENCH	CONTROLLER CABINET	SIGNAL STRAIN POLE	POWER POLE	SINGLE POST SIGN
GUARDRAIL	HYDRANT	PED. SIGNAL PEDESTAL	SIGNAL MAST ARM	COMBINATION POLE	MULTI-POST SIGN
BUILDING	STREET NAME SIGN	TRAFFIC SIGNAL PEDESTAL	SIGNAL HEAD	LIGHT POLE	OVERHEAD SIGN

# CONDITION DIAGRAM

LOCATION SR 90 (US 41) FROM COMMERCIAL DR TO GUILFORD RD  
 COUNTY COLLIER CITY NAPLES  
 DATE 06/27/2017 PREPARED BY HNTB



## SYMBOLS

	FENCE		BUS STOP BENCH		CONTROLLER CABINET		SIGNAL STRAIN POLE		POWER POLE		SINGLE POST SIGN
	GUARDRAIL		HYDRANT		PED. SIGNAL PEDESTAL		SIGNAL MAST ARM		COMBINATION POLE		MULTI-POST SIGN
	BUILDING		STREET NAME SIGN		TRAFFIC SIGNAL PEDESTAL		SIGNAL HEAD		LIGHT POLE		OVERHEAD SIGN

**DISTRIBUTION**  
**ITEM 10 C**

**Update on the Collier Area Transit (CAT) Fare Analysis Study**

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**OBJECTIVE:** For the Committee to receive an update on the CAT Fare Analysis Study

**CONSIDERATIONS:** As part of the CAT Transit Development Plan, it was noted that it is appropriate for CAT to periodically review and evaluate its fare structure to ensure that fares are fair and equitable while also generating revenue needed to operate the services. Tindale Oliver, the consultant, developed preliminary scenarios for potential fare modifications for fixed route and paratransit.

Fixed route scenarios including changes to or elimination of bus transfers; changes in the cost and length of bus passes; and changes in the regular fare structure. Paratransit scenarios include analyzing ridership based on different degrees of ridership elasticity, and using a flat fee for paratransit service.

The Public Transit Advisory Committee (PTAC) narrowed the fixed route fare scenarios to four scenarios. These scenarios and passenger surveys were presented to the public on January 30<sup>th</sup> for additional comment. These public comments are still being reviewed.

**STAFF RECOMMENDATION:** For the Committee to receive the update on the CAT Fare Analysis Study

Prepared By: Eric Ortman, MPO Senior Planner

**DISTRIBUTION**  
**ITEM 10 D**

**Update on the FY2019 – FY2020 Unified Planning Work Program (UPWP)**

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**OBJECTIVE:** For the Committee to receive an update on the UPWP

**CONSIDERATIONS:** The UPWP describes the previous tasks accomplished by the MPO and the tasks to be undertaken by the MPO in the upcoming two-year period. Each task includes a budget, timeframe and responsible agency.

In the upcoming UPWP as well as the first year of subsequent UPWP, the MPO will begin work on and complete the 2045 Long Range Transportation Plan. This task requires the great majority of the MPO's budget thus minimizing the MPO's ability to undertake additional significant studies. **Attachment 1** is a draft section of the FY2019 – FY2020 UPWP that includes the BPAC.

In the current UPWP (in effect until June 30, 2018) there have been two significant bicycle and pedestrian projects undertaken; the Bicycle & Pedestrian Plan, and the Golden Gate Walkable Community Study; the combined cost of these two studies is approximately \$175,000.

The upcoming TIP for FY2019 – FY2023 also incorporates for the first time, the Board's decision to allocate 100% of its Transportation Management Area (TMA) funds to each of the three project categories on a 5-year schedule.

Year 1: Bicycle and Pedestrian projects (FY23)  
Year 2: Bridge projects (FY24)  
Year 3: Congestion Management projects (FY25)  
Year 4: Bicycle and Pedestrian projects (FY26)  
Year 5: Congestion Management projects(FY27)

**STAFF RECOMMENDATION:** For the Committee to receive the UPWP update

**ATTACHMENTS:**

1. Special Projects and Systems Planning section of the FY2019 – FY2020 UPWP

Prepared By: Eric Ortman, MPO Senior Planner

## **SPECIAL PROJECTS & SYSTEMS PLANNING**

### **PURPOSE:**

To complete various recurring and non-recurring planning projects. These projects will assist in providing a balanced, multimodal transportation system.

### **PREVIOUS WORK:**

- Staff support to the citizen-based Bicycle & Pedestrian Advisory Committee.
- Development of annual Work Program priorities for construction of new sidewalks, pathways and bike lanes.
- Served as liaison to FDOT to communicate the need for bicycle and pedestrian facilities on State roads.
- Completed an update of the Comprehensive Pathways Plan in 2012. Completed a Bicycle and Pedestrian Master Plan in 2018.
- Coordinated with the City of Naples, Marco Island, Everglades City, and Collier County Staff to complete an inventory of the current bike and pedestrian facilities.
- Incorporated the inventory into the Collier County Bicycle and Pedestrian Facilities Map which will be published in 2018.
- Completed the Naples Manor Walkable Community Study (March 2010), Immokalee Walkable Community Study (December 2011), and the Golden Gate Walkable Community Study (June 2018).
- Participated in the US 41 (Commercial Drive to Guilford Road) and Airport Pulling Road (US 41 to Estey Avenue) Pedestrian/ Bicycle Safety Audit.
- The MPO first adopted CMS priorities in August 2003.
- Developed the CMC Stakeholders Committee which developed the concept for the update of the CMP in 2006.
- Updated CMP in 2008 and in 2017 to better define the CMP performance measures and process for projects.

### **REQUIRED TASKS:**

#### **BICYCLE AND PEDESTRIAN PLANNING SUPPORT:**

- Review the *Bicycle and Pedestrian Master Plan* as needed and update every five years.
- Conduct an annual project prioritization process, if needed.
- Participate in special events that promote bicycle/pedestrian activities and safety education.
- Continue outreach to Naples Pathway Coalition, Community Traffic Safety Team and Healthy Community Coalition of Collier County to gain community support of Bicycle and Pedestrian initiatives.
- Coordinate with MPO member governments and School District regarding data collection activities to quantify number of bicyclists and pedestrians at specific locations around Collier County.



- Coordinate with FDOT and local governments to ensure that roadway expansion and retrofit projects work towards meeting the bicycle/pedestrian goals identified in the Bicycle and Pedestrian Master Plan.
- Work with the Technical Advisory Committee (TAC) and School District to identify candidate projects for Safe Routes to Schools Program.
- Analyze bicycle/pedestrian facilities and crashes
- Update the multi-modal components of the LRTP, and LOS analysis as needed.
- Incorporate bicycle and pedestrian facilities plans and programs into multi-modal and mode-shift efforts.
- Coordinate with, and coordinate support for, the transit modal interface.
- Attend and participate in workshops and seminars sponsored by FHWA, FDOT and other professional organizations as appropriate.
- Coordinate with FDOT and member agencies to address integration of MAP-21 and FAST Performance Management Measures into Bicycle and Pedestrian planning in the move towards performance based planning.
- Consultant services may be used on this task.

#### **CONGESTION MANAGEMENT PROCESS SUPPORT:**

- Review CMP 2017 Update with the Congestion Management Committee (CMC) and prioritize CMP projects for funding from Federal, State or local sources.
- Complete a biannual Transportation System Performance Report to provide a thorough system assessment in order to identify where priority investments should be made.
- Staff will continue to coordinate with the Lee County MPO by attending their Traffic Management and Operations Committee (TMOC) and on the Collier/Lee/Charlotte Traffic Incident Management Committee to the extent necessary and feasible.
- Continue to coordinate with Collier Area Transit (CAT) and LeeTran with the LinC system which connects CAT and LeeTran; thereby connecting two counties over an expansive geographical area.
- Coordinate with FDOT and member agencies to address Congestion Management Planning in an effort to move towards performance based planning.
- Consultant and/or MPO staff will continue to review the current CMP and will update or revise the plan to reflect the latest strategies and performance measures as necessary.
- Attend and participate in local, jurisdictional, agency, municipality, FDOT and Lee MPO technical meetings and workshops related to CMC, CMP, and congestion relief strategies.
- Consultant and/or MPO staff to gather traffic volume, traffic signal, and roadway geometry information and crash statistics to facilitate the MPO's assessment of congestion for the Metropolitan Area.
- Facilitate "best practices" approach for incorporating CMP measures into existing plans and programs, including preliminary engineering, traffic simulation modeling, and project prioritization.
- Staff will continue to research alternative transportation choices to include Transportation Demand Management (TDM) strategies in the CMP.

**END PRODUCT:**

**(TARGET DATE)**

- Prioritized Transportation Alternative Program Projects (as needed)
- Prioritized Bicycle and Pedestrian Projects for inclusion in FDOT’s Work Program. (as needed)
- Coordinated efforts with member governments. (ongoing)
- Review pathways element of Regional Transportation Network. (annually)
- Participate in meetings and activities of Community Traffic Safety Team (CTST) (monthly)
- Maintain, update and publish Bike/Ped Users Map (as needed)
- Collect and analyze bicycle and pedestrian crash data (as needed)
- *Bicycle and Pedestrian Master Plan* Updates (as needed)
- *Transportation System Performance Report* (7<sup>th</sup> quarter)
- Updated Congestion Management Process. (as necessary)
- Updated CMP project identification and prioritization Methodology. (as necessary)
- Updated transportation project information. (ongoing)
- Updated traffic volume, signal and roadway geometry information (as necessary)
- Prioritized Congestion Management projects for funding. (as necessary)

**RESPONSIBLE AGENCY:**

Collier MPO Consultant Services	<b>FY 2018/19</b> FHWA (PL)	\$111,000
Collier MPO Consultant Services	<b>FY 2019/20</b> FHWA (PL)	\$67,000

## Task 5 - Financial Tables

Task 5 - Special Projects & Systems Planning Estimated Budget Detail for FY 2018/19							
Budget Category & Description	FHWA (PL)	FHWA (SU)	FTA 5305	FTA State Match	FTA Local Match	Trans. Disad.	Total
<b>A. Personnel Services</b>							
MPO staff salaries, fringe benefits, and other deductions	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000
<b>Subtotal:</b>	<b>\$50,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50,000</b>
<b>B. Consultant Services</b>							
Transportation System Performance Report	\$61,000	\$0	\$0	\$0	\$0	\$0	\$61,000
<b>Subtotal:</b>	<b>\$61,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$61,000</b>
<b>Total:</b>	<b>\$111,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$111,000</b>

Task 5 - Special Projects & Systems Planning Estimated Budget Detail for FY 2019/20							
Budget Category & Description	FHWA (PL)	FHWA (SU)	FTA 5305	FTA State Match	FTA Local Match	Trans. Disad.	Total
<b>A. Personnel Services</b>							
MPO staff salaries, fringe benefits, and other deductions	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000
<b>Subtotal:</b>	<b>\$50,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50,000</b>
<b>B. Consultant Services</b>							
Transportation System Performance Report	\$17,000	\$0	\$0	\$0	\$0	\$0	\$17,000
<b>Subtotal:</b>	<b>\$17,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$17,000</b>
<b>Total:</b>	<b>\$67,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$67,000</b>