



# **Agenda TAC**

## **Technical Advisory Committee**

### **IN-PERSON MEETING**

Growth Management Department  
Planning & Regulation Building  
Conference Rooms 609/610  
2800 N. Horseshoe Dr.  
Naples, FL, 34104

**November 28, 2022, 9:30 A.M.**

1. **Call to Order**
2. **Roll Call**
3. **Approval of the Agenda**
4. **Approval of the September 26, 2022 Meeting Minutes**
5. **Open to Public for Comments Items Not on the Agenda**
6. **Agency Updates**
  - A. FDOT
  - B. MPO Executive Director
7. **Committee Action**
  - A. Endorse Congestion Management Process (CMP) Origin and Destination (O & D) Report
  - B. Endorse County's Updated Transit Asset Management (TAM) Plan Performance Targets
  - C. Endorse Transit Regional Service and Fare Study Scope
  - D. Endorse Transfer of \$2.5 million in FY23 SU Funds to CAT Maintenance & Operations Facility Replacement Project
8. **Reports & Presentations\***
9. **Member Comments**
10. **Distribution Items**
  - A. Revised/Final Congestion Hotspots Fact Sheets
  - B. Draft 2023 MPO Meeting Calendar
11. **Next Meeting Date**

January 23, 2023

**New Location:** Transportation Management Services Bldg. Main Conference Room, 2885 S. Horseshoe Dr., Naples, FL, 34104
12. **Adjournment**

*\*May Require Committee Action*

### ***PLEASE NOTE:***

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**TECHNICAL ADVISORY COMMITTEE of the  
COLLIER METROPOLITAN PLANNING ORGANIZATION  
MEETING MINUTES  
September 26, 2022, 9:30 a.m.**

**1.     Call to Order**

**Ms. Lantz** called the meeting to order at 9:29 a.m.

**2.     Roll Call**

**Ms. McLaughlin** called the roll and confirmed a quorum was present.

**TAC Members Present**

Lorraine Lantz, Chair, Collier County Transportation Planning

Dan Hall, Collier County Traffic Operations

Don Scott, Lee MPO

Omar DeLeon, Collier County Public Transportation & Neighborhood Enhancement (PTNE)

**TAC Members Absent**

Allison Bickett, Vice Chair, City of Naples

Andrew Bennett, Collier County Airport Authority

Daniel Smith, City of Marco Island

Dave Rivera, City of Naples

John Kasten, Collier County School Board

Justin Martin, City of Marco Island

Margaret Wuerstle, Southwest Florida Regional Planning Council

Tim Brock, Everglades City

Ute Vandersluis, Naples Airport Authority

**MPO Staff**

Anne McLaughlin, Executive Director

Scott Philips, Principal Planner

Dusty Siegler, Administrative Assistant

**Others Present**

Wally Blain, Benesch (*virtually via Zoom*)



3. **Approval of the Agenda**

**Ms. Lantz** informed members that MPO Staff handed out a proposed revised Agenda at the meeting. The revised Agenda adds Item 7.E. **Ms. McLaughlin** confirmed Item 7.E. is a walk-on item; an amendment to the Unified Planning Work Program (UPWP) for professional services.

*Mr. Scott moved to approve the agenda as amended. Mr. DeLeon seconded. Carried unanimously.*

(The amended agenda and walk-on item presented at the meeting is attached to these meeting minutes as Attachment “A”.)

4. **Approval of the August 22, 2022 Meeting Minutes**

*Mr. Scott moved to approve the August 22, 2022 meeting minutes. Mr. DeLeon seconded. Carried unanimously.*

5. **Public Comments for Items not on the Agenda**

None.

6. **Agency Updates**

**A. FDOT**

**Ms. McLaughlin** indicated Ms. Victoria Peters could not make it to the meeting due to a schedule conflict. Ms. Peters’ update is that FDOT is holding a few grant sessions in Fort Myers and Mobility Week is coming up in the end of October. **Ms. McLaughlin** said she could circulate the specifics regarding dates. **Mr. Scott** clarified that there is a grant session on October 13 at 10 a.m., at the North Fort Myers Library.

**B. MPO Executive Director**

**Ms. McLaughlin** stated Ms. Brandy Otero has accepted a new position with Collier County; she will be managing the grant program for Transportation Management Services. Her last day with the MPO was on Friday, September 23.

7. **Committee Action**

**A. Endorse Addition of Funds to Cover Cost Increases on Eden Park Elementary and 111<sup>th</sup> Ave. Projects**

**Ms. McLaughlin** explained that Collier County approached the MPO to see if the MPO could assist with the addition of funds to cover cost increases for the Eden Park Elementary and 111<sup>th</sup> Avenue North projects. MPO Staff intends to take the issue to the MPO Board at its October meeting and would

like TAC's endorsement prior to it being presented to the MPO Board. Cost increases have impacted the two projects. The cost estimate for the 111<sup>th</sup> Avenue North Paved Shoulders project was produced in 2013; the project was first programmed in Fiscal Year 2017/2018. Engineering plans were recently completed, and the revised construction cost estimate has now increased. The funding shortfall is \$125,000. Collier County was able to secure additional funding to cover the Construction Engineering & Inspection (CEI) costs. The construction cost estimate for the Eden Park Elementary Safe Routes to School Sidewalk project was produced in 2016. FDOT programmed the project in 2018/2019. Engineering plans were recently completed, and the revised construction cost estimate has now increased substantially. The funding shortfall is \$799,997. Collier County was able to secure additional funding for the CEI cost increase.

According to FDOT's five-year Work Program, dating from September 15, 2022, there is approximately \$3.3 million in the MPO's SU box for FY 2023, and an additional \$519,357 in funds for the Transportation Alternative Program for Urban Areas. Funding is available to cover the amount the County is requesting. However, FDOT recently informed the MPO that FDOT does not yet have budget authority for the 2023 funding and does not anticipate having budget authority until February or March of 2023. At this time, Ms. Peters and FDOT are looking to see what other funds might be available sooner. Staff would like to bring the item to the MPO Board to secure their approval to cover the cost overrun. **Mr. Scott** commented that the total amount appears to be higher than the budget, so there must be some money in the first year that is not tied to the budget. **Ms. McLaughlin** responded that there may be money in the first year not tied to the budget increase. The approximate \$3.3 million may include about three different pools of money; some of it is GFSU. **Ms. Lantz** commented it appears there are funds available and the issue appears to be one of administrative timing. **Ms. McLaughlin** agreed and indicated the County is covering what it can.

***Mr. Scott** moved to endorse Addition of Funds to Cover Cost Increases on Eden Park Elementary and 111<sup>th</sup> Ave. N Projects. **Mr. Hall** seconded. Carried unanimously.*

## **B. Review Congestion Management Process (CMP) Origin and Destination (O & D) Study**

**Ms. McLaughlin** announced that the MPO's consultant, Wally Blain, was attending the meeting via Zoom to provide a presentation on the current draft CMP O&D Study report. The Congestion Management Committee (CMC) reviewed the draft report at their September 21 meeting. CMC has until October 7 to provide comments. Staff would like questions and comments after Mr. Blain's presentation; the final report will be brought back to TAC in November for endorsement.

**Mr. Blain** provided a presentation regarding the draft CMP O&D Study report:

The data used for the study comes from Replica Data platform, an analytic platform. The data is sourced from a variety of different avenues; it is an activity-based model, so it is a simulation of real-time collected data. The activity-based modeling removes specifics and information about individuals; the data is already "de-identified" when it is received and there is no personal information attached to it. Several data sources are used, including mobile/cell phone location and point of interest data, land use/real estate data, transaction/sales data (not used much for the purpose of this study), and ground truth data.

On methodology review, the planning subareas in both Collier and Lee Counties were used for analysis. CMC, when it initially reviewed the study, indicated it wanted to subareas to be in line with the growth management plans and maps. The four neighboring/regional counties were also added to show trip interactions related to Collier County.

On the county level summary, there was an analysis of how many trips originate in Collier County daily (an average weekday in Spring of 2021). The data is a little over one year old, but it is the most current data available today. Benesch looked at how many trips stay in Collier County, how many end outside of the County (about 10 %), how many trips come back into the County (about 9%), and how many trips start in Collier County and end in Lee County (approximately 90,000). There is a high correlation and interaction between the two counties. Another item evaluated was trips that pass through Collier County, but do not end or start in Collier County. Approximately 38,000 daily trips pass through Collier County and a majority of the pass-through trips have an origin or destination in Lee County. I-75 carries the majority of the traffic but there are many trips on SR 82 and SR 29 that are considered pass-through trips. Benesch evaluated the impact of the pass-through trips on the transportation system. The highest number of pass-through trips are on I-75, both at Lee County and Broward County. Mr. Blain presented a spaghetti plot map not included in the draft report (but will be included in the final report). The map depicts home to work trips; where people live in Collier County and their associated work trips. Half of the people working and living in Collier County work west of I-75. 9% of Collier County residents work in Lee County. Mr. Blain presented another graphic chart (not included in the draft report) showing residents working from home from 2019 to 2022. The trend shows that, while the number of people working from home has come down since COVID, there has been stabilization over the past year or so in how many people are working from home. Currently, approximately 25,000 are working from home, 7% of the population/16% of workers, on an average weekday.

On subarea reporting, there are 17 distinct subareas in Collier County that were evaluated. Mr. Blain presented an excerpt of subarea maps included in the report. The maps show trip distributions-where a trip originated in the subarea and where the subarea was the destination. There are also tables and trip matrices for all of the subareas in the Appendix. A series of charts for each subarea were created that show when the subarea was the origin, when it was the destination, when it is considered the home location, and what that means for home to work trips. Mr. Blain pointed out that CMC asked him for clarification on what constituted an errand trip. Errands include taking a car for service, going to a salon, and going to the bank. Grocery shopping would be categorized as a shopping trip. It seems that the service/retail aspect delineates the difference between an errand and a shopping trip. When “home” is a trip purpose on the charts, it means the trip is returning to home, not starting at home. The charts divide up trip distance and trip length. One thing that overwhelms the trip average is out of region or long-distance trips that exceed the highest end range. The charts also show when the trips start and the frequency throughout the day.

On key takeaways/next steps, Replica does the same level of estimating for transit trips, but the data was not included in the data set. Benesch has communicated with Replica. Replica has two conditions to be met; one is that there is a minimum threshold for the size of the system that they want to evaluate. Collier Area Transit does meet that minimum. The second condition is that they are getting the information from the Google transit feed, which transit agencies provide. It seems there was a concern or issue regarding that condition. Benesch has requested Replica to provide the transit information in its next data release so it can be included in the report. On the concentration of work trips, perhaps there is a way to evaluate from

a work as destination perspective rather than a home as origin perspective. There was an evaluation of Collier County residents that leave the county for work, but not of out-of-county residents that come to work in Collier County; there is an opportunity to look at this. Some areas have a more diverse mix of land use and have a higher internal capture of trips that stay in the area rather than leave the area. As the MPO looks towards its 2050 Long-Range Transportation Plan (“LRTP”) update, there is an opportunity to evaluate things like safety data correlated with trip and O&D data, subareas that are environmental justice areas and what that means for the goals and evaluations of the LRTP matrix.

On the schedule, Mr. Blain gave a presentation to CMC last week and presentations for TAC and Citizens Advisory Committee (CAC) occur today. Benesch hopes to get comments on the draft report back by October 7 so that comments can be reviewed and Benesch can coordinate with Staff to get a revised draft out before the next round of committee meetings, which would be CMC on November 16, TAC and CAC on November 28, and a final MPO Board presentation on December 9.

**Mr. Scott** asked Mr. Blain if he received the email Mr. Scott sent him and **Mr. Blain** confirmed that he had. **Mr. Scott** stated the information he sent Mr. Blain is interesting because it provides a large number of trips in percentages that can be looked at. Another interesting thing is that IOD patterns can be viewed; Central Florida, Collier County and Lee County are the areas that come up on that map. It is something to view from a big picture perspective. At the CMC meeting, there was a discussion that the work trips seemed low; but when you look at the percentages, it is about 17%. It is a national O&D and there is an Excel spreadsheet with trip information. Mr. Scott found it interesting.

**Ms. Lantz** asked if there were any other comments and **Mr. Scott** indicated he would submit written comments. **Ms. Lantz** and **Ms. McLaughlin** reiterated that written comments would be submitted by October 7 and thanked Mr. Blain for his presentation.

### **C. Potential Agenda Topics for Joint Meeting with Lee County MPO**

**Ms. McLaughlin** stated that Collier MPO is working with Lee MPO to have joint meetings of TAC and CAC on October 24 at FDOT’s SWAO office. Times for the meeting have not yet been set. Ms. McLaughlin reviewed the agendas from the joint meetings from last year to get an idea of what was discussed and if any items may be good for discussion this year. Last year, there were discussions about regional roads, status of specific projects, regional transit, FDOT COMMUTE with Enterprise update, and regional bike path updates. **Mr. Scott** suggested an update on Rail Trail, as the study is being wrapped up. Another idea is to have the airport do a presentation and give an update on what it is doing for projects. **Ms. McLaughlin** indicated the airport provided a good presentation last year. With respect to COMMUTE with Enterprise, **Mr. Scott** indicated there is more data on van pooling and he is not sure if it is ready for presentation, but the trip reporting should be underway. FDOT has more data this year than it did last year. **Ms. McLaughlin** suggested the new Bipartisan Infrastructure Law; it may be interesting to know who is applying for what, when the deadlines are, and any lessons learned. **Ms. Lantz** asked if there could be a discussion about LRTP coordination and she thought Lee MPO was contemplating an O&D study. **Mr. Scott** responded that Lee MPO is thinking about an O&D study. He would like to see Mr. Blain’s O&D report so that Lee MPO can work to have the other side/perspective addressed and would also like a big picture perspective. Mr. Scott recently met with the economic development council, and it has information related to trips. **Ms. McLaughlin** and **Mr. Scott** discussed that the LRTP update for 2050 could be a topic

at the joint meeting. **Mr. Scott** asked Ms. McLaughlin if she would like to get the MPO Interlocal Agreement done, and **Ms. McLaughlin** responded in the affirmative. **Mr. DeLeon** stated that Collier Area Transit is coordinating with LeeTran on a potential study in the future for regional planning.

**Ms. McLaughlin** asked Mr. Scott for input on start times for the joint TAC and CAC meetings, and **Mr. Scott** suggested 10 a.m. (TAC) and 1:30 p.m. (CAC).

#### **D. Endorse FDOT Vision Zero Safety Targets for Calendar Year 2023**

**Ms. McLaughlin** explained that the Vision Zero safety target is the one target that must be adopted annually. FDOT updates the safety targets and the Highway Safety Improvement Plan each year. FDOT informed staff that it is staying with the Vision Zero safety target for Calendar Year 2023. Collier MPO has traditionally opted to support FDOT in its targets. **Ms. McLaughlin** told Mr. Scott that she has not been able to locate any update from FDOT on crash reporting, and **Mr. Scott** responded it will probably be a few months before an update is received; Mr. Scott used last year's. **Ms. McLaughlin** continued that Collier MPO's data is a little dated, but we know the State and our counties are not meeting the target. Ms. McLaughlin's rationale is there is a sense of security in being in-line with FDOT's target. FDOT is doing the major work of reporting to the federal government, which alleviates some of the burden that would otherwise be on Collier MPO if a separate target were adopted.

**Ms. Lantz** commented that overall, it looks like fatalities have gone up and serious injuries have gone down, but the data is from 2019. **Ms. McLaughlin** indicated that trends often change within a few years. **Mr. Scott** commented serious injuries in Lee County have gone up.

***Mr. Scott** moved to Endorse FDOT Vision Zero Safety Targets for Calendar Year 2023 and **Mr. DeLeon** seconded. Carried unanimously.*

#### **E. Endorse Amendment #2 to FY 22/23-23/24 Unified Planning Work Program (UPWP)**

**Ms. McLaughlin** explained that Collier MPO would like TAC's endorsement of the proposed Amendment<sup>1</sup>. The Amendment is needed because staff anticipates difficulty in filling the principal planner position vacancy. The position has been posted for a few weeks and there may be a potential candidate; Ms. McLaughlin's experience is that it has been difficult to fill positions in this region, especially now that it is widely known that it is expensive to live here. The position may be easier to fill when the County's new pay proposal goes forward, but even then, it may not compete with the cost of housing.

The purpose of the Amendment is to move funds from a variety of categories. The best summary is the last chart (Agenda Item 7E, Attachment 2) and shows the funds being moved from personnel to consultant services. The intention is to reach a total of \$145,000, and it moves funds under the tasks of administration, data collection/development, transportation improvement program, and special projects and systems planning, which is where most of the work is being done now. Based on the MPO's general planning contract and the rates set in that contract for planners, the \$145,000 would allow a part-time

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<sup>1</sup> See Attachment "A" to these meeting minutes.

planner to be hired through a consulting firm, should the need arise. It is a safety net if recruitment proves difficult.

**Ms. Lantz** asked if the MPO was able to fill the position, would staff present another amendment to move the money back to personnel; or does Staff need the flexibility at this time? **Ms. McLaughlin** indicated a need for flexibility at this time. The MPO currently works with five different consulting firms; all of them generally have experienced planners on board and Staff thinks such a planner would be able to be effective quickly. **Mr. Hall** asked if such a planner would work in the MPO's office, and **Ms. McLaughlin** responded it is possible, but she is open to remote work depending on the arrangement. **Mr. Hall** asked if such a consultant could only do certain projects or if there would be a conflict of interest issue with the consulting firm handling other projects while working for the MPO. **Ms. McLaughlin** responded she had not thought about that, and **Mr. Hall** suggested that she consider it; it may reduce the availability of consultant planners to help the MPO. **Ms. Lantz** commented that a consultant planner may be able to work on one scope of work but not another one due to a potential conflict; this could be an issue with the upcoming LRTP update. **Mr. Scott** asked how the LRTP update is being done and **Ms. McLaughlin** indicated she needed to follow up and circle back; she thinks that requests for professional services are going out. **Mr. Scott** pointed out that consultants do not know where they are at in the rotation (for offers to work on projects), so the consultant would not know whether they are in line to be offered the next project. **Mr. Hall** commented if the consultant does a lot of work with the County, they may not want to help the MPO, but if they do not do work with the County, maybe they would be willing.

**Ms. Lantz** asked if Staff needed approval of the Amendment to move forward with asking more questions, and **Ms. McLaughlin** responded in the affirmative. Not all of the logistics have been determined; Staff did not want to add action items to the joint meetings with Lee County next month. This meeting is otherwise the only opportunity to get the draft Amendment before TAC before it needs to go to the MPO Board, and the MPO Board has a joint meeting with Lee County in November as well. Staff did not want to add action items to the MPO Board's joint meeting either.

***Mr. Scott** moved to Endorse Amendment #2 to FY 22/23-23/24 Unified Planning Work Program (UPWP) and **Mr. DeLeon** seconded. Carried unanimously.*

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

None.

**9. Member Comments**

None.

**10.     Distribution Items**

**A.   Congestion Hotspots Fact Sheets**

Item distributed. **Ms. McLaughlin** indicated that revisions are being made and the revised Fact Sheets will be provided for the November meeting.

*Mr. Hall exited the meeting.*

**11.     Next Meeting Date**

*October 24, 2022, 10 a.m. – Joint Meeting with Lee MPO TAC at FDOT D1 Southwest Area Office – in person.*

**12.     Adjournment**

**Ms. Lantz** adjourned the meeting at 10:21 a.m.



**Agenda TAC**  
**Technical Advisory Committee**  
**IN-PERSON MEETING**  
 Growth Management Department  
 Planning & Regulation Building  
 Conference Rooms 609/610  
 2800 N. Horseshoe Dr  
 Naples, FL

**September 26, 2022, 9:30 AM**

1. **Call to Order**
2. **Roll Call**
3. **Approval of the Agenda**
4. **Approval of the August 22, 2022 Meeting Minutes**
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  - B. MPO Executive Director
7. **Committee Action**
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- C. Potential Agenda Topics for Joint Meeting with Lee County MPO
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- E. Endorse Amendment #2 to FY 22/23-23/24 Unified Planning Work Program (UPWP)
8. **Reports & Presentations\***
9. **Member Comments**
10. **Distribution Items**
  - A. Congestion Hotspots Fact Sheets
11. **Next Meeting Date**

October 24, 2022 – **Joint Meeting with Lee MPO TAC at FDOT D1 Southwest Area Office**
12. **Adjournment**

*\*May Require Committee Action*

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**Attachment "A" to  
 TAC Meeting Minutes  
 9/26/2022**



**EXECUTIVE SUMMARY**  
**COMMITTEE ACTION**  
**ITEM 7E**

**Endorse Amendment #2 to FY 22/23-23/24 Unified Planning Work Program (UPWP)**

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**OBJECTIVE:** For the committee to review and endorse the draft amendment to the Fiscal Year (FY) 22/23-23-24 UPWP.

**CONSIDERATIONS:** The UPWP provides a planning work program that identifies and describes the MPO's budget for activities, studies and technical support expected to be undertaken in the metropolitan area on behalf of the MPO Board. It also lists the funding source(s) for each planning task and specifies whether the task will be conducted by MPO staff, consultants or county agencies.

An amendment is necessary to reallocate funding from personnel services to consultant services within Tasks 1, 2, 3 and 5 to provide general support to the MPO. The MPO has advertised a vacant Principal Planner position and may need assistance from a consultant until a new Principal Planner is hired. This is a net zero revision. There is still sufficient funding to cover salaries within the UPWP.

This item is being brought forward as a walk on item and will be distributed concurrent with the review of the Technical and Citizens Advisory Committees on 9/26/22. The public comment period will close at the MPO Board meeting on 10/14/22.

**STAFF RECOMMENDATION:** That the committee endorse Amendment 2 to the FY 22/23-23/24 UPWP.

Prepared By: Brandy Otero, Principal Planner

**ATTACHMENT(S):**

1. Amendment #2 to FY 22/23-23/24 UPWP in track changes
2. Summary of Changes



**COLLIER  
METROPOLITAN PLANNING ORGANIZATION  
BONITA SPRINGS (NAPLES), FL UZA**

**UNIFIED PLANNING WORK PROGRAM  
FISCAL YEARS (FY) 2022/23-2023/24  
July 1, 2022-June 30, 2024**

This document was approved and adopted by the  
Collier Metropolitan Planning Organization on  
May 13, 2022

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Council Member Paul Perry, MPO Chair

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Federal Planning Fund  
Federal Aid Program (FAP) - # 0313-060-M  
Financial Management (FM) - # 439314-4-14-01 & 439314-4-14-02  
FDOT Contract #G2821

Amendment 1: 9/9/22  
Amendment 2: 10/14/22

Federal Transit Administration (FTA) Section 5305(d) Funds  
Financial Management (FM) - # 410113 1 14  
Contract #G1J00  
Contract #G1V40  
Contract #G2594

Prepared by the staff and the participating agencies of the Collier Metropolitan Planning Organization. The preparation of this document has been financed in part through grants from the Federal Highway Administration (CFDA Number 20.205), the Federal Transit Administration (CFDA Number 20.505), the U.S. Department of Transportation, under the Metropolitan Planning Program, Section 104(f) of title 23, U.S. Code, and from Local funding provided by Collier County, the City of Naples, the City of Marco Island, and the City of Everglades City. The contents of this document do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

The MPO does not discriminate against anyone on the basis of race, color, religion, sex, age, national origin, disability or family status. For more information on the MPO's commitment to equity and nondiscrimination, or to express concerns visit <https://www.colliermpo.org/get-involved/civil-rights/>.

## TASK 1 ADMINISTRATION

### PURPOSE:

To conduct activities (including staff travel and capital expenses) including the development and maintenance of administrative reports and grants contract administration. This task also includes all public involvement activities and administrative support for MPO planning and programs in general, including assistance to Federal, State, and local agency staff, as needed. It provides for the administration of the area-wide multimodal transportation planning process in accordance with Federal and State requirements, and for the technical management over each project included in the UPWP.

### PREVIOUS WORK:

- Ongoing administrative activities
- Staff support for MPO Board and Committee meetings
- Develop and Update the UPWP
- Update Staff Services Agreement and Lease Agreement
- Public Involvement activities in compliance with the Public Participation Plan
- Procurement Activities
- Quarterly invoicing request
- Monthly invoicing activities
- Update to Public Participation Plan in 2020
- Maintained MPO website
- Strategic Plan and Annual Report

### REQUIRED ACTIVITIES:

- Administer MPO Governing Board meetings and all Advisory Committee meetings including meeting advertisement and the preparation of minutes and agenda packages.
- Attend training at conferences, workshops, etc. (MPO staff and Governing Board members) Attend business meetings as required. Including but not limited to FDOT meetings, Title VI, ADA and Environmental Justice training opportunities.
- Perform grant and financial tasks including preparing grant agreements, grant compliance tasks, grant reimbursements, timekeeping, inventory, contract management, invoice payment.
- Purchase of office supplies, computers, printers, software, and audio-visual equipment.
- Rental lease payments for office space and MPO vehicle.
- Monthly payments for phone system, cell phones, website hosting, postage (monthly and annual permit) and administrative functions to run the MPO.
- Payment for MPO insurance.
- Participate in joint FDOT/MPO annual certification reviews and in Federal TMA reviews.
- Procure services, supplies, and equipment (including office supplies, printers, computers, iPads, software purchase and licensing, and audio-visual equipment. This includes preparation of Request for Proposals, Request for Professional Services, purchase orders, contracts, etc. Lease of necessary office equipment (printers, copiers, etc.).
- Review and maintain existing agreements, by-laws, and COOP. Modify as necessary to stay in compliance with federal/state rules and laws.

- Prepare and adopt the two-year UPWP; process modifications and amendments; submit progress reports and invoices.
- Monitor and update the annual Strategic Plan and Annual Report.
- Maintain the Public Participation Plan (PPP) and update as necessary. Conduct all activities to maintain compliance with plan including to maintain and update website, legal ads, press releases, etc.
- Monitor progress towards goals, including Disadvantaged Business Enterprise (DBE) goals and ensure compliance with DBE policy.
- Consultant services to provide general staff support as needed to accomplish required activities identified in task.

End Product/Deliverable(s)	Target Date
Administer MPO Governing Board and Advisory Committee meetings.	Ongoing
Progress Reports and Invoices to FDOT	Quarterly
Amendments and Modifications to FY 23/24 UPWP	As Needed
Draft FY 25/26 UPWP	March 2024
Final FY 25/26 UPWP	May 2024
Strategic Plan and Annual Report	October - Annually
Joint FDOT/MPO annual certification reviews.	Spring 2023/Spring 2024
Prepare for the 2024 Federal Certification review.	Summer 2024
Public Participation Plan (PPP) - Update as necessary.	Ongoing
Agenda packages and public notices for MPO Board and advisory committees	Monthly
Monitor progress towards goals, including Disadvantaged Business Enterprise (DBE) goals and ensure compliance with DBE policy.	Annually
Updated Bylaws, COOP, and MPO Agreements	As needed

**RESPONSIBLE AGENCY:** Collier MPO, Consultant Services

## Task 1 - Financial Tables

Task 1 - Administration Estimated Budget Detail for FY 22/23						
Budget Category	Budget Category Description	FHWA (PL)	FHWA (SU)	FTA 5305	Trans. Disad.	Total
<b>A. Personnel Services</b>						
	MPO staff salaries, fringe benefits, and other deductions	<del>\$225,000</del>	\$0	\$0	\$0	<del>\$225,000</del>
	<b>Subtotal:</b>	<del>\$225,000</del>	<del>\$0</del>	<del>\$0</del>	<del>\$0</del>	<del>\$225,000</del>
<b>B. Consultant Services</b>						
	Website maintenance, hosting fees, etc.	\$5,000	\$0	\$0	\$0	\$5,000
	<b>General Support</b>	<del>\$75,000</del>	<del>\$0</del>	<del>\$0</del>	<del>\$0</del>	<del>\$75,000</del>
	<b>Subtotal:</b>	<del>\$80,000</del>	<del>\$0</del>	<del>\$0</del>	<del>\$0</del>	<del>\$80,000</del>
<b>C. Travel</b>						
	Travel and Professional Development	\$5,000	\$0	\$0	\$0	\$5,000
	<b>Subtotal:</b>	<del>\$5,000</del>	<del>\$0</del>	<del>\$0</del>	<del>\$0</del>	<del>\$5,000</del>
<b>D. Other Direct Expenses</b>						
	Building or room Rental/lease	\$17,000	\$0	\$0	\$0	\$17,000
	Insurance	\$6,000	\$0	\$0	\$0	\$6,000
	Cellular Telephone Access and expenses	\$3,600	\$0	\$0	\$0	\$3,600
	General Copying Expenses, equipment lease and purchase, printing charges, computer purchase, software purchase, repairs and maintenance	\$15,000	\$0	\$0	\$0	\$15,000
	General Office Supplies	\$3,000	\$0	\$0	\$0	\$3,000
	Legal Advertising	\$2,000	\$0	\$0	\$0	\$2,000
	Motor Pool Rental and Car Maintenance /expenses	\$5,000	\$0	\$0	\$0	\$5,000
	Postage, business reply permit, freight expenses, etc.	\$1,200	\$0	\$0	\$0	\$1,200
	Telephone Access, expenses and system maintenance	\$1,000	\$0	\$0	\$0	\$1,000
	<b>Subtotal:</b>	<del>\$53,800</del>	<del>\$0</del>	<del>\$0</del>	<del>\$0</del>	<del>\$53,800</del>
	<b>Total:</b>	<del>\$363,800</del>	<del>\$0</del>	<del>\$0</del>	<del>\$0</del>	<del>\$363,800</del>

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Task 1 - Administration						
Estimated Budget Detail for FY 2023/24						
Budget Category	Budget Category Description	FHWA (PL)	FHWA (SU)	FTA 5305	Trans. Disad.	Total
<b>A. Personnel Services</b>						
	MPO staff salaries, fringe benefits, and other deductions	\$305,000	\$0	\$0	\$0	\$305,000
	<b>Subtotal:</b>	<b>\$305,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$305,000</b>
<b>B. Consultant Services</b>						
	Website maintenance, hosting fees, etc.	\$5,000	\$0	\$0	\$0	\$5,000
	<b>Subtotal:</b>	<b>\$5,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,000</b>
<b>C. Travel</b>						
	Travel and Professional Development	\$5,000	\$0	\$0	\$0	\$5,000
	<b>Subtotal:</b>	<b>\$5,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,000</b>
<b>D. Other Direct Expenses</b>						
	Building or room Rental/lease	\$17,000	\$0	\$0	\$0	\$17,000
	Insurance	\$6,000	\$0	\$0	\$0	\$6,000
	Cellular Telephone Access and expenses	\$3,600	\$0	\$0	\$0	\$3,600
	General Copying Expenses, equipment lease, printing charges, repairs and maintenance	\$15,000	\$0	\$0	\$0	\$15,000
	General Office Supplies	\$3,000	\$0	\$0	\$0	\$3,000
	Legal Advertising	\$2,000	\$0	\$0	\$0	\$2,000
	Motor Pool Rental and Car Maintenance /expenses	\$5,000	\$0	\$0	\$0	\$5,000
	Postage, business reply permit, freight expenses, etc.	\$1,200	\$0	\$0	\$0	\$1,200
	Telephone Access, expenses and system maintenance	\$1,000	\$0	\$0	\$0	\$1,000
	<b>Subtotal:</b>	<b>\$53,800</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$53,800</b>
	<b>Total:</b>	<b>\$368,800</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$368,800</b>

## **TASK 2 DATA COLLECTION / DEVELOPMENT**

### **PURPOSE:**

Develop and monitor the multimodal transportation system to preserve capacity, maximize personal mobility and freight movement, ensure user safety and system security, and maintain the transportation system's integrity. Acquire data to evaluate the system's operating efficiency and conditions to assess current needs, validate the MPO's and FDOT D-1 regional transportation planning model, project future travel demand, and identify future improvements. Coordination with local agencies, jurisdictions and municipalities when reviewing and updating the forecasts and plans is essential. Update GIS database to address current conditions that include, but are not limited to functional classification; roadway network for District One Regional Transportation Demand Model; bicycle & pedestrian facilities inventory; and prepare various overlays for analytical purposes. Coordinate with Collier County staff on use of the County's Interactive Growth Model (CIGM) in analyzing amendments and updates to the Long Range Transportation Plan.

### **PREVIOUS WORK:**

- Developed GIS maps for bike/pedestrian planning activities.
- Updated TAZs and socioeconomic data for 2045 LRTP.
- Updated socio-economic data and TAZ structures for the 2045 LRTP Update.
- 2045 Long Range Transportation Plan adoption in 2021.
- Adoption of FY 2022 performance measures.

### **REQUIRED ACTIVITIES:**

- Coordinate with FDOT, local governments, and neighboring MPOs to collect and provide transportation data and information to support MPO, federal, and state planning activities, model development, and performance measures;
- Acquire and analyze data to support performance-based planning efforts such as the Long Range Transportation Plan, MPO Model Development, Transportation Improvement Program, Public Transit Safety Plan, Planning and Corridor Studies, Freight Studies, Complete Streets, Resiliency Studies, Congestion Management Process, etc.;
- Coordinate with federal, state, and local partners to prepare, analyze, and integrate 2020 U.S. Census data into MPO planning activities and efforts;
- Participate in the FDOT Statewide Model Task Force and regional modeling activities to support the FDOT D-1 model development, calibration, validation, and maintenance;
- Collaborate with Collier County to update the County Interactive Growth Model;
- Coordinate with the MPO Congestion Management Committee to evaluate data and data platforms used to analyze system conditions and needs.
- Review functional classifications, boundary information, and TAZ data based on 2020 census.
- Review and provide travel demand model information such as Annual Average Daily Traffic (AADT) and volume-to-capacity ratios for planning documents, other agency and citizen's requests.
- Prepare and maintain GIS files, and prepare and maintain maps.
- Coordinate with County staff on the County's Crash Data Management System (CDMS)
- Analyze bike/ped facilities and crash data.

- Complete equity analysis in preparation for 2050 LRTP.
- Continue coordination with jurisdictions, agencies, and municipalities within Collier County and adjacent to Collier County on community master plans, transportation system plans, multi-modal mobility plans, Local Road Safety Plan etc. and the data used to update and maintain such information.
- Consultant services to provide general staff support as needed to accomplish required activities identified in task.

End Task/Deliverable(s)	Target Date
Collier Data for 2020 Validation of the District 1 Regional Planning Model	August 2022
Updated GIS Files and maps	As needed
Coordinate with the County staff on updates to the County Interactive Growth Model (CIGM) so that both entities (County and MPO) are using the most current and accurate TAZ structure and socioeconomic data available	As needed
Equity Analysis	June 2024
Bike/Ped Crash Data Analysis	As needed

**RESPONSIBLE AGENCY:** Collier MPO, Consultant Services



## Task 2 - Financial Tables

Task 2 - DATA COLLECTION/DEVELOPMENT Estimated Budget Detail for FY 2022/23						
Budget Category	Budget Category Description	FHWA (PL)	FHWA (SU)	FTA 5305	Trans. Disad.	Total
<b>A. Personnel Services</b>						
	MPO staff salaries, fringe benefits, and other deductions	<del>\$30,000</del>	\$0	\$0	\$0	<del>\$30,000</del>
	<b>Subtotal:</b>	<del>\$30,000</del>	\$0	\$0	\$0	<del>\$30,000</del>
<b>B. Consultant Services</b>						
	Contract/Consultant Services / <del>General Support</del>	<del>\$45,000</del>	\$0	\$0	\$0	<del>\$45,000</del>
	<b>Subtotal</b>	\$15,000	\$0	\$0	\$0	\$15,000
	<b>Total:</b>	\$75,000	\$0	\$0	\$0	\$75,000

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Task 2 - DATA COLLECTION/DEVELOPMENT Estimated Budget Detail for FY 2023/24						
Budget Category	Budget Category Description	FHWA (PL)	FHWA (SU)	FTA 5305	Trans. Disad.	Total
<b>A. Personnel Services</b>						
	MPO staff salaries, fringe benefits, and other deductions	\$25,000	\$0	\$0	\$0	\$25,000
	<b>Subtotal:</b>	\$25,000	\$0	\$0	\$0	\$25,000
<b>B. Consultant Services</b>						
	Contract/Consultant Services	\$15,000	\$0	\$0	\$0	\$15,000
	<b>Subtotal</b>	\$15,000	\$0	\$0	\$0	\$15,000
	<b>Total:</b>	\$40,000	\$0	\$0	\$0	\$40,000

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## TASK 3 TIP MONITORING AND DEVELOPMENT

### PURPOSE:

Develop Multimodal Transportation Improvement Programs (TIP) for FY 23/24-27/28 and FY 24/25-28/29 that identify all Federal, State, and locally funded transportation improvements consistent with the requirements of Federal and State laws. Coordinate with FDOT and member agencies to address integration of MAP-21 and FAST Performance Management Measures in the TIP as well as new requirements from the Bipartisan Infrastructure Law (BIL). This section also includes transportation system planning tasks related to contingency of operations and short-range transportation planning and programming.

### PREVIOUS WORK:

- Coordinated with agencies and jurisdictions on transportation plans and programs.
- Annual preparation of TIP and TIP amendments.
- Annual list of project priorities for inclusion in the TIP.
- Adoption of FY 23-27 TIP

### REQUIRED ACTIVITIES

- Develop annual project priorities identifying unfunded highway, transit, bicycle and pedestrian, planning and congestion management projects that are prioritized by the MPO. This activity includes review of applications and associated activities.
- Review FDOT Draft Tentative Work Program and Tentative Work Program for consistency with the LRTP and adopted priorities of the MPO Board.
- Prepare and adopt the TIP. This includes coordinating all efforts with FDOT, local agencies, jurisdictions and the STIP.
- Prepare and process amendments. This includes reviewing amendments for consistency with the TIP and LRTP.
- Coordinate with FDOT and member agencies to address integration of FAST Act Performance Management Measures in performance-based planning.
- Consultant services to provide general staff support as needed to accomplish required activities identified in task.

End Task	Target Date
Annual Project Priority Lists	June – Annually
FY 23/24-27/28 TIP	June - 2023
FY 24/25-28/29 TIP	June - 2024
TIP Amendments and Modifications	As needed
Adopted Safety Targets and Related Performance Measures	Annually

**RESPONSIBLE AGENCY:** Collier MPO

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### Task 3 - Financial Tables

Task 3 - TIP						
Estimated Budget Detail for FY 22/23						
Budget Category	Budget Category Description	FHWA (PL)	FHWA (SU)	FTA 5305	Trans. Disad.	Total
<b>A. Personnel Services</b>						
	MPO staff salaries, fringe benefits, and other deductions	<del>\$10,000</del>	\$0	\$0	\$0	<del>\$10,000</del>
	<b>Subtotal:</b>	<del>\$10,000</del>	<del>\$0</del>	<del>\$0</del>	<del>\$0</del>	<del>\$10,000</del>
<b>B. Consultant Services</b>						
	<u>General Support/ Automated TIP</u>	<del>\$20,000</del>	<del>\$0</del>	<del>\$0</del>	<del>\$0</del>	<del>\$20,000</del>
	<b>Subtotal:</b>	<del>\$20,000</del>	<del>\$0</del>	<del>\$0</del>	<del>\$0</del>	<del>\$20,000</del>
	<b>Total:</b>	<del>\$30,000</del>	<del>\$0</del>	<del>\$0</del>	<del>\$0</del>	<del>\$30,000</del>

Task 3 - TIP						
Estimated Budget Detail for FY 23/24						
Budget Category	Budget Category Description	FHWA (PL)	FHWA (SU)	FTA 5305	Trans. Disad.	Total
<b>A. Personnel Services</b>						
	MPO staff salaries, fringe benefits, and other deductions	\$30,000	\$0	\$0	\$0	\$30,000
	<b>Subtotal:</b>	\$30,000	\$0	\$0	\$0	\$30,000
	<b>Total:</b>	\$30,000	\$0	\$0	\$0	\$30,000

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## TASK 5 SPECIAL PROJECTS AND 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:

- 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 first Transportation System Performance Report.
- Began Congestion Management Process Update, which will continue into this UPWP for completion.
- Completed first Local Road Safety Plan.

### REQUIRED TASKS:

- 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 continued integration of Performance Management measures into Bicycle and Pedestrian Planning and Congestion Management Planning.
- Consultant services to provide general staff support as needed to accomplish required activities identified in task.

### Bicycle/Pedestrian Planning

- Participate in special events that promote bicycle/pedestrian activities and safety education.
- Participate in meetings/workshops related to bicycle/pedestrian initiatives, including those hosted by FDOT, FHWA, CTST, Naples Pathway Coalition, Blue Zones, Healthy Community Coalition of Collier County, and other agencies.
- 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.
- Maintain and update the current Bicycle Pedestrian Master Plan as needed, and prior to the LRTP update.
- Depending on new federal and state guidance, prepare documents to address one or more of the following programs:
  - Vision Zero Action Plan
  - Safe Streets for All
  - Complete Streets
  - Tackling the Climate Crisis – Transition to a Clean Energy, Resilient Future
- Prepare updates to SUNTrail maps as opportunity arises.

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### Congestion Management Planning

- Complete the Congestion Management Process Update.
- Prepare an updated Transportation System Performance Report prior to completion of the 2050 Long Range Transportation Plan. This document will become a guiding document of the 2050 LRTP.
- Attend Lee TMOC and Collier/Lee/Charlotte TIM Team to the extent feasible
- Attend and participate in technical meetings and workshops related to the CMC, CMP and congestion relief strategies
- Update the Local Road Safety Plan with current data and statistics. This document will become a guiding document of the 2050 LRTP.
- Facilitate “best practices” approach for incorporating CMP measures into existing plans and programs, including preliminary engineering, traffic simulation modeling, and project prioritization.

End Task/Deliverable	Target Date
Congestion Management Process Update	December 2022
Updated Transportation System Performance Report	June 2024
Updated Local Road Safety Plan	June 2024
Proposed revisions to SUNTrails Map	As needed
Safe Routes to School Program applications and prepare letters of support	As needed
Collier Bicycle/Pedestrian Facility Map Update	As needed
Bike/Ped Master Plan Update	June 2024

**RESPONSIBLE AGENCY:** Collier MPO, Consultant Services

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## Task 5 – Financial Tables

Task 5 - Special Projects & Systems Planning Estimated Budget Detail for FY 2022/23					
Budget Category & Description	FHWA (PL)	FHWA (SU)	FTA 5305	Trans. Disad.	Total
<b>A. Personnel Services</b>					
MPO staff salaries, fringe benefits, and other deductions	\$31,000	\$0	\$0	\$0	\$31,000
<b>Subtotal:</b>	<b>\$31,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$31,000</b>
<b>B. Consultant Services</b>					
General Support	\$20,000	\$0	\$0	\$0	\$20,000
Congestion Management Process Update	\$20,000	\$0	\$0	\$0	\$20,000
Transportation System Performance Report	\$0	\$100,000	\$0	\$0	\$100,000
Bike/Ped Master Plan	\$67,133	\$0	\$0	\$0	\$67,133
<b>Subtotal:</b>	<b>\$107,133</b>	<b>\$100,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$207,133</b>
<b>Total:</b>	<b>\$138,133</b>	<b>\$100,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$238,133</b>

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Task 5 - Special Projects & Systems Planning Estimated Budget Detail for FY 2023/24					
Budget Category & Description	FHWA (PL)	FHWA (SU)	FTA 5305	Trans. Disad.	Total
<b>A. Personnel Services</b>					
MPO staff salaries, fringe benefits, and other deductions	\$80,000	\$0	\$0	\$0	\$80,000
<b>Subtotal:</b>	<b>\$80,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$80,000</b>
<b>B. Consultant Services</b>					
Transportation System Performance Report	\$0	\$50,000	\$0	\$0	\$50,000
Bike/Ped Master Plan	\$54,925	\$0	\$0	\$0	\$54,925
<b>Subtotal:</b>	<b>\$54,925</b>	<b>\$50,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$104,925</b>
<b>Total:</b>	<b>\$134,925</b>	<b>\$50,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$184,925</b>

**SUMMARY TABLES**

**TABLE 3 – FY 2022/23 AGENCY PARTICIPATION**

Task #	Task Description	FHWA A CPG	FHWA A PL	FHWA A CPG	FHWA A SU	FTA Section 5305 (FY 21)	FTA Section 5305 (FY 22)	FTA Section 5307 (FY 22)	FDOT Soft Match	Local	TD Trust	Total	Amount to Consultant
1	Administration		\$ 363,800						\$ 80,238	\$ -	\$ -	\$ 444,038	\$ 80,000
2	Data Collection/ Development		\$ 75,000						\$ 16,542	\$ -	\$ -	\$ 91,542	\$ 45,000
3	Transportation Improvement Program (TIP)		\$ 30,000						\$ 6,617	\$ -	\$ -	\$ 36,617	\$ 20,000
4	Long Range Planning		\$ 78,543	\$ 250,000					\$ 17,323	\$ -	\$ -	\$ 345,866	\$ 278,543
5	Special Projects and Systems Planning		\$ 138,133	\$ 100,000					\$ 30,466	\$ -	\$ -	\$ 268,599	\$ 207,133
6	Transit and Transportation Disadvantaged		\$ 166,860			\$ 128,028	\$ 124,715	\$60,000	\$ 99,988		\$ 27,954	\$ 607,545	\$ 265,319
7	Regional Coordination		\$ 32,000			\$ -			\$ 7,058	\$ -	\$ -	\$ 39,058	\$ -
8	Locally Funded Activities		\$ -			\$ -			\$ -	\$ 8,000	\$ -	\$ 8,000	\$ -
	Total fiscal year 2022/23 funds for all tasks		\$ 884,336	\$ 350,000		\$ 128,028	\$ 124,715	\$ 60,000	\$ 258,232	\$ 8,000	\$ 27,954	\$ 1,841,265	
	Total De-obligation from prior fiscal years		\$ -			\$ -			\$ -	\$ -	\$ -	\$ -	
	Total cost, including carryover, for all tasks		\$ 884,336	\$ 350,000		\$ 128,028	\$ 124,715	\$ 60,000	\$ 258,232	\$ 8,000	\$ 27,954	\$ 1,841,265	\$ 895,995

	FHWA A PL	FHWA A SU	FTA 5307	FDOT	TD Trust	Collier Co.	Naples	Everglades	Marco Is.	Total
State Support/Match for MPO (I)	\$ -			\$ 258,232	\$ -		\$ -	\$ -	\$ -	\$ 258,232
FY 2022/23 Funding	\$ 884,336	\$ 350,000	\$ 60,000		\$ 27,954		\$ -	\$ -	\$ -	\$ 1,322,290
FY 2022/23 Local Funding	\$ -		\$ -	\$ -		\$ 5,000	\$ 2,000	\$ -	\$ 1,000	\$ 8,000
5305 Carryover *	\$ -		\$ 252,743	\$ -				\$ -		\$ 252,743
De-Obligation from Prior Fiscal Years			\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -
Total cost, including carryover, for all tasks	\$ 884,336	\$ 350,000	\$ 312,743	\$ 258,232	\$ 27,954	\$ 5,000	\$ 2,000	\$ -	\$ 1,000	\$ 1,841,265

(I) For FY 2022/2023, FDOT will "soft match" the MPP/PL Funds using toll revenue expenditures as a credit toward the non-Federal matching share.  
The amount identified on this line represent the amount of "soft match" required (both State and local) for the amount of Federal PL section 112 funds requested in this UPWP.  
\* - FTA Section 5305 includes FY 21 and FY 22 funding



**TABLE 4 – FY 2022/23 FUNDING SOURCE**

Task #	Task Description	FHWA PL Federal	FHWA SU Federal	FTA 5305 Carryforward	FTA Section 5307 (FY 22)	FDOT Soft Match	Total Federal Funding	State TD Trust	Local Funding	Total
1	Administration	\$ 363,800				\$ 80,238	\$ 363,800	\$ -	\$ -	\$ 444,038
2	Data Collection/Development	\$ 75,000				\$ 16,542	\$ 75,000	\$ -	\$ -	\$ 91,542
3	Transportation Improvement Program (TIP)	\$ 30,000				\$ 6,617	\$ 30,000	\$ -	\$ -	\$ 36,617
4	Long Range Planning	\$ 78,543	\$ 250,000			\$ 17,323	\$ 328,543	\$ -	\$ -	\$ 345,866
5	Special Projects and Systems Planning	\$ 138,133	\$ 100,000			\$ 30,466	\$ 238,133	\$ -	\$ -	\$ 268,599
6	Transit and Transportation Disadvantaged	\$ 166,860		\$ 252,743	\$ 60,000	\$ 99,988	\$ 166,860	\$ 27,954		\$ 607,545
7	Regional Coordination	\$ 32,000				\$ 7,058	\$ 32,000	\$ -	\$ -	\$ 39,058
8	Locally Funded Activities for all tasks	\$ -				\$ -	\$ -	\$ -	\$ 8,000	\$ 8,000
		\$ 884,336	\$ 350,000	\$ 252,743	\$ 60,000	\$ 258,232	\$ 1,234,336	\$ 27,954	\$ 8,000	\$ 1,841,265
	State Support/Match for MPO (1)	\$ -	\$ -			\$ 258,232	\$ -	\$ -		\$ 258,232
	FY 2022/23 Funding	\$ 884,336	\$ 350,000		\$ 60,000	\$ -	\$ -	\$ 27,954		\$ 1,322,290
	FY 2022/23 Local Funding	\$ -	\$ -			\$ -	\$ -		\$ 8,000	\$ 8,000
	Roll Forward from Prior Fiscal Year			\$ 252,743		\$ -	\$ -	\$ -		\$ 252,743
	Total cost, including carryover, for a	\$ 884,336	\$ 350,000	\$ 252,743	\$ 60,000	\$ 258,232	\$ 1,234,336	\$ 27,954	\$ 8,000	\$ 1,841,265

\*Soft match includes \$195,046 at .1807% and \$63,186 at 20% to match PTGAs.

**TABLE 5 – FY 2023/24 AGENCY PARTICIPATION**

Task #	Task Description	FHWA CPG	FHWA PL	FHWA CPG	FDOT Soft Match	Local	TD Trust	Total	Amount to Consultant
1	Administration								
2	Data Collection/ Development	\$ 368,800	\$ -	\$ -	\$ 81,340	\$ -	\$ -	\$ 450,140	\$ 5,000
3	Transportation Improvement Program (TIP)	\$ 40,000	\$ -	\$ -	\$ 8,822	\$ -	\$ -	\$ 48,822	\$ 15,000
4	Long Range Planning	\$ 30,000	\$ -	\$ -	\$ 6,617	\$ -	\$ -	\$ 36,617	\$ -
5	Special Projects and Systems Planning	\$ 46,846	\$ 300,000	\$ -	\$ 10,332	\$ -	\$ -	\$ 357,178	\$ 306,846
6	Transit and Transportation Disadvantaged	\$ 134,925	\$ 50,000	\$ -	\$ 29,758	\$ -	\$ -	\$ 214,683	\$ 104,925
7	Regional Coordination	\$ 156,403	\$ -	\$ -	\$ 34,495	\$ -	\$ 27,954	\$ 218,852	\$ 123,883
8	Locally Funded Activities	\$ 32,000	\$ -	\$ -	\$ 7,058	\$ -	\$ -	\$ 39,058	\$ -
	Total fiscal year 2022/23 funds for all tasks	\$ -	\$ -	\$ -	\$ -	\$ 8,000	\$ -	\$ 8,000	\$ -
	Total De-obligation from prior fiscal years	\$ 808,974	\$ 350,000	\$ -	\$ 178,422	\$ 8,000	\$ 27,954	\$ 1,373,350	\$ -
	Total cost, including carryover, for all tasks	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		<b>\$ 808,974</b>	<b>\$ 350,000</b>	<b>\$ 8,000</b>	<b>\$ 178,422</b>	<b>\$ 27,954</b>	<b>\$ 1,373,350</b>	<b>\$ 1,373,350</b>	<b>\$ 555,654</b>

	FHWA PL	FHWA SU	FDOT	TD Trust	Collier Co.	Naples	Everglades	Marco Is.	Total
State Support/Match for MPO (1)	\$ -	\$ -	\$ 178,422	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 178,422
FY 2023/24 Funding	\$ 808,974	\$ 350,000	\$ -	\$ 27,954	\$ -	\$ -	\$ -	\$ -	\$ 1,186,928
FY 2023/24 Local Funding	\$ -	\$ -	\$ -	\$ -	\$ 5,000	\$ 2,000	\$ -	\$ 1,000	\$ 8,000
De-Obligation from Prior Fiscal Years	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total cost, including carryover, for all tasks	<b>\$ 808,974</b>	<b>\$ 350,000</b>	<b>\$ 178,422</b>	<b>\$ 27,954</b>	<b>\$ 5,000</b>	<b>\$ 2,000</b>	<b>\$ -</b>	<b>\$ 1,000</b>	<b>\$ 1,373,350</b>

(1) For FY 2023/2024, FDOT will "soft match" the MPP/PL Funds using toll revenue expenditures as a credit toward the non-Federal matching share.  
The amount identified on this line represent the amount of "soft match" required (both State and local) for the amount of Federal PL section 112 funds requested in this UPWP.

**TABLE 6 – FY 2023/24 FUNDING SOURCE**

Task #	Task Description	FHWA PL Federal	FHWA SU Federal	FDOT Soft Match	Total Federal Funding	State TD Trust	Local Funding	Total
1	Administration	\$ 368,800		\$ 81,340	\$ 368,800	\$ -	\$ -	\$ 450,140
2	Data Collection/Development	\$ 40,000		\$ 8,822	\$ 40,000	\$ -	\$ -	\$ 48,822
3	Transportation Improvement Program (TIP)	\$ 30,000		\$ 6,617	\$ 30,000	\$ -	\$ -	\$ 36,617
4	Long Range Planning	\$ 46,846	\$ 300,000	\$ 10,332	\$ 346,846	\$ -	\$ -	\$ 357,178
5	Special Projects and Systems Planning	\$ 134,925	\$ 50,000	\$ 29,758	\$ 184,925	\$ -	\$ -	\$ 214,683
6	Transit and Transportation Disadvantaged	\$ 156,403		\$ 34,495	\$ 156,403	\$ 27,954		\$ 218,852
7	Regional Coordination	\$ 32,000		\$ 7,058	\$ 32,000	\$ -	\$ -	\$ 39,058
8	Locally Funded Activities	\$ -		\$ -	\$ -	\$ -	\$ 8,000	\$ 8,000
	Total fiscal year 2023/24 funds for all tasks	\$ 808,974	\$ 350,000	\$ 178,422	\$ 1,158,974	\$ 27,954	\$ 8,000	\$ 1,373,350
	State Support/Match for MPO (1)	\$ -	\$ -	\$ 178,422	\$ -	\$ -		\$ 178,422
	FY 2023/24 Funding	\$ 808,974	\$ 350,000	\$ -	\$ -	\$ 27,954		\$ 1,186,928
	FY 2023/24 Local Funding	\$ -	\$ -	\$ -	\$ -		\$ 8,000	\$ 8,000
	Total cost, including carryover, for all tasks	\$ 808,974	\$ 350,000	\$ 178,422	\$ 1,158,974	\$ 27,954	\$ 8,000	\$ 1,373,350

2022/23

Task #	Task Description	Task Total	Personnel	Revision	Consultant	Revision	Travel and Other Direct Expenses	Funding After Amendment
1	Administration	\$ 363,800.00	\$ 300,000	\$ (75,000)	\$ 5,000	\$ 75,000	\$ 58,800	\$ 363,800
2	Data Collection/Development	\$ 75,000.00	\$ 60,000	\$ (30,000)	\$ 15,000	\$ 30,000	\$ -	\$ 75,000
3	Transportation Improvement Program	\$ 30,000.00	\$ 30,000	\$ (20,000)	\$ -	\$ 20,000	\$ -	\$ 30,000
4	Long Range Planning	\$ 328,543.00	\$ 50,000	\$ -	\$ 278,543			\$ 328,543
5	Special Projects and Systems Planning	\$ 238,133.00	\$ 51,000	\$ (20,000)	\$ 187,133	\$ 20,000		\$ 238,133
6	Transit and Transportation Disadvantaged	\$ 507,557.00	\$ 93,608	\$ -	\$ 385,319		\$ 28,630	\$ 507,557
7	Regional Coordination	\$ 32,000.00	\$ 25,000	\$ -	\$ -		\$ 7,000	\$ 32,000
8	Locally Funded Activities	\$ 8,000.00	\$ -				\$ 8,000	\$ 8,000
	<b>Total fiscal year 2021/22 funds for all tasks</b>	<b>\$ 1,583,033</b>	<b>\$ 609,608</b>	<b>\$ (145,000)</b>	<b>\$ 870,995</b>	<b>\$ 145,000</b>	<b>\$ 102,430</b>	<b>\$ 1,583,033</b>

**EXECUTIVE SUMMARY**  
**COMMITTEE ACTION**  
**ITEM 7A**

**Endorse Congestion Management Process (CMP) Origin and Destination Report**

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**OBJECTIVE:** For the committee to endorse the CMP Origin and Destination (O&D) Report.

**CONSIDERATIONS:** The O&D Report is the final deliverable under the CMP 2022 Update. The committee reviewed the draft O&D Report at the September meeting. The revisions made in response to comments received are shown in track changes in **Attachment 1**. A clean version of the final draft O&D Report is shown in **Attachment 2**. Responses to comments submitted by Collier County Transportation Planning Division are provided in **Attachment 3**. The project consultant, Benesch, will give the presentation shown in **Attachment 4**.

The final O&D Report will be placed on the MPO Board's December 9, 2022, agenda for approval.

**STAFF RECOMMENDATION:** That the committee endorse the final O&D Report.

Prepared By: Anne McLaughlin, MPO Director

**ATTACHMENT(S):**

1. Final O&D Report – revised pages in track changes
2. Final O&D Report – clean copy
3. Collier County Transportation Planning Comments-Responses
4. Presentation on O&D Report



## Congestion Management Process Origin and Destination Report

October 27, 2022

FINAL DRAFT

Prepared by



## 1.0 Introduction

### 1.1 Purpose

As part of the MPO's Congestion Management Process, a review of travel characteristics is being conducted for the purpose of providing additional insights into trip making and travel patterns within Collier County. This origin and destination study utilizes the Replica ([www.replicahq.com](http://www.replicahq.com)) Places data platform for conducting this analysis. The methodology proposed for this analysis was reviewed by the MPO's Congestion Management Committee on May 18th 2022 and is included in Appendix A.

The Replica Places module allows for analysis of trip making patterns and characteristics at census, municipal, and county level geographies. The basis for this analysis is the average weekday travel observed during the Spring (March - May) 2021. Additionally, the ability to define geographic boundaries for reporting and analysis within Replica allows for more specific results. For this O-D Study, identification of subareas within Collier County and Lee County. In addition to further sub-dividing Collier and Lee counties, Figure 1 shows the surrounding counties that have been used for conducting this study. The subareas within Collier County for this analysis are based on a review of the Collier County Planning Communities and specific areas defined on the Growth Management Plan. One final revision was made to these 17 subareas by combining the City of Marco Island with the surrounding communities of Goodland, Isles of Capri, and Hammock Bay.

In total 17 subareas were identified for Collier County following this approach. Other areas included in the analysis outside of Collier County include the 22 planning communities identified in Lee County as well as Broward County, Charlotte County, Miami-Dade County, and Glades County.

Undertaking this approach for summarizing travel data allows for results that provide insights into broad overview patterns as well as more granular and specific interactions between subareas. These results will allow the Collier MPO to better coordinate with its regional partners for developing transportation related strategies for addressing regional congestion and mobility. Information regarding travel patterns – time of day, trip lengths, and trip purpose – will be beneficial to the MPO's upcoming LRTP 2050 LRTP and development of the travel demand model.

The remainder of this report is divided into two major sections for reporting trip characteristics and results of the O-D Study as described below.

- **Collier County Results:** This section provides a generalized overview of the trips occurring in Collier County on an average weekday. Summary information regarding location of origin and destination of trips identifies the larger regional context of trips interacting with Collier County.
- **Collier County Subarea Results:** for each of the 17 subareas in Collier County, a detailed review of trips beginning and ending within each location includes a review of trip length, trip purpose, trip distance, and start time is summarized. Analysis summarizing the residents within each subarea and their work location provides additional detail for assessing commuting travel patterns.



## 1.2 Executive Summary

The Collier MPO examined the trip making patterns within Collier County and the connectivity of these trips to the larger Southwest and South Florida regions. Using trip origins and destinations associated with subareas of Collier County based on the Future Land Use Map, several key insights were identified for these areas based on their location, development patterns, and mix of uses.

In addition to reviewing trip patterns within Collier County, regional trips were entering, exiting, and passing through the County were also evaluated. This regional review also extended to the subarea analysis conducted within Collier County to identify areas of high trip interaction outside of Collier County. Below are some of the key takeaways that were identified from this analysis.

More than 90,000 trips a day start in Collier County and end in Lee County.

38,000 daily trips pass through Collier County, primarily on I-75.

Nearly 9% workers living in Collier County have jobs in Lee County and an additional 2% work within the larger Southwest and South Florida region.

Of the workers that work in Collier County nearly 1-in-3 works in the same subarea where they live or 28% of the total workers living in Collier County.

### 1.2.1 Trip Characteristics

Many of the County's subareas are well established from a land use perspective and [contain a](#) developed transportation grid. In those areas primarily west of CR 951, the trip lengths and time traveled are lower, and number of trips internally captured within a subarea are greater. Trip Characteristics for some of the key subareas of the county are included in Table 1 below.

**Table 1: Summary of Key Subarea Trip Characteristics**

Subarea	Average Trip Length (Miles)	Average Trip Duration (Minutes)	Daily Trips Originating	Percent of Trips Remaining Internal	Percent of Population Working from Home
Ave Maria	22	29	11,100	45%	10.5%
Central Naples	17	14	80,000	24%	10.0%
City of Marco Island	23	26	66,000	66%	11.0%
City of Naples	18	21	133,000	39%	10.0%
East Naples	11	15	80,000	35%	7.2%
Golden Gate	10	15	106,000	43%	6.9%
Immokalee	13	19	60,000	72%	5.4%
North Naples	15	18	235,000	48%	9.8%
Rural Estates	18	26	72,000	32%	11.3%
South Naples	15	19	115,000	50%	8.0%
Urban Estates	14	18	136,000	41%	10.4%
County-Wide	17	20	1,100,000	44%	9.1%





About half of these subareas have a higher internal capture than the county-wide average. The two sub-areas with the highest rates of internally captured trips (City of Marco Island and Immokalee) demonstrate a balanced mix of land-uses, are more isolated from other areas of development, and are more mature in the development cycle. The Ave Maria subarea also demonstrates a high level of internally captured trips as well as a high percentage of people working from home. However, as a rural village that is still developing, the average trip lengths and trip durations are the longest of those listed in the table. These higher trip measures illustrate the continued reliance of this subarea on the greater region for certain purposes, such as work trips, while the area is not completely built out.

Areas such as South Naples, North Naples or Golden Gate have diverse land use patterns and an integrated road network connectivity which provide for additional destinations or opportunities to satisfy trip making without traveling great distances.

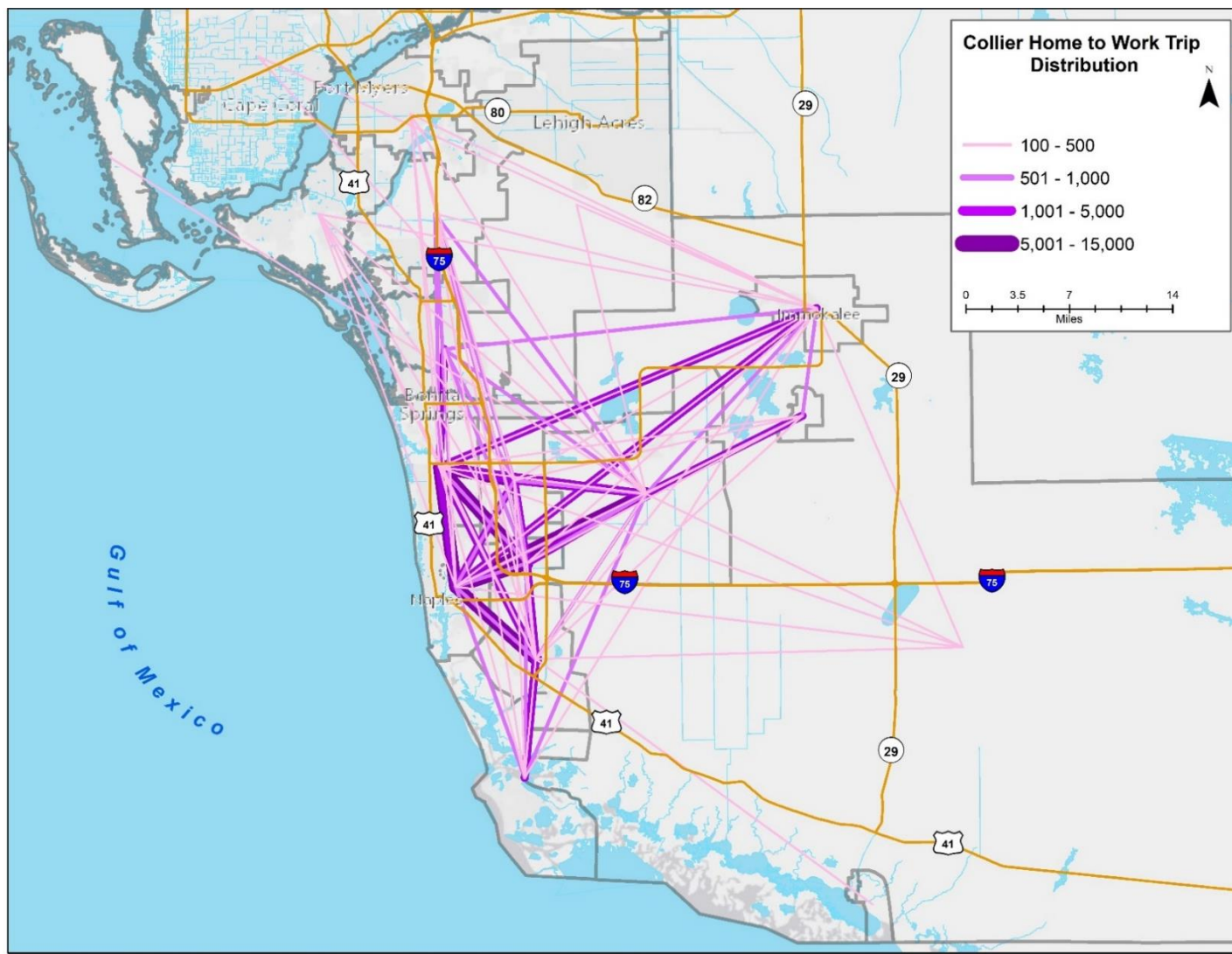
### **1.2.2 Journey to Work**

Highest levels of traffic congestion have long been associated with the daily commute of workers during the AM and PM “Rush Hour.” As a key indicator of daily travel patterns, an association of highly correlated home and work locations was completed between the Collier County subareas and the remainder of the study area. Shown in Figure 2, are the highest paired areas of resident location and work locations. Appendix B contains a full reporting of home to work origins and destinations including this pairs where the origin and destination are the same subarea.

Looking at these pairings, 50% of working residents have a work location in the sub areas of Central Naples, City of Naples, East and North Naples; all of which are West of I-75. Additionally, 9% of working residents have a work location located in Lee County.



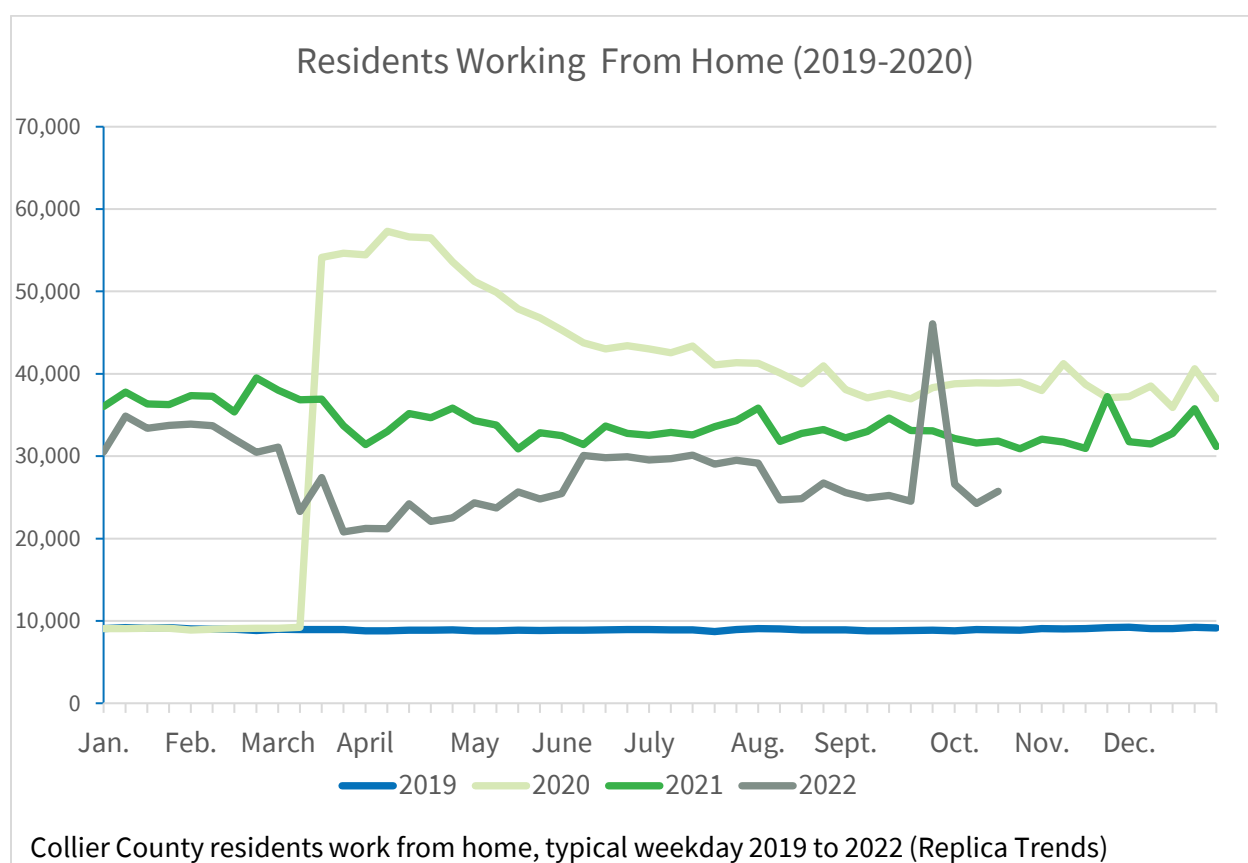
**Figure 2: Home to Work Patterns**



According to the US Census Bureau, the number of people primarily working from home between 2019 and 2021 has tripled.<sup>1</sup> This pattern has held true for Collier County as well. Figure 3 illustrates the recent trends in the number of people working from home from January 2019 through the week of October 17, 2022. Prior to the onset of the COVID-19 pandemic, less than 9,000 people worked from home on a typical weekday as reported in the American Community Survey. During 2020, a sudden spike in residents working from home began to level off during 2021 and stabilize through 2022. In 2022, the number of people working from home has varied, and currently is around 25,000 people on a typical weekday. This is equal to about 16% of workers and 7% of the total population. A recent spike in late September is associated with the landfall of Hurricane Ian.

With slightly more than one-year worth of stable data, it's likely too soon to draw conclusions regarding seasonal fluctuations or expectations for impacts to future travel demand. However, the lowest observed work from home numbers during the spring of 2022 followed by an increase during the summer months should be monitored for continued understanding of this newer trend.

**Figure 3: Work from Home Trends**



<sup>1</sup>[https://www.census.gov/newsroom/press-releases/2022/people-working-from-home.html?utm\\_campaign=20220915mспios1ccpups&utm\\_medium=email&utm\\_source=govdelivery](https://www.census.gov/newsroom/press-releases/2022/people-working-from-home.html?utm_campaign=20220915mспios1ccpups&utm_medium=email&utm_source=govdelivery)

### 1.2.3 Next Steps

In addition to exploring the results of this analysis, several observations can be made towards identifying future next steps. These next steps include a deeper exploration of certain observations and patterns that were observed as well as expanding the scope of this analysis to investigate additional travel characteristics. A few of these observations and possible next steps are summarized below.

- During the Origin/Destination Study it was discovered that transit trips were not included as part of the Replica data set. Discussions were conducted with the data provider to review the applications data model. Future releases of travel data will have transit trip information included. Exploring key transit trip patterns will aid the MPO and Collier Area Transit in understanding and planning for the transportation needs of the public.
- Certain areas, such as North Naples were identified as a high employment location for many areas. Evaluating high employment areas as the destination and examining trips made during the day as compared with home-to-work commute trips can provide insights into the peak traveling periods and assist the MPO in developing future congestion management strategies on congested corridors.
- Evaluating high employment locations from the destination perspective will provide insight into the number of people working in Collier County and living in one of the regions other counties.
- A deeper review of areas with high internally capture origin and destination pairs can provide insights into the trip patterns and land use dependency as a complement to future land use and transportation planning. This level of review can also aid in better understanding shorter-distance trips and efforts to promote walking and biking as alternatives to driving.
- As part of the MPO's upcoming 2050 LRTP, incorporation of Environmental Justice areas into the analysis of trip patterns would identify areas where transportation options are limited and inform the selection of future project.



**Table 2: Daily Trip Origins and Destinations by County**

County	Trip Origin	Trip Destination
<b>Collier (Internal)</b>	1,024,000	1,024,000
<b>Lee</b>	87,000	96,000
<b>Broward</b>	3,000	4,800
<b>Miami-Dade</b>	5,000	4,900
<b>Hendry</b>	3,000	3,500
<b>Charlotte</b>	1,700	2,600
<b>Other Counties</b>	15,000	16,400
<b>Total</b>	<b>1,138,700</b>	<b>1,152,200</b>

## 2.2 Trips Passing Through Collier County

In addition to the more than 1 million daily trips occurring in Collier County daily, an additional 38,000 daily trips pass through the County. A breakdown of these pass-through trips by county origin is listed in Table 3. Of specific note is the high number of trips (10,600) passing through Collier County that have both an origin and a destination in Lee County. ~~Trips traveling on SR 82 and SR 29 which enter Collier County from Lee County, explore this observation in detail, revealed that 9,300 of these trips are the result of a small segment of Bonita Beach Road just west of Vanderbilt Drive being located within Collier County on one and exit on the other are considered to have passed through Collier County while only for a short distance.~~

**Table 3: County to County Pass-Through Trips**

Origin County	Lee	Miami-Dade	Broward	Charlotte	Hendry	Other Counties	Total
<b>Lee</b>	10,601	2,762	2,868	99	1,831	1,061	19,222
<b>Miami-Dade</b>	2,839	0	29	220	178	2,344	5,610
<b>Broward</b>	1,882	16	0	226	68	1,628	3,820
<b>Charlotte</b>	26	232	291	0	24	48	621
<b>Hendry</b>	1,563	134	104	20	200	90	2,111
<b>Other Counties</b>	725	2,597	2,085	56	88	925	6,476
<b>Total</b>	17,636	5,742	5,383	621	2,389	6089	37,860

Looking closer at the routes of these pass-through trips, Figure 5 illustrates the daily volume of pass-through traffic crossing the county line at key gateway locations and traveling through the network. I-75 acts as the primary thoroughfare for this regional movement of traffic through Collier County. Table 4 provides additional details on the regional roadways with information regarding total daily trips and pass-through trips entering and exiting Collier County at the key gateway locations.

Within the county, the percentage of trips on each roadway can vary depending on the roadway and time of day. This most clearly exhibited on I-75 where the total number of pass-thru trips remain relatively constant, and the percentage of pass-thru trips varies significantly. North of Golden Gate Parkway, this percentage is roughly 15% (18,000 of 120,000), is close to 30% between CR 951 and Golden Gate Parkway (18,000 of 66,000) and more than 50% (15,000 of 29,000) heading east on Alligator Alley toward Broward County. This change in trips also illustrates the heavier interstate use in the urbanized





<b>US 41 (Miami-Dade County)</b>	5,600	4,600	2,700	2,100	47.1%
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### 3.0 Collier County Subareas

Evaluating and identifying trip patterns for the 17 subareas within Collier County includes a review of trip origins and destinations associated with each subarea as well as a review of work commuting patterns. Utilizing home and works locations captured through the mobile-source data available with Replica, a matrix association of residents' home subarea and work subarea was created. Reviewing trip purpose to isolate work trips originating from a residents' home subarea provided trip characteristics for home to work commuting on a typical weekday during the Spring 2021 Season. Changes in working and commuting habits have emerged because of the COVID-19 pandemic. New data provided by Replica was used to identify the percentage of workers working from home.

For comparison with statistics presented for each of the subareas, select countywide measures are shown in Table 5. Given the newest trends in working from home, additional clarification has been added to the footnotes of Table 5. Presented as a typical weekday pattern, work locations is based on the conditions observed on an average Thursday during the 2021 Spring Season. Not all workers work from home every day. This means that the Collier County residents working from home may have an in-office physical location not in Collier County.

**Table 5: Select Countywide Trip Characteristics**

Measure	Countywide Value
<b>Average Trip Length</b>	17.4 miles
<b>Median Trip Length</b>	4.7 miles
<b>Average Trip Duration</b>	20 minutes
<b>Median Trip Duration</b>	9 minutes
<b>Countywide Residents</b>	373,600
<b><u>Employed</u> Countywide <u>WorkersResidents</u><sup>1</sup></b>	158,000
<b>Residents Working in Collier <u>CountyCounty</u><sup>2</sup></b>	137,300
<b>Residents Working in Lee <u>CountyCounty</u><sup>2</sup></b>	14,300
<b>Residents Working from <u>HomeHome</u><sup>3</sup></b>	34,000

Footnotes:

1- Number of residents living in Collier County that are employed, regardless of employment location.

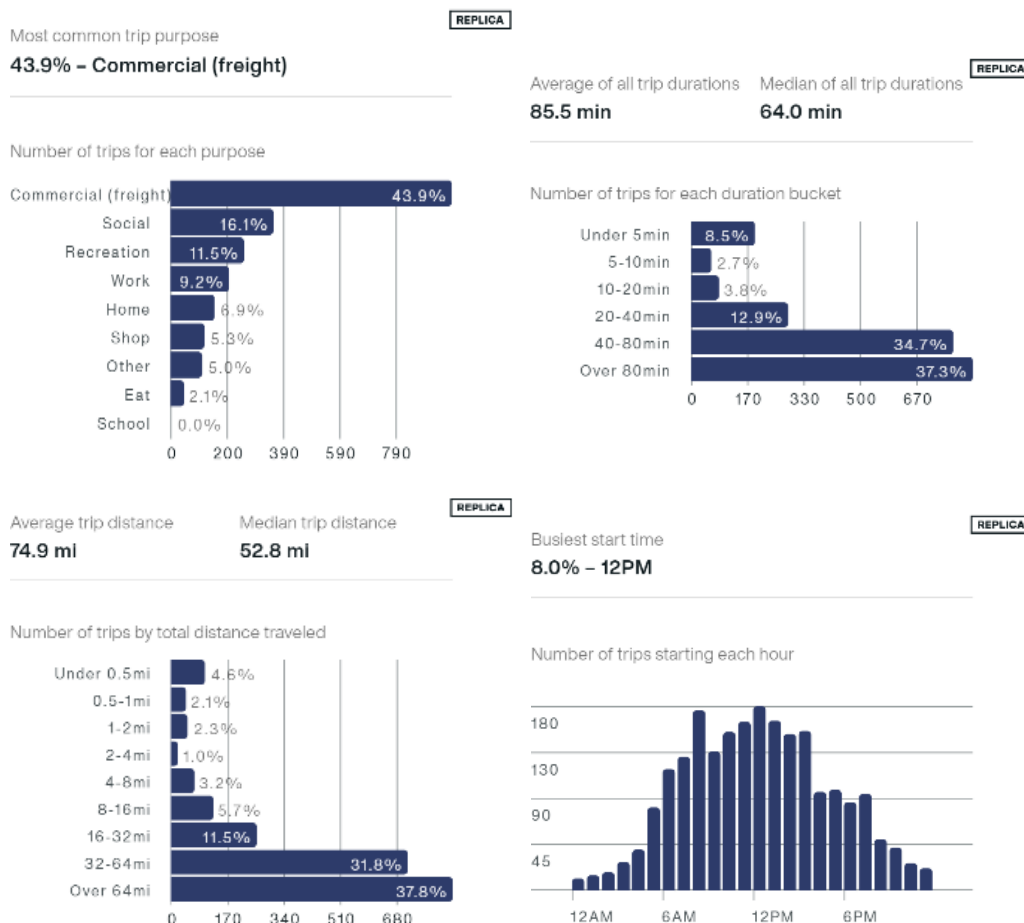
2 – Number of Collier County residents with an “in-person” office location in the listed county. For Collier County, this includes residents working from home.

3 – Number of Collier County residents working from home regardless of “in-person” work location.

Source: Replica 2021 Spring Season, Typical Weekday (Thursday)



**Figure 13: Selected Trip Characteristics for Big Cypress Destinations**



### 3.2.3 Work Location

As a very sparsely populated area of Collier County, there are very few people in the labor force for evaluating the impacts of work trips originating from this subarea. Table 9 indicates that work trips made by residents of Big Cypress are predominantly to the South Naples subarea. A total of ~~131~~ 131 workers travel to South Naples from Big Cypress.

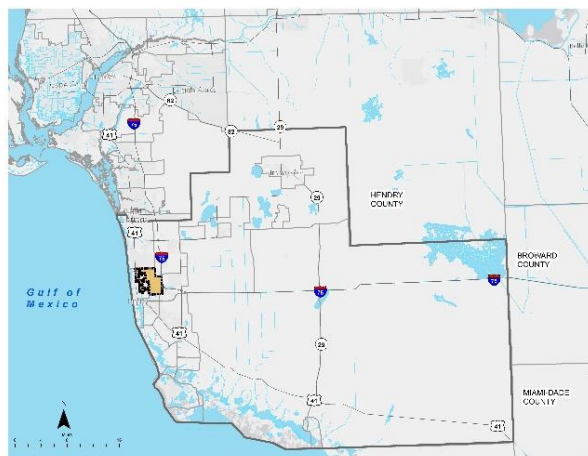
Shown in Figure 13 are selected characteristics related to the work commute trip. Compared with trip time and distance for all trips originated within the study area, work trips on average are longer in time and distance and demonstrate a distinct A.M. peak pattern. Information regarding working from home is also made available through Replica. It was estimated that 16 of the 121 (13.2%) Big Cypress subarea residents worked from home during the Spring 2021 quarter.



### 3.3 Central Naples

The Central Naples subarea is adjacent to the City of Naples and extends north to Pine Ridge Road and as far east as I-75 as shown in the image to the right.

Table 10 identifies the number of trip origin and destination for the top 20 subarea locations when at least one trip end takes place in the Central Naples subarea. The trip origins listed have a destination in the Central Naples subarea and vice-versa for the destinations listed. Of the 82,000 daily trips originating from this area, nearly 24% (19,331) stay within the subarea. Other areas highly associated with trips in this area include North Naples and the City of Naples where a diverse mix of land uses, and an integrated roadway network connectivity support this relationship



**Table 10: Central Naples Trip Origins and Destinations**

Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
Central Naples (internal)	19,331	19,331	City of Marco Island	847	814
North Naples	13,657	13,643	San Carlos	756	754
City of Naples	12,924	13,102	Estero	635	648
Golden Gate	6,892	6,938	Fort Myers	470	635
Urban Estates	6,228	6,493	South Fort Myers	337	475
East Naples	5,781	5,763	Lehigh Acres	328	486
South Naples	4,197	3,742	Immokalee	327	364
Rural Estates	2,409	2,677	Heritage Bay	277	316
Bonita Springs	1,766	1,497	Miami-Dade County	268	242
Out of Region	915	1,035	Cape Coral	239	415

#### 3.3.1 Trips Beginning in Subarea

Figure 16 provides a summary of the trip purpose, trip distance, trip duration and the busiest start time statistics for the area. Trips originating in Central Naples have a high home trip purpose at about 22,000 or 27% of the daily trips generated in the subarea. Shopping trip purposes is also relatively high at roughly 20,000 or 24% of total trips daily. The more predominant activities in Central Naples include residential dwelling, ~~golfing~~, commercial services, and other public services including schools and health center. The average distance traveled is 14 miles, and the average duration is estimated at 17 minutes for trips originating in Central Naples. Trip distances for trips starting in Central Naples follow a normal distribution with the highest frequency of trips travel between four and eight miles. More than half of the trips originating from Central Naples have a travel time of less than 10 minutes. With the median trip length less than five miles and trip time less than 10 minutes, many of the trips originating







## Congestion Management Process Origin and Destination Report

October 27, 2022

**FINAL DRAFT**

Prepared by



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## 1.0 Introduction

### 1.1 Purpose

As part of the MPO's Congestion Management Process, a review of travel characteristics is being conducted for the purpose of providing additional insights into trip making and travel patterns within Collier County. This origin and destination study utilizes the Replica ([www.replicahq.com](http://www.replicahq.com)) Places data platform for conducting this analysis. The methodology proposed for this analysis was reviewed by the MPO's Congestion Management Committee on May 18th 2022 and is included in Appendix A.

The Replica Places module allows for analysis of trip making patterns and characteristics at Census, municipal, and county level geographies. The basis for this analysis is the average weekday travel observed during the Spring (March -May) 2021. Additionally, the ability to define geographic boundaries for reporting and analysis within Replica allows for more specific results. For this O-D Study, identification of subareas within Collier County and Lee County. In addition to further sub-dividing Collier and Lee counties, Figure 1 shows the surrounding counties that have been used for conducting this study. The subareas within Collier County for this analysis are based on a review of the Collier County Planning Communities and specific areas defined on the Growth Management Plan. One final revision was made to these 17 subareas by combining the City of Marco Island with the surrounding communities of Goodland, Isles of Capri, and Hammock Bay.

In total 17 subareas were identified for Collier County following this approach. Other areas included in the analysis outside of Collier County include the 22 planning communities identified in Lee County as well as Broward County, Charlotte County, Miami-Dade County, and Glades County.

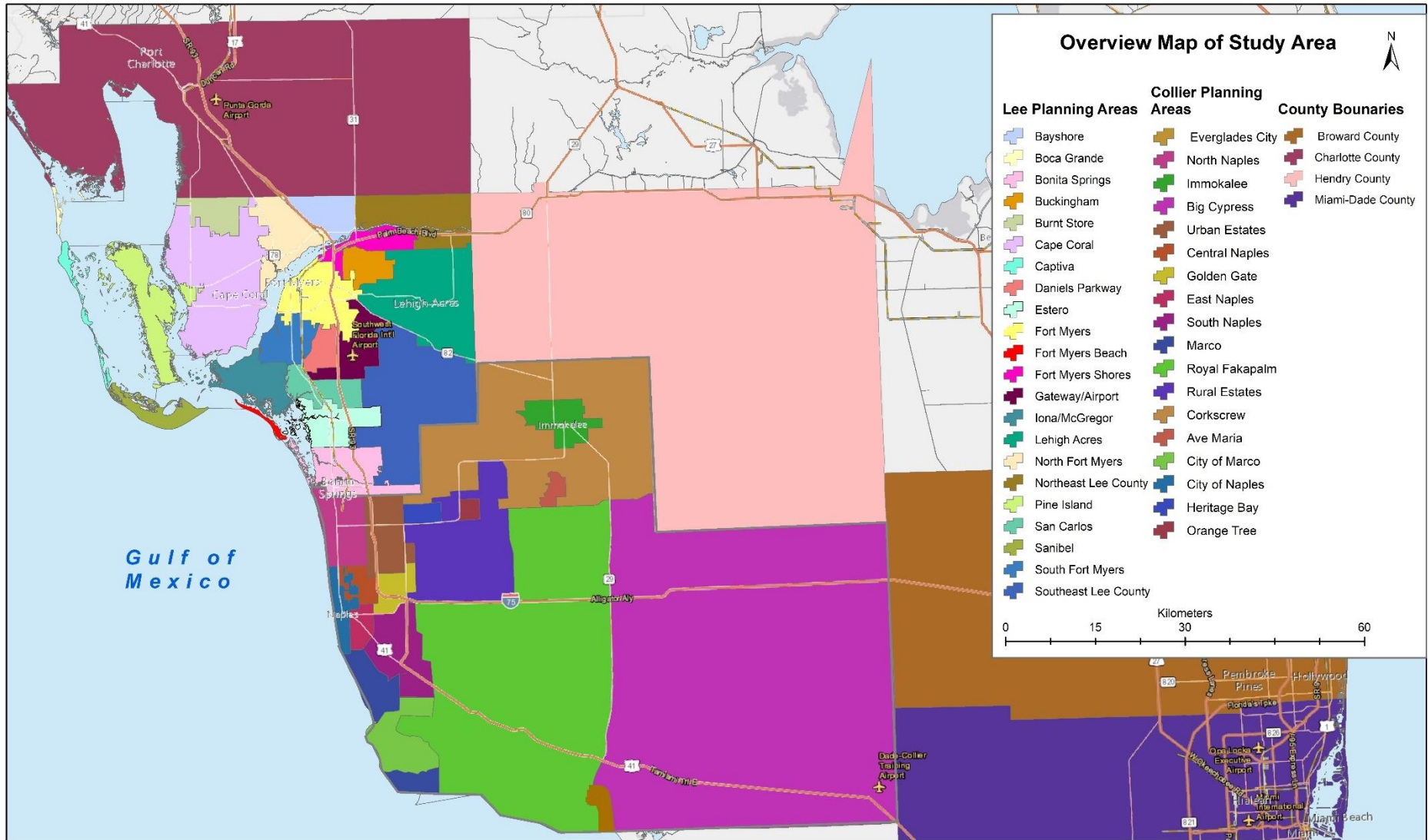
Undertaking this approach for summarizing travel data allows for results that provide insights into broad overview patterns as well as more granular and specific interactions between subareas. These results will allow the Collier MPO to better coordinate with its regional partners for developing transportation related strategies for addressing regional congestion and mobility. Information regarding travel patterns – time of day, trip lengths, and trip purpose – will be beneficial to the MPO's upcoming LRTP 2050 LRTP and development of the travel demand model.

The remainder of this report is divided into two major sections for reporting trip characteristics and results of the O-D Study as described below.

- **Collier County Results:** This section provides a generalized overview of the trips occurring in Collier County on an average weekday. Summary information regarding location of origin and destination of trips identifies the larger regional context of trips interacting with Collier County.
- **Collier County Subarea Results:** for each of the 17 subareas in Collier County, a detailed review of trips beginning and ending within each location includes a review of trip length, trip purpose, trip distance, and start time is summarized. Analysis summarizing the residents within each subarea and their work location provides additional detail for assessing commuting travel patterns.



Figure 1: Customized Subareas for O-D Study





## 1.2 Executive Summary

The Collier MPO examined the trip making patterns within Collier County and the connectivity of these trips to the larger Southwest and South Florida regions. Using trip origins and destinations associated with subareas of Collier County based on the Future Land Use Map, several key insights were identified for these areas based on their location, development patterns, and mix of uses.

In addition to reviewing trip patterns within Collier County, regional trips were entering, exiting, and passing through the County were also evaluated. This regional review also extended to the subarea analysis conducted within Collier County to identify areas of high trip interaction outside of Collier County. Below are some of the key takeaways that were identified from this analysis.

More than 90,000 trips a day start in Collier County and end in Lee County.

38,000 daily trips pass through Collier County, primarily on I-75.

Nearly 9% workers living in Collier County have jobs in Lee County and an additional 2% work within the larger Southwest and South Florida region.

Of the workers that work in Collier County nearly 1-in-3 works in the same subarea where they live or 28% of the total workers living in Collier County.

### 1.2.1 Trip Characteristics

Many of the County's subareas are well established from a land use perspective and contain a developed transportation grid. In those areas primarily west of CR 951, the trip lengths and time traveled are lower, and number of trips internally captured within a subarea are greater. Trip Characteristics for some of the key subareas of the county are included in Table 1 below.

**Table 1: Summary of Key Subarea Trip Characteristics**

Subarea	Average Trip Length (Miles)	Average Trip Duration (Minutes)	Daily Trips Originating	Percent of Trips Remaining Internal	Percent of Population Working from Home
Ave Maria	22	29	11,100	45%	10.5%
Central Naples	17	14	80,000	24%	10.0%
City of Marco Island	23	26	66,000	66%	11.0%
City of Naples	18	21	133,000	39%	10.0%
East Naples	11	15	80,000	35%	7.2%
Golden Gate	10	15	106,000	43%	6.9%
Immokalee	13	19	60,000	72%	5.4%
North Naples	15	18	235,000	48%	9.8%
Rural Estates	18	26	72,000	32%	11.3%
South Naples	15	19	115,000	50%	8.0%
Urban Estates	14	18	136,000	41%	10.4%
County-Wide	17	20	1,100,000	44%	9.1%



About half of these subareas have a higher internal capture than the county-wide average. The two sub-areas with the highest rates of internally captured trips (City of Marco Island and Immokalee) demonstrate a balanced mix of land-uses, are more isolated from other areas of development, and are more mature in the development cycle. The Ave Maria subarea also demonstrates a high level of internally captured trips as well as a high percentage of people working from home. However, as a rural village that is still developing, the average trip lengths and trip durations are the longest of those listed in the table. These higher trip measures illustrate the continued reliance of this subarea on the greater region for certain purposes, such as work trips, while the area is not completely built out.

Areas such as South Naples, North Naples or Golden Gate have diverse land use patterns and an integrated road network connectivity which provide for additional destinations or opportunities to satisfy trip making without traveling great distances.

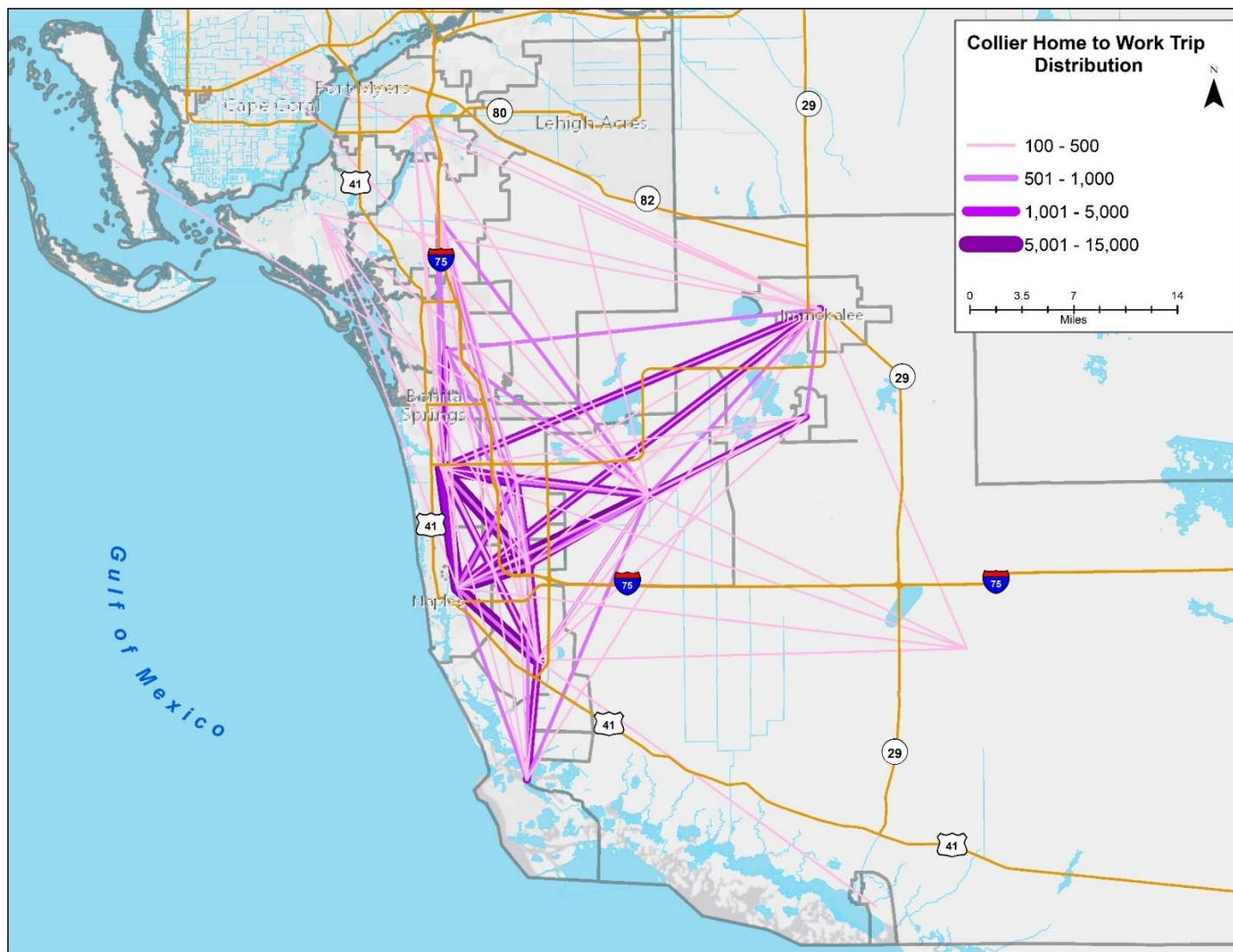
### 1.2.2 Journey to Work

Highest levels of traffic congestion have long been associated with the daily commute of workers during the AM and PM “Rush Hour.” As a key indicator of daily travel patterns, an association of highly correlated home and work locations was completed between the Collier County subareas and the remainder of the study area. Shown in Figure 2, are the highest paired areas of resident location and work locations. Appendix B contains a full reporting of home to work origins and destinations including this pairs where the origin and destination are the same subarea.

Looking at these pairings, 50% of working residents have a work location in the sub areas of Central Naples, City of Naples, East and North Naples; all of which are West of I-75. Additionally, 9% of working residents have a work location located in Lee County.



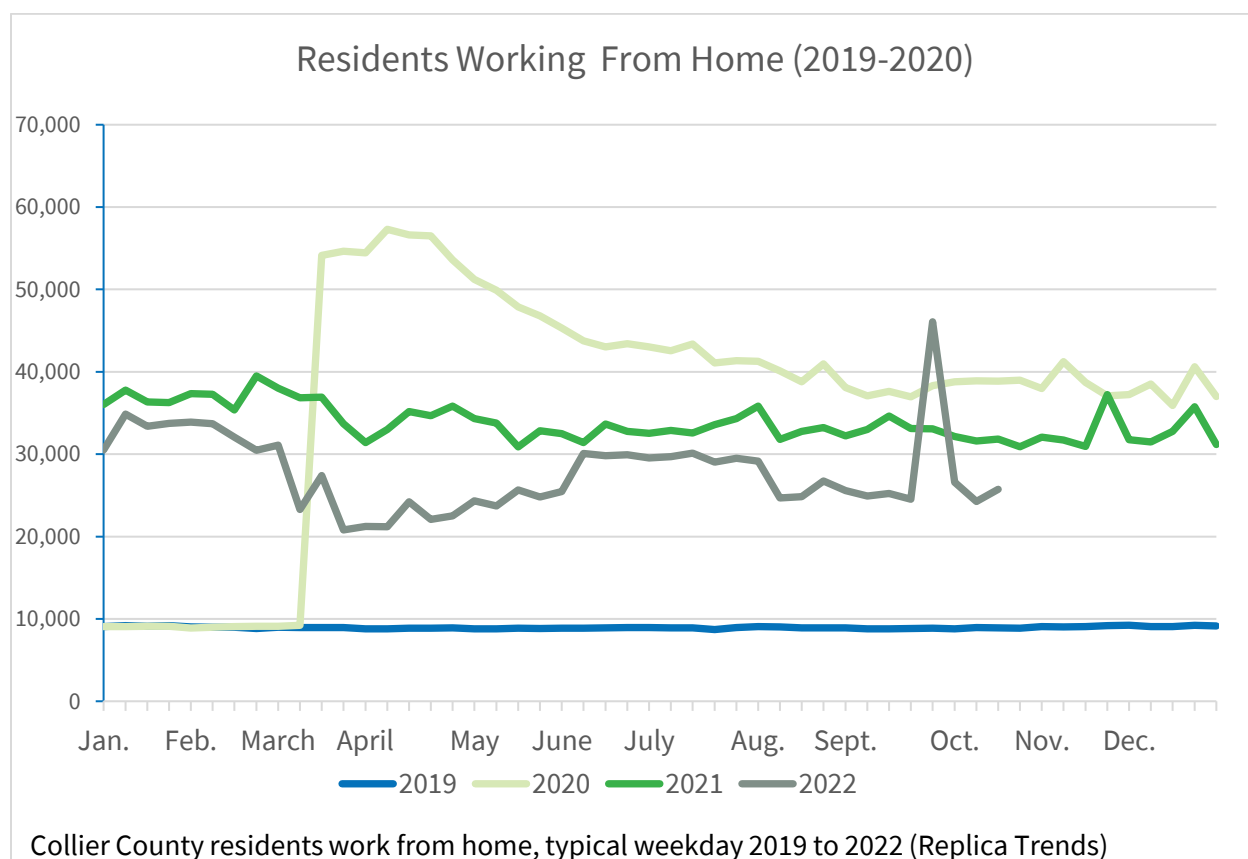
**Figure 2: Home to Work Patterns**



According to the US Census Bureau, the number of people primarily working from home between 2019 and 2021 has tripled.<sup>1</sup> This pattern has held true for Collier County as well. Figure 3 illustrates the recent trends in the number of people working from home from January 2019 through the week of October 17, 2022. Prior to the onset of the COVID-19 pandemic, less than 9,000 people worked from home on a typical weekday as reported in the American Community Survey. During 2020, a sudden spike in residents working from home began to level off during 2021 and stabilize through 2022. In 2022, the number of people working from home has varied, and currently is around 25,000 people on a typical weekday. This is equal to about 16% of workers and 7% of the total population. A recent spike in late September is associated with the landfall of Hurricane Ian.

With slightly more than one-year worth of stable data, it's likely too soon to draw conclusions regarding seasonal fluctuations or expectations for impacts to future travel demand. However, the lowest observed work from home numbers during the spring of 2022 followed by an increase during the summer months should be monitored for continued understanding of this newer trend.

**Figure 3: Work from Home Trends**



<sup>1</sup>[https://www.census.gov/newsroom/press-releases/2022/people-working-from-home.html?utm\\_campaign=20220915mapios1ccpuprs&utm\\_medium=email&utm\\_source=govdelivery](https://www.census.gov/newsroom/press-releases/2022/people-working-from-home.html?utm_campaign=20220915mapios1ccpuprs&utm_medium=email&utm_source=govdelivery)

### 1.2.3 Next Steps

In addition to exploring the results of this analysis, several observations can be made towards identifying future next steps. These next steps include a deeper exploration of certain observations and patterns that were observed as well as expanding the scope of this analysis to investigate additional travel characteristics. A few of these observations and possible next steps are summarized below.

- During the Origin/Destination Study it was discovered that transit trips were not included as part of the Replica data set. Discussions were conducted with the data provider to review the applications data model. Future releases of travel data will have transit trip information included. Exploring key transit trip patterns will aid the MPO and Collier Area Transit in understanding and planning for the transportation needs of the public.
- Certain areas, such as North Naples were identified as a high employment location for many areas. Evaluating high employment areas as the destination and examining trips made during the day as compared with home-to-work commute trips can provide insights into the peak traveling periods and assist the MPO in developing future congestion management strategies on congested corridors.
- Evaluating high employment locations from the destination perspective will provide insight into the number of people working in Collier County and living in one of the regions other counties.
- A deeper review of areas with high internally capture origin and destination pairs can provide insights into the trip patterns and land use dependency as a complement to future land use and transportation planning. This level of review can also aid in better understanding shorter-distance trips and efforts to promote walking and biking as alternatives to driving.
- As part of the MPO's upcoming 2050 LRTP, incorporation of Environmental Justice areas into the analysis of trip patterns would identify areas where transportation options are limited and inform the selection of future project.





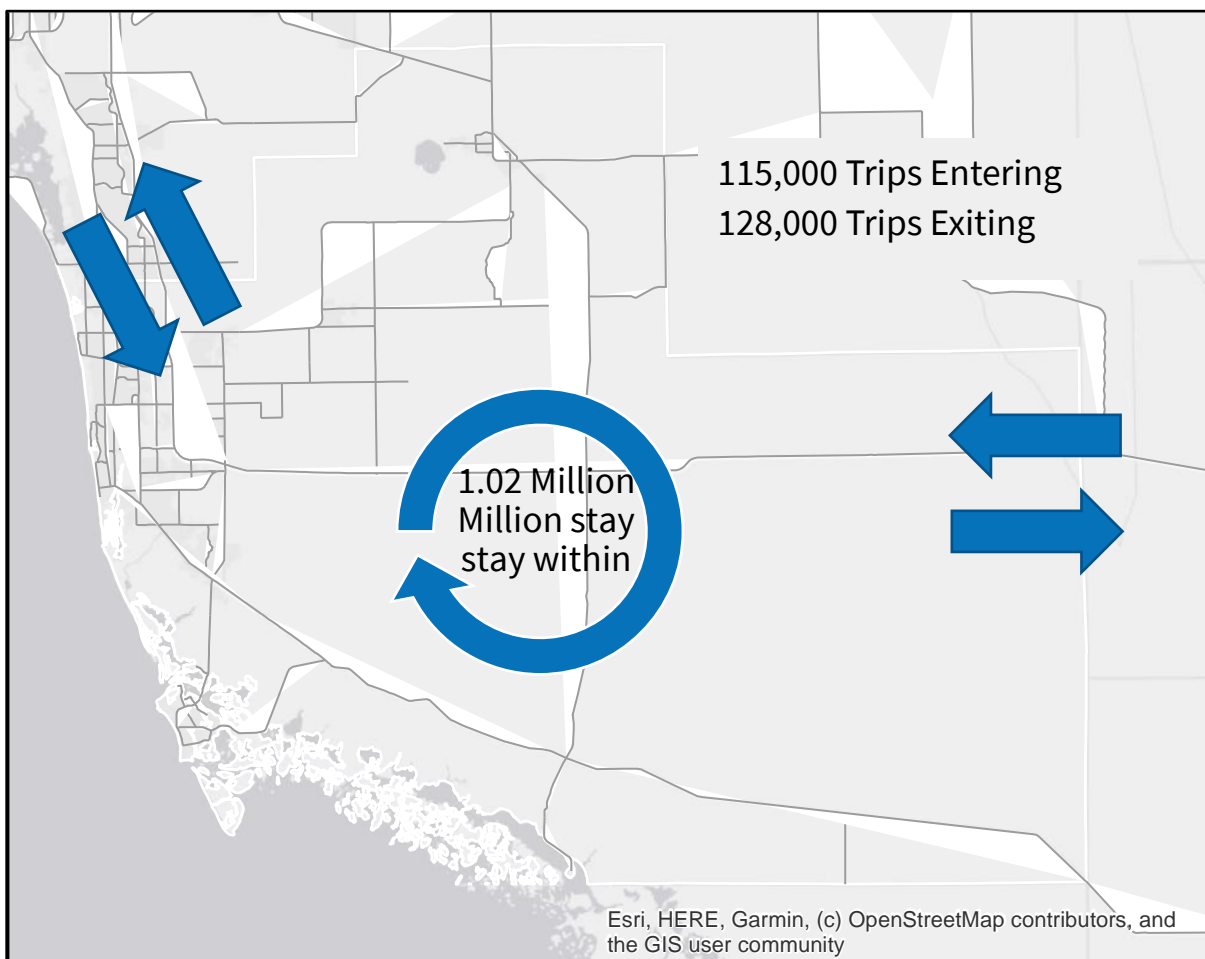
## 2.0 Collier County Trips

Utilizing the Replica Places data platform, information regarding number of trips and certain trip characteristics for Collier County have been summarized. This summary compares trip origins and destinations for trips starting and/or ending with Collier County as well as those passing through the county on major regional roadways.

### 2.1 Trips in Collier County

On an average weekday during the Spring of 2021, there were more than 1.26 million trips made on roadways in Collier County with at least one trip end (origin or destination) occurring in the county. Illustrated in Figure 4, more than 75% of these trips start and end within Collier County and nearly 20% of the trips cross the county line using one of the region's major transportation facilities. Table 2 provides a further breakdown of trip origins and destinations for counties in South Florida and other areas beyond the region. It's important to note for these trips that at least one trip end (origin or destination) is within Collier County.

**Figure 4: Daily Trips in Collier County**



**Table 2: Daily Trip Origins and Destinations by County**

County	Trip Origin	Trip Destination
<b>Collier (Internal)</b>	1,024,000	1,024,000
<b>Lee</b>	87,000	96,000
<b>Broward</b>	3,000	4,800
<b>Miami-Dade</b>	5,000	4,900
<b>Hendry</b>	3,000	3,500
<b>Charlotte</b>	1,700	2,600
<b>Other Counties</b>	15,000	16,400
<b>Total</b>	<b>1,138,700</b>	<b>1,152,200</b>

## 2.2 Trips Passing Through Collier County

In addition to the more than 1 million daily trips occurring in Collier County daily, an additional 38,000 daily trips pass through the County. A breakdown of these pass-through trips by county origin is listed in Table 3. Of specific note is the high number of trips (10,600) passing through Collier County that have both an origin and a destination in Lee County. Exploring this observation in detail, revealed that 9,300 of these trips are the result of a small segment of Bonita Beach Road just west of Vanderbilt Drive being located within Collier County.

**Table 3: County to County Pass-Through Trips**

Origin County	Lee	Miami-Dade	Broward	Charlotte	Hendry	Other Counties	Total
<b>Lee</b>	10,601	2,762	2,868	99	1,831	1,061	19,222
<b>Miami-Dade</b>	2,839	0	29	220	178	2,344	5,610
<b>Broward</b>	1,882	16	0	226	68	1,628	3,820
<b>Charlotte</b>	26	232	291	0	24	48	621
<b>Hendry</b>	1,563	134	104	20	200	90	2,111
<b>Other Counties</b>	725	2,597	2,085	56	88	925	6,476
<b>Total</b>	17,636	5,742	5,383	621	2,389	6089	37,860

Looking closer at the routes of these pass-through trips, Figure 5 illustrates the daily volume of pass-through traffic crossing the county line at key gateway locations and traveling through the network. I-75 acts as the primary thoroughfare for this regional movement of traffic through Collier County. Table 4 provides additional details on the regional roadways with information regarding total daily trips and pass-through trips entering and exiting Collier County at the key gateway locations.

Within the county, the percentage of trips on each roadway can vary depending on the roadway and time of day. This most clearly exhibited on I-75 where the total number of pass-thru trips remain relatively constant, and the percentage of pass-thru trips varies significantly. North of Golden Gate Parkway, this percentage is roughly 15% (18,000 of 120,000), is close to 30% between CR 951 and Golden Gate Parkway (18,000 of 66,000) and more than 50% (15,000 of 29,000) heading east on Alligator Alley toward Broward County. This change in trips also illustrates the heavier interstate use in the urbanized area for daily trip making as the total number of trips are nearly five-times greater north of Golden Gate



Parkway than they are on Alligator Alley. With only 15% of the trips on I-75 entering/exiting Lee County passing through, the remaining 85% (more than 119,000 daily trips) on I-75 begin or end in Collier County.

**Figure 5: Daily Pass-Through Trips at Key Gateways**



**Table 4: Daily Trips at Major County Line Crossings**

Roadway Facility	Total Trips Entering	Total Trips Exiting	Pass-Thru Trips Entering	Pass-Thru Trips Exiting	Percent Pass-thru (Regional) Trips
<b>I-75 (Lee County)</b>	65,000	74,000	11,000	8,700	14.2%
<b>SR 82 (Lee County)</b>	12,000	12,000	4,000	3,800	32.5%
<b>SR 29 (Lee County)</b>	6,200	7,100	2,400	3,000	40.6%
<b>US 41 (Lee County)</b>	28,000	21,000	200	100	<1%
<b>I-75 (Broward County)</b>	13,000	17,000	7,800	10,000	59.3%
<b>US 41 (Miami-Dade County)</b>	5,600	4,600	2,700	2,100	47.1%



### 3.0 Collier County Subareas

Evaluating and identifying trip patterns for the 17 subareas within Collier County includes a review of trip origins and destinations associated with each subarea as well as a review of work commuting patterns. Utilizing home and works locations captured through the mobile-source data available with Replica, a matrix association of residents' home subarea and work subarea was created. Reviewing trip purpose to isolate work trips originating from a residents' home subarea provided trip characteristics for home to work commuting on a typical weekday during the Spring 2021 Season. Changes in working and commuting habits have emerged because of the COVID-19 pandemic. New data provided by Replica was used to identify the percentage of workers working from home.

For comparison with statistics presented for each of the subareas, select countywide measures are shown in Table 5. Given the newest trends in working from home, additional clarification has been added to the footnotes of Table 5. Presented as a typical weekday pattern, work locations is based on the conditions observed on an average Thursday during the 2021 Spring Season. Not all workers work from home every day. This means that the Collier County residents working from home may have an in-office physical location not in Collier County.

**Table 5: Select Countywide Trip Characteristics**

Measure	Countywide Value
<b>Average Trip Length</b>	17.4 miles
<b>Median Trip Length</b>	4.7 miles
<b>Average Trip Duration</b>	20 minutes
<b>Median Trip Duration</b>	9 minutes
<b>Countywide Residents</b>	373,600
<b>Employed Countywide Residents<sup>1</sup></b>	158,000
<b>Residents Working in Collier County<sup>2</sup></b>	137,300
<b>Residents Working in Lee County<sup>2</sup></b>	14,300
<b>Residents Working from Home<sup>3</sup></b>	34,000

Footnotes:

1- Number of residents living in Collier County that are employed, regardless of employment location.

2 – Number of Collier County residents with an “in-person” office location in the listed county. For Collier County, this includes residents working from home.

3 – Number of Collier County residents working from home regardless of “in-person” work location.

Source: Replica 2021 Spring Season, Typical Weekday (Thursday)

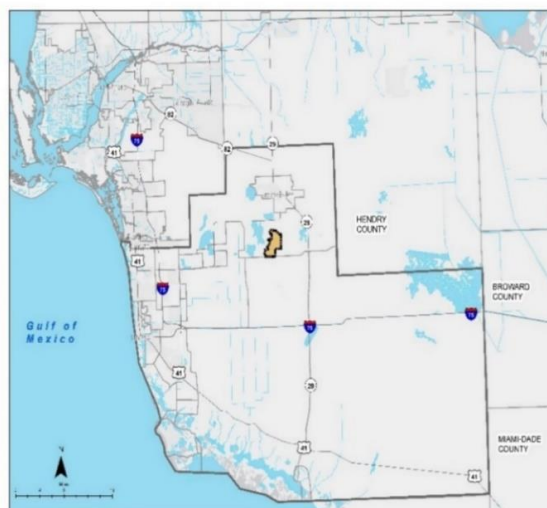
Summary level information for each of the 17 subareas of Collier County is provided in the following sections along with a matrix of trips origins and destinations, and workers by home and work location for each subarea in Appendix B.



### 3.1 Ave Maria

Ave Maria is an unincorporated community in northern Collier County. Shown in the image to the right, Ave Maria is south of Immokalee and located along Oil Well Road.

Table 6 identifies the trip origins and destinations for the top 20 subarea locations when at least one trip end takes place in Ave Maria subarea. The trip origins listed have a destination in the Ave Maria subarea and vice-versa for the destinations listed. The 5,014 trips originating daily within the Ave Maria subarea and remaining within the area represent 45% of the roughly 11,000 daily trips originating from the area. The nearby areas of Immokalee and the Rural Estates, also experience a high trip interaction with Ave Maria. Of note, are the more than 500 daily trips coming from the North Naples area when compared with other areas which are closer.



#### 3.1.1 Trips Beginning in Subarea

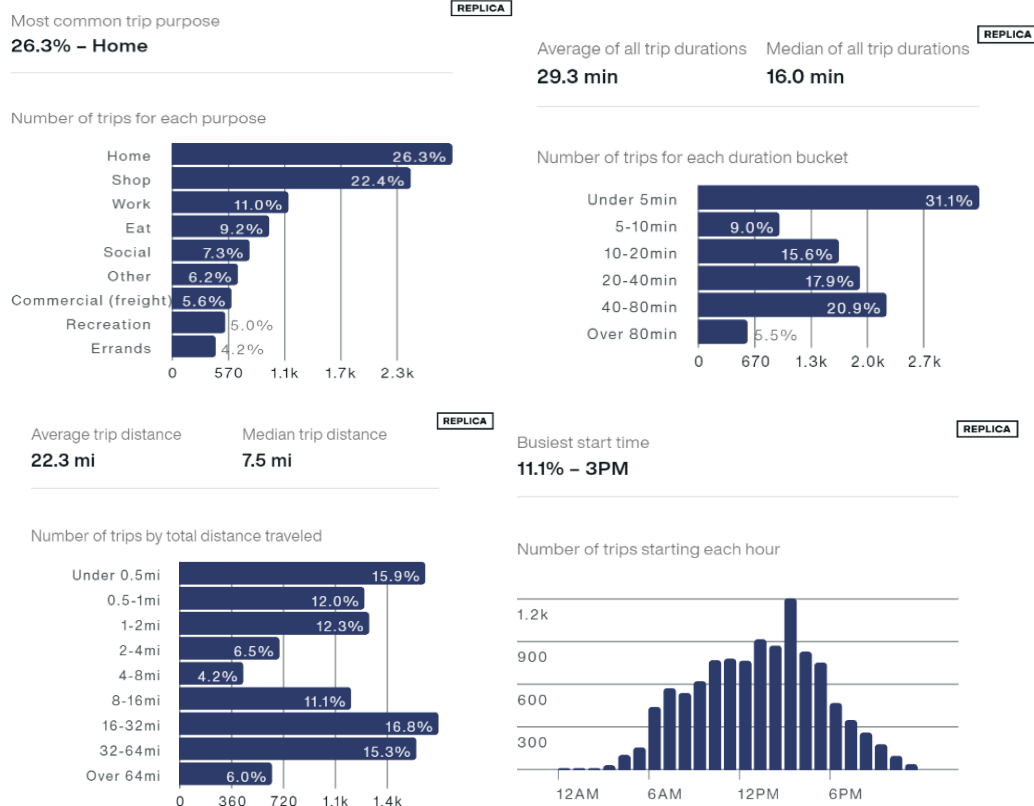
Trips originating in Ave Maria have a high home trip purpose, or destination, with about 2,800 trips or 26% of the daily trips generated in the subarea as shown in Figure 6. Ave Maria is a recently built Village in Rural Collier County that is somewhat isolated from other suburban communities. The pattern of trips associated with this style of development is identifiable as nearly 40% of all trips originating within Ave Maria having a trip distance less than 4 miles in length while more than 30% of trips travel between 16 and 64 miles daily. Many trips can be satisfied within a short distance while others take a greater distance to accomplish for certain activities. This results in an average travel distance of 22 miles and an average time of 29 minutes. Even though there are a high number of trips that travel within the area, there are a significant number of trips originating from the area travelling long distances. Figure 7 illustrates the geographic distribution of destinations for trips originating in the subarea.

**Table 6: Ave Maria Subarea Trip Origins and Destinations**

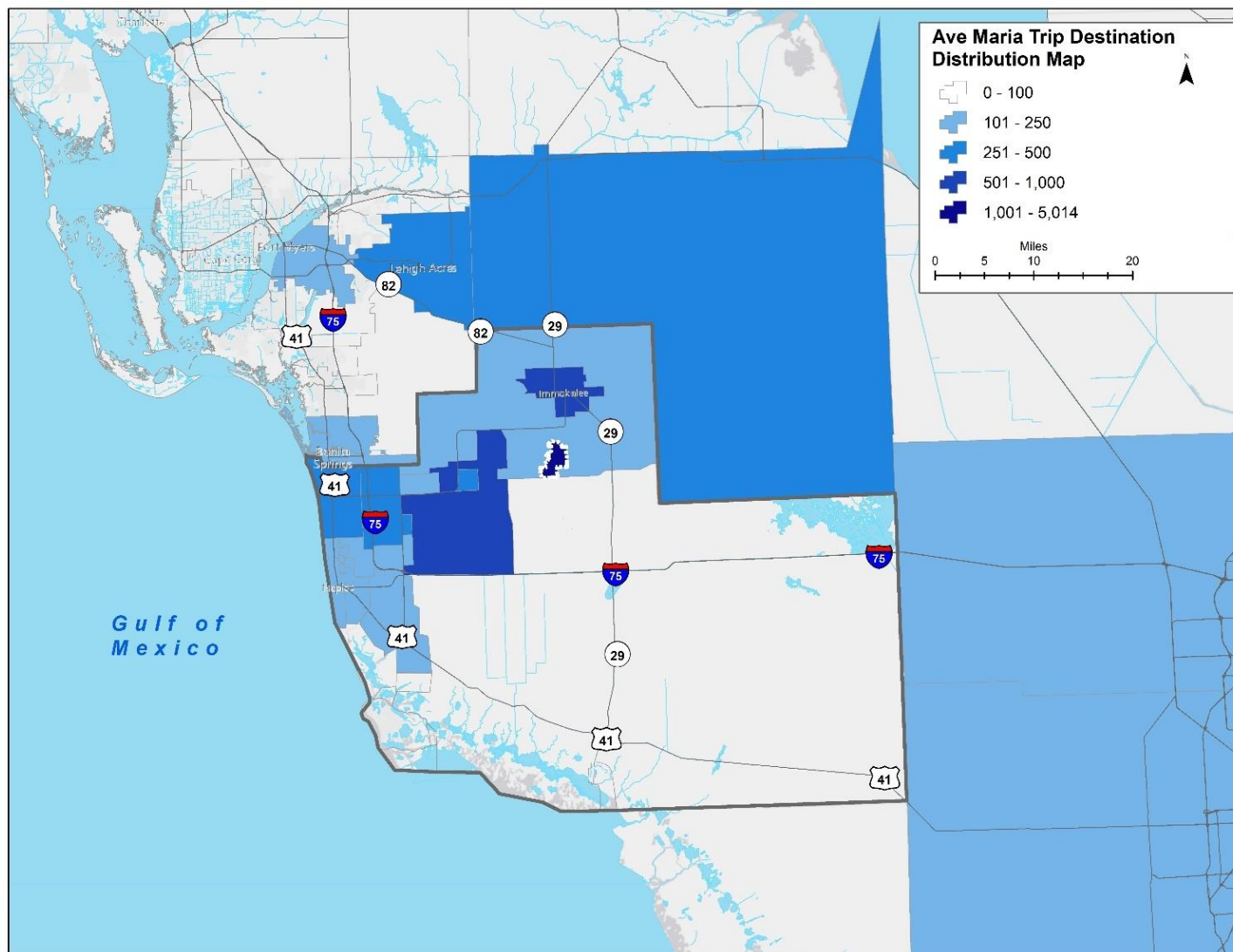
Subarea	Trips From	Trips To	Subarea	Trips From	Trip To
Ave Maria (internal)	5,014	5,014	Corkscrew	172	171
Immokalee	928	901	Bonita Springs	171	140
Rural Estates	917	839	Central Naples	167	143
North Naples	507	394	City of Naples	165	134
Urban Estates	457	364	East Naples	164	132
Hendry County	354	413	South Naples	146	113
Orange Tree	342	298	Fort Myers	124	112
Golden Gate	217	170	Heritage Bay	124	120
Lehigh Acres	207	263	Miami-Dade County	117	125
Out of Region	203	221	Estero	97	68



**Figure 6: Selected Trip Characteristics for Ave Maria Origins**



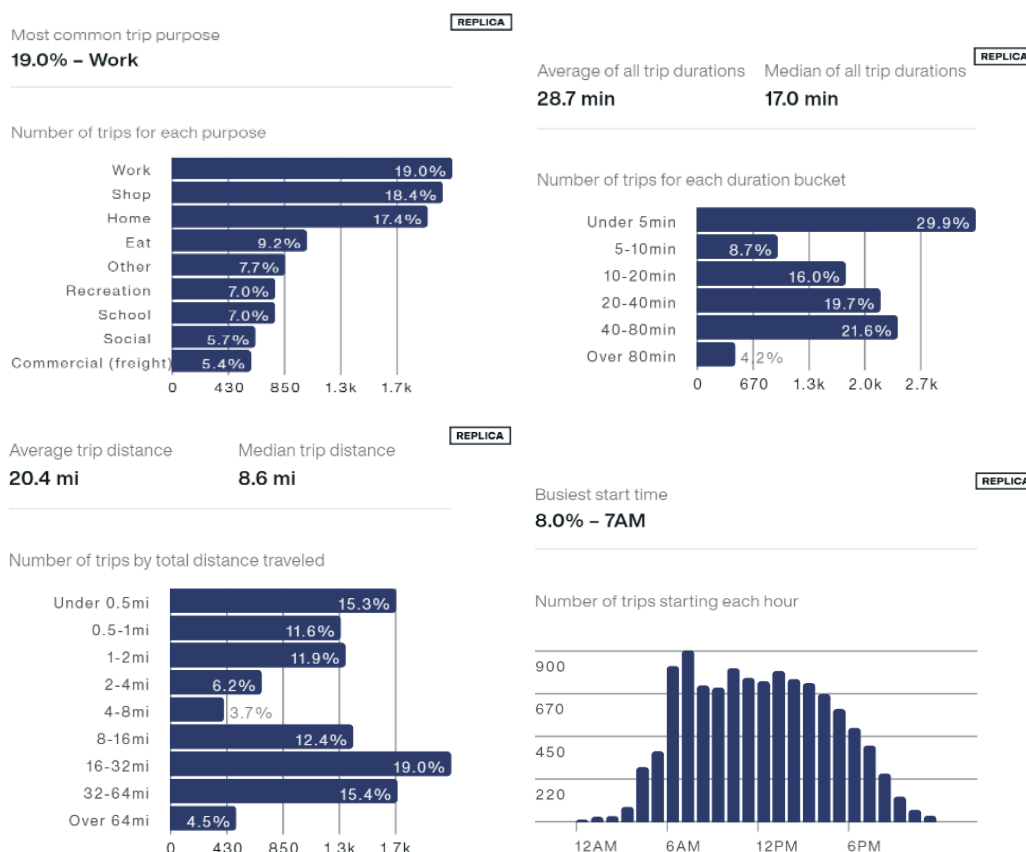
**Figure 7: Destinations for trips Originating in Ave Maria Subarea**



### 3.1.2 Trips Ending in Subarea

Since the Ave Maria subarea includes the Arthrex Medical Facility as well as other service-related businesses, 19% of all trips ending within the subarea are for work. Shopping and home are also high destinations as shown in Figure 8. Average trip duration and travel distance are similar for trips ending within Ave Maria and trips beginning in Ave Maria. The distribution of trips throughout the day however varies for trips originating and trips ending within the subarea and are understandable given the predominate origin purpose (home) and destination purpose (work). Figure 9 illustrates the geographic distribution of origins for trips ending in the Ave Maria subarea.

**Figure 8: Selected Trip Characteristics for Ave Maria Destinations**



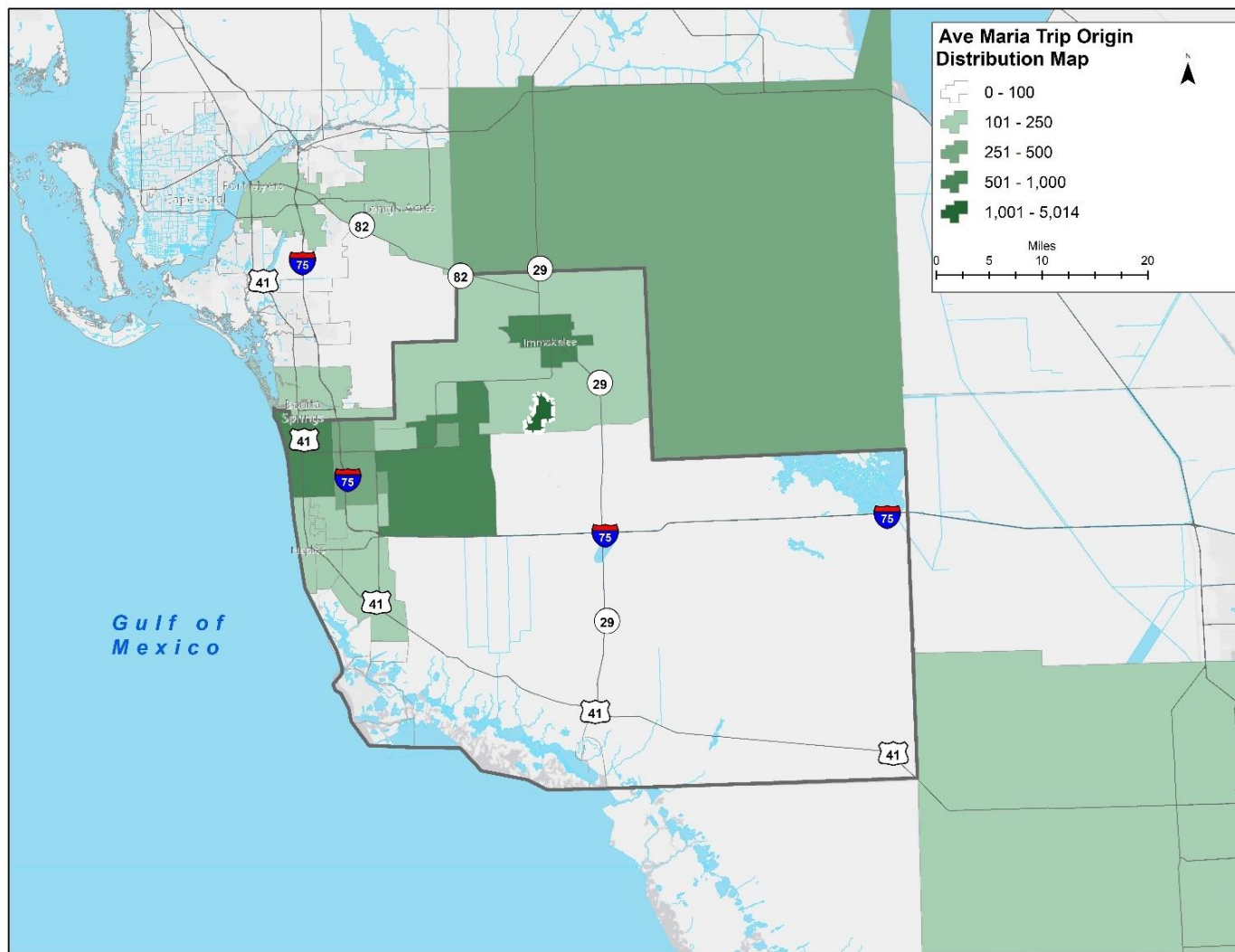
### 3.1.3 Work Location

Table 7 lists the top work location subareas for the more than 1,250 workers living in the Ave Maria subarea. Consistent with observed trip length and duration patterns, the two highest work locations are the Ave Maria subarea and the North Naples subarea. Residents of Ave Maria have work opportunities nearby or at a considerable distance.





**Figure 9: Origins for trips Ending in Ave Maria Subarea**

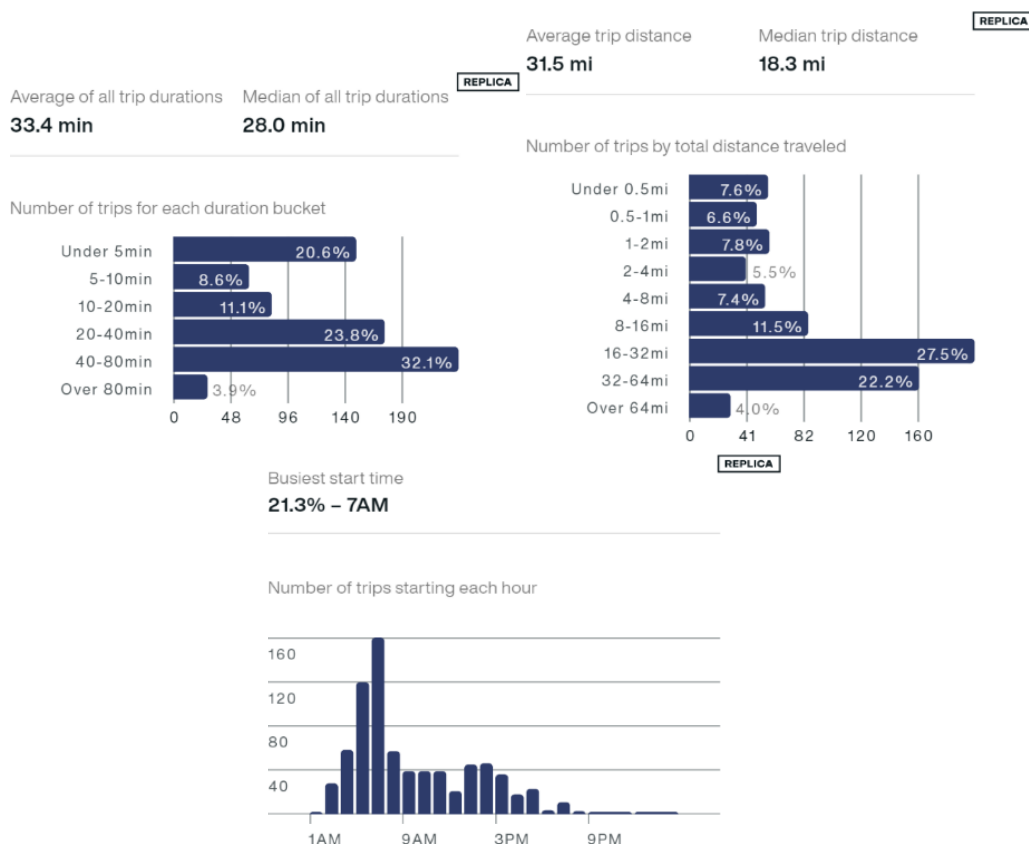


Shown in Figure 10 are selected characteristics related to the work commute trip. Compared with trip time and distance for all trips originated within the study area, work trips on average are longer in time and distance and demonstrate a distinct A.M. peak pattern. Information regarding working from home is also made available through Replica. It was estimated that nearly 275 or 10.5% of the 2,500 Ave Maria subarea residents worked from home during the Spring 2021 quarter.

**Table 7: Work Locations for Residents of Ave Maria**

Work Location	Population	Work Location	Population
Ave Maria	226	Orange Tree	32
North Naples	171	San Carlos	27
Rural Estates	136	South Fort Myers	23
City of Naples	105	Miami-Dade County	22
Central Naples	87	East Naples	22
Urban Estates	71	Golden Gate	19
Immokalee	64	Out of Region	16
Bonita Springs	56	Southeast Lee County	15
Heritage Bay	51	Corkscrew	15
South Naples	43	North Fort Myers	12

**Figure 10: Ave Maria Home to Work Trip Characteristics**



### 3.2 Big Cypress

Big Cypress is the largest subarea in Collier County analyzed for this study as shown in the image to the right. This easternmost location in Collier County includes the Big Cypress National Preserve as a dominant feature. Several isolated rural communities within this subarea, including Carnestown, Copeland, Copeland, and Ochopee contribute to the traffic characteristics summarized below. Since this subarea also includes the Rest Area along Alligator Alley, traffic characteristics summarized below are influenced by the long-distance nature of the Interstate 75 traffic.

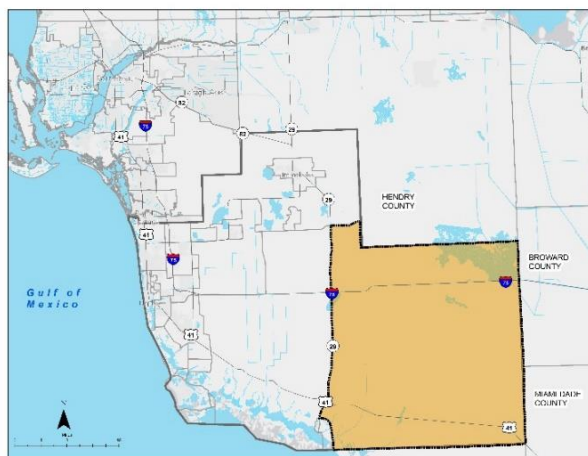


Table 8 shows the trip origin and destination for the top 20 subarea locations when at least one trip end takes place in the Big Cypress subarea. The trip origins listed have a destination in the Big Cypress subarea and vice-versa for the destinations listed. While the number of trips that originate within the Big Cypress subarea are low, 15% of the 2,300 daily trips stay internal to the area. Other areas highly associated with trips in this area are external to Collier County and even beyond the region. This relationship of trip origins and destinations supports the impact of the I-75 Rest Area.

**Table 8: Big Cypress Trip Origins and Destinations**

Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
Big Cypress (internal)	349	349	Rural Estates	46	50
Out of Region	291	286	Immokalee	41	45
Broward County	254	286	City of Marco Island	45	45
Miami-Dade County	275	271	City of Naples	45	37
Everglades City	67	122	Cape Coral	35	35
Royal Fakapalm	120	118	North Naples	33	30
South Naples	112	101	Corkscrew	25	29
Hendry County	124	100	Lehigh Acres	17	22
Fort Myers	41	79	North Fort Myers	24	22
Charlotte County	45	59	Gateway/Airport	23	20

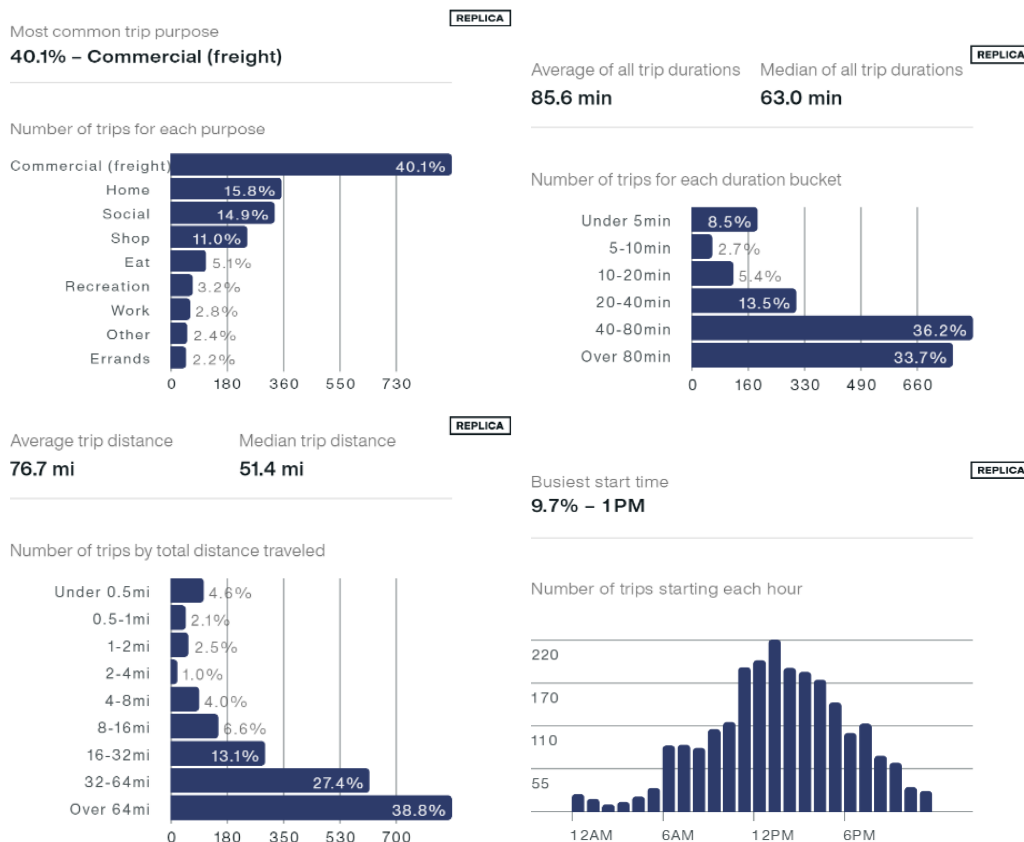
#### 3.2.1 Trips Beginning in Subarea

Trips originating in this subarea have a high commercial trip purpose as shown in Figure 11. While many trips originated from within this subarea have long travel times and trip distances, it is interesting to note the number of short distance trips that are under two miles. These shorter distance trips would indicate that these trips are staying within the isolated rural communities mentioned previously. Figure 12 illustrates the geographic distribution of destinations for trips originating in the Big Cypress subarea.

**Figure 11: Selected Trip Characteristics for Big Cypress Origins**





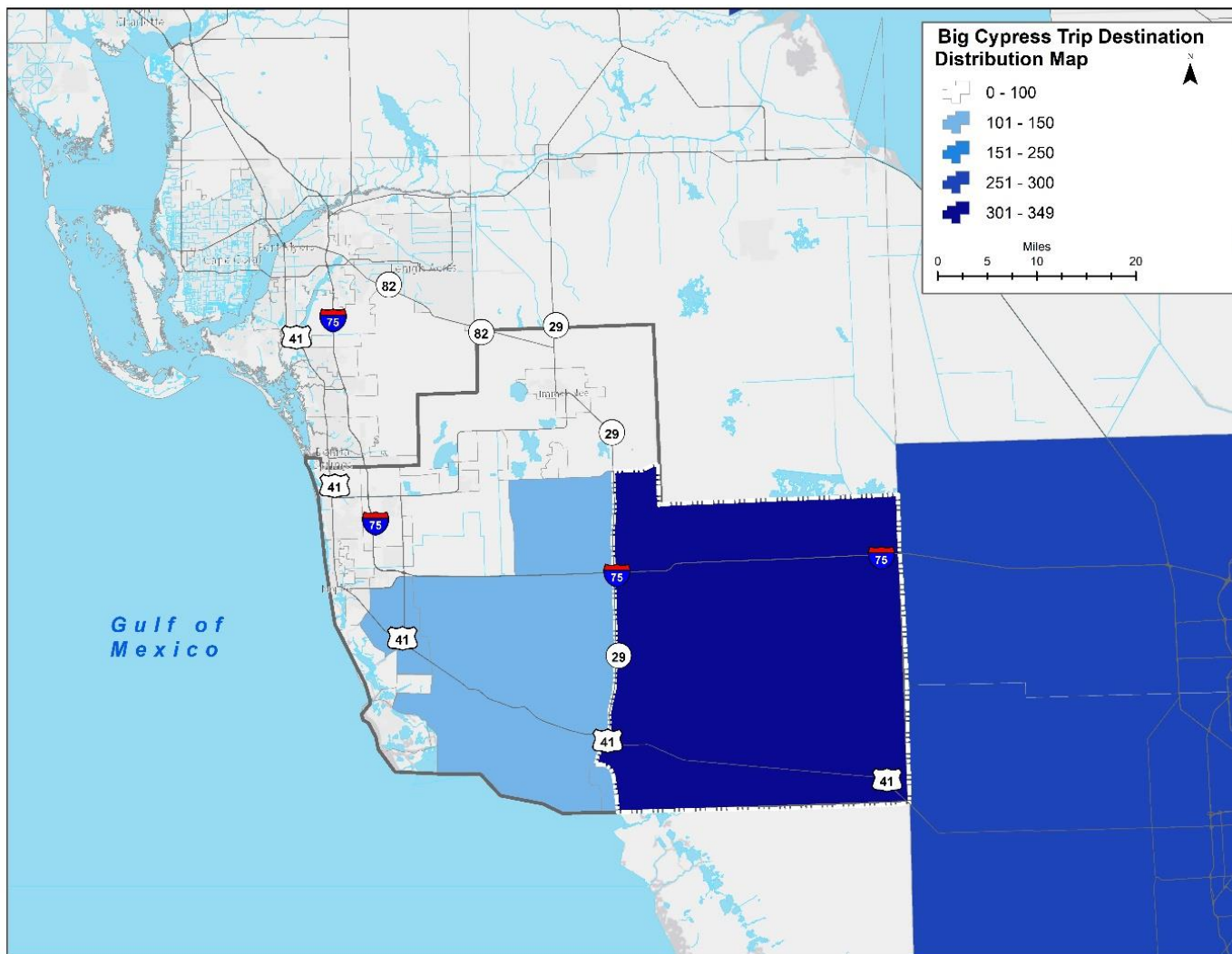


### 3.2.2 Trips Ending in Subarea

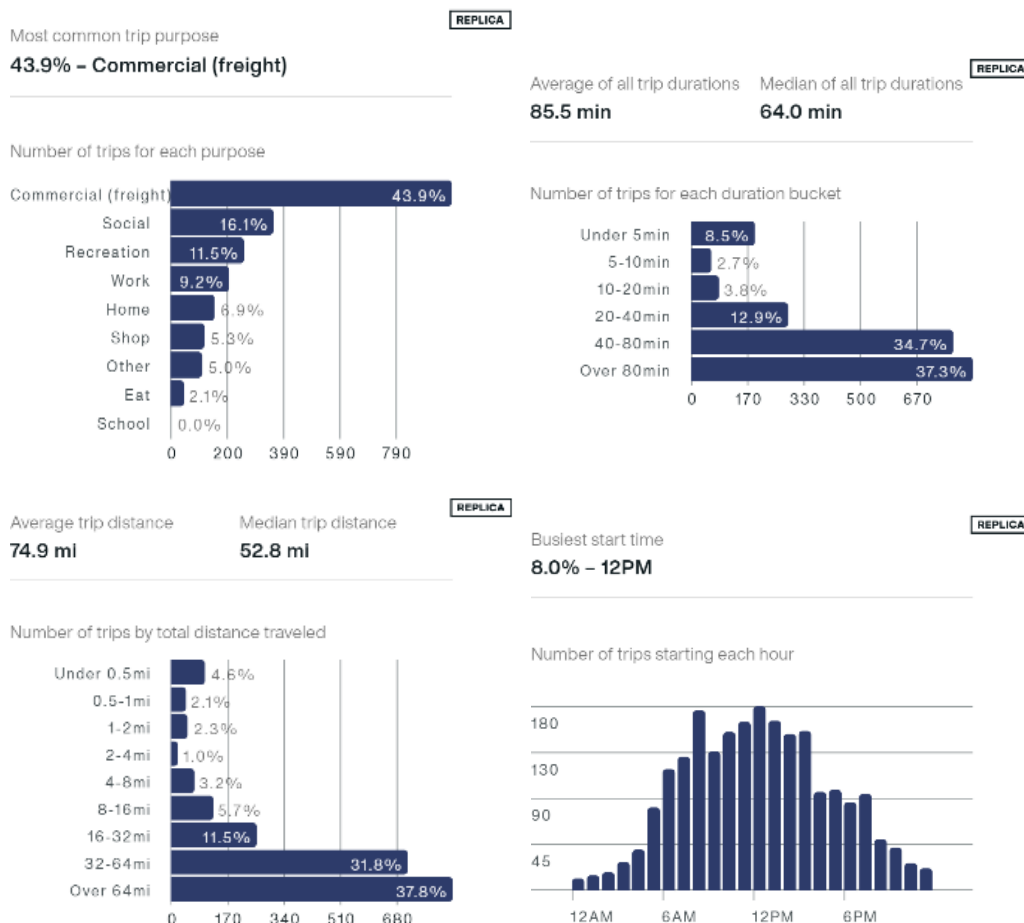
Figure 13 illustrates characteristics for trips ending in the Big Cypress subarea. Average trip duration and travel distance are similar for trips ending within the subarea as those beginning there. The highest purpose for trips ending in this subarea, like those originating here, is for commercial purposes. The two highest personal trip purposes ending in this subarea are for social and recreation purposes. These trip purposes being higher than the others is a unique condition compared to the other subareas and indicate the influence of the state and national park lands contained within the subarea. Figure 14 illustrates the geographic distribution of origins for trips ending in the Big Cypress subarea.



**Figure 12: Destinations for trips Originating in Big Cypress Subarea**



**Figure 13: Selected Trip Characteristics for Big Cypress Destinations**



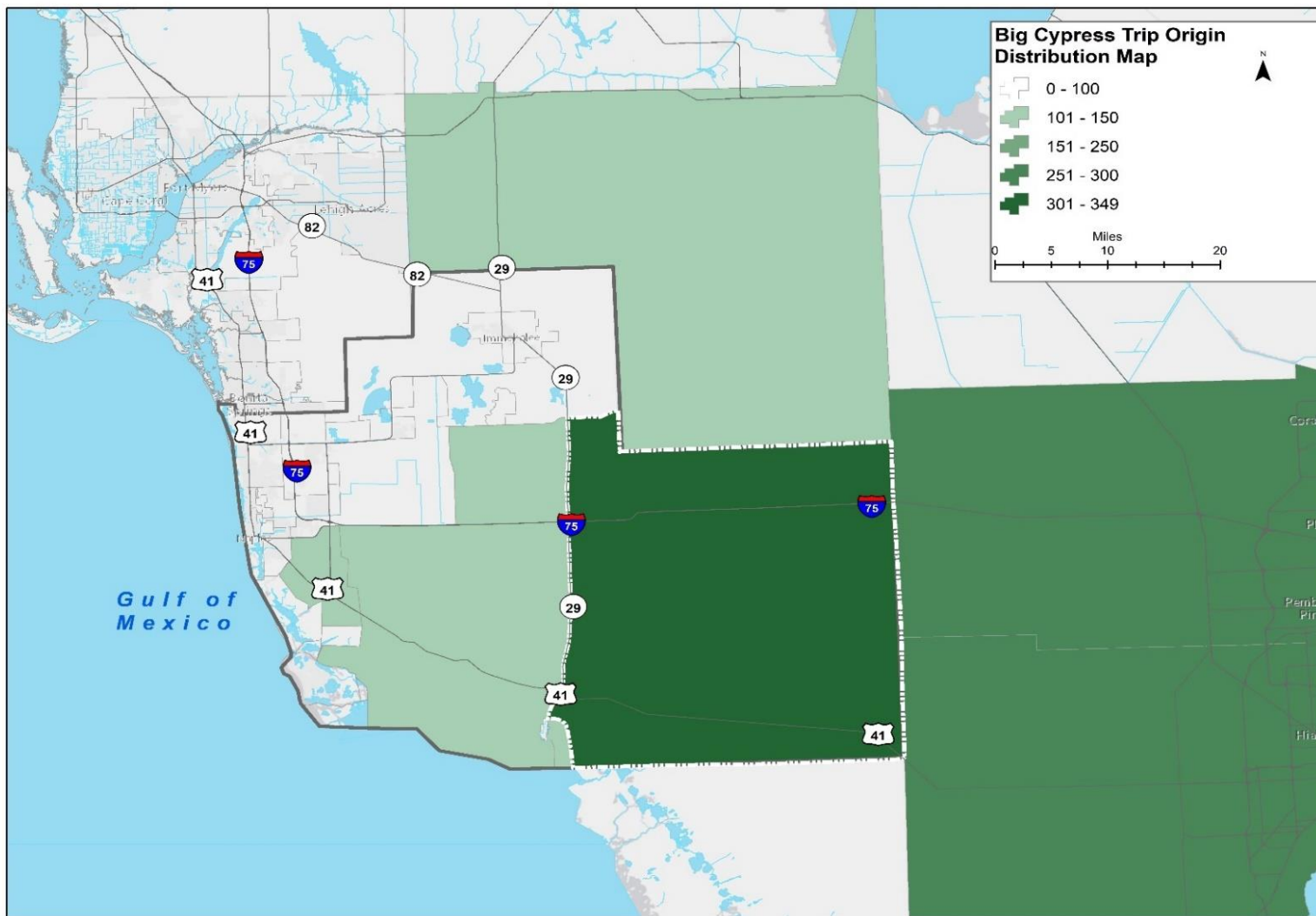
### 3.2.3 Work Location

As a very sparsely populated area of Collier County, there are very few people in the labor force for evaluating the impacts of work trips originating from this subarea. Table 9 indicates that work trips made by residents of Big Cypress are predominantly to the South Naples subarea. A total of 12 workers travel to South Naples from Big Cypress.

Shown in Figure 13 are selected characteristics related to the work commute trip. Compared with trip time and distance for all trips originated within the study area, work trips on average are longer in time and distance and demonstrate a distinct A.M. peak pattern. Information regarding working from home is also made available through Replica. It was estimated that 16 of the 121 (13.2%) Big Cypress subarea residents worked from home during the Spring 2021 quarter.



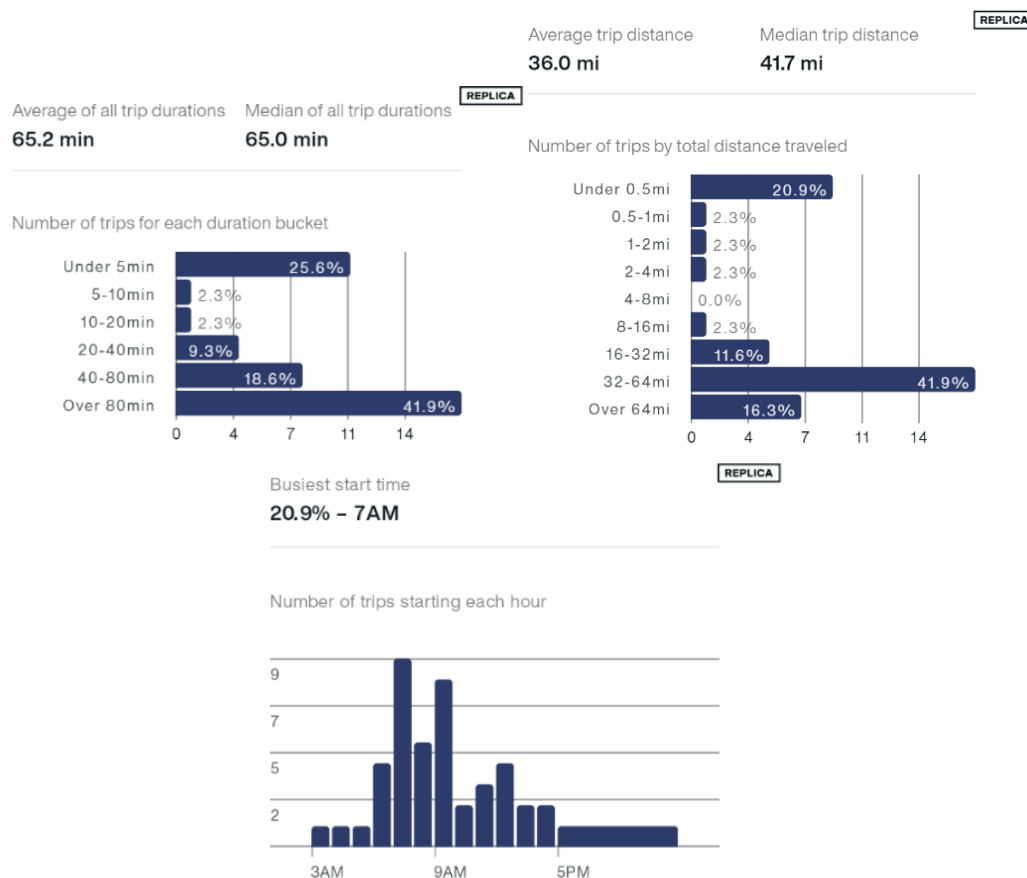
**Figure 14: Origins for trips Ending in Big Cypress Subarea**



**Table 9: Work Locations for Residents of Big Cypress**

Work Location	Population	Work Location	Population
South Naples	12	City of Naples	2
Miami-Dade County	7	Fort Myers	1
Royal Fakapalm	6	Immokalee	1
Ave Maria	6	Rural Estates	1
Central Naples	5	Big Cypress	1
North Naples	5	Corkscrew	1
City of Marco Island	3	East Naples	1
Broward County	2	Orange Tree	1
Everglades City	2		

**Figure 15: Big Cypress Home to Work Trip Characteristics**

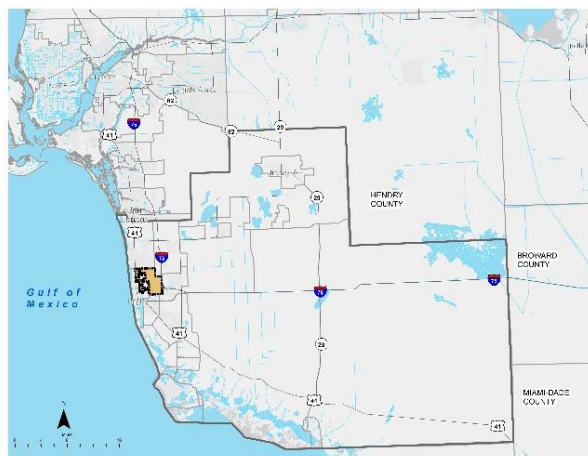




### 3.3 Central Naples

The Central Naples subarea is adjacent to the City of Naples and extends north to Pine Ridge Road and as far east as I-75 as shown in the image to the right.

Table 10 identifies the number of trip origin and destination for the top 20 subarea locations when at least one trip end takes place in the Central Naples subarea. The trip origins listed have a destination in the Central Naples subarea and vice-versa for the destinations listed. Of the 82,000 daily trips originating from this area, nearly 24% (19,331) stay within the subarea. Other areas highly associated with trips in this area include North Naples and the City of Naples where a diverse mix of land uses, and an integrated roadway network connectivity support this relationship



**Table 10: Central Naples Trip Origins and Destinations**

Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
Central Naples (internal)	19,331	19,331	City of Marco Island	847	814
North Naples	13,657	13,643	San Carlos	756	754
City of Naples	12,924	13,102	Estero	635	648
Golden Gate	6,892	6,938	Fort Myers	470	635
Urban Estates	6,228	6,493	South Fort Myers	337	475
East Naples	5,781	5,763	Lehigh Acres	328	486
South Naples	4,197	3,742	Immokalee	327	364
Rural Estates	2,409	2,677	Heritage Bay	277	316
Bonita Springs	1,766	1,497	Miami-Dade County	268	242
Out of Region	915	1,035	Cape Coral	239	415

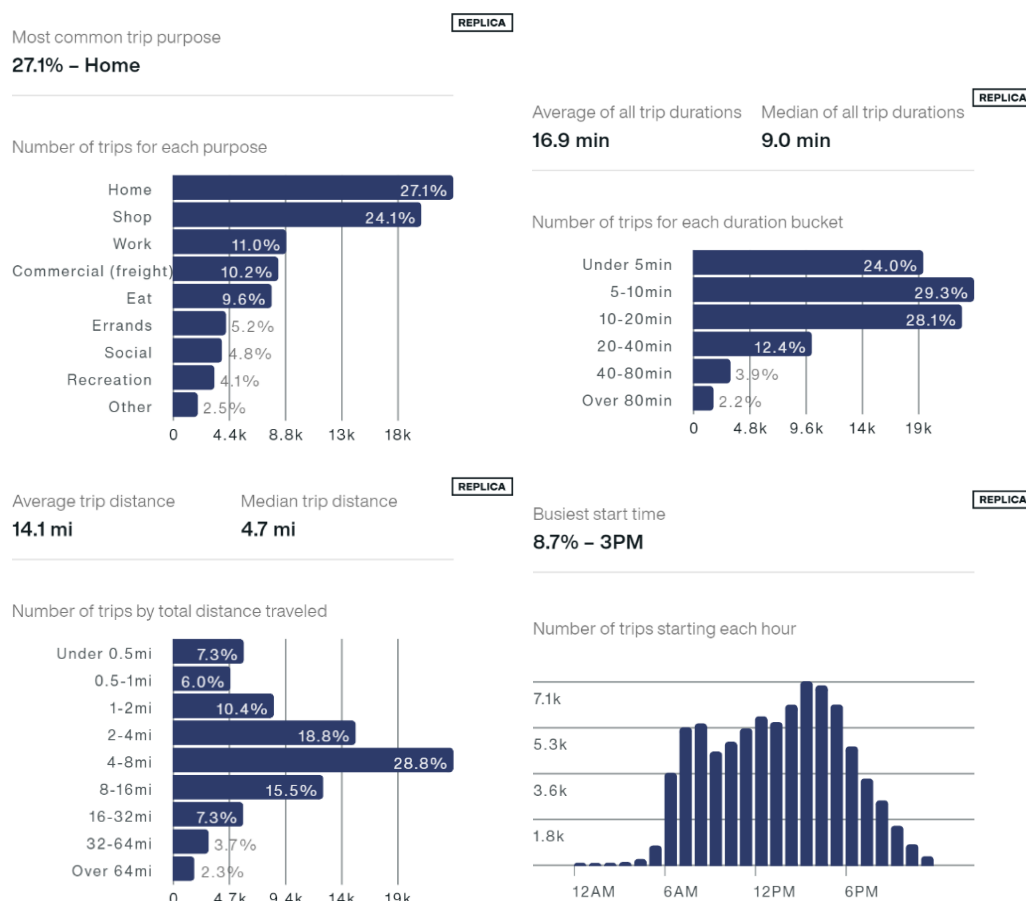
#### 3.3.1 Trips Beginning in Subarea

Figure 16 provides a summary of the trip purpose, trip distance, trip duration and the busiest start time statistics for the area. Trips originating in Central Naples have a high home trip purpose at about 22,000 or 27% of the daily trips generated in the subarea. Shopping trip purposes is also relatively high at roughly 20,000 or 24% of total trips daily. The more predominant activities in Central Naples include residential dwelling, commercial services, and other public services including schools and health center. The average distance traveled is 14 miles, and the average duration is estimated at 17 minutes for trips originating in Central Naples. Trip distances for trips starting in Central Naples follow a normal distribution with the highest frequency of trips travel between four and eight miles. More than half of the trips originating from Central Naples have a travel time of less than 10 minutes. With the median trip length less than five miles and trip time less than 10 minutes, many of the trips originating in this



subarea can be considered short distance trips. Figure 17 illustrates the geographic distribution of destinations for trips originating in the Central Naples subarea.

**Figure 16: Selected Trip Characteristics for Central Naples Origins**

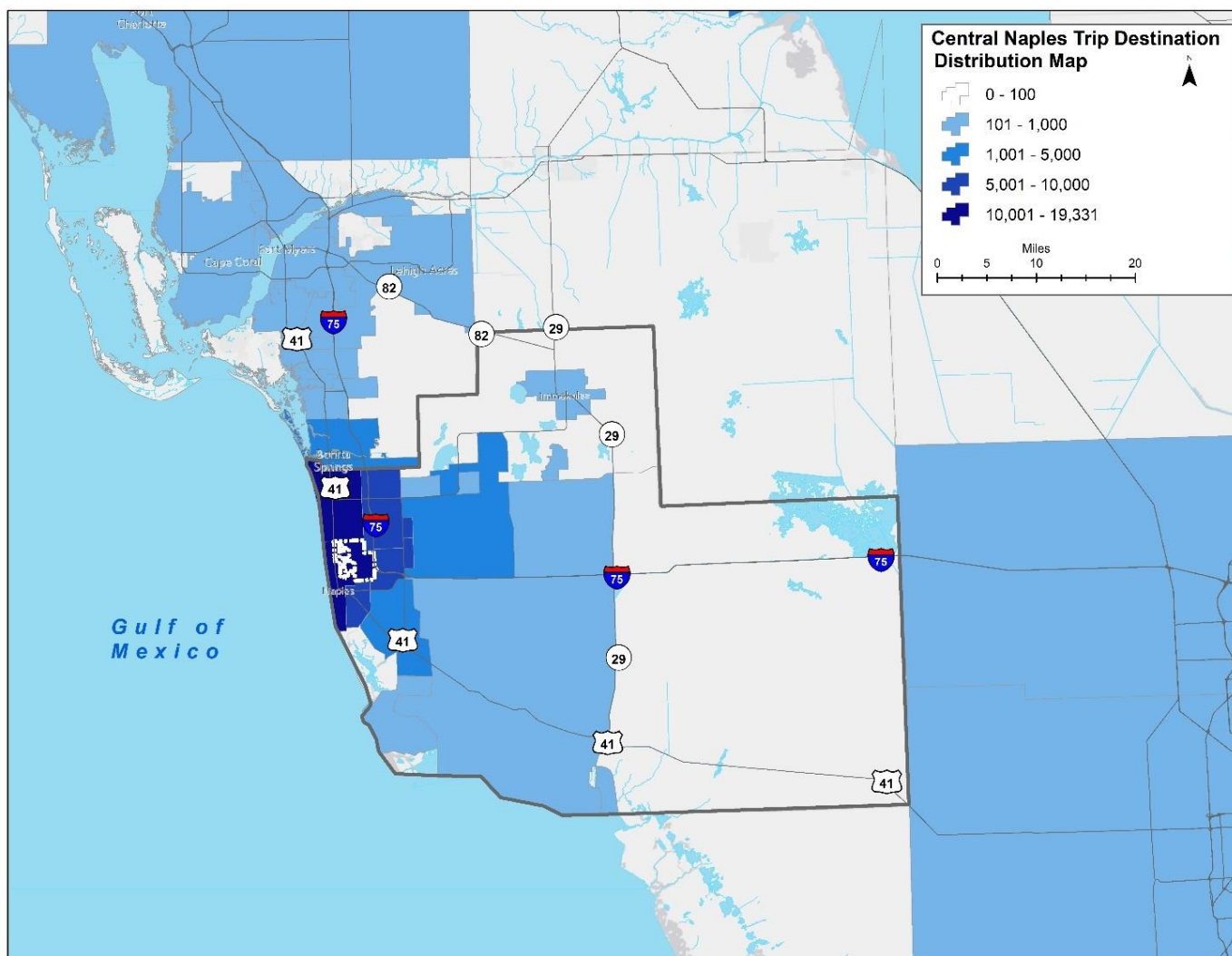


### 3.3.2 Trips Ending in Subarea

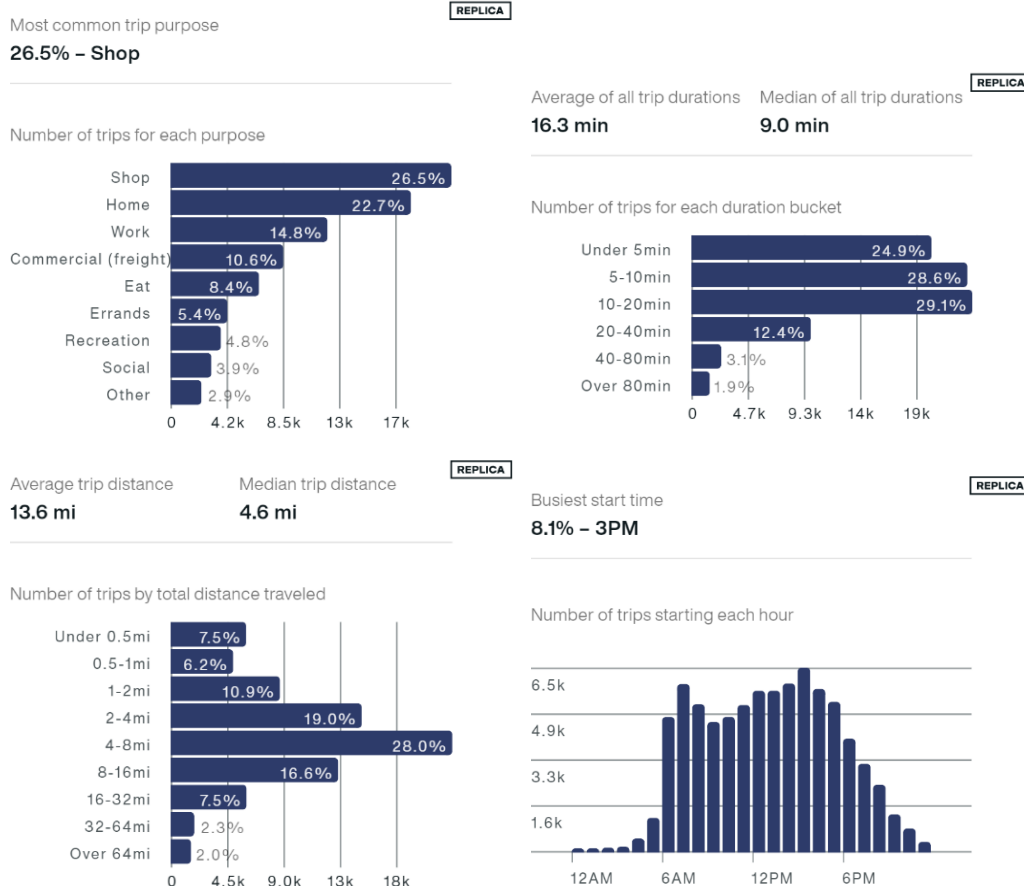
Figure 18 provides a summary of trips ending in the Central Naples subarea. The highest trips purposes, distribution of travel distance and travel times for these trips is very similar to origin trips. This suggests that trip-making is more single purpose rather than chaining trips together for multiple purposes. Trips ending in the Central Naples subarea average less than 14 miles and last around 16 minutes. Figure 19 illustrates the geographic distribution of origins for trips ending in the Central Naples subarea.



**Figure 17: Destinations for trips Originating in Central Naples Subarea**





**Figure 18: Selected Trip Characteristics for Central Naples Destinations**

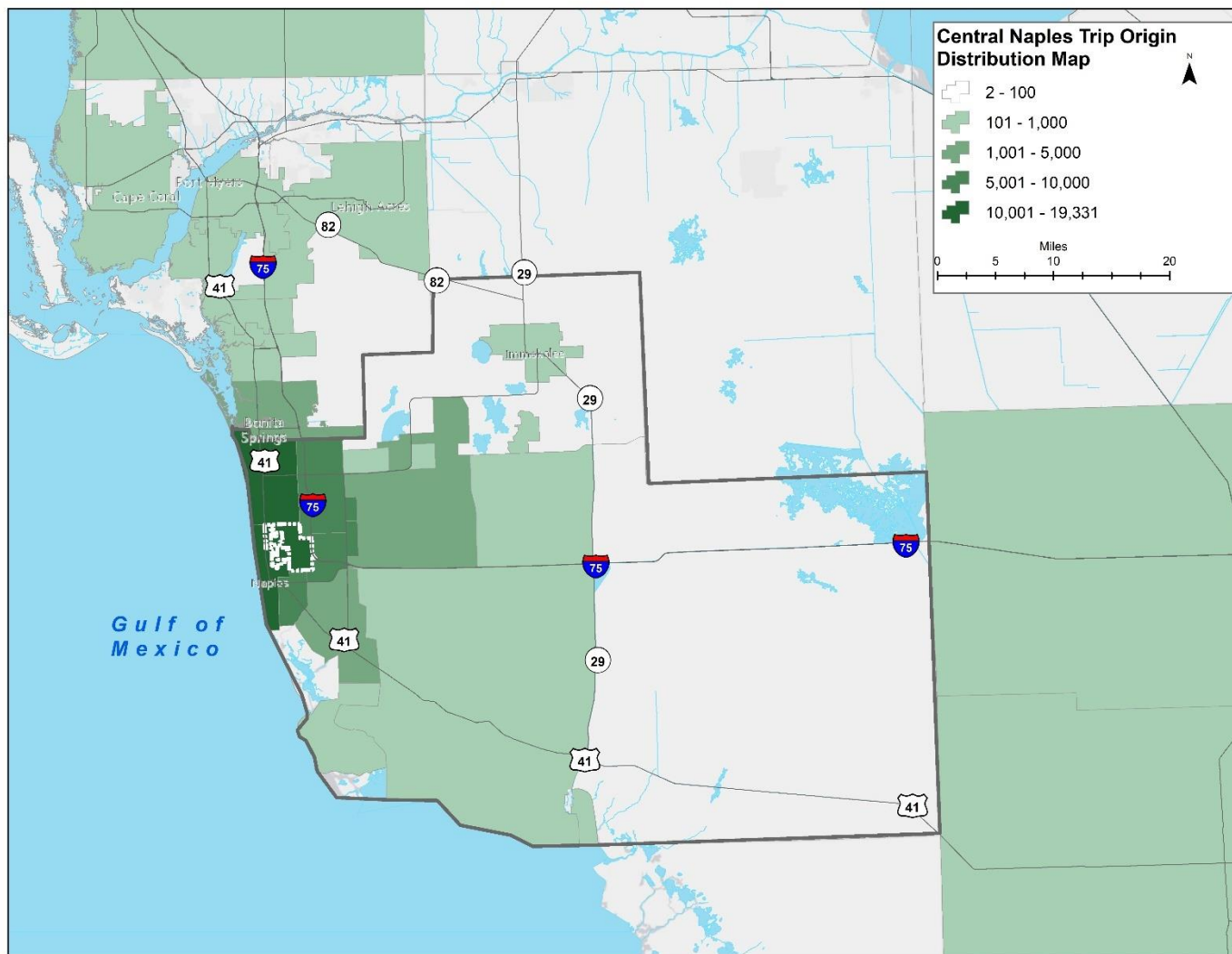
### 3.3.3 Work Location

Table 11 lists the top work location subareas for the nearly 9,400 works residing in the Central Naples subarea. This table indicates that work trips made by residents of Central Naples are predominantly to the City of Naples, the North Naples subarea or within the Central Naples subarea.

Shown in Figure 20 are selected characteristics related to the work commute trip. Compared with trip time and distance for all trips originated within the study area, work trips on average are longer in time and distance and demonstrate a distinct A.M. peak pattern. Information regarding working from home is also made available through Replica. It was estimated that 2,100 or 10% of the 21,000 Central Naples residents worked from home during the Spring 2021 quarter.



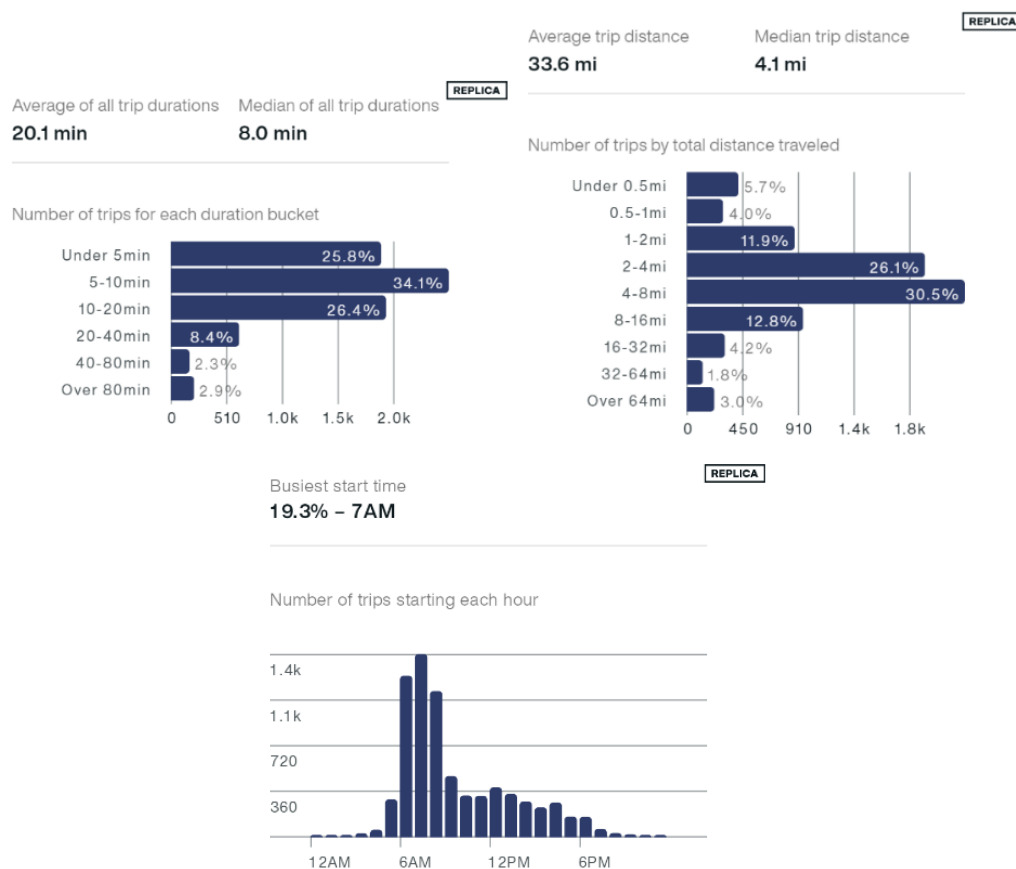
**Figure 19: Origins for trips Ending in Central Naples Subarea**



**Table 11: Work Locations for Residents of Central Naples**

Work Location	Population	Work Location	Population
City of Naples	2,542	Immokalee	157
North Naples	2,026	South Fort Myers	134
Central Naples	1,724	Fort Myers	120
East Naples	501	City of Marco Island	120
Urban Estates	439	Miami Dade County	109
Golden Gate	299	Bonita Springs	53
South Naples	295	Ave Maria	38
Rural Estates	260	Iona/McGregor	34
San Carlos	227	Estero	27
Out of Region	216	Broward County	14

**Figure 20: Central Naples Home to Work Trip Characteristics**



### 3.4 City of Marco Island

The City of Marco Island subarea encompasses the areas of unincorporated Collier County that are beyond the city's official limits but are close in proximity and character to the city. This expansion includes the neighboring areas of Goodland, the Isles of Capri and Hammock Bay as shown in the image to the right. The subarea is predominantly a residential area with several coastline resorts/hotels, commercial activities, and other recreational features.



Table 12 identifies the trip origins and destinations for the top 20 subarea locations when at least one trip end takes place in this subarea. Trip origins listed have a destination in the City of Marco Island subarea and vice-versa for the destinations listed. The 43,800 trips originating in the City of Marco Island subarea and remaining in the area represents 66% of the nearly 66,000 daily trips originating in the subarea. Other areas highly associated with trips in this area include South Naples, the City of Naples, and East Naples subareas. There are also a high number of trips that originate or end out of the region being studied.

**Table 12: City of Marco Island Trip Origins and Destinations**

Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
City of Marco Island (internal)	43,800	43,800	Royal Fakapalm	419	401
South Naples	7,503	7,537	Miami-Dade County	393	376
City of Naples	1,560	1,566	Bonita Springs	305	363
Out of region	1,522	1,651	Fort Myers	234	334
East Naples	1,470	1,495	Estero	205	228
North Naples	1,276	1,418	Everglades City	171	146
Golden Gate	1,263	1,444	Broward County	170	305
Central Naples	814	847	San Carlos	168	268
Urban Estates	755	920	South Fort Myers	134	235
Rural Estates	576	926	Immokalee	129	136

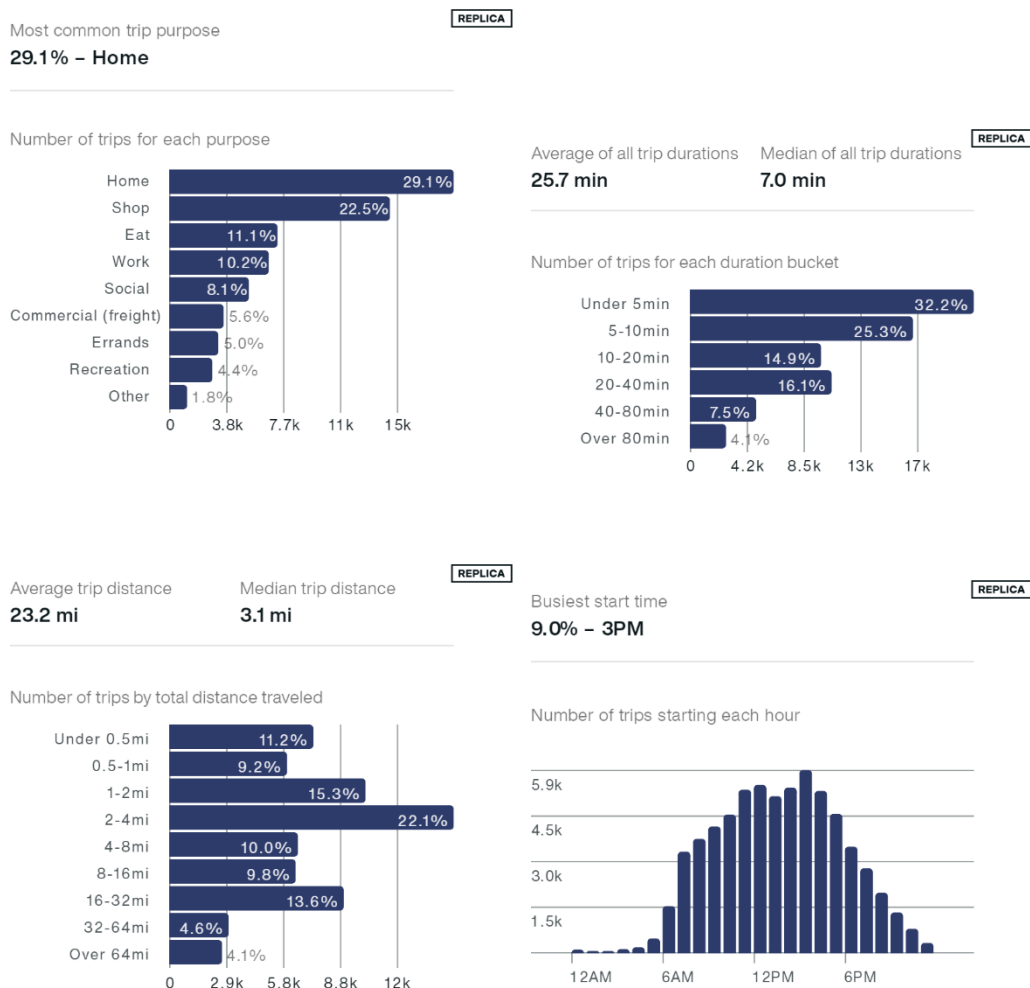
#### 3.4.1 Trips Beginning in Subarea

Figure 21 provides a summary of the trip purpose, trip distance, trip duration, and start time statistics for the area. Trips originating in the City of Marco Island subarea have a high home trip purpose at about 29% of the daily trips generated in the subarea, while shopping trip purposes are an estimated 23% of trips daily in the area. The average trip distance of 23 miles and duration of 26 minutes overstates the high number of short distance trips where one in three trips lasts less than five minutes and shorter



than 2 miles. These shorter distance trips support the high percentage of trips internal to the subarea. Figure 22 illustrates the geographic distribution of destinations for trips originating in the City of Marco Island subarea.

**Figure 21: Selected Trip Characteristics for City of Marco Island Origins**



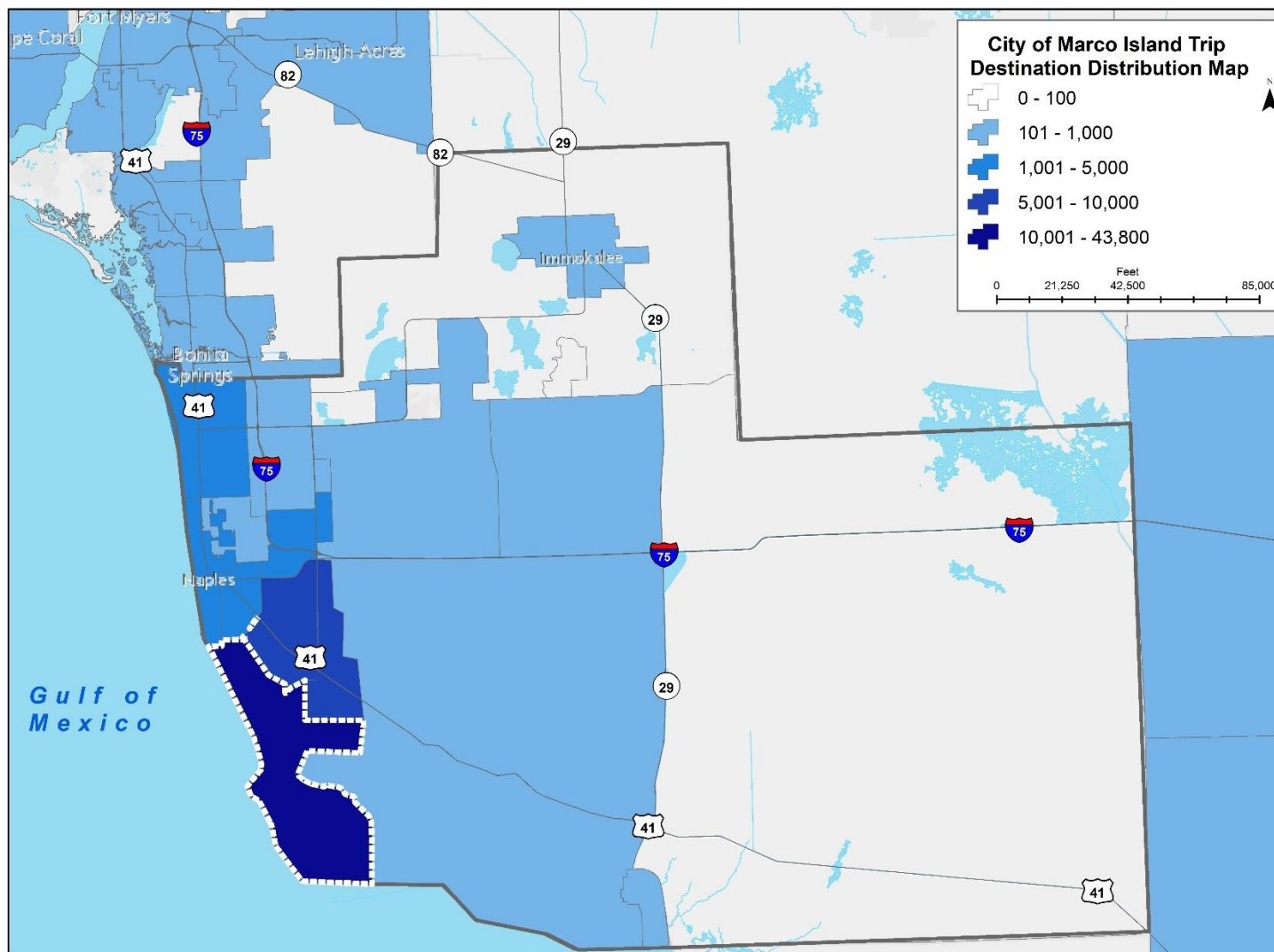
### 3.4.2 Trips Ending in Subarea

Figure 23 shows the characteristics of trips ending in the City of Marco Island subarea. Since there is such a high number of trips that stay internal to the subarea, these characteristics are very similar to the origin trips shown previously. This relationship is influenced by the subarea's high-end shopping, resort, and residential land use features. Figure 24 graphically illustrates the geographic distribution of origins for trips ending in the City of Marco Island subarea.

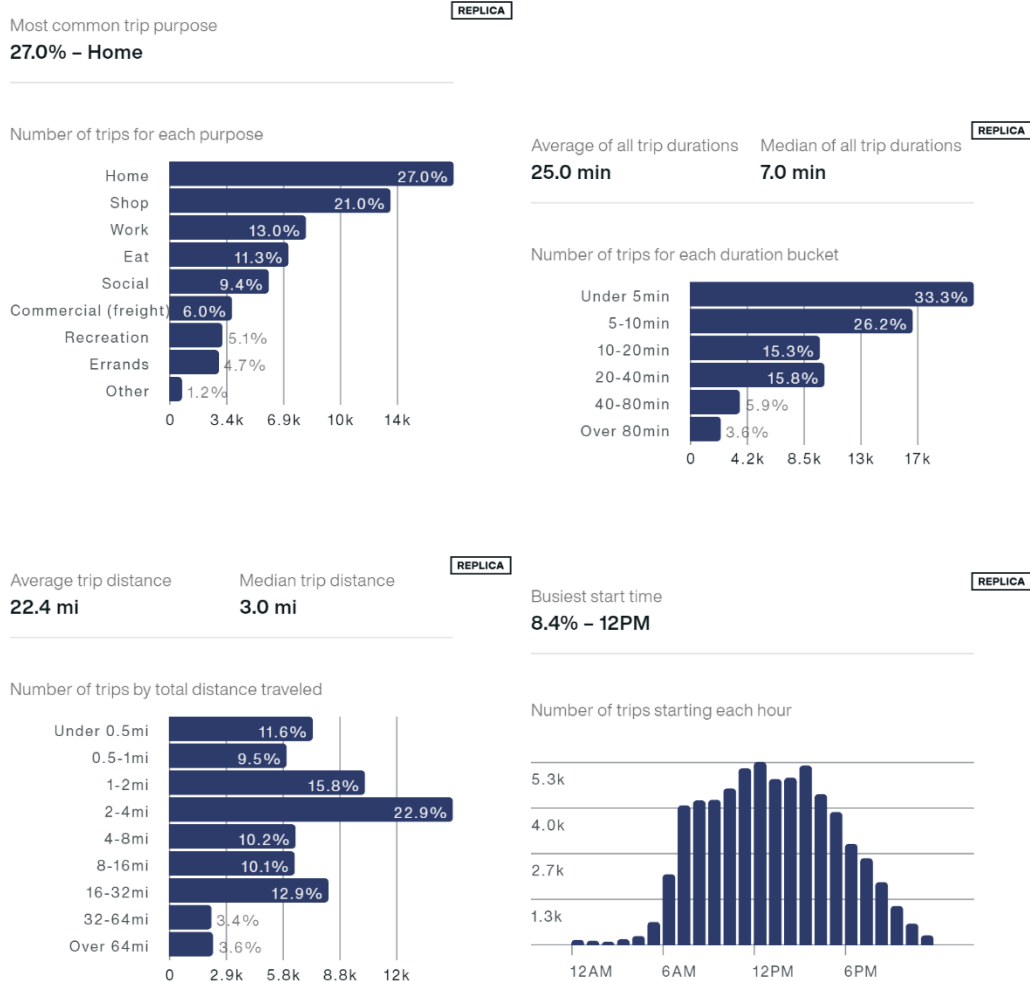




**Figure 22: Destinations for trips Originating in City of Marco Island Subarea**



**Figure 23: Selected Trip Characteristics for City of Marco Island Destinations**



### 3.4.3 Work Location

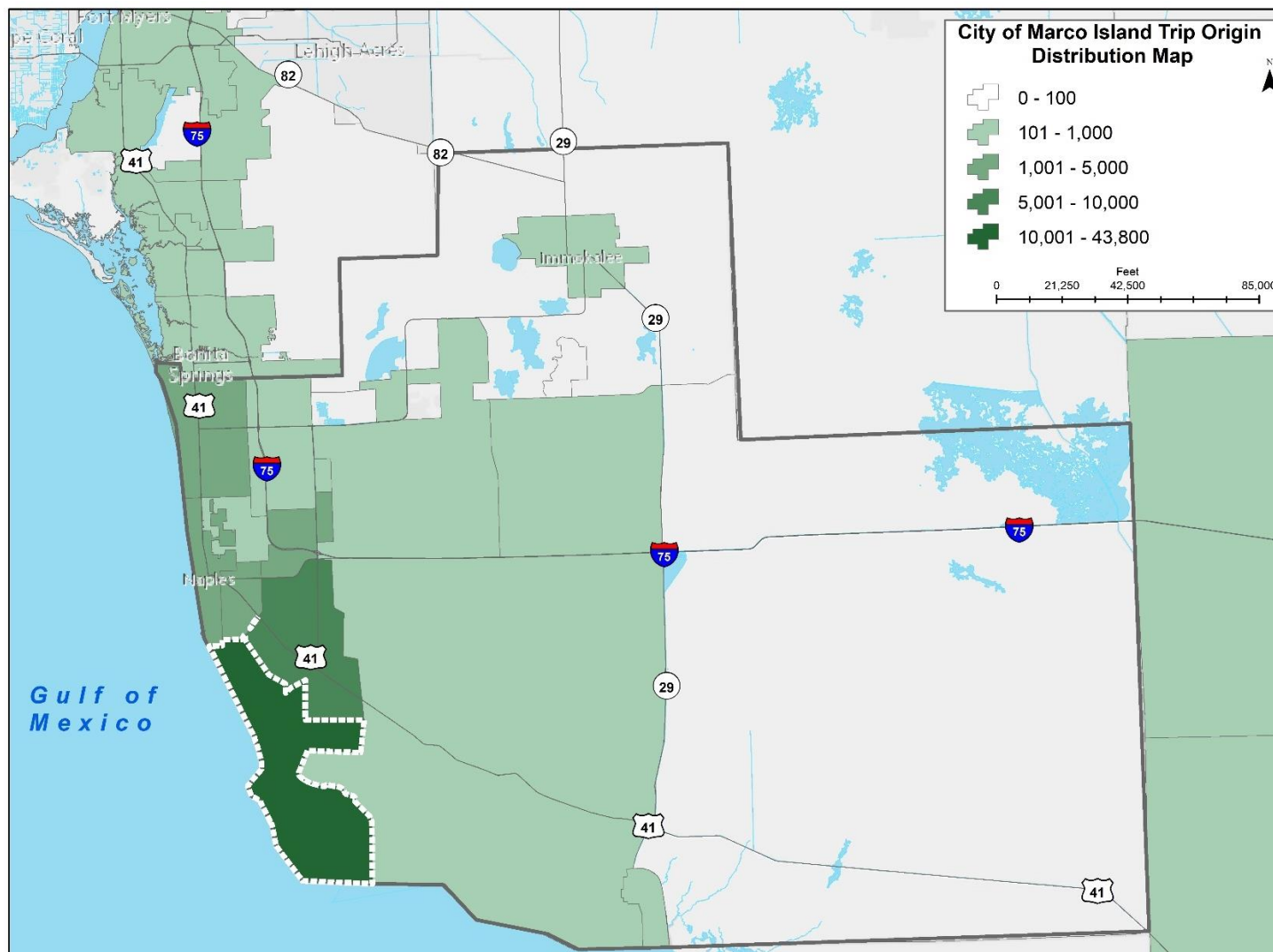
Table 13 lists the top work locations for residents of the City of Marco Island subarea. This table indicates that work trips made by residents of the City of Marco Island are predominantly within the City of Marco Island subarea. More than 60% of the 6,900 workers living in the City of Marco Island subarea also work within the subarea.

Shown in Figure 25 are selected characteristics related to the work commute trip. Compared with trip time and distance for all trips originated within the study area, work trips follow a similar pattern as all trips originating from the subarea. The average trip distance of 55 miles and average trip duration of 44 minutes illustrate the impact of the 348 workers traveling outside of the region. It was estimated that 2,100 or 11% of the 19,000 people residing in the City of Marco Island subarea worked from home during the Spring 2021 quarter.





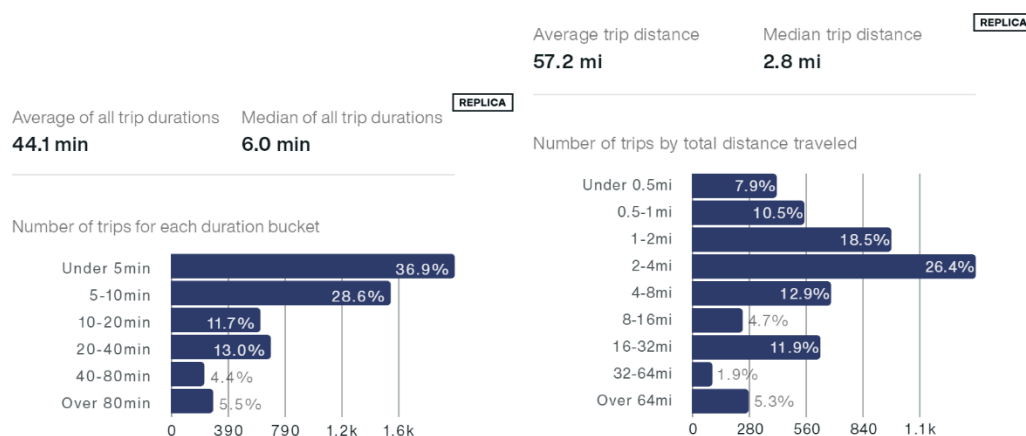
**Figure 24: Origins for trips Ending in City of Marco Island Subarea**



**Table 13: Work Locations for Residents of City of Marco Island**

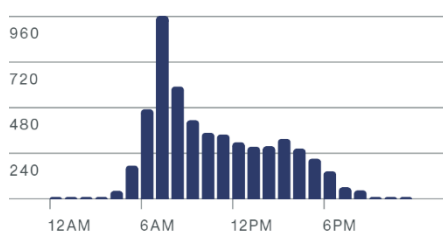
Work Location	Population	Work Location	Population
City of Marco Island	4,363	Broward County	91
North Naples	405	South Fort Myers	85
South Naples	399	Golden Gate	77
Out of region	348	Royal Fakapalm	45
City of Naples	295	Immokalee	35
Central Naples	229	Ave Maria	25
Miami-Dade County	191	Everglades City	25
East Naples	142	Rural Estates	23
San Carlos	137	Estero	12
Urban Estates	115	Orange Tree	11

**Figure 25: City of Marco Island Home to Work Trip Characteristics**



Busiest start time  
**18.1% – 7AM**

Number of trips starting each hour



### 3.5 City of Naples

The City of Naples subarea is inclusive of the current city limits as shown in the image to the right.

Table 14 identifies the trip origins and destinations for the top 20 subarea locations when at least one trip end takes place in the City of Naples subarea. Trip origins listed have a destination in the City of Naples subarea and vice-versa for the destinations listed. The 52,570 trips originating in the City of Naples subarea and remaining within the area represent 40% of the more than 130,000 daily trips originating in the subarea. The nearby areas of North Naples, Central Naples and East Naples have high trip interactions with more than 10,000 daily trips coming into the City of Naples.



**Table 14: City of Naples Trip Origins and Destinations**

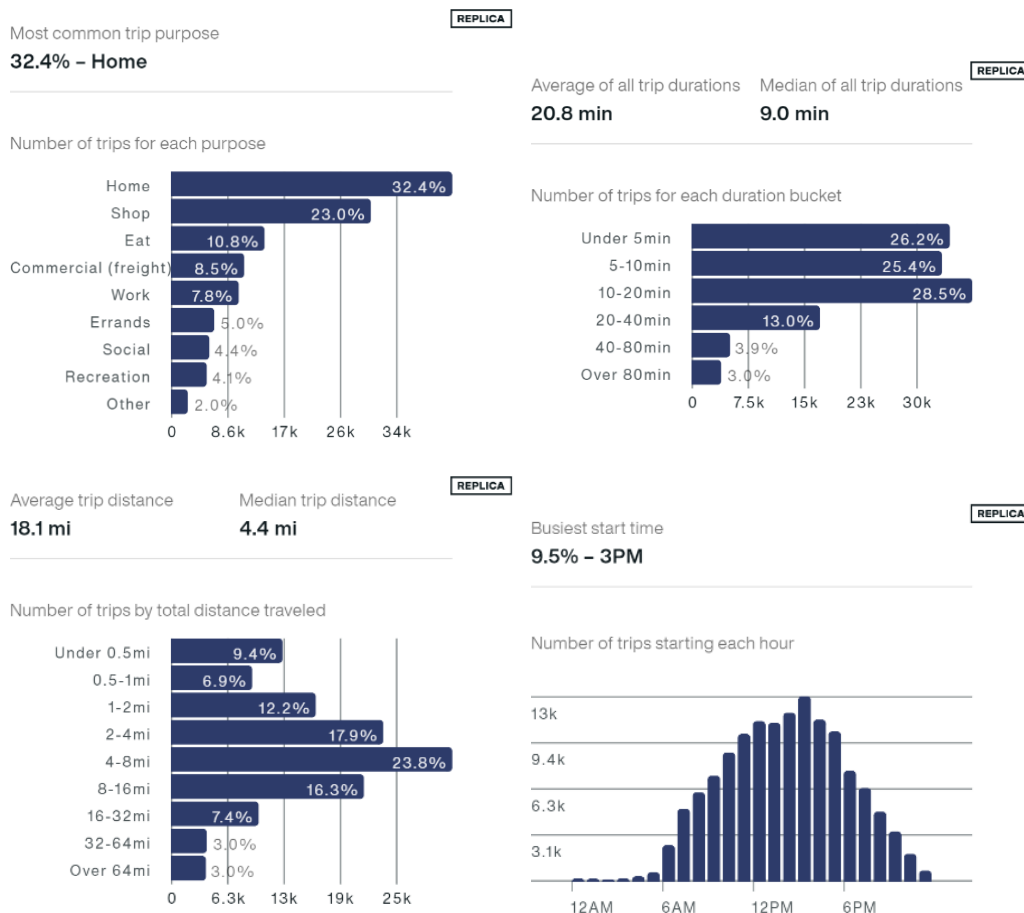
Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
City of Naples (Internal)	52,570	52,570	City of Marco Island	1,566	1,560
North Naples	18,196	17,337	Estero	907	940
Central Naples	13,102	12,924	San Carlos	668	791
East Naples	10,454	10,465	Fort Myers	574	820
South Naples	7,812	6,818	Miami-Dade County	527	545
Golden Gate	7,360	7,159	South Fort Myers	461	569
Urban Estates	6,857	6,550	Immokalee	423	407
Bonita Springs	3,047	2,377	Heritage Bay	387	337
Rural Estates	2,781	3,089	Lehigh Acres	362	566
Out of region	2,404	2,466	Broward County	336	57

#### 3.5.1 Trips Beginning in Subarea

Figure 26 provides a summary of the trips purpose, trip distance, trip duration and start time statistics for the area. Trips originated in the City of Naples have a high home trip purpose at about 32% of the trips daily in the area. The average trip distance of 18 miles and the average trip duration of 21 minutes are more than double the median values for these measures. As seen in the graphs, a large portion of trips originated here are shorter distance. However, the regional nature of the uses in this subarea explains the longer trips. Figure 27 illustrates the geographic distribution of destinations for trips originating in the City of Naples subarea.



**Figure 26: Selected Trip Characteristics for City of Naples Origins**

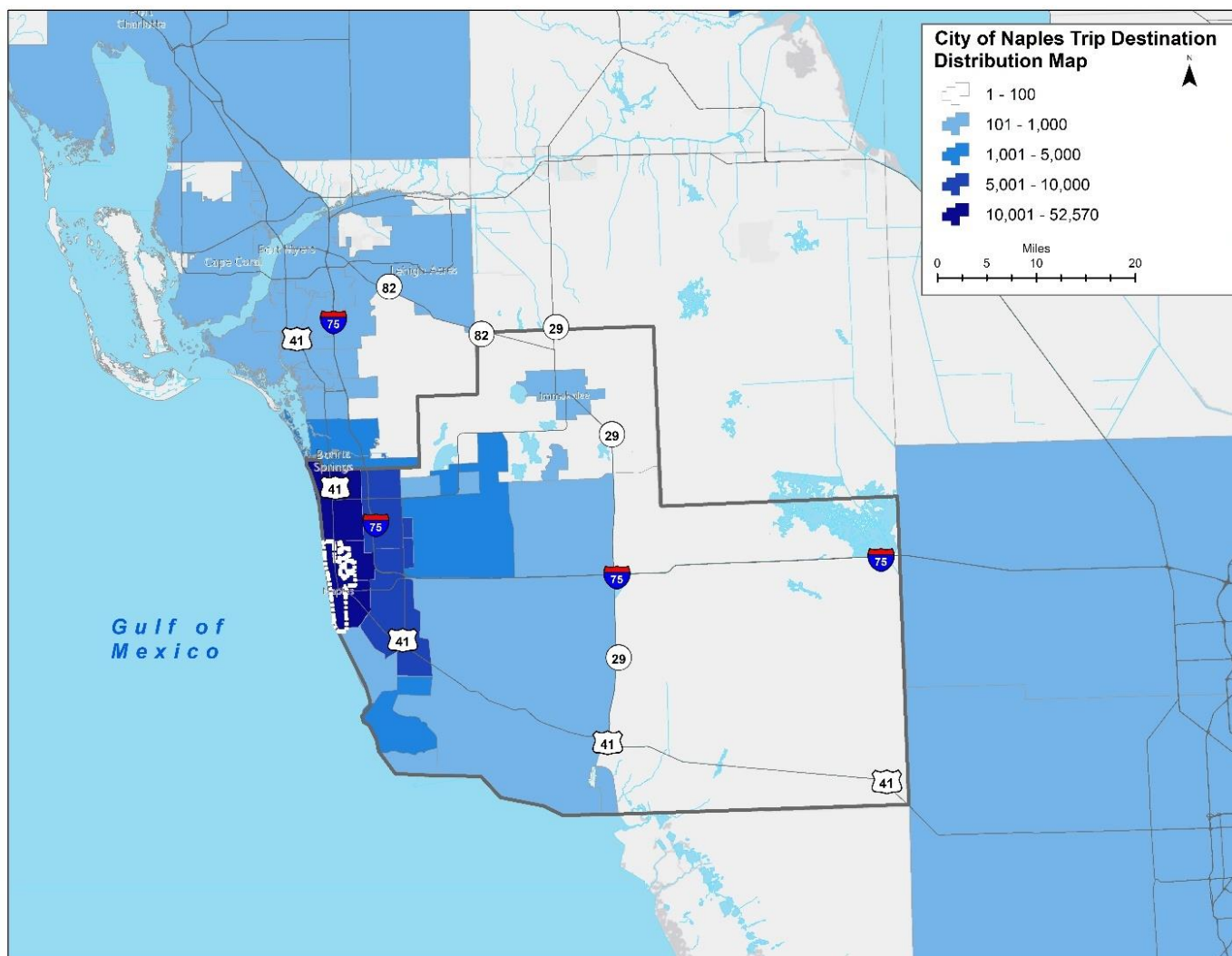


### 3.5.2 Trips Ending in Subarea

Figure 28 shows the characteristics of trips ending in the City of Naples subarea. These trips demonstrate very similar characteristics in terms of trip distance and duration compared with the trip origins. While shopping is the top purpose for trips ending in the City of Naples subarea, the percentage of work trips ending in the subarea (15.5%) is twice the percentage of work trips when the origin is the City of Naples (7.8%). This indicates that a significant number of individuals working within the subarea are commuting from another subarea. The distribution of starting times for trips ending in the subarea is also another distinct difference when compared with trips originating within the subarea. Figure 29 graphically illustrates the geographic distribution of origins for trips ending in the City of Naples subarea.

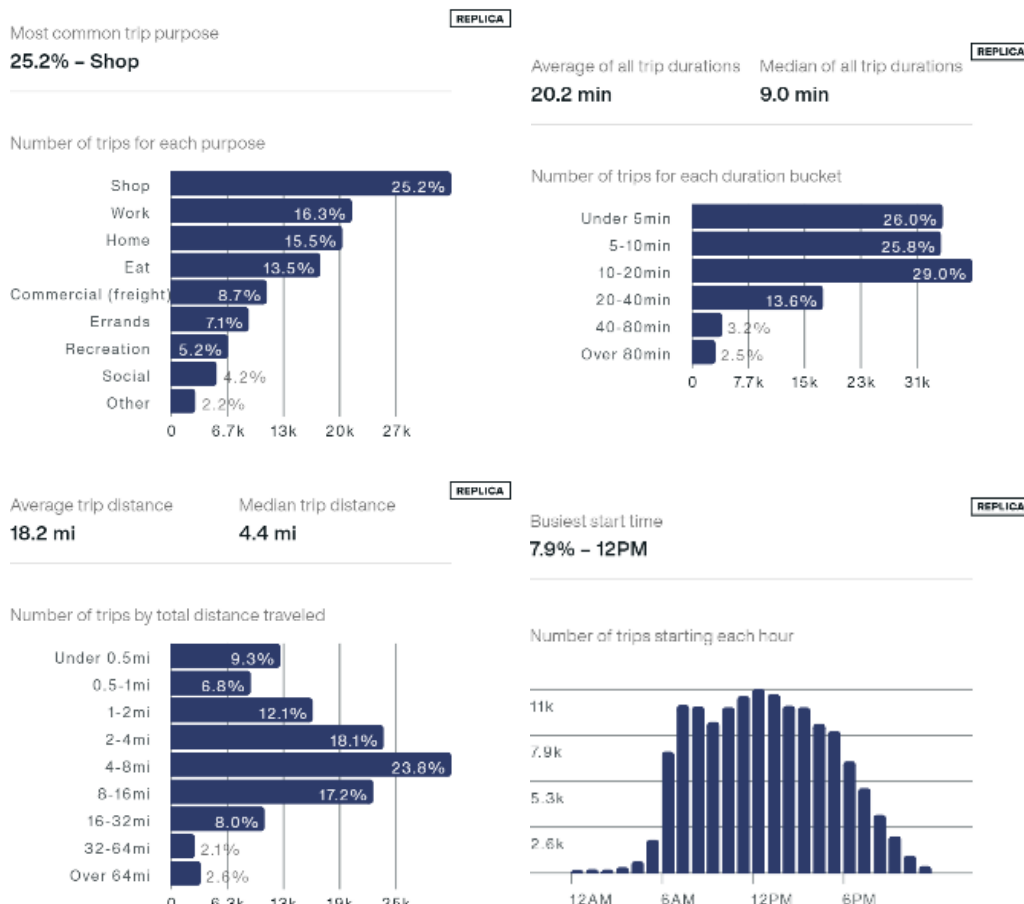


**Figure 27: Destinations for trips Originating in City of Naples Subarea**





**Figure 28: Selected Trip Characteristics for City of Naples Destinations**



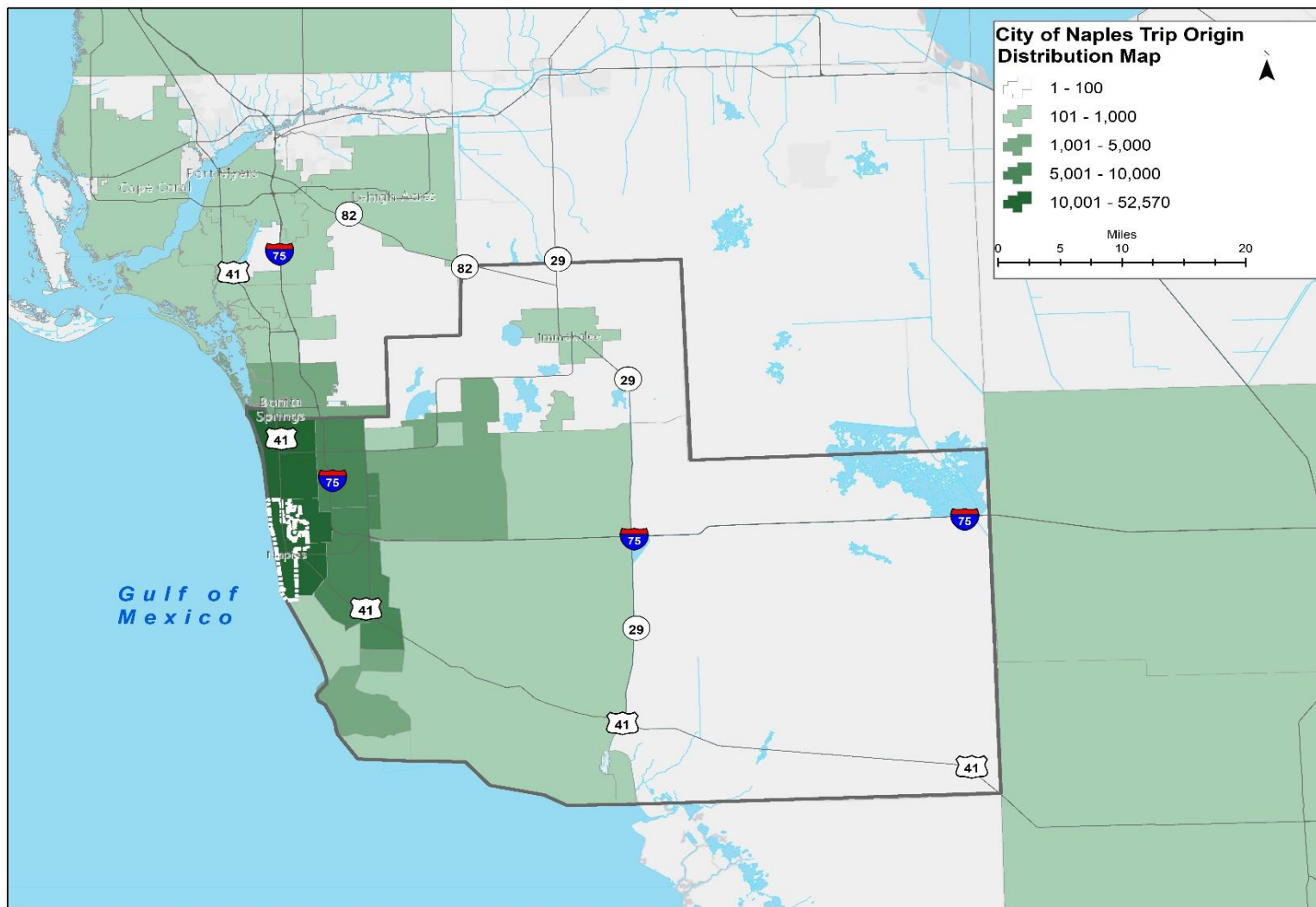
### 3.5.3 Work Location

Table 15 lists the top work locations for the more than 6,400 workers residing in the City of Naples. This table indicates that residents of the City of Naples also predominantly work within the City of Naples. The North Naples and Central Naples nearby subareas are the workplace for more than 500 residents each.

Shown in Figure 30 are selected characteristics related to the work commute trip. Compared with trip time and distance for all trips originating within the study area, work trips exhibit a more disparate pattern with longer averages and lower median values. These trips also demonstrate a distinct A.M. peak pattern. Trips are most commonly between two to eight miles or under 10 minutes. Information regarding working from home is also made available through Replica. It was estimated that 1,600 or 10% of 16,374 residents in the City of Naples subarea worked from home during the Spring 2021 quarter.



**Figure 29: Origins for trips Ending in City of Naples Subarea**

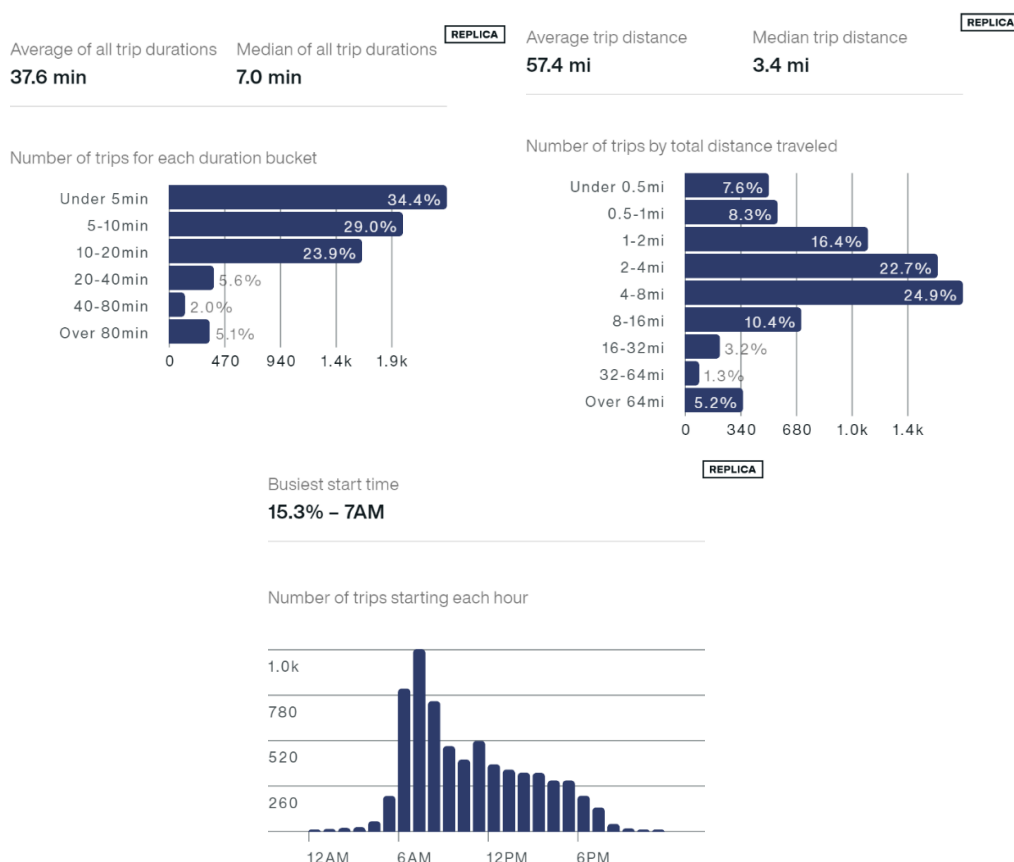




**Table 15: Work Locations for Residents of City of Naples**

Work Location	Population	Work Location	Population
City of Naples	3,165	Miami-Dade County	82
North Naples	771	South Fort Myers	80
Central Naples	537	Rural Estates	51
East Naples	428	Cape Coral	41
Out of region	410	Ave Maria	35
Urban Estates	219	Broward County	32
San Carlos	147	City of Marco Island	27
South Naples	110	Fort Myers	19
Golden Gate	106	Immokalee	16
Bonita Springs	90	Iona/McGregor	13

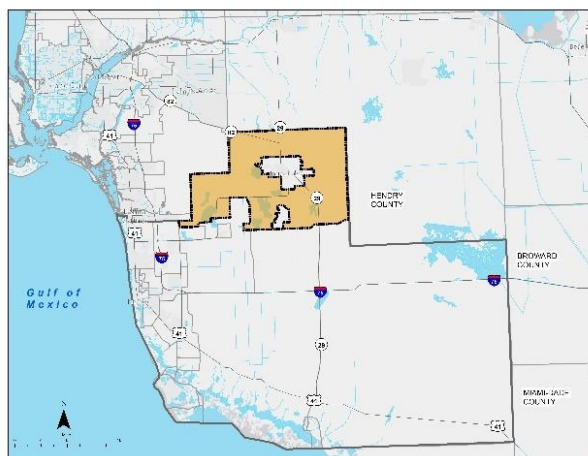
**Figure 30: City of Naples Home to Work Trip Characteristics**



### 3.6 Corkscrew

The Corkscrew subarea is in northern Collier County and surrounds Immokalee. The Corkscrew subarea is primarily comprised of wetland features, agricultural land uses, and rural residential communities.

Table 16 identifies the trip origins and destinations for the top 20 subarea locations when at least one trip end takes place in the Corkscrew subarea. The trip origins listed have a destination in the Corkscrew subarea and vice-versa for the destinations listed. The 685 trips originating in the Corkscrew subarea and remaining within the area represent 22% of the more than 3,000 daily trips originating from the area. The nearby subareas of Immokalee, Rural Estates and Ave Maria have a have trip generation with Corkscrew compared to the other subareas. As a more rural area, the overall daily trips in to and out of this area are relatively low.



**Table 16: Corkscrew Trip Origins and Destinations**

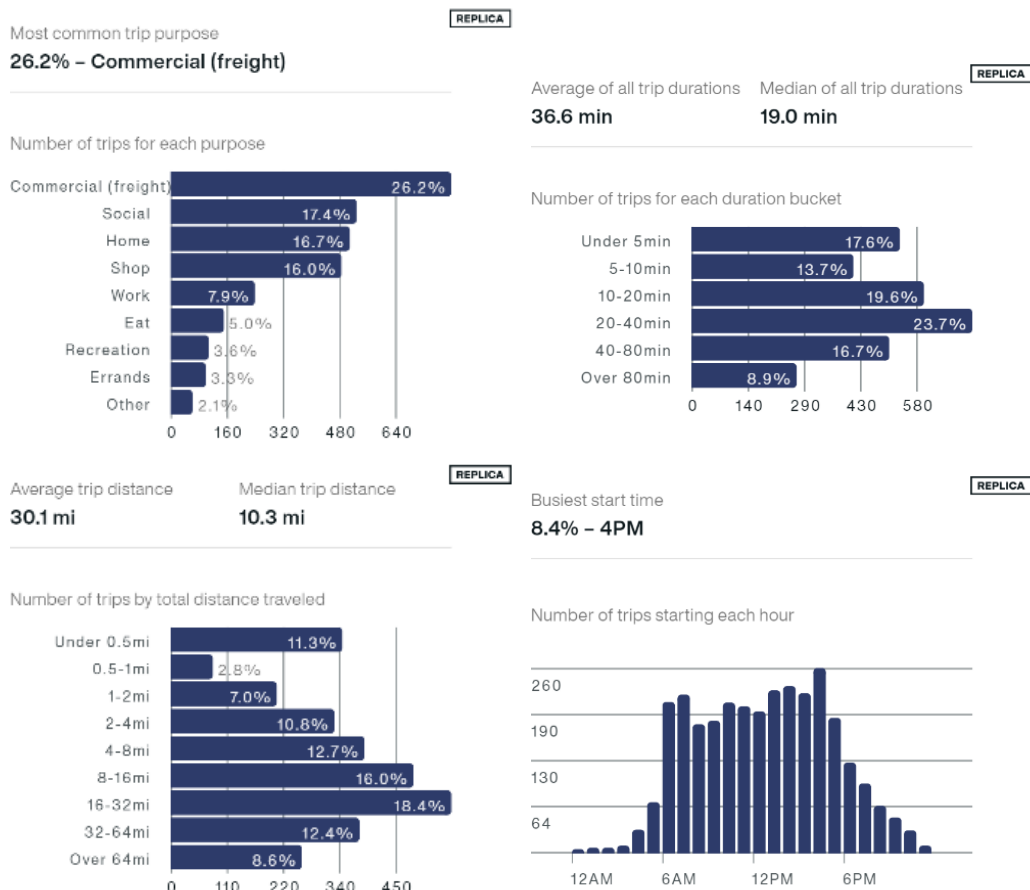
Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
Corkscrew (internal)	685	685	Royal Fakapalm	56	49
Immokalee	573	608	Miami-Dade County	53	58
Rural Estates	307	249	Orange Tree	51	61
Ave Maria	171	172	Bonita Springs	47	42
Out of Region	150	132	City of Naples	46	39
North Naples	150	104	Broward County	42	59
Hendry County	141	129	South Naples	39	28
Lehigh Acres	112	141	San Carlos	34	31
Urban Estates	110	80	Central Naples	33	32
Golden Gate	60	37	Fort Myers	32	53

#### 3.6.1 Trips Beginning in Subarea

Figure 31 provides a summary of the trip purpose, trip distance, trip duration and start time statistics for the area. Trips originating in the Corkscrew subarea have a high commercial trip purpose at about 26% of the daily trips, which is consistent with the agricultural and mining uses in the area. The average trip distance traveled is around 30 miles and the average trip duration is 36 minutes. Both of which are indicative of the rural nature of this area. Figure 32 illustrates the geographic distribution of destinations for trips originating in the Corkscrew subarea.



**Figure 31: Selected Trip Characteristics for Corkscrew Origins**

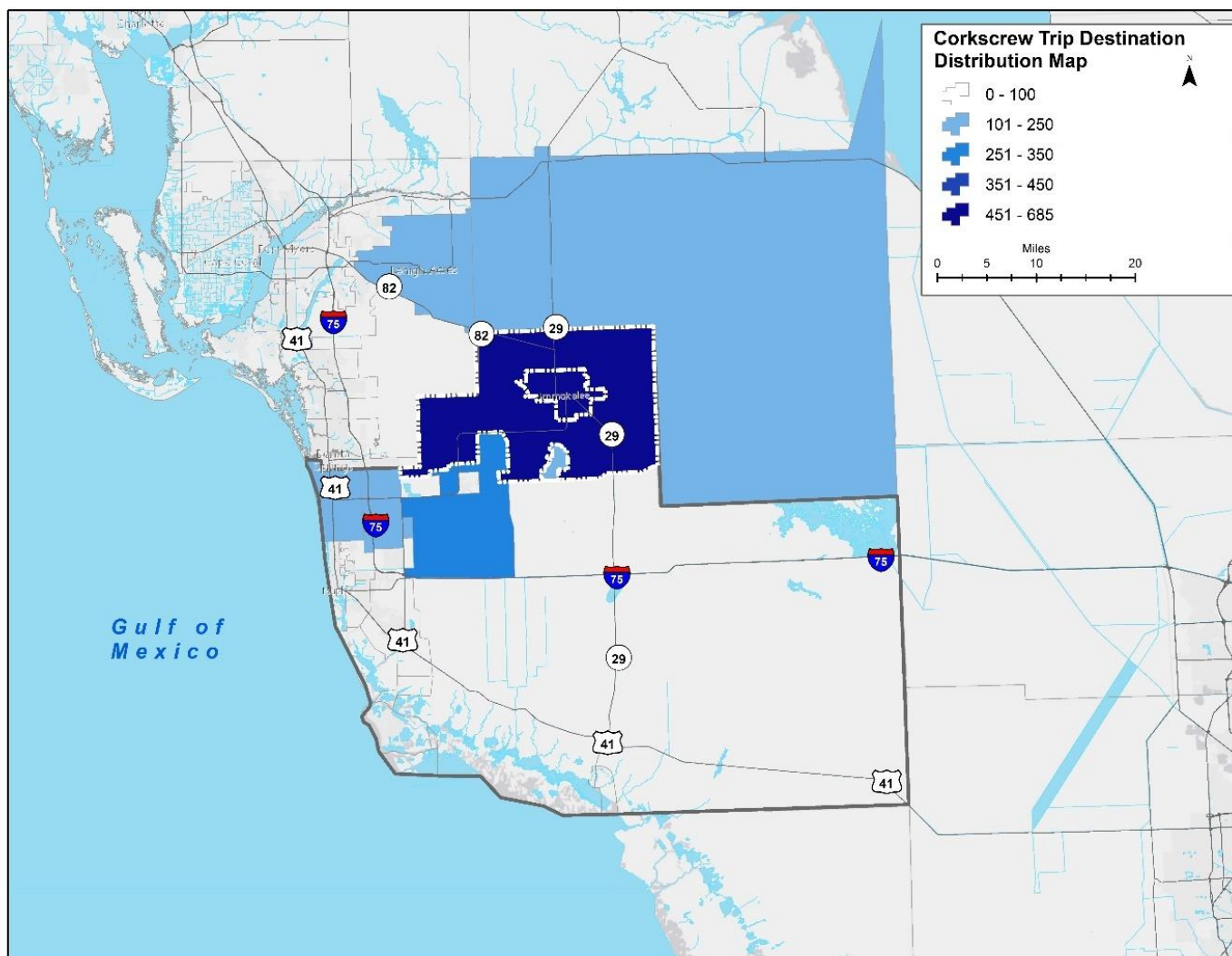


### 3.6.2 Trips Ending in Subarea

Figure 33 shows characteristics for trips ending in the Corkscrew subarea. Along with the map in Figure 34 illustrating the geographic distribution of origins for trips ending in the Corkscrew subarea, these characteristics are like those for trips originating within the area. Social and shopping trips are among some of the main trip purposes for trips in the area.



**Figure 32: Destinations for trips Originating in Corkscrew Subarea**



**Figure 33: Selected Trip Characteristics for Corkscrew Destinations**



### 3.6.3 Work Location

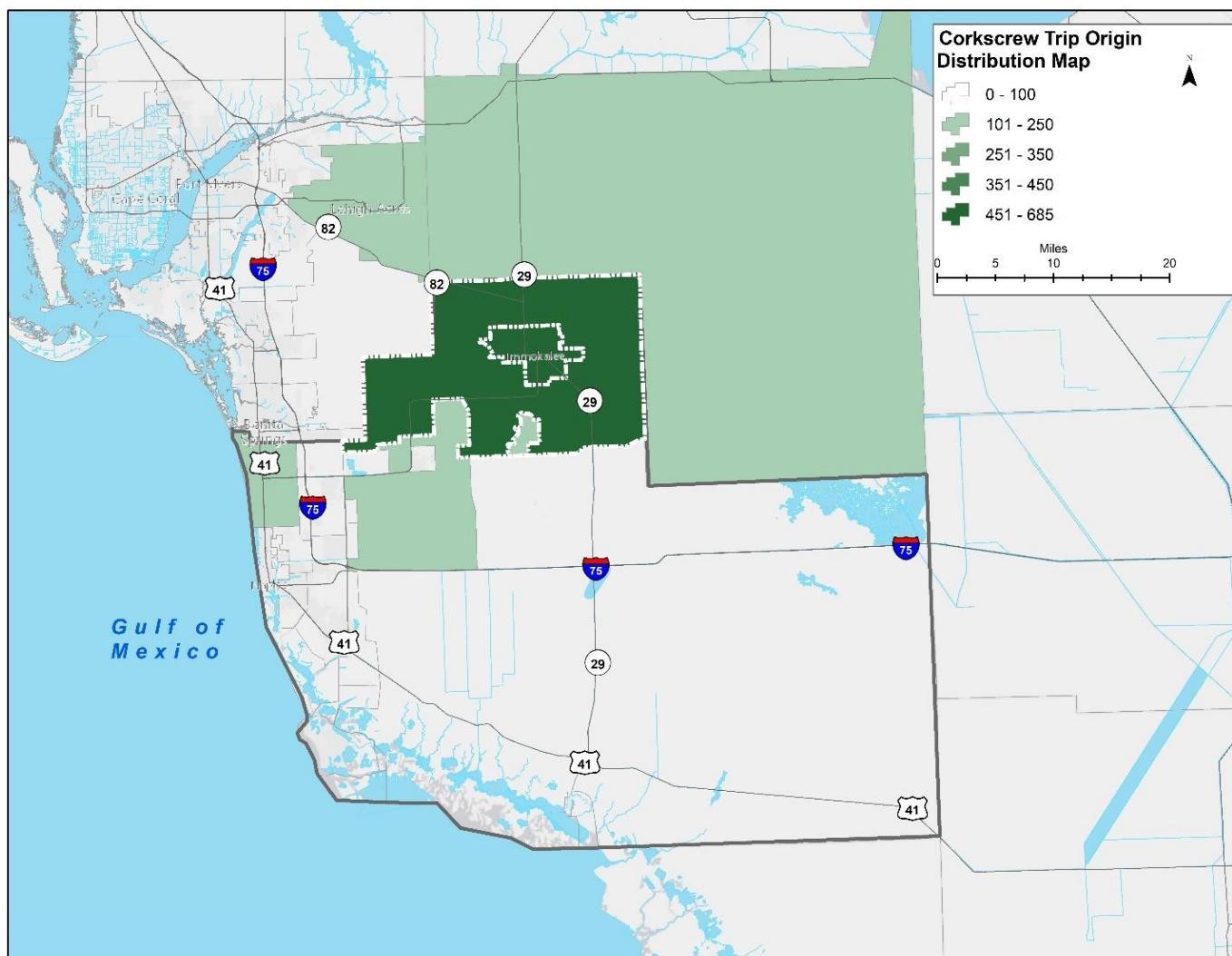
Table 17 lists the top work location subareas for the 900 workers living in the Corkscrew subarea. This table indicates that work trips made by residents of Corkscrew are predominantly to the nearby Immokalee subarea as well as North Naples

Shown in Figure 35 are selected characteristics related to the work commute trip. Compared with trip time and distance for all trips originated within the study area, work trips on average are shorter in time and distance and demonstrate a distinct A.M. peak pattern. Information regarding working from home is also made available through Replica. It was estimated that 80 or 8.8% of the people residing in the Corkscrew subarea worked from home during the Spring 2021.





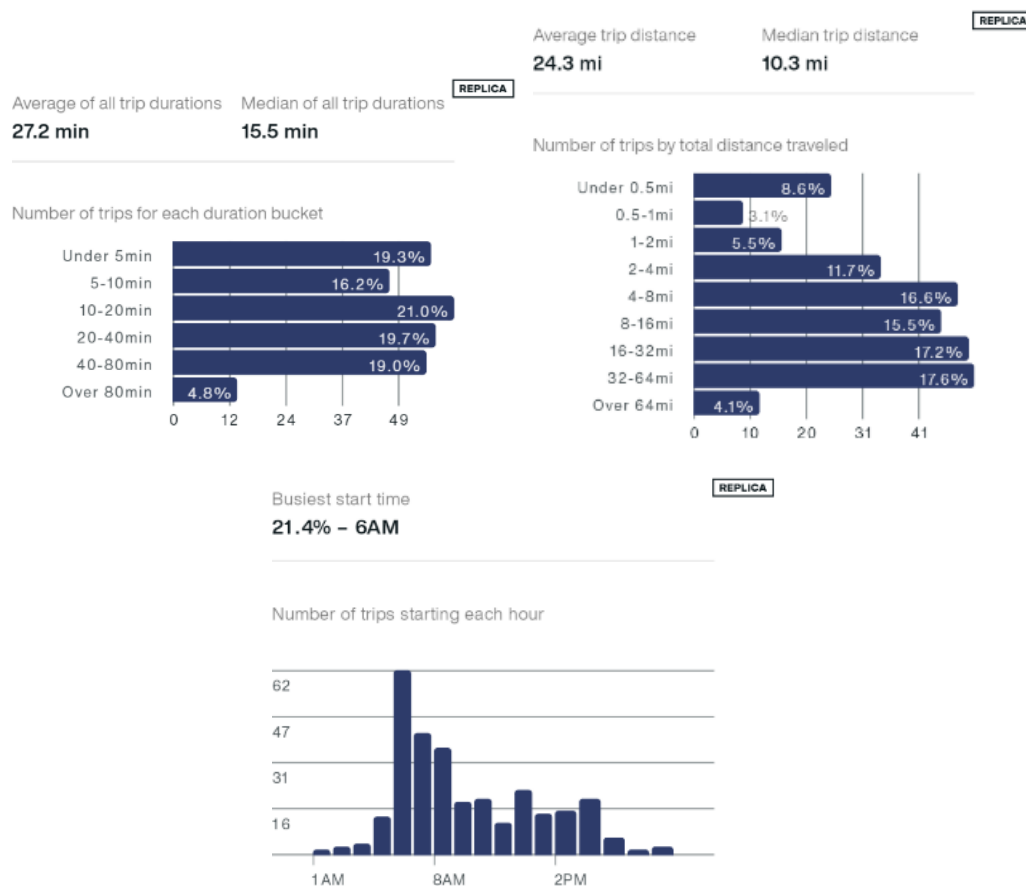
**Figure 34: Origins for trips Ending in Corkscrew Subarea**



**Table 17: Work Locations for Residents of Corkscrew**

Work Location	Population	Work Location	Population
Immokalee	101	Fort Myers	12
North Naples	57	East Naples	12
Ave Maria	30	South Fort Myers	10
City of Naples	28	Heritage Bay	7
San Carlos	20	Miami-Dade County	5
Rural Estates	20	Estero	5
Central Naples	20	Lehigh Acres	5
South Naples	17	Sanibel	5
Urban Estates	17	Bonita Springs	4
Corkscrew	13	Fort Myers Shores	4

**Figure 35: Corkscrew Home to Work Trip Characteristics**





### 3.7 East Naples

East Naples is in southwest Collier County as illustrated in the image to the right.

Table 18 identifies the trip origins and destinations for the top 20 subarea locations when at least one trip end takes place in the East Naples subarea. The trip origins listed have a destination in the East Naples subarea and vice-versa for the destinations listed. The 28,132 trips originating in the East Naples subarea and remaining in the area represent 34% of the more than 82,000 daily trips originating in the area. This percentage is a relatively higher percentage than the internal trips in other subareas. Other areas of high trip interaction include the neighboring South Naples and City of Naples subareas.



**Table 18: East Naples Trip Origins and Destinations**

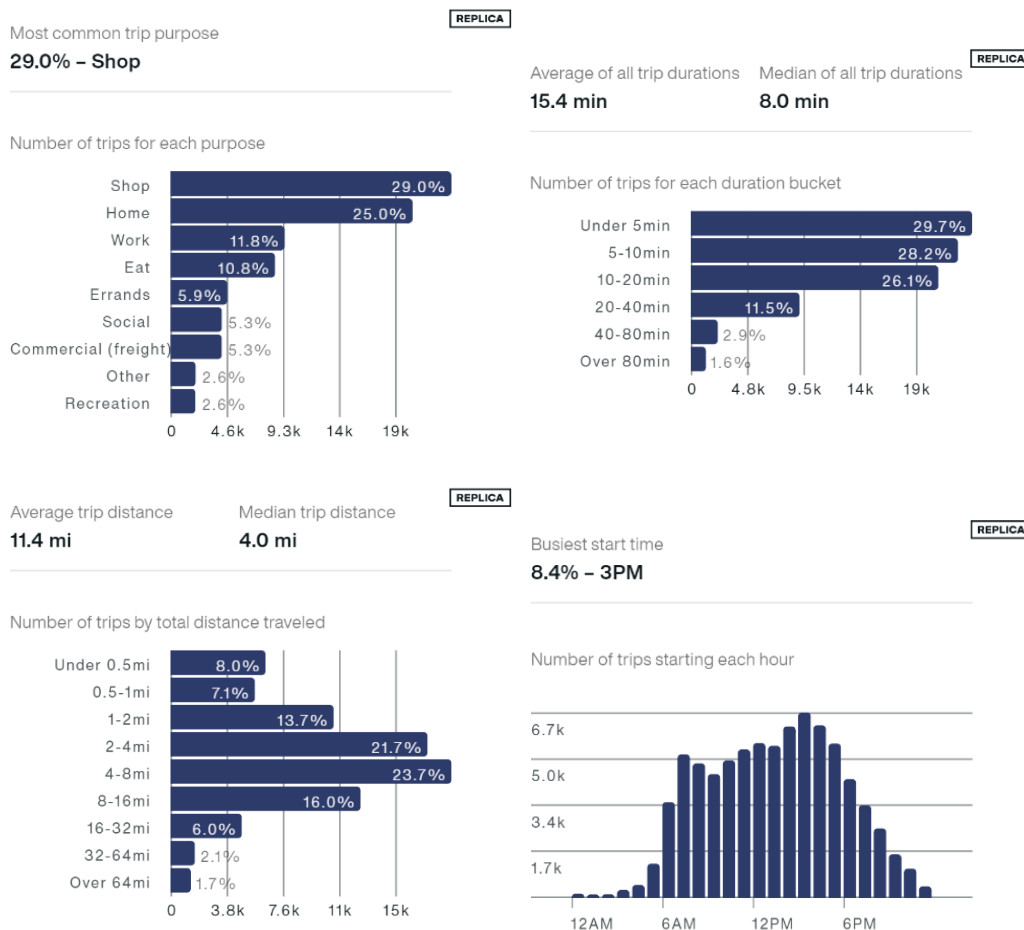
Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
East Naples (Internal)	28,132	28,132	Out of Region	788	896
South Naples	12,327	12,263	Estero	346	339
City of Naples	10,465	10,454	San Carlos	307	441
Golden Gate	6,706	6,962	Fort Myers	304	487
Central Naples	5,763	5,781	Immokalee	254	328
North Naples	5,230	5,449	South Fort Myers	252	390
Urban Estates	2,843	2,969	Royal Fakapalm	244	239
Rural Estates	1,538	1,881	Miami-Dade County	230	214
City of Marco Island	1,495	1,289	Heritage Bay	182	197
Bonita Springs	1,148	936	Gateway/Airport	174	350

#### 3.7.1 Trips Beginning in Subarea

Figure 36 provides a summary of the trip purpose, trip distance, trip duration and the start time statistics for the area. Trips originating from East Naples have a high home trip purpose at 30% of the daily trips generated in the subarea, while shopping trips are a quarter of the total trips at 21,000 trips in the area. The average trip distance traveled is around 11 miles and the average trip duration is 15 minutes. Figure 37 illustrates the geographic distribution of destinations for trips originating in the East Naples subarea.



**Figure 36: Selected Trip Characteristics for East Naples Origins**

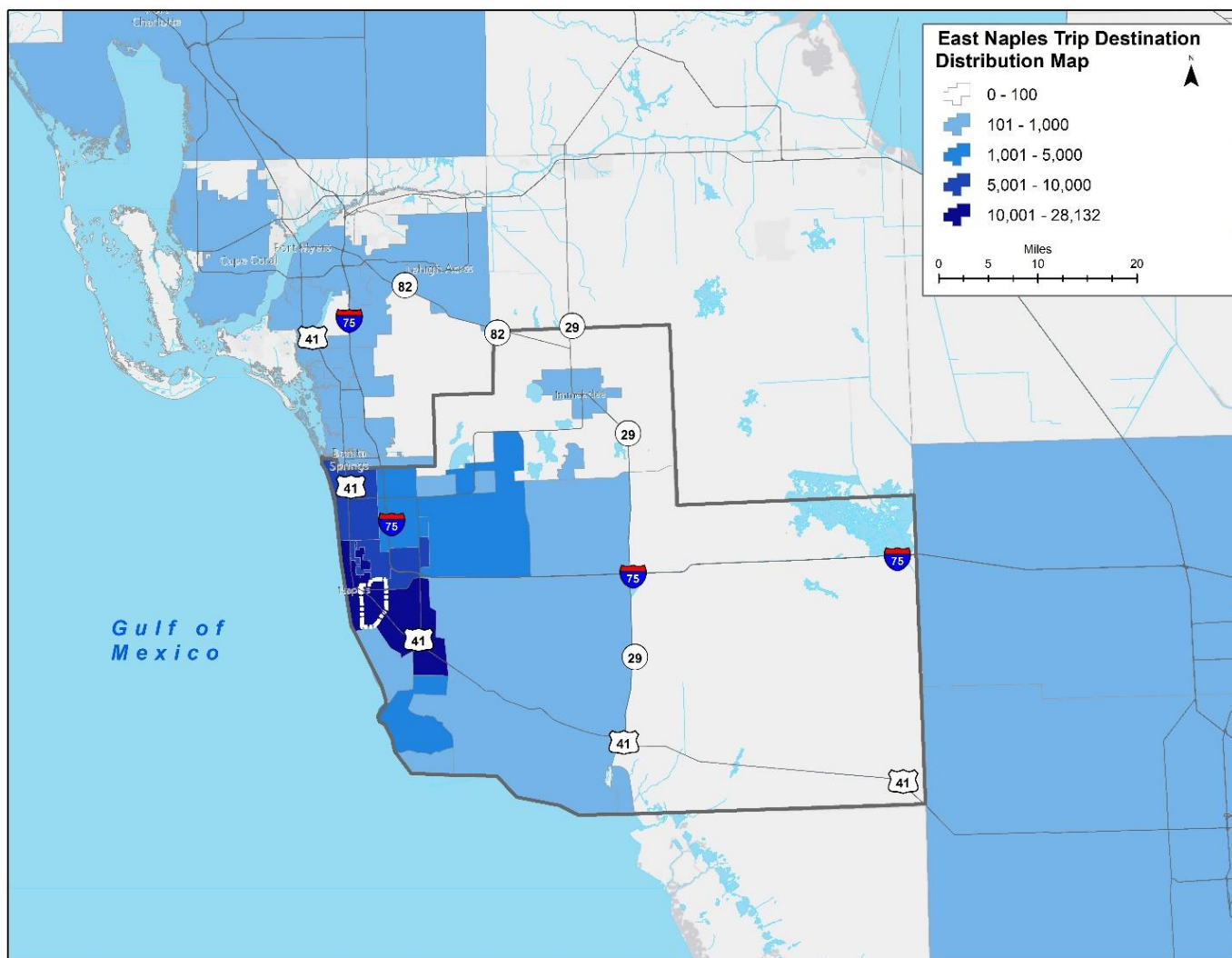


### 3.7.2 Trips Ending in Subarea

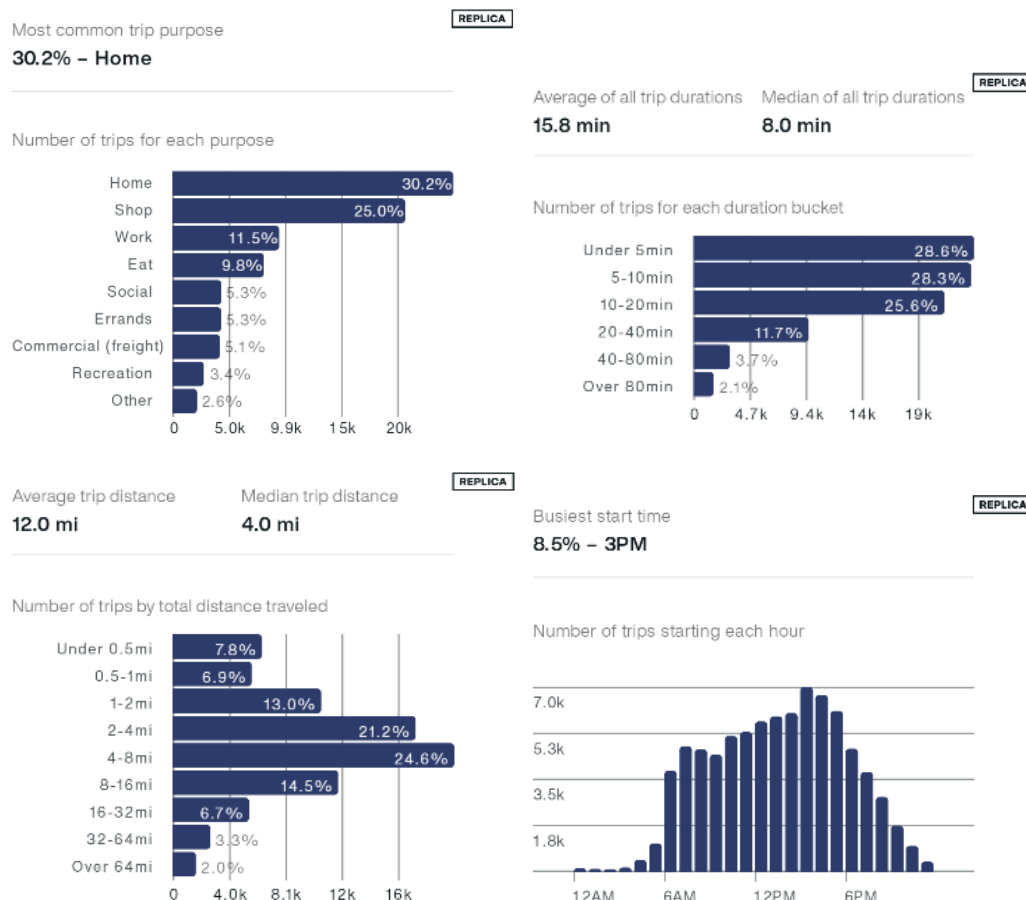
Figure 38 shows the characteristics of trips ending in East Naples, including features such as trip's purpose, trip distance, trip duration and the busiest start time trips. More than 30% of the trips ending in East Naples have a high home destination, while shopping trips account for one-in-four trips ending in the area. Like the trip origins where these two top purposes are reversed combined with the high percentage of trips internal to the area, the average trip distance and trip duration are nearly the same for these destination trips and the origin trips. The busiest start time shows an early afternoon spike during the 3 P.M. hour. Figure 39 graphically illustrates the geographic distribution of origins for trips ending in the East Naples subarea.



**Figure 37: Destinations for trips Originating in East Naples Subarea**



**Figure 38: Selected Trip Characteristics for East Naples Destinations**



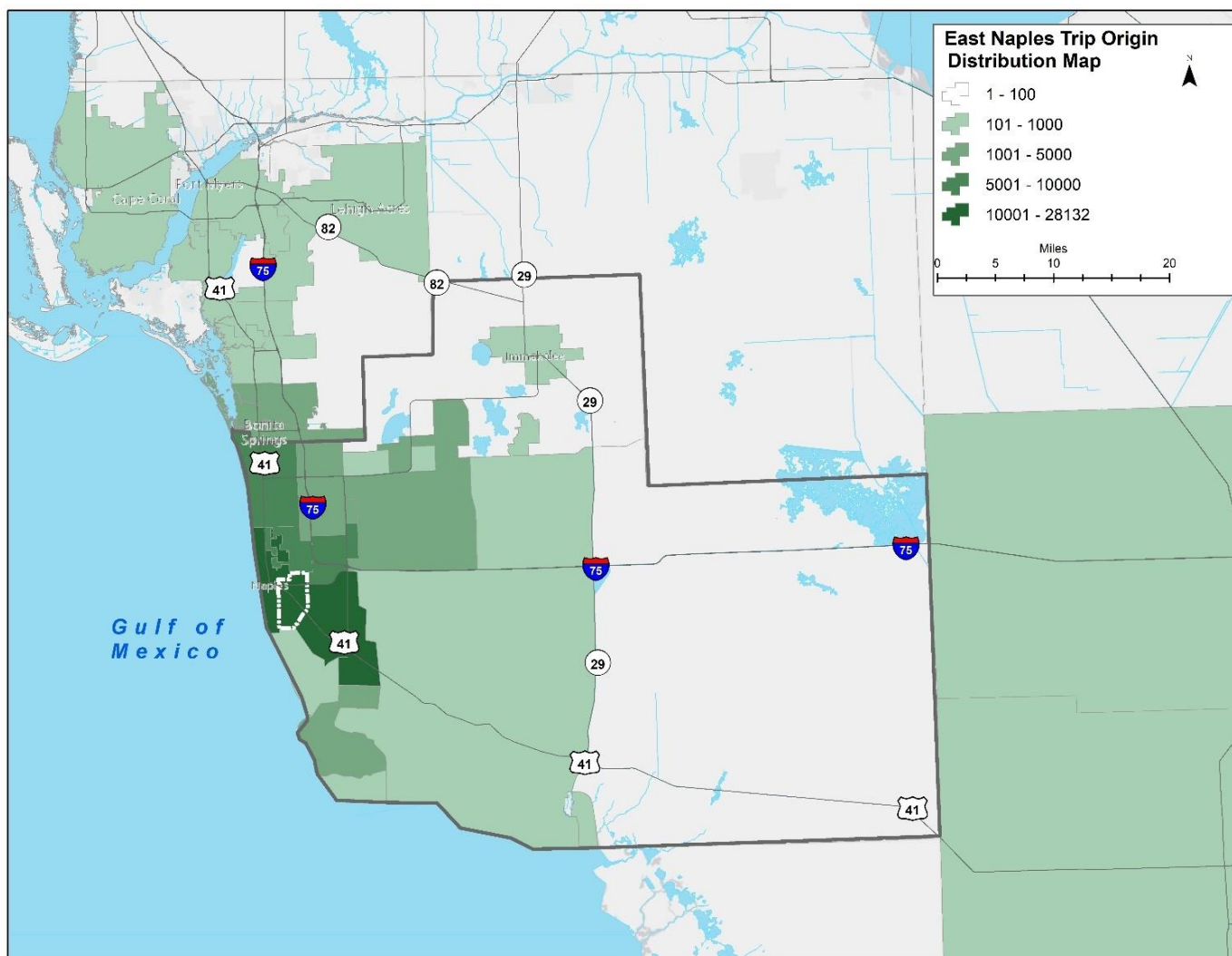
### 3.7.3 Work Location

Table 19 lists the top work location subareas for the 9,900 workers residing in the subarea. This table indicates that work trips made by residents of East Naples are predominantly internal to the East Naples subarea, the City of Naples, or North Naples.

Shown in Figure 40 are selected characteristics related to the work commute trip. Compared with trip time and distance for all trips originated within the study area, work trips on average are longer in time and distance on average, and demonstrate a distinct A.M. peak starting as early as 5 A.M. While these trips are longer than the average trips in the subarea, more than 40% are less than 4 miles in length. Information regarding working from home is also made available through Replica. It was estimated that 1,650 or 7.2% of the 22,800 residents in the East Naples subarea worked from home during the Spring 2021 quarter.



**Figure 39: Origins for trips Ending in East Naples Subarea**

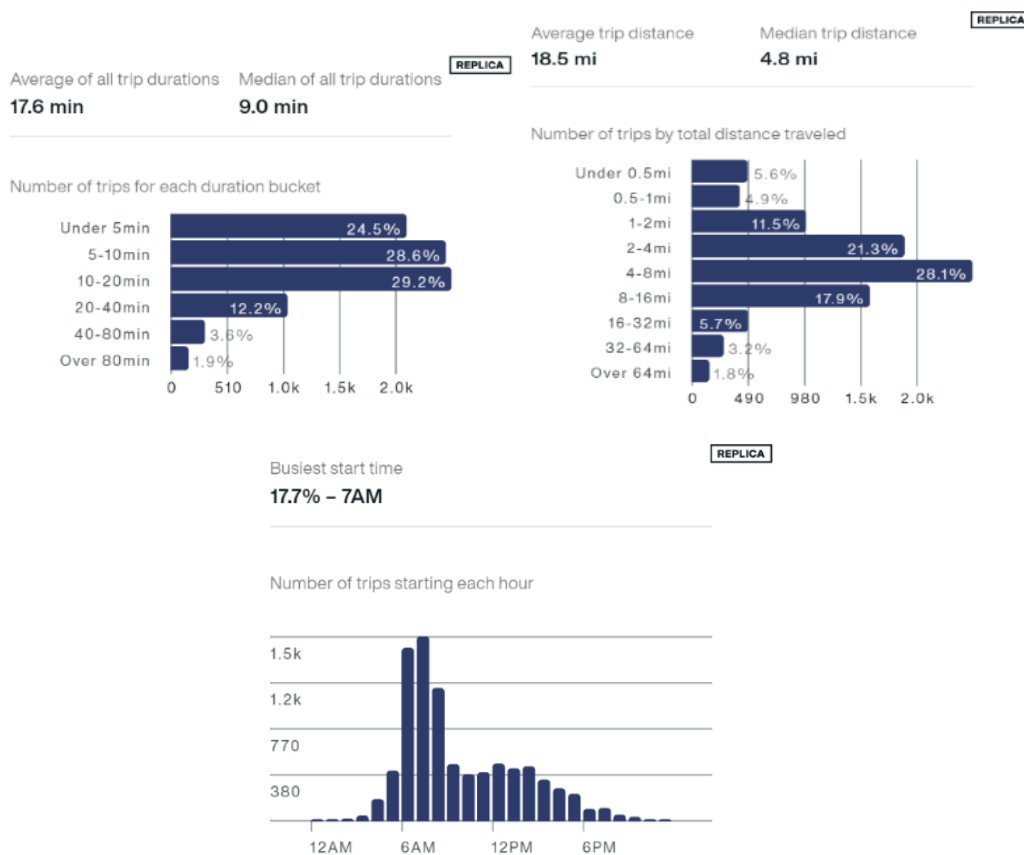




**Table 19: Work Locations for Residents of East Naples**

Work Location	Population	Work Location	Population
East Naples	2,753	Rural Estates	156
City of Naples	2,348	Out of Region	119
North Naples	1,179	Immokalee	107
Central Naples	760	Miami-Dade County	107
South Naples	567	Ave Maria	86
City of Marco Island	393	Bonita Springs	70
Golden Gate	379	Fort Myers	54
Urban Estates	299	Royal Fakapalm	28
San Carlos	191	Estero	23
South Fort Myers	167	Broward County	18

**Figure 40: East Naples Home to Work Trip Characteristics**



### 3.8 Everglades City

The Everglades City subarea is inclusive of the City of Everglades City, Chokoloskee, and Plantation Island. These small communities, located in southern Collier County, have a long history with connections to fishing and nature.

Table 20 identifies the trip origins and destinations for the top 20 subarea locations when at least one trip end takes place in the Everglades City subarea. The trip origins listed have a destination in the Everglades City subarea and vice-versa for the destinations listed. The 1,668 trips originating in the Everglades City subarea and remaining in the area represent 45% of the more than 3,700 daily trips originating in the subarea. Separated from other built areas by large distances, reduces the amount of direct interaction with external locations. While more than half of the trips leave the area, no single external area exhibits a high correlation of trips.



**Table 20: Everglades City Trip Origins and Destinations**

Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
Everglades City (internal)	1,668	1,668	Big Cypress	122	67
South Naples	375	368	Golden Gate	46	63
Royal Fapalm	333	294	Urban Estates	27	52
Out of Region	261	268	Central Naples	35	42
City of Marco Island	146	171	Bonita Springs	35	40
Miami-Dade County	115	108	Lehigh Acres	22	39
East Naples	77	86	Fort Myers	11	27
Broward County	64	78	Immokalee	24	27
North Naples	64	76	Rural Estates	12	23
City of Naples	57	74	South Fort Myers	11	21

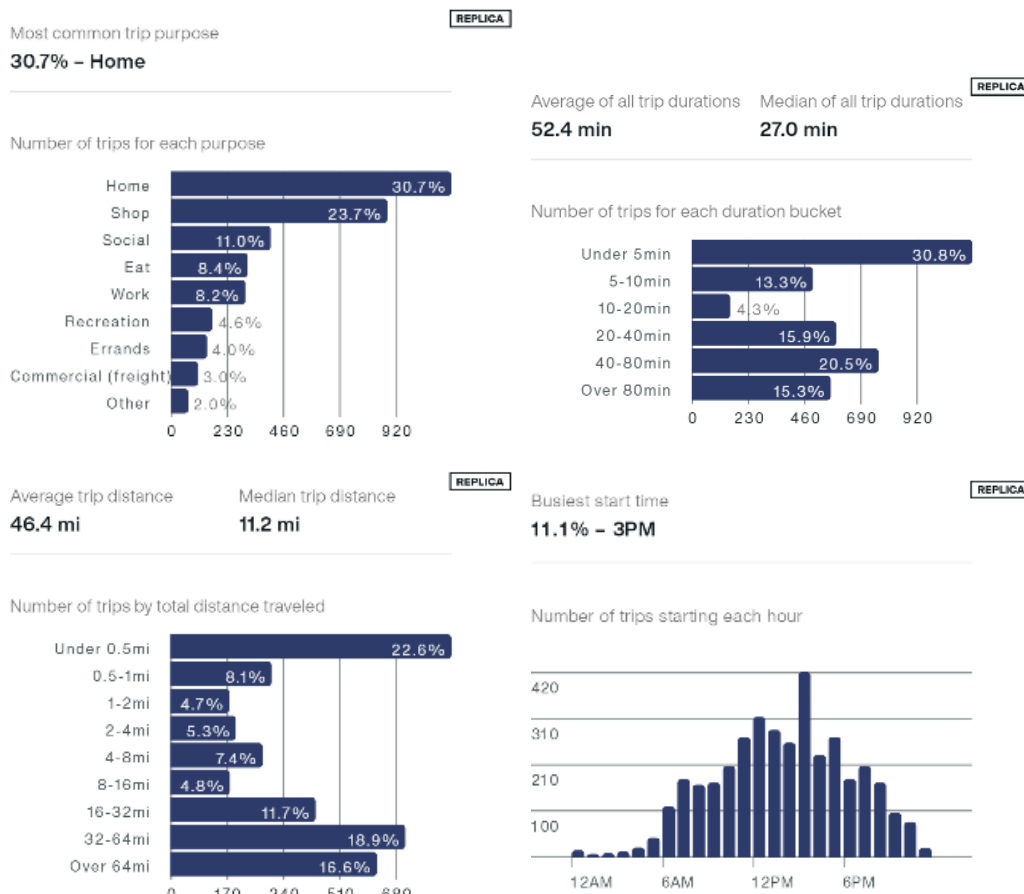
#### 3.8.1 Trips Beginning in Subarea

Figure 41 provides a summary of the trip purpose, trip distance, trip duration and start time statistics for the area. Trips originating in the Everglades City subarea have a high home trip purpose at about 31% of the daily trips, while shopping trips are at estimated at 24% of daily trips generated in the subarea. While a considerable number of trips originating within the area are less than ½ mile in distance and less than 5 minutes, the average trip distance of 46 miles and trip duration of 52 minutes underscore the remote location of this subarea. Figure 42 illustrates the geographic distribution of destinations for trips originating in the Everglades City subarea.





**Figure 41: Selected Trip Characteristics for Everglades City Origins**

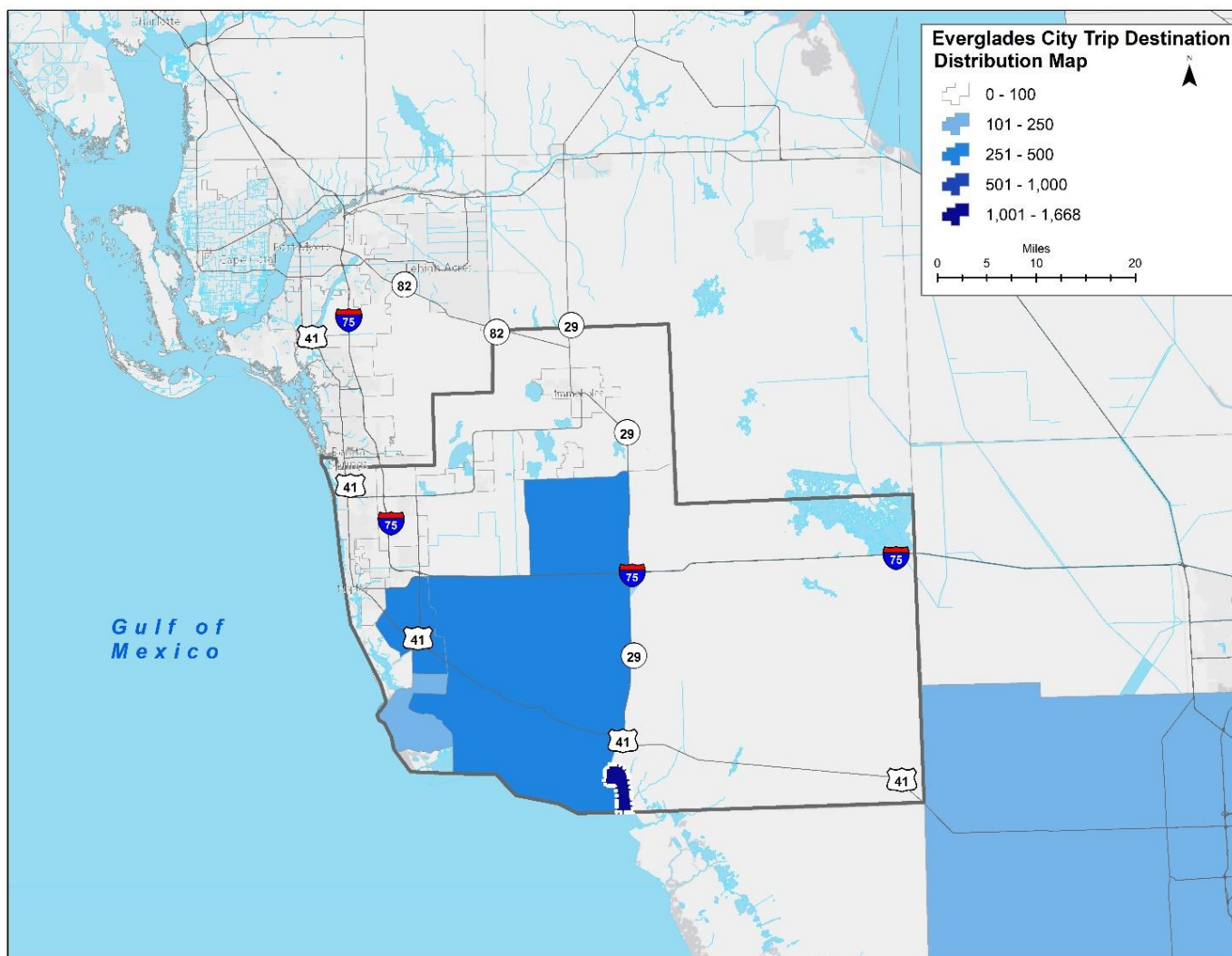


### 3.8.2 Trips Ending in Subarea

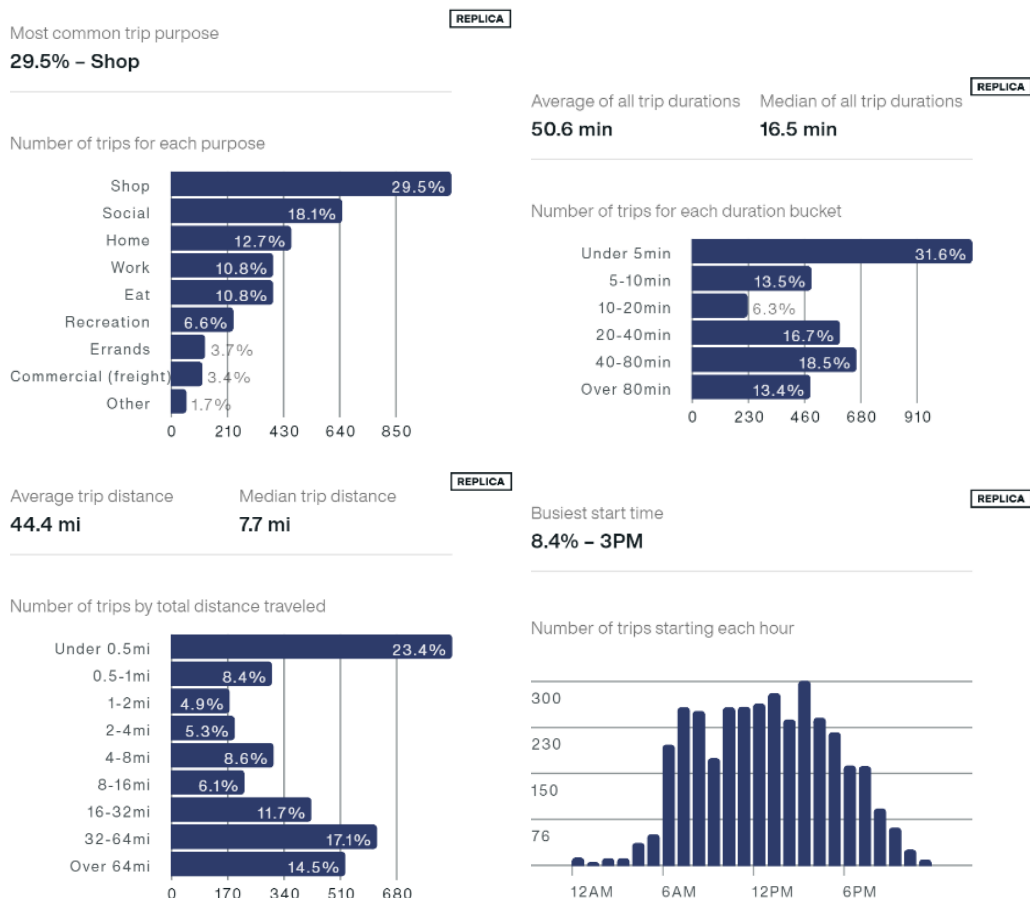
Figure 43 shows the characteristics of trips endings in the Everglades City subarea. As expected, these trip characteristics are similar for trips originating in the area. High trip purposes for trips ending in the Everglades City subarea are slightly different than trip origins and the other subareas with shopping and social trips being the highest. Like some of the other rural subareas (Big Cypress and Corkscrew), social trips do make up a higher percentage. This could be a result of the lower total number of trips and the connected feel of the established rural communities within these subareas. Average trip distance and trip duration measures however are comparable with those for origin trips. The distribution and frequency of these trips are also similar to those of origin trips. The distribution of trip start times however follows a different pattern than that of the trip origins. This could be attributed to the length of time it takes to travel for longer distance trips and the amount of time it takes to reach the Everglades City subarea. Figure 44 graphically illustrates the geographic distribution of origins for trips ending in the Everglades City subarea.



**Figure 42: Destinations for trips Originating in Everglades City Subarea**



**Figure 43: Selected Trip Characteristics for Everglades City Destinations**

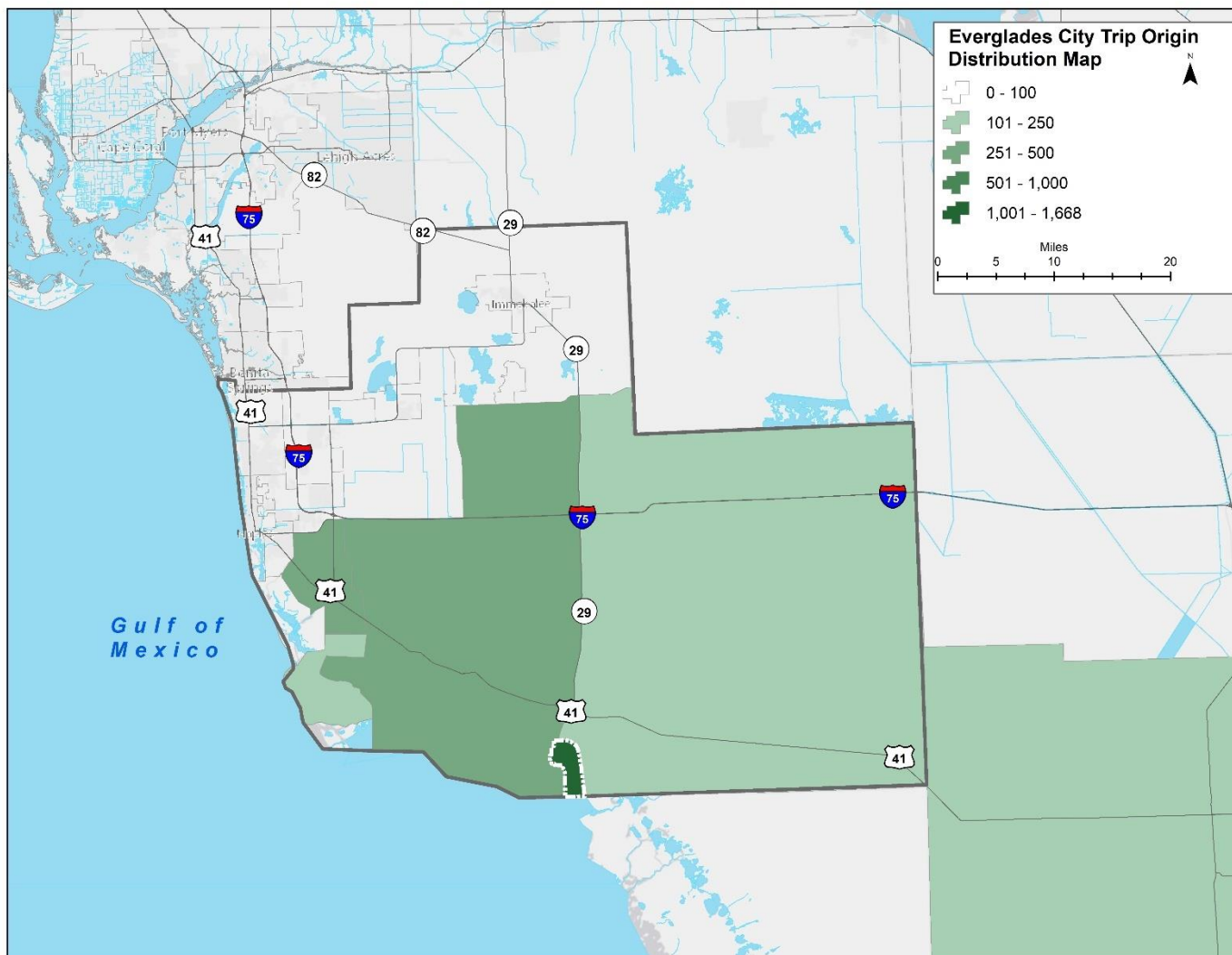


### 3.8.3 Work Location

Table 21 lists the top work locations for 239 workers residing in the Everglades City subarea. There is not a strong relationship between work locations for residents of this area. However, the highest locations of South Naples, North Naples and the City of Naples are a great distance away. This is illustrated in Figure 45 where the average and median travel times for this subarea are nearly equal. Most other subareas, excluding the nearby Big Cypress area, have median commute times that are significantly less than the average. There are a considerable number of trips ending at work with a relatively short distance. This can be explained by the compact size of the subarea and the ability to travel short distances during the workday. Information regarding working from home is also made available through Replica. Less than 50 of the 480 people (10.3%) residing in the Everglades City subarea worked from home during the Spring 2021 quarter.



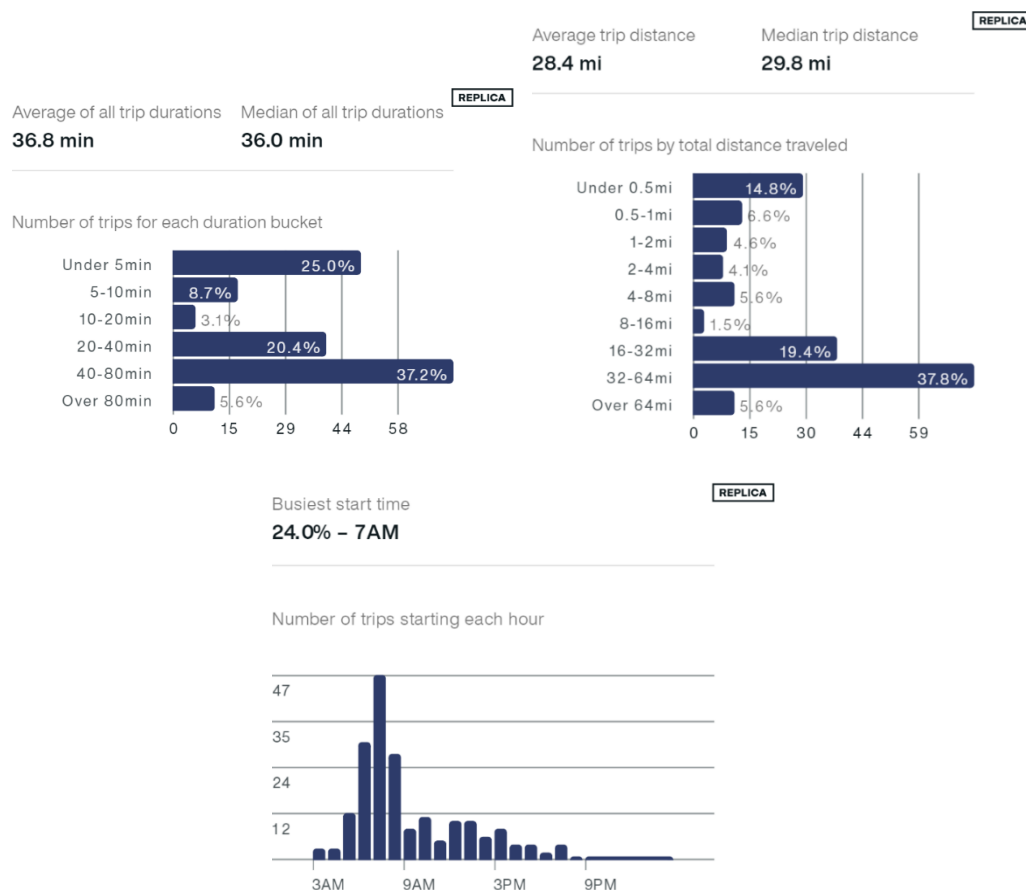
**Figure 44: Origins for trips Ending in Everglades City Subarea**



**Table 21: Work Locations for Residents of Everglades City**

Work Location	Population	Work Location	Population
South Naples	60	Big Cypress	4
North Naples	44	Ave Maria	4
City of Naples	20	San Carlos	3
Everglades City	18	Gateway/Airport	2
Miami-Dade County	17	Immokalee	2
East Naples	13	Marco	2
Royal Fakapalm	11	South Fort Myers	1
City of Marco Island	10	Golden Gate	1
Central Naples	8	Out of Region	0
Urban Estates	7		

**Figure 45: Everglades City Home to Work Trip Characteristics**

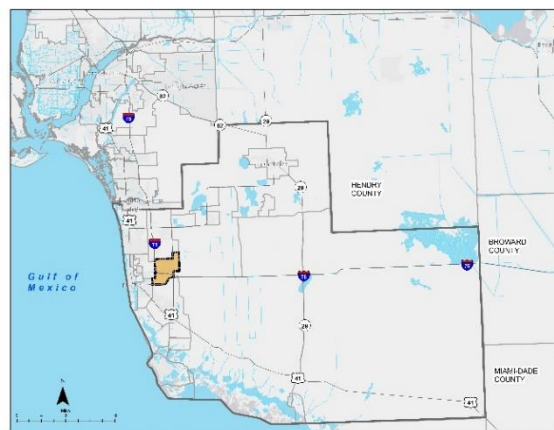




### 3.9 Golden Gate

The Golden Gate Community is in western Collier County and includes Golden Gate City as illustrated in the image to the right.

Table 22 identifies the trip origins and destinations for the top 20 subarea locations when at least one trip end occurs in the Golden Gate subarea. The trip origins listed have a destination in the Golden Gate subarea and vice-versa for the destinations listed. The 45,537 trips originating daily within the Golden Gate subarea and remaining within the area represent 42% of the more than 108,000 daily trips originating from the area. The nearby areas of North Naples, Urban Estates, South Naples, and City of Naples also experience high trip interaction with the Golden Gate subarea. These areas have diverse land use patterns and integrated road network connectivity with Golden Gate.



**Table 22: Golden Gate Trip Origins and Destinations**

Subarea	Trips From	Trips To	Subarea	Trips From	Trip To
Golden Gate (internal)	45,537	45,537	San Carlos	773	907
North Naples	8,427	8,639	Out of Region	732	836
Urban Estates	8,311	8,291	Fort Myers	341	687
South Naples	8,381	7,881	Estero	673	622
City of Naples	7,159	7,360	South Fort Myers	263	565
Central Naples	6,938	6,892	Orange Tree	381	494
East Naples	6,962	6,706	Lehigh Acres	264	479
Rural Estates	5,348	5,667	Immokalee	396	459
Bonita Springs	1,508	1,565	Miami-Dade County	465	413
City of Marco Island	1,444	1,263	Broward County	304	374

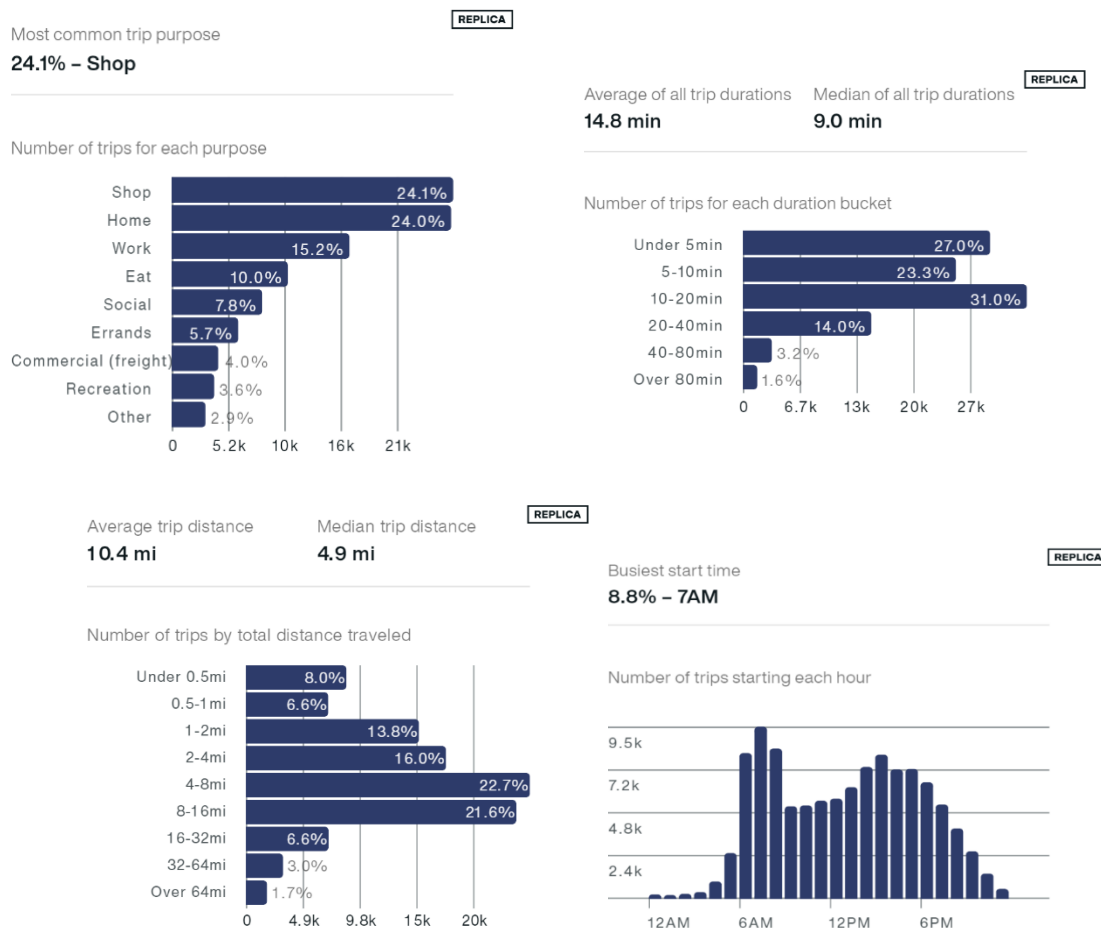
#### 3.9.1 Trips Beginning in Subarea

Trips originating in Golden Gate have a high shopping trip purpose at about 26,000 or 24% of the daily trips generated in the subarea. Similarly, home trip purposes are 24% as shown in Figure 46. The Golden Gate subarea is primarily residential with a few commercial services and schools which could account for the high shopping and home trip purposes in the area. Figure 46 also provides summary statistics regarding travel distance and travel times. The average distance traveled in the area is around 10 miles with an average duration of 15 minutes for trips originating from within the subarea. This suggests that on average, residents travel to areas near the Golden Gate or within the area. Nearly half of the trips originating in Golden Gate travel between 4 and 16 miles. Trips originating from Golden Gate have a relatively short trip duration, as most trip journeys are between 10 and 20 minutes. Furthermore, more than a quarter of the trips (i.e., 29,000 trips) are under 5 minutes. Around 50% of the overall trips in the area are made within 10 minutes, which suggests that there are a significant number of persons making



short trips within the Golden Gate area or in neighboring areas. Figure 47 illustrates the geographic distribution of destinations for trips originating in the Golden Gate subarea.

**Figure 46: Selected Trip Characteristics for Golden Gate Origins**



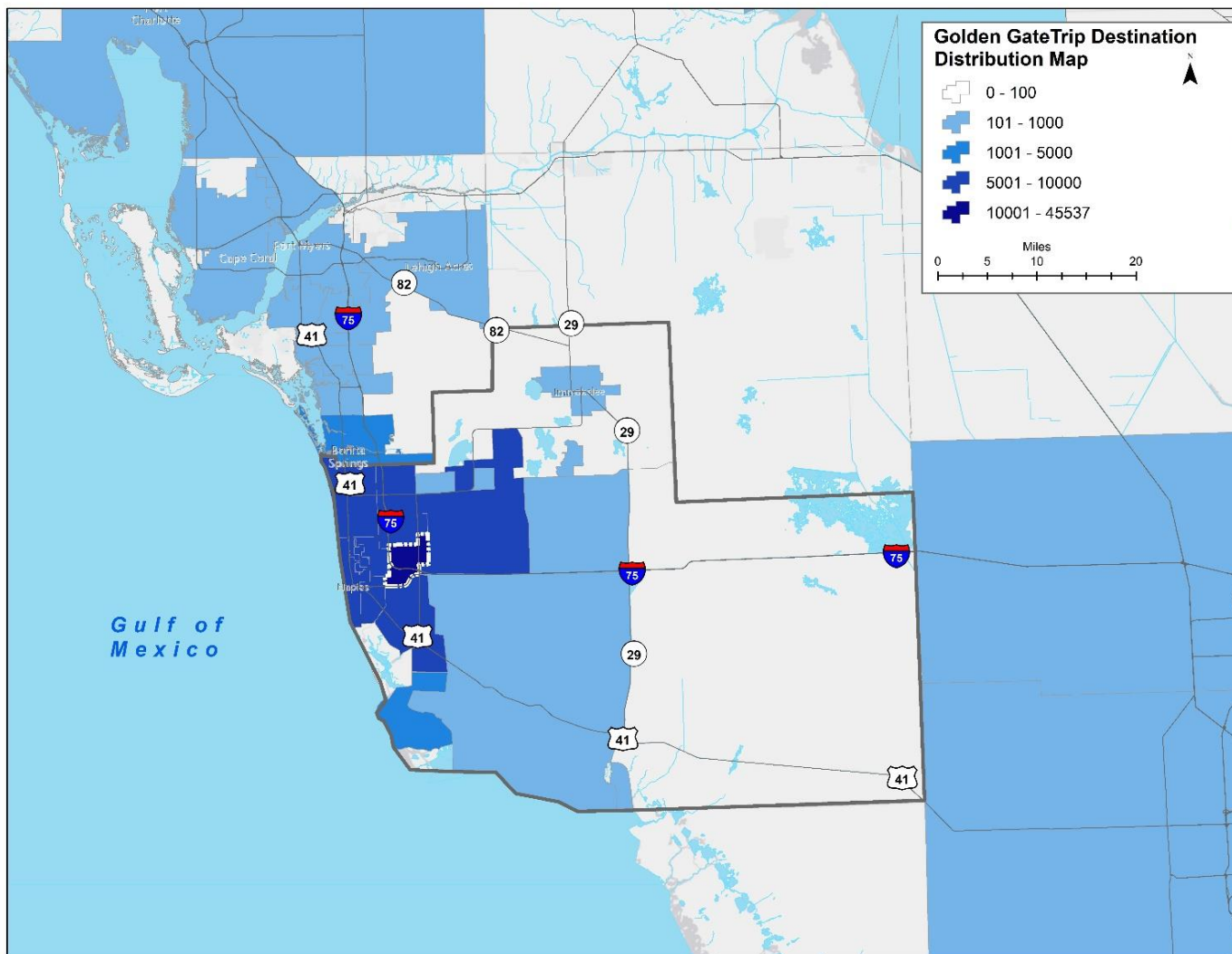
### 3.9.2 Trips Ending in Subarea

About 40% of all trips ending in Golden Gate are for home purposes with about 43,000 trips, while only 22,000 trips end in Golden Gate for shopping purposes. The average trip distance is around 10 miles, and the average travel time is about 14 minutes. Almost one quarter of the trips ending in Golden Gate have a 4-8-mile travel distance. While around 20% of total trips travel 8-16 miles before ending in Golden Gate. This accounts for about 22,000 trips. Many of the trips in the area (34,000 trips) have a 10-20-minute travel time (32.2% of total trips). There is also a significant number of shorter distance trips, under 5 minutes, that ended in Golden Gate. Figure 48 provides summary statistics regarding travel distance and travel times for these trips. Figure 49 illustrates the geographic distribution of origins for trips ending in the Golden Gate subarea.

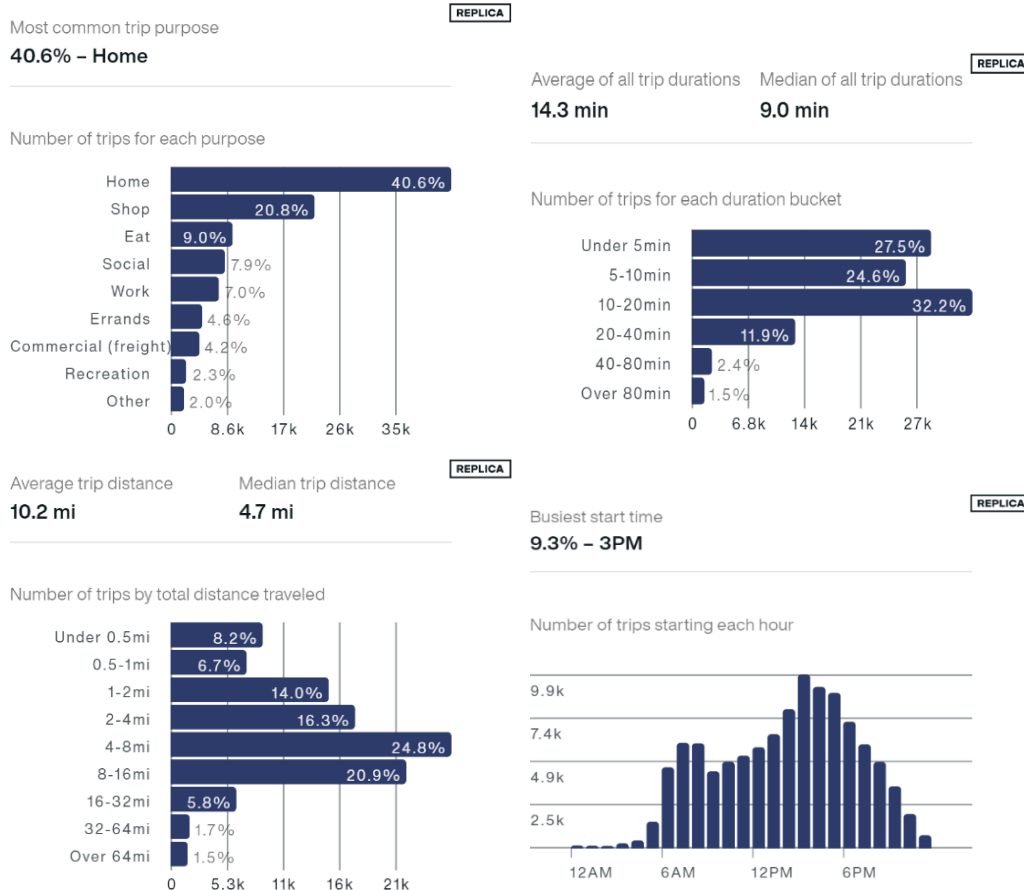




**Figure 47: Destinations for trips Originating in Golden Gate Subarea**



**Figure 48: Selected Trip Characteristics for Golden Gate Destinations**



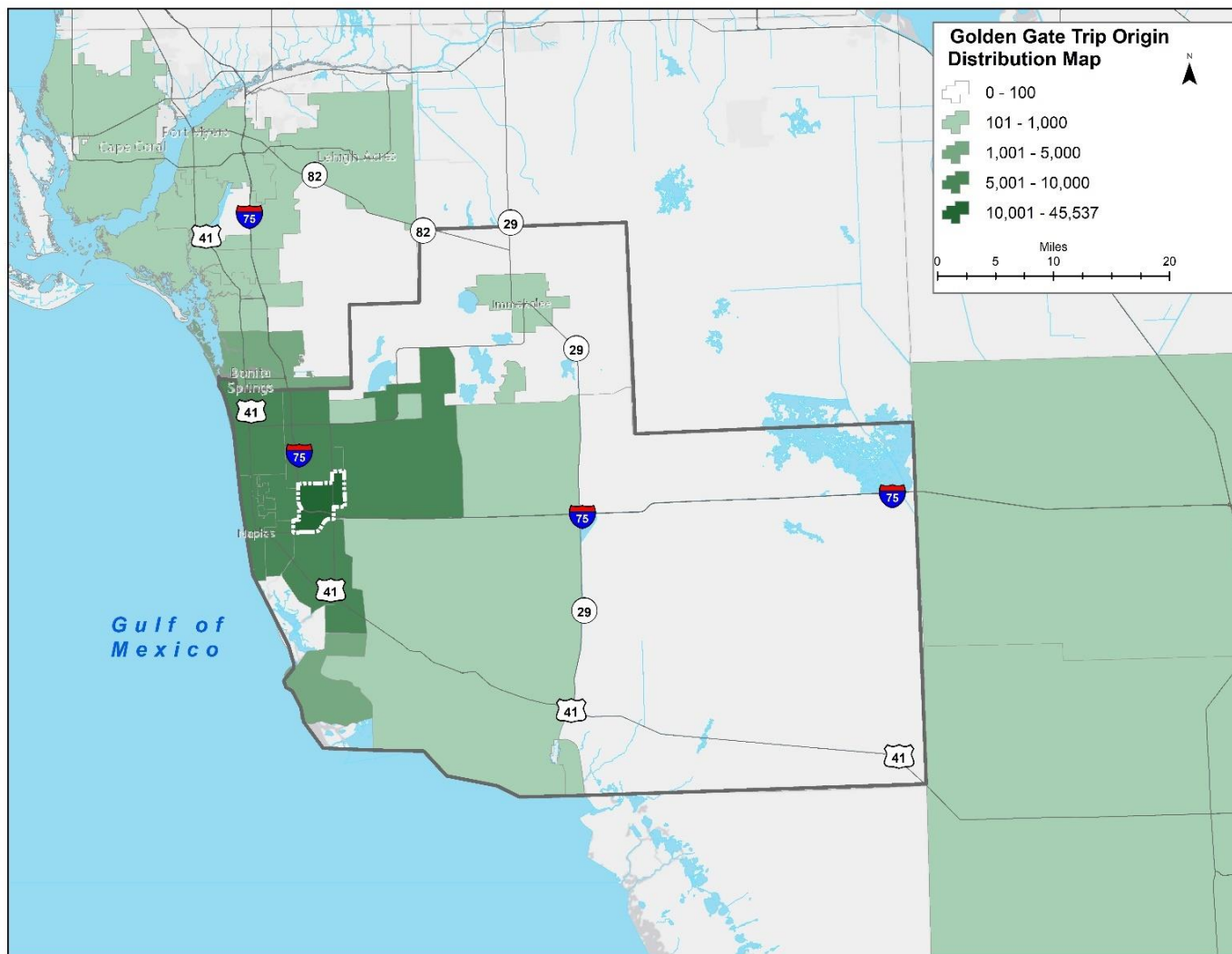
### 3.9.3 Work Location

Table 23 lists the top work location subareas for 26,700 workers living in the Golden Gate subarea. This table indicates that work trips made by residents of Golden Gate are predominantly to the North Naples subarea.

Shown in Figure 50 are selected characteristics related to the work commute trip. Compared with trip time and distance for all trips originated within the study area, work trips on average are longer in time and distance and demonstrate a distinct A.M. peak pattern. Information regarding working from home is also made available through Replica. It is estimated that 3,600 or 6.9% of the residents in the Golden Gate subarea worked from home during the Spring 2021 quarter.



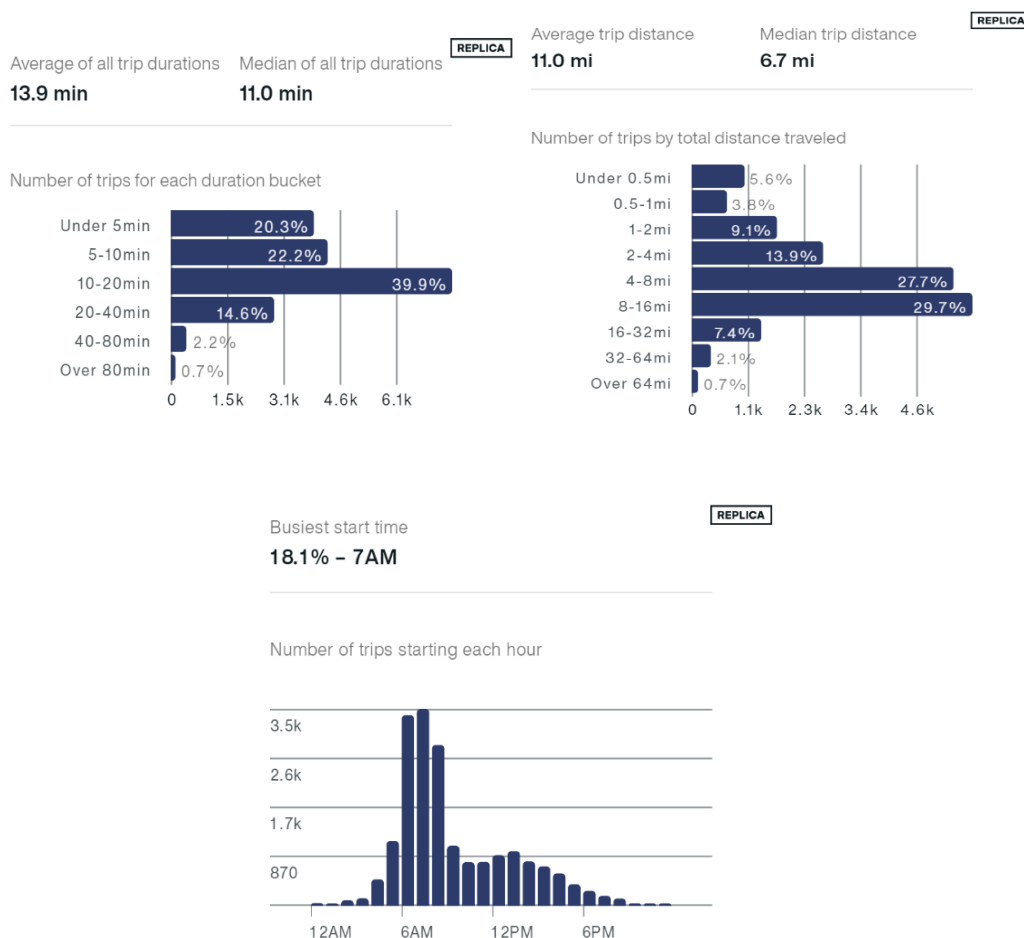
**Figure 49: Origins for trips Ending in Golden Gate Subarea**



**Table 23: Work Locations for Residents of Golden Gate**

Work Location	Population	Work Location	Population
North Naples	4,428	Bonita Springs	366
Golden Gate	3,502	South Fort Myers	327
City of Naples	3,212	Miami-Dade County	295
Central Naples	2,434	Ave Maria	227
East Naples	1,935	Estero	199
Urban Estates	1,519	Fort Myers	132
Rural Estates	1,141	Immokalee	118
South Naples	908	Out of Region	92
City of Marco Island	739	Broward County	43
San Carlos	573	Orange Tree	36

**Figure 50: Golden Gate Home to Work Trip Characteristics**



### 3.10 Heritage Bay

The Heritage Bay subarea is located northern Collier County along CR 846 (Immokalee Road) as shown in the image to the right. This subarea was developed based on its unique land use pattern compared with the surrounding area and the Growth Management Plan.

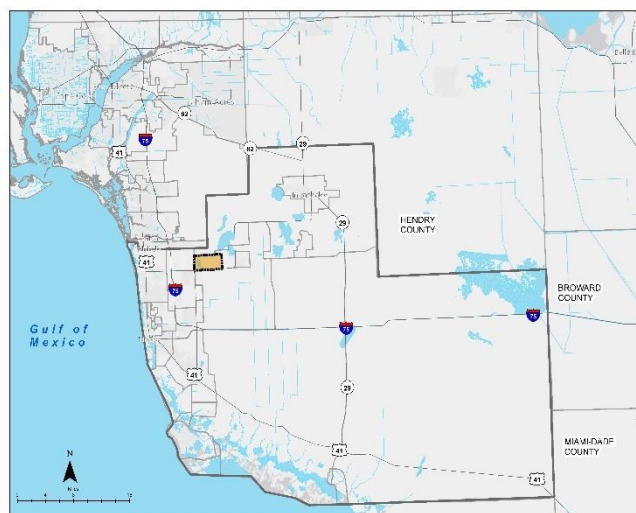


Table 24 lists the trip origins and destinations for the top 20 subarea locations when at least one trip end takes place in the subarea. Trip origins listed have a destination in the Heritage Bay subarea and vice-versa for the destinations listed. With 24% of the trips originating in the Heritage Bay subarea and remaining, the percentage of internal trips for this subarea is lower than many other areas in the County, reflecting the dependent nature of the shopping and retail uses this subarea for other nearby areas. The Urban Estates, Rural Estates, and North Naples subareas have a high trip interaction with the Heritage Bay subarea. The diverse development of these areas reflects the dependency of trip making in this part of the county between adjacent subareas where single-use development is more predominant.

**Table 24: Heritage Bay Trip Origins and Destinations**

Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
Heritage Bay (internal)	2,949	2,949	East Naples	197	182
Urban Estates	2,584	2,511	South Naples	210	156
Rural Estates	1,817	1,695	Out of region	111	127
North Naples	1,239	1,185	Ave Maria	120	124
Bonita Springs	519	446	Fort Myers	64	106
Orange Tree	351	419	San Carlos	112	105
Golden Gate	357	390	Estero	108	101
City of Naples	337	387	Lehigh Acres	43	99
Central Naples	316	277	South Fort Myers	63	91
Immokalee	194	198	Gateway/Airport	46	75

#### 3.10.1 Trips Beginning in Subarea

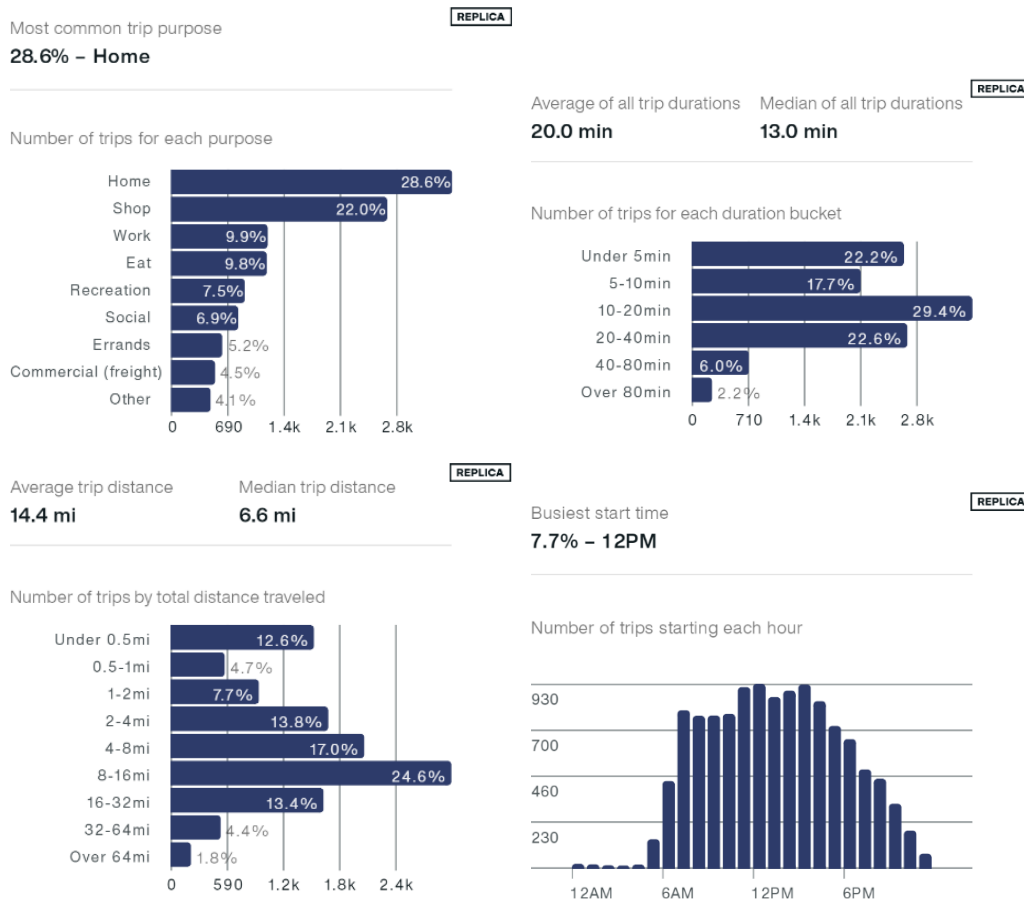
Figure 51 provides a summary of the trip purpose, trip distance, trip duration, and start time statistics for the area. Trips originating in the Heritage Bay have a high home trip purpose at about 29% of total trips with shopping comprising roughly 22% of the daily trips. Heritage Bay is primarily a residential community with a commercial node located at the intersection of Collier Blvd and Immokalee Road. The average trip distance of 14 miles and average trip duration of 20 minutes are comparable with other





areas in Collier County where a diverse mix of uses exist. Figure 52 illustrates the geographic distribution of destinations for trips originating in the Heritage Bay subarea.

**Figure 51: Selected Trip Characteristics for Heritage Bay Origins**

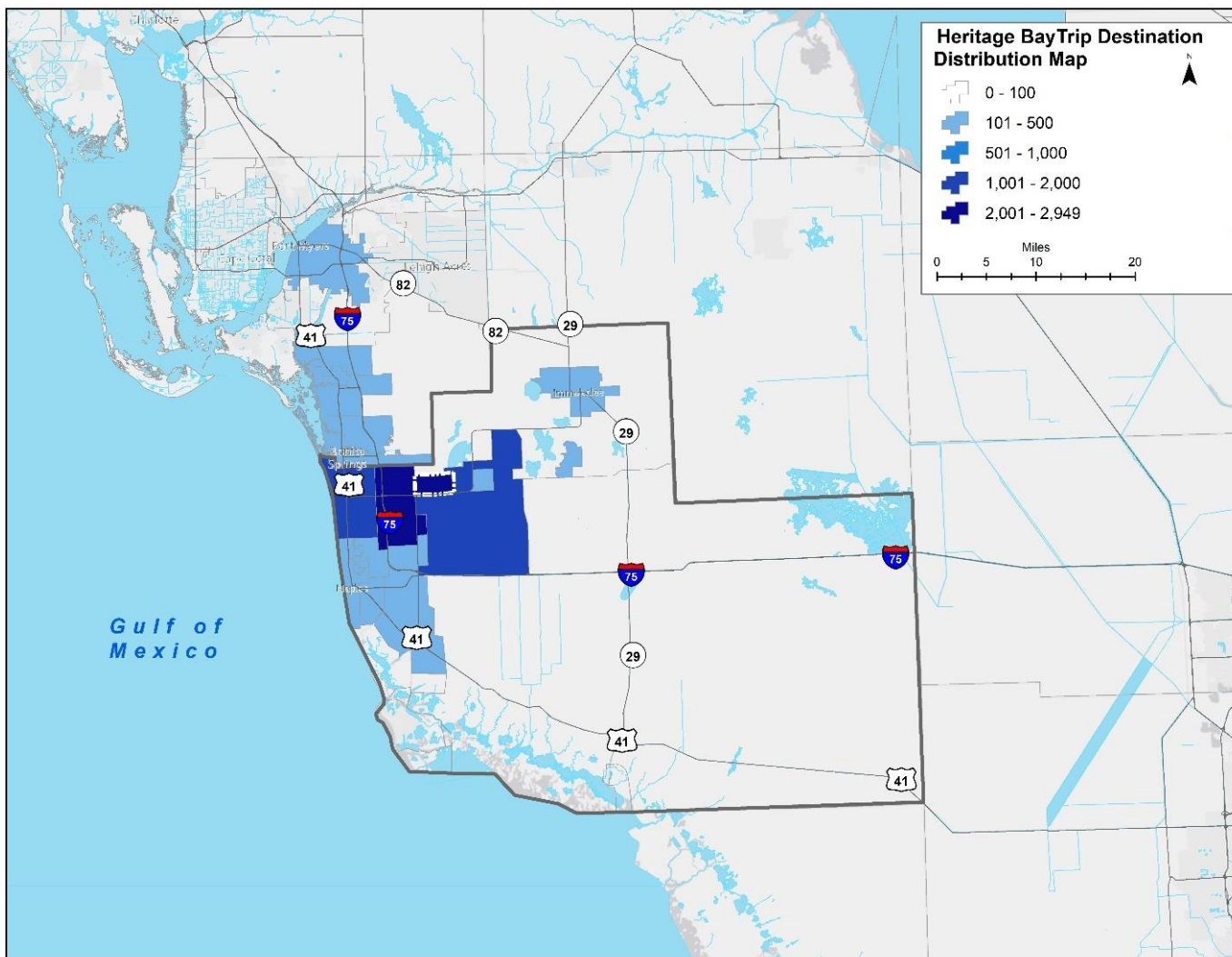


### 3.10.2 Trips Ending in Subarea

Figure 53 shows the characteristics for trips ending in the Heritage Bay subarea. Trips ending in Heritage Bay are influenced by the commercial and restaurant uses as indicated by the high number of shopping and eating trips. The average trip distance and duration measures are equal to those for trips originating in the subarea. While these destination trips occur throughout the day, an early afternoon spike around 3 P.M. is noticeable. Figure 54 graphically illustrates the geographic distribution of origins for trips ending in the Heritage Bay subarea.

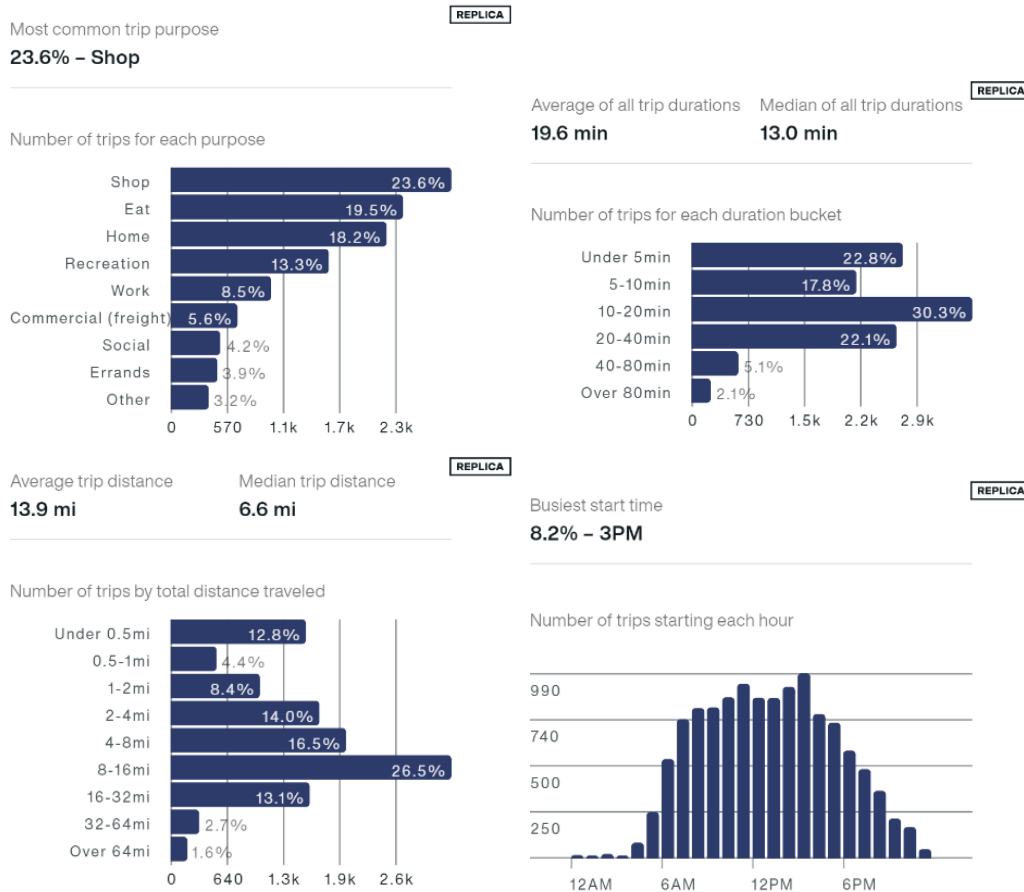


**Figure 52: Destinations for trips Originating in Heritage Bay Subarea**





**Figure 53: Selected Trip Characteristics for Heritage Bay Destinations**



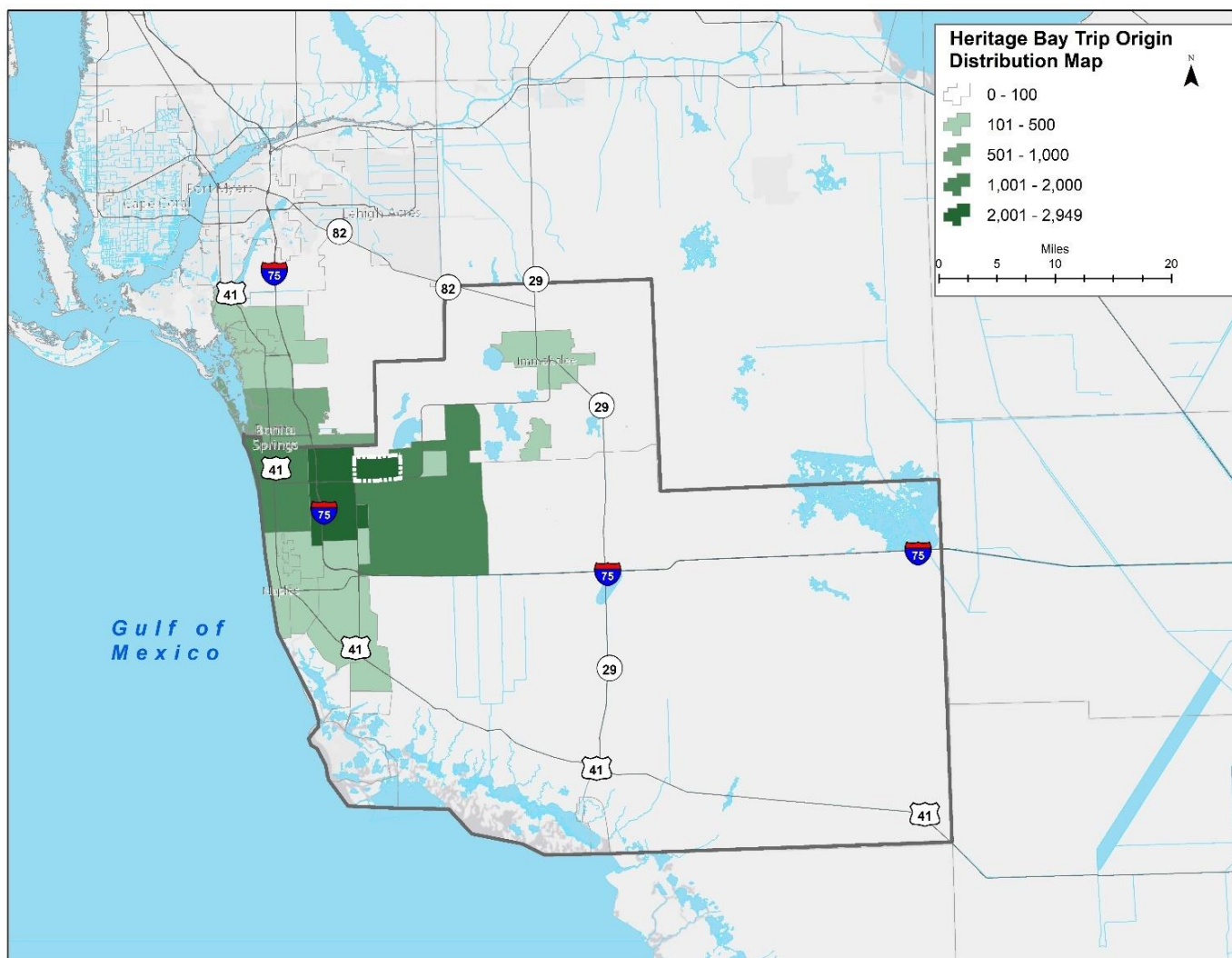
### 3.10.3 Work Location

Table 24 lists the top work location subareas for 1,200 workers living in the Heritage Bay subarea. This table indicates that residents predominantly work in the to the North Naples and Ave Maria subareas.

Shown in Figure 55 are selected characteristics related to the work commute trip. Compared with trip time and distance for all trips originating within the study area, work trips on average are longer and take longer. There is distinct peak period in the morning between 6 A.M. to 9 A.M. Information regarding working from home is also made available through Replica. It was estimated that 370 of the 3,000 people (12.1%) residing in the Heritage Bay subarea worked from home during the Spring 2021 quarter.



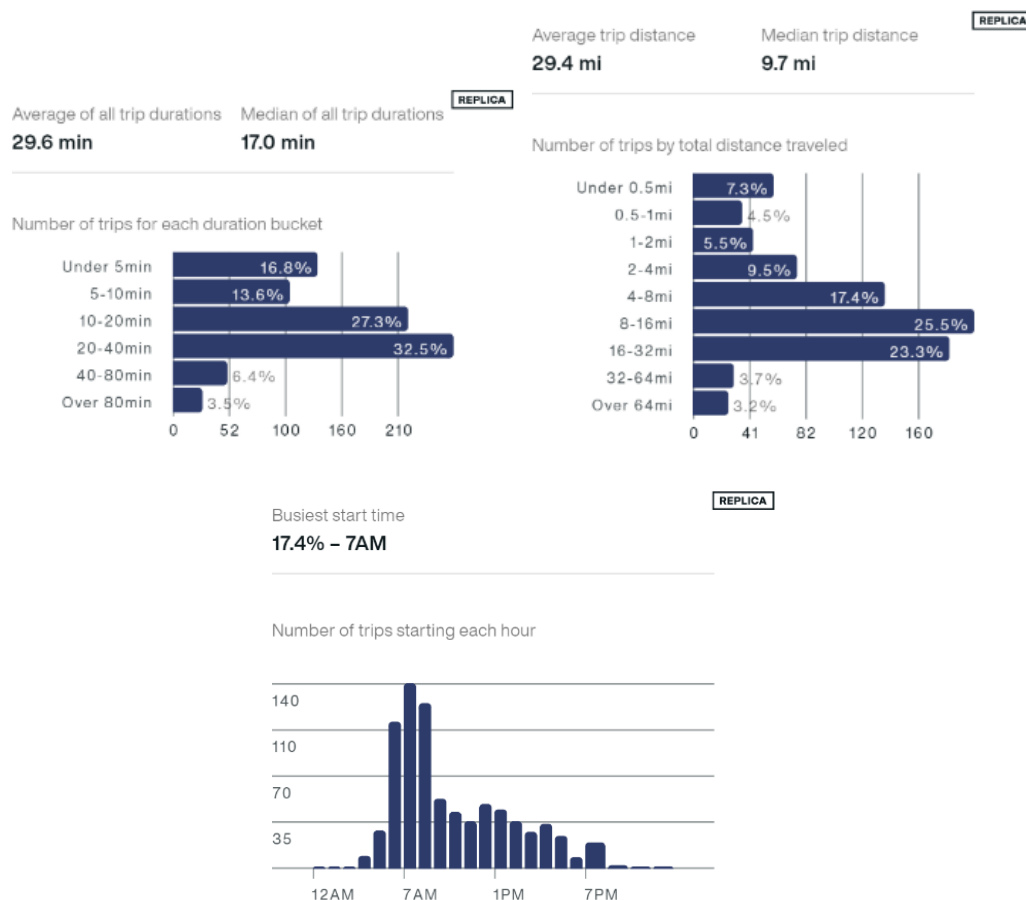
**Figure 54: Origins for trips Ending in Heritage Bay Subarea**



**Table 25: Work Locations for Residents of Heritage Bay**

Work Location	Population	Work Location	Population
North Naples	165	Bonita Springs	31
Ave Maria	156	South Fort Myers	26
Rural Estates	133	Orange Tree	26
Central Naples	115	Miami-Dade County	24
City of Naples	103	East Naples	23
Urban Estates	97	North Fort Myers	20
San Carlos	53	City of Marco Island	20
Immokalee	39	Golden Gate	16
South Naples	36	Out of Region	14
Heritage Bay	32	Estero	13

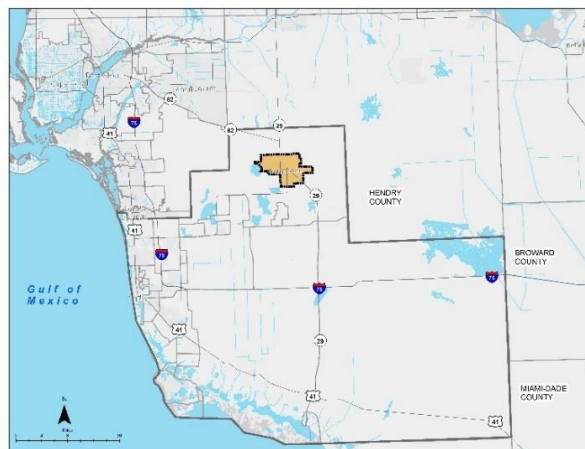
**Figure 55: Heritage Bay Home to Work Trip Characteristics**



### 3.11 Immokalee

The Immokalee subarea is an urban area located in northeast Collier County.

Table 26 identifies the trip origins and destinations for the top 20 subarea locations when at least one trip end takes place in the Immokalee subarea. Trip origins listed have a destination in the Immokalee subarea and vice-versa for the destinations listed. 72% of the 60,000 daily trips originating in the Immokalee subarea, remained in the area. This internal rate is the highest rate for all subareas in Collier County. Other areas of higher trip interaction include Lehigh Acres in Lee County and Hendry County. As a more isolated urban area Immokalee provides shopping and other service-related needs for the residents and surrounding lower density rural areas.



**Table 26: Immokalee Trip Origins and Destinations**

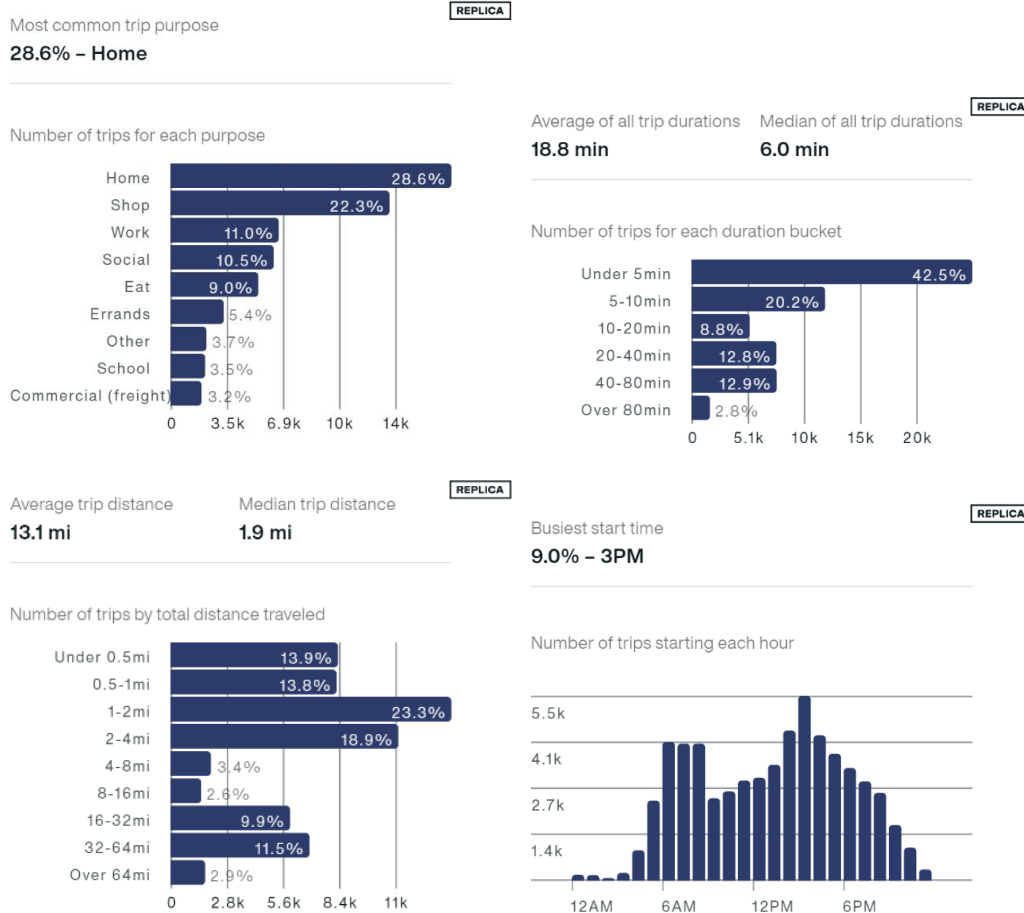
Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
Immokalee (internal)	43,465	43,465	South Fort Myers	328	534
Lehigh Acres	2,639	2,542	San Carlos	453	439
Hendry County	1,695	1,944	City of Naples	407	423
Fort Myers	967	1,230	Golden Gate	459	396
Rural Estates	1,258	1,150	Central Naples	364	327
Out of Region	1,073	1,001	Estero	423	311
Ave Maria	901	928	South Naples	391	291
North Naples	902	820	Cape Coral	211	276
Urban Estates	872	751	Bonita Springs	319	264
Corkscrew	608	573	East Naples		254

#### 3.11.1 Trips Beginning in Subarea

Figure 56 provides a summary of the trip purpose, trip distance, trip duration, and start time statistics for the area. Trips originating from Immokalee have a high home or shopping trip purpose. Combined with the high number of internal trips occurring in this area, this relationship can be expected as and relate a higher rate of single purpose trips. The number of shorter distance trips is a result of the compact size of this area and internal nature of the trips. Because of the isolated nature of Immokalee from other areas results in extremely different average and median travel distances. Half of the trips originating in Immokalee are less than two miles in length. The two highest external (not Immokalee) subareas for trip interaction are Lehigh Acres and Hendry County. While these subareas are not in Collier County, they are closer in location than the developed areas of Collier County. Figure 57 illustrates the geographic distribution of destinations for trips originating in the Immokalee subarea.



**Figure 56: Selected Trip Characteristics for Immokalee Origins**



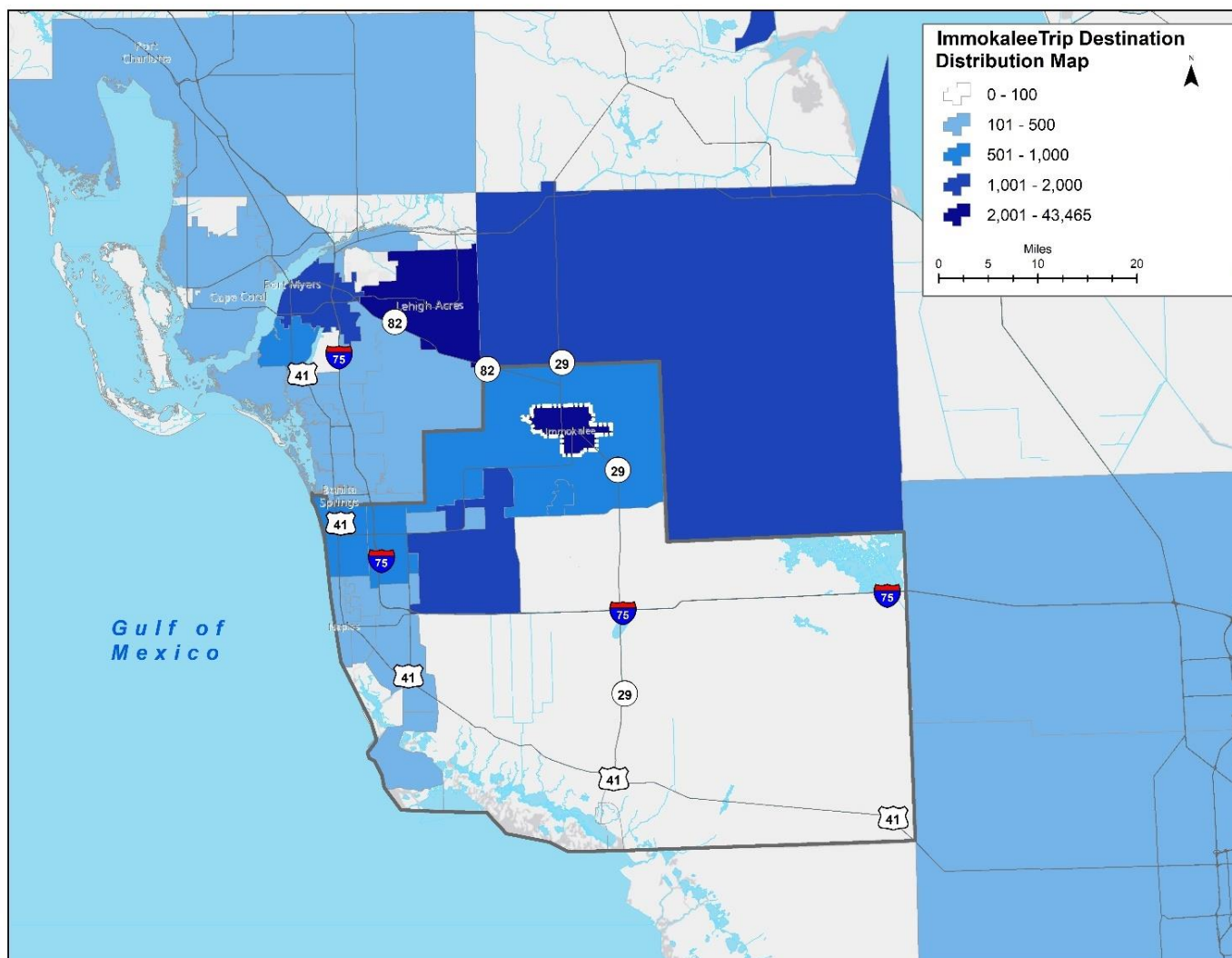
### 3.11.2 Trips Ending in Subarea

Figure 58 shows the characteristics of trips ending in the Immokalee subarea. Due to the high number of internal trips within the subarea, these characteristics nearly mirror those of origin trips. Any slight variation in these measures is a result of trips beginning outside of the subarea when the purpose for entering the subarea is different than the purpose for leaving the subarea. Figure 59 graphically illustrates the geographic distribution of origins for trips ending in the Immokalee subarea.



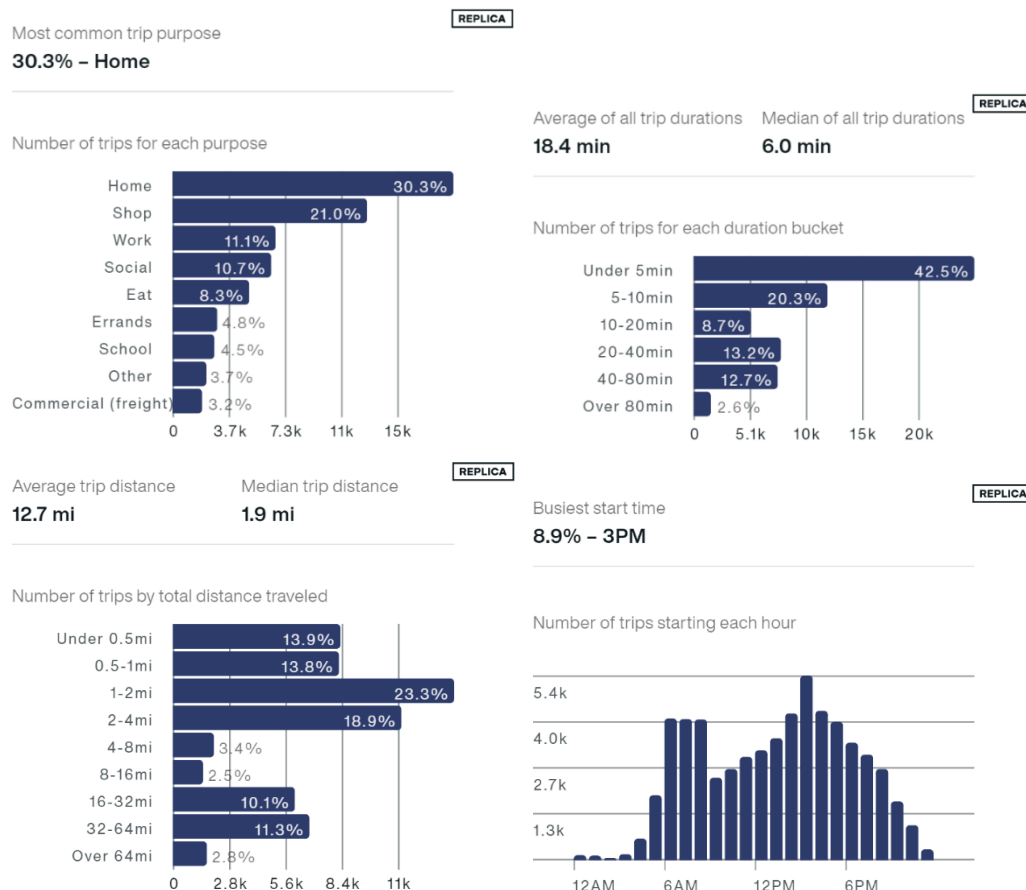


**Figure 57: Destinations for trips Originating in Immokalee Subarea**





**Figure 58: Selected Trip Characteristics for Immokalee Destinations**

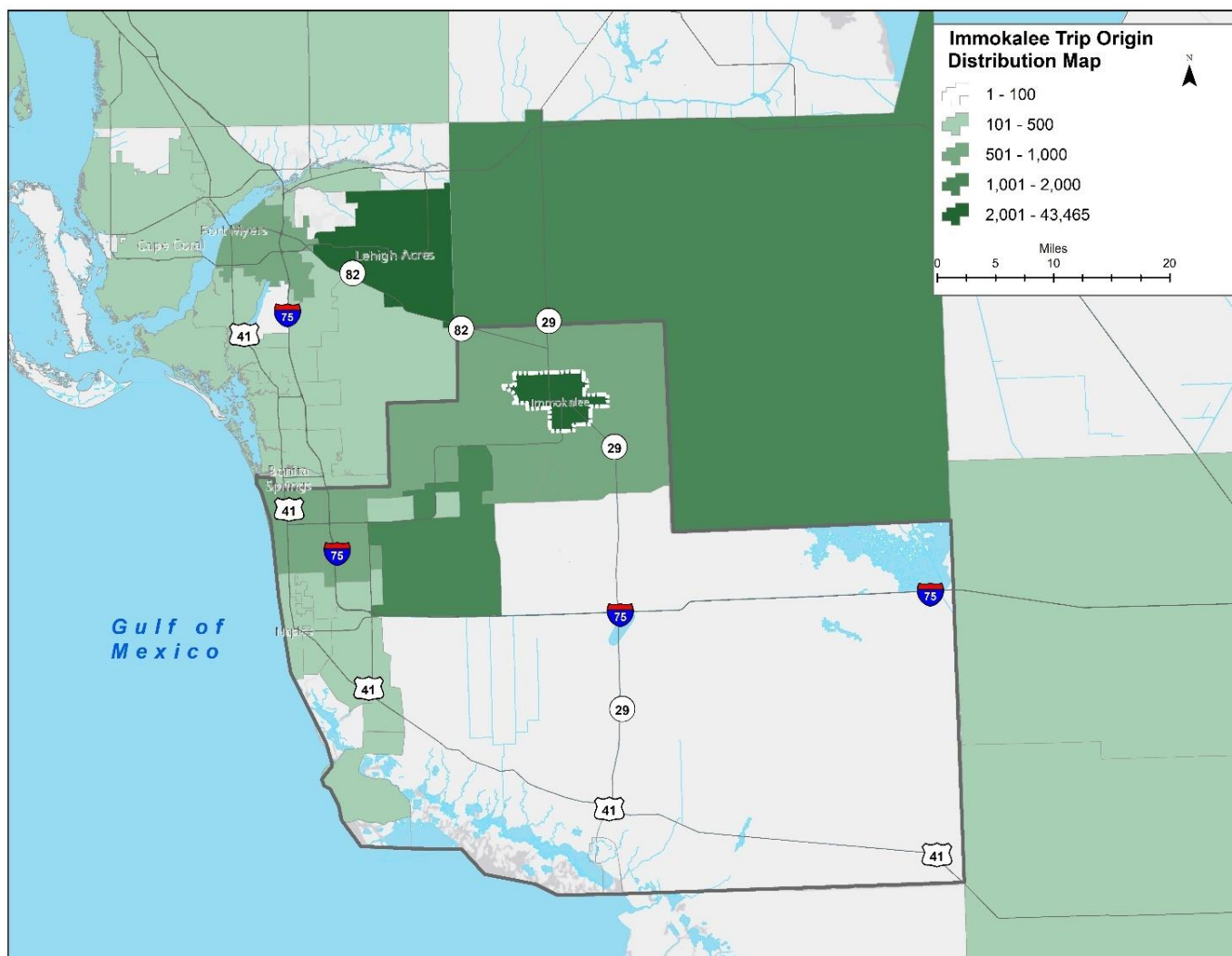


### 3.11.3 Work Location

Table 27 lists the top work locations for 11,500 workers living in the Immokalee subarea. This table indicates that work trips made by residents of Immokalee are predominantly within the Immokalee subarea. A significant number of residents also work in the North Naples area which greatly influences the home to work trip measures as shown in Figure 60. These home to work trips reflect the single purpose trip and eliminate any trips that were chained or for multiple purposes. While there are a considerable number of work locations outside of the area, the high number of jobs located within the area result in work commute trips that are similar in time and distance as all other trips. Work trips however exhibit a distinct peak at 6 A.M. Information regarding working from home is also made available through Replica. It was estimated that 1,400 or 5.4% of the 26,500 residents in the Immokalee subarea worked from home during the Spring 2021 quarter.



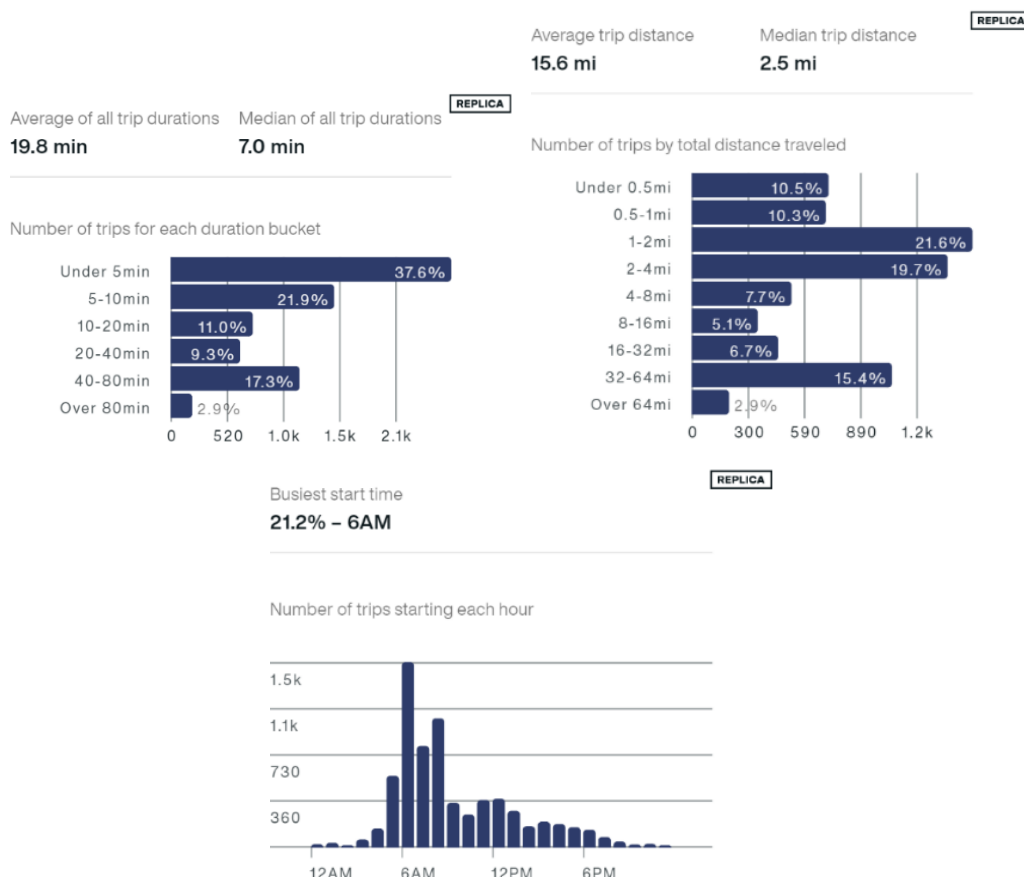
**Figure 59: Origins for trips Ending in Immokalee Subarea**



**Table 27: Work Locations for Residents of Immokalee**

Work Location	Population	Work Location	Population
Immokalee	5,737	Urban Estates	185
North Naples	1,017	South Fort Myers	177
Ave Maria	626	Bonita Springs	164
City of Naples	534	Golden Gate	159
Estero	492	South Naples	159
Rural Estates	321	Fort Myers	156
San Carlos	295	Out of region	153
Central Naples	288	City of Marco Island	126
Corkscrew	211	Heritage Bay	115
East Naples	193	Orange Tree	86

**Figure 60: Immokalee Home to Work Trip Characteristics**



### 3.12 North Naples

The North Naples subarea, located in northwest Collier County, is adjacent to Lee County Line as shown in the image to the right.

Table 28 identifies the number of trip origin and destination for the top 20 subarea locations when at least one trip end takes place in the North Naples subarea. Trip origins listed have a destination in the North Naples subarea and vice-versa for the destinations listed. The 111,944 trips originating in North Naples subarea and remaining in the area represent about 47% of the 240,000 daily trips originating in the subarea are. The nearby areas of Urban Estates, City of Naples, Bonita Spring and Central Naples experience a high connection to the North Naples areas with over 10,000 daily trips.



**Table 28: North Naples Trip Origins and Destinations**

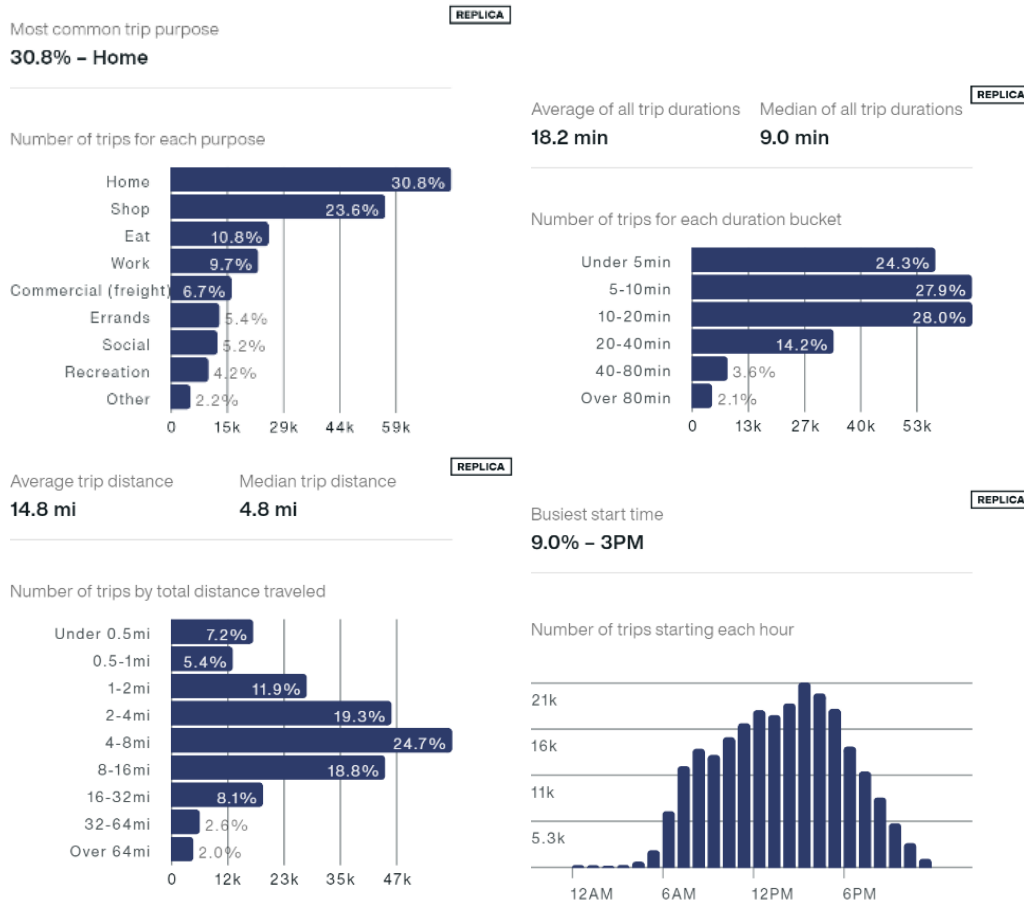
Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
North Naples (internal)	111,944	111,944	Out of region	3,044	3,357
Urban Estates	26,095	25,896	San Carlos	1,950	2,539
Bonita Springs	18,387	15,689	Fort Myers	1,649	2,051
City of Naples	17,337	18,196	South Fort Myers	1,438	1,554
Central Naples	13,643	13,657	City of Marco Island	1,418	1,276
Golden Gate	8,639	8,427	Heritage Bay	1,185	1,239
Rural Estates	5,993	7,270	Cape Coral	927	1,278
East Naples	5,449	5,230	Lehigh Acres	916	1,307
South Naples	5,043	4,926	Immokalee	820	902
Estero	3,392	3,437	Orange Tree	737	1,084

#### 3.12.1 Trips Beginning in Subarea

Figure 61 provides the trip purpose, trip distance, trip duration and start time statistics for the area. 31% of the daily trips originating in North Naples subarea have a high home trip purpose. Shopping trips are also a dominant trip purpose accounting for 24% of total trips daily. North Naples possesses a diverse mixed land use that offers a wide range of resources and services to residents and nearby subareas. The average trip generated in this area travels 14 miles and lasts 18 minutes. More than 50% of these trips have a destination that is less than 5 miles away. As with other subareas in northern Collier County close to the I-75 corridor, subareas in southern Lee County (Bonita Springs and Estero) have a high trip interaction with the North Naples subarea. Figure 62 illustrates the geographic distribution of destinations for trips originating in the North Naples subarea.



**Figure 61: Selected Trip Characteristics for North Naples Origins**



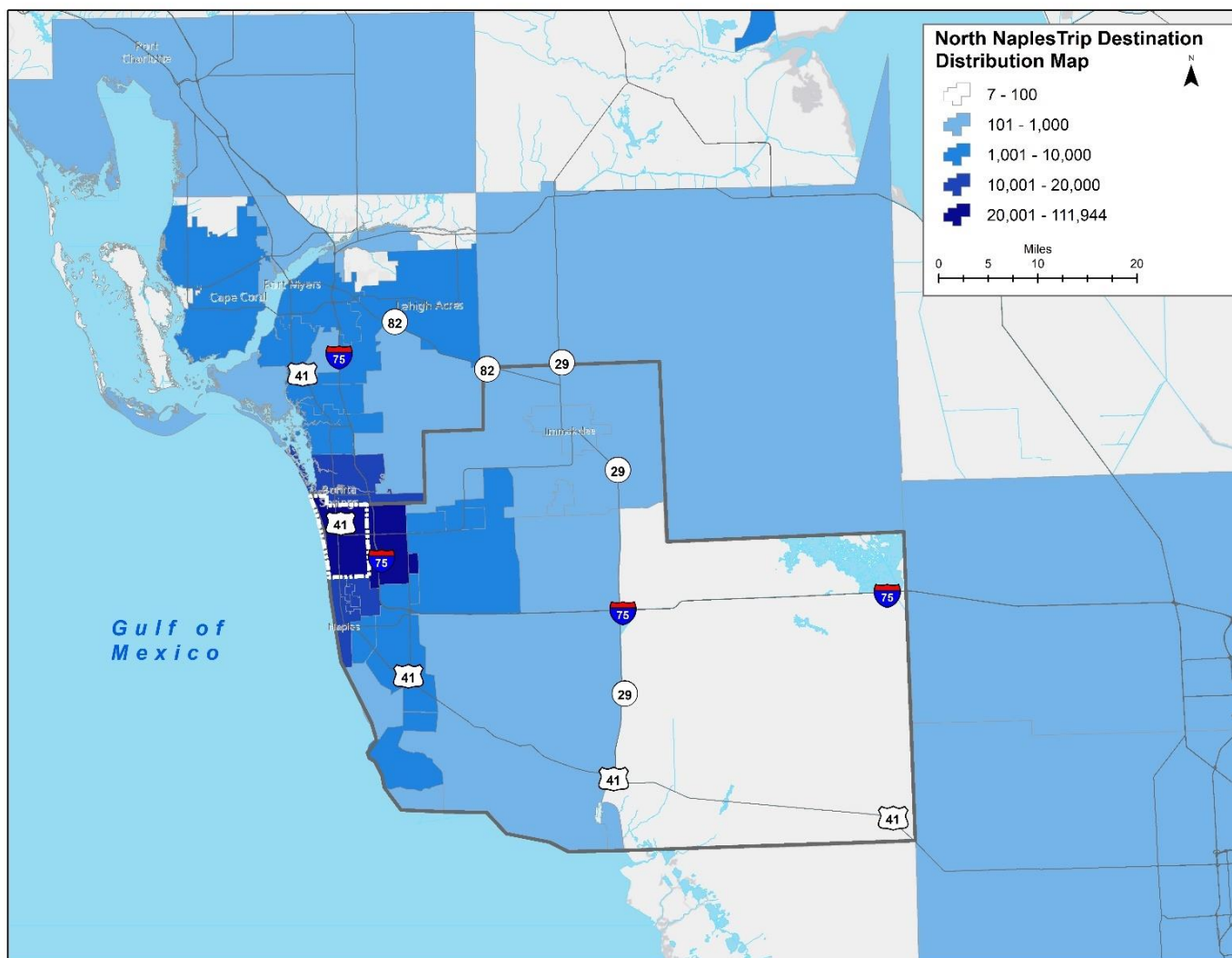
### 3.12.2 Trips Ending in Subarea

Figure 63 shows the characteristics of trips ending in the North Naples subarea. Trips ending in North Naples also have a high shopping trip purpose (26% of daily trip destinations) or home trip purpose (22% of daily trip destinations). At 13% of the daily trip destinations, more work trips end in the North Naples than those that originate within the area. The average trip distance of 15 miles and average travel time of 19 minutes are roughly the same as those measures for trip origins. Figure 64 illustrates the geographic distribution of origins for trips ending in the North Naples subarea.



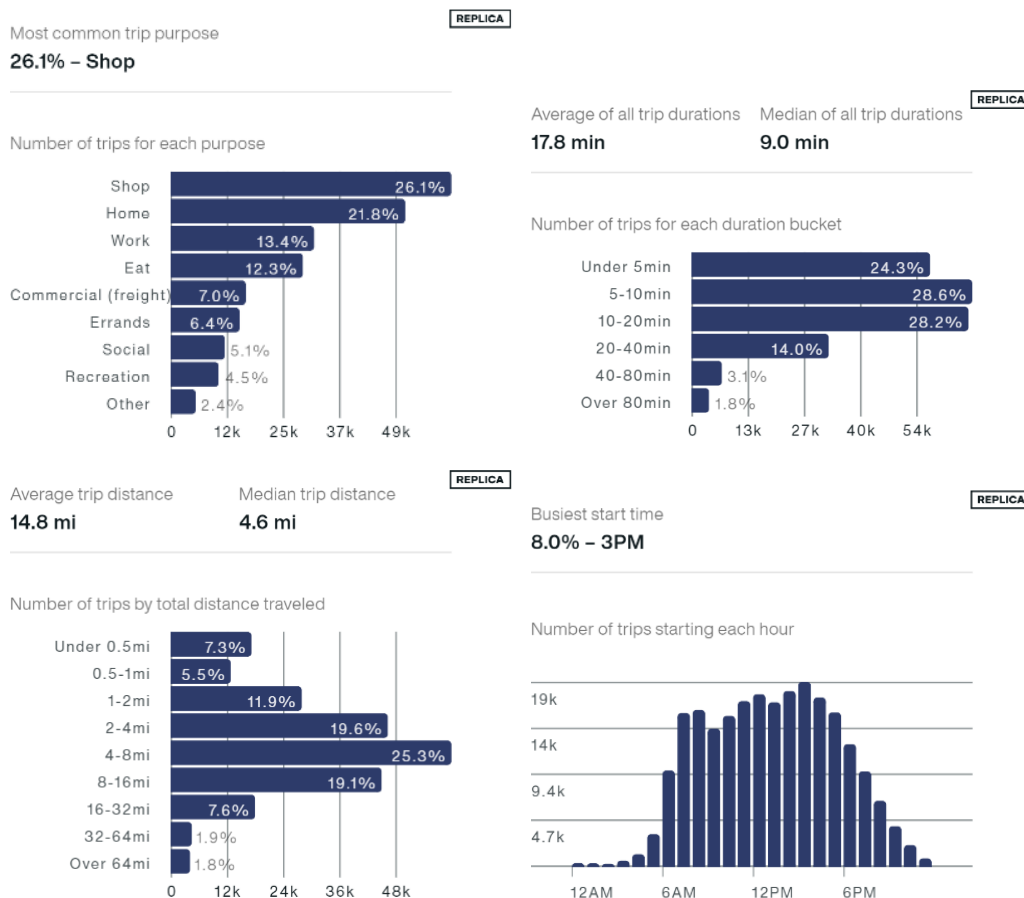


**Figure 62: Destinations for trips Originating in North Naples Subarea**





**Figure 63: Selected Trip Characteristics for North Naples Destinations**



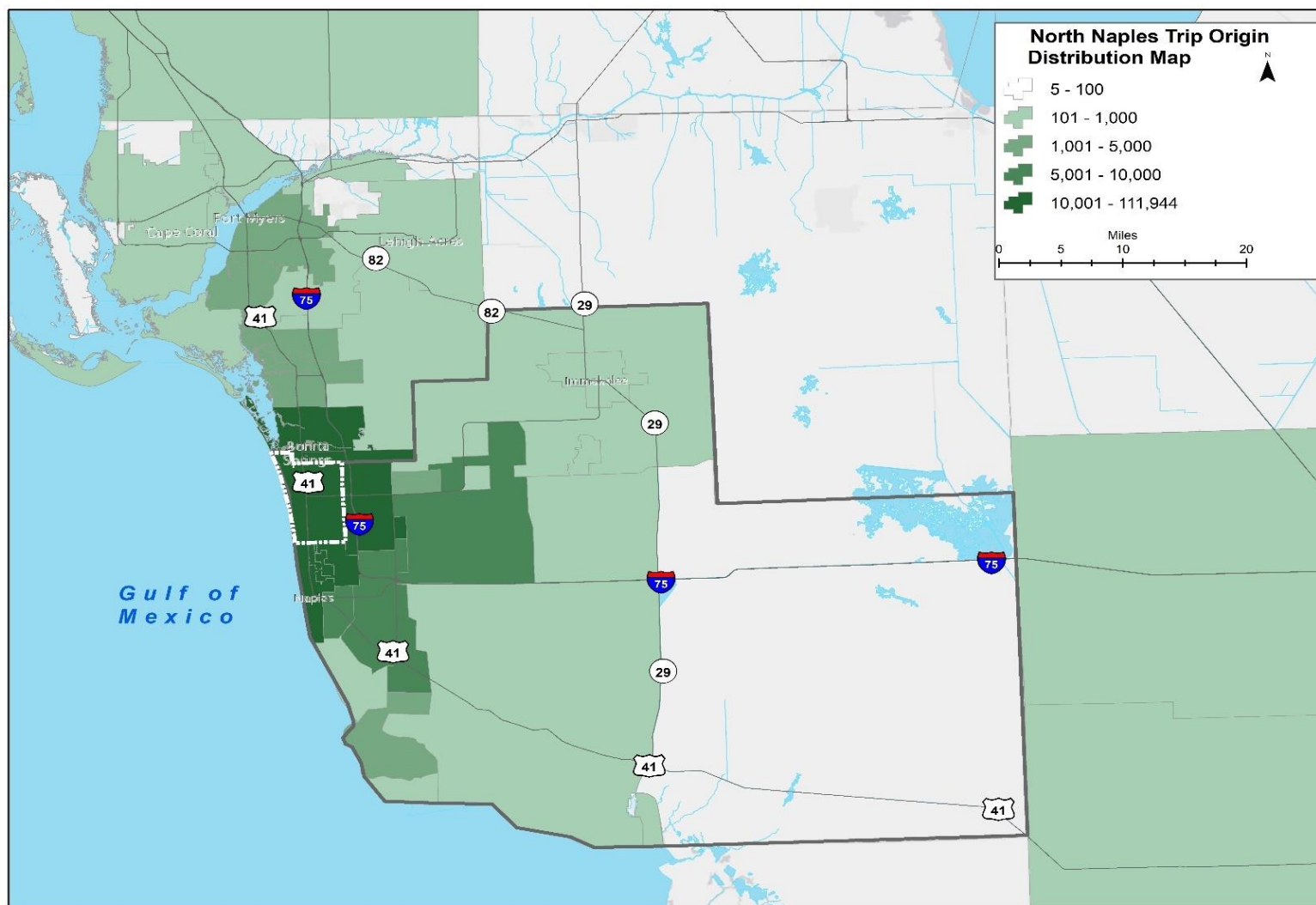
### 3.12.3 Work Location

Table 29 lists the top work locations for the more than 21,500 workers living in the North Naples subarea. This table indicates that residents of North Naples also have jobs that are predominantly within the subarea.

Shown in Figure 65 are selected characteristics related to the work commute trip. Compared with trip time and distance for all trips originated within the study area, work trips on average have longer travel times and distances. The average work trip of 38 miles is more than 2.5 times longer than the average trip originating within the North Naples area. However then median trip distance of just under 5 miles is comparable with the same measure for all trips originating in the area. The work trips also demonstrate a distinct A.M. peak pattern. Information regarding working from home is also made available through Replica. It was estimated that 5,600 or 9.8% of North Naples subarea 57,000 residents worked from home during the Spring 2021 quarter.



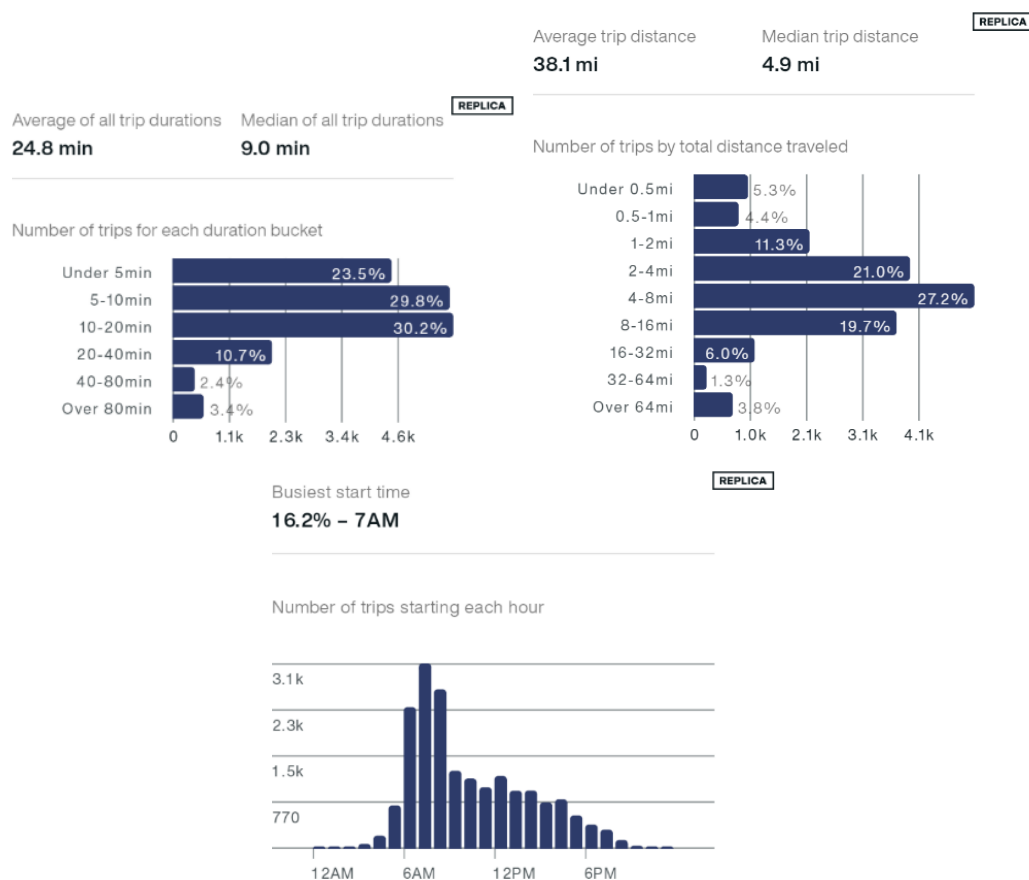
Figure 64: Origins for trips Ending in North Naples Subarea



**Table 29: Work Locations for Residents of North Naples**

Work Location	Population	Work Location	Population
North Naples	9,810	South Naples	336
City of Naples	2,937	Miami-Dade County	294
Central Naples	1,525	Fort Myers	290
Urban Estates	1,087	Estero	248
Out of region	935	Rural Estates	222
Bonita Springs	876	City of Marco Island	120
East Naples	700	Ave Maria	105
San Carlos	645	Immokalee	102
Golden Gate	607	Sanibel	66
South Fort Myers	342	Iona/McGregor	64

**Figure 65: North Naples Home to Work Trip Characteristics**



### 3.13 Orange Tree

The Orange Tree subarea is a small community located in central Collier County. This subarea was created specifically for this analysis base on review of the Growth Management Plan and the areas distinct development pattern compared with surrounding areas.



Table 30 identifies the trip origins and destinations for the top 20 subarea locations when at least one trip end occurs in the Orange Tree subarea. The trip origins listed have a destination in the Orange Tree subarea and vice-versa for the destinations listed. 3,434 trips originated in the Orange Tree subarea and remained within the area representing 18% of the more than 19,000 daily trips originating from the area. More trips originated from the Rural Estates subarea and ended in Orange Tree. Shopping and school-related trips within this subarea are attractive to the trips originating in the predominantly residential Rural Estates.

**Table 30: Orange Tree Trip Origins and Destinations**

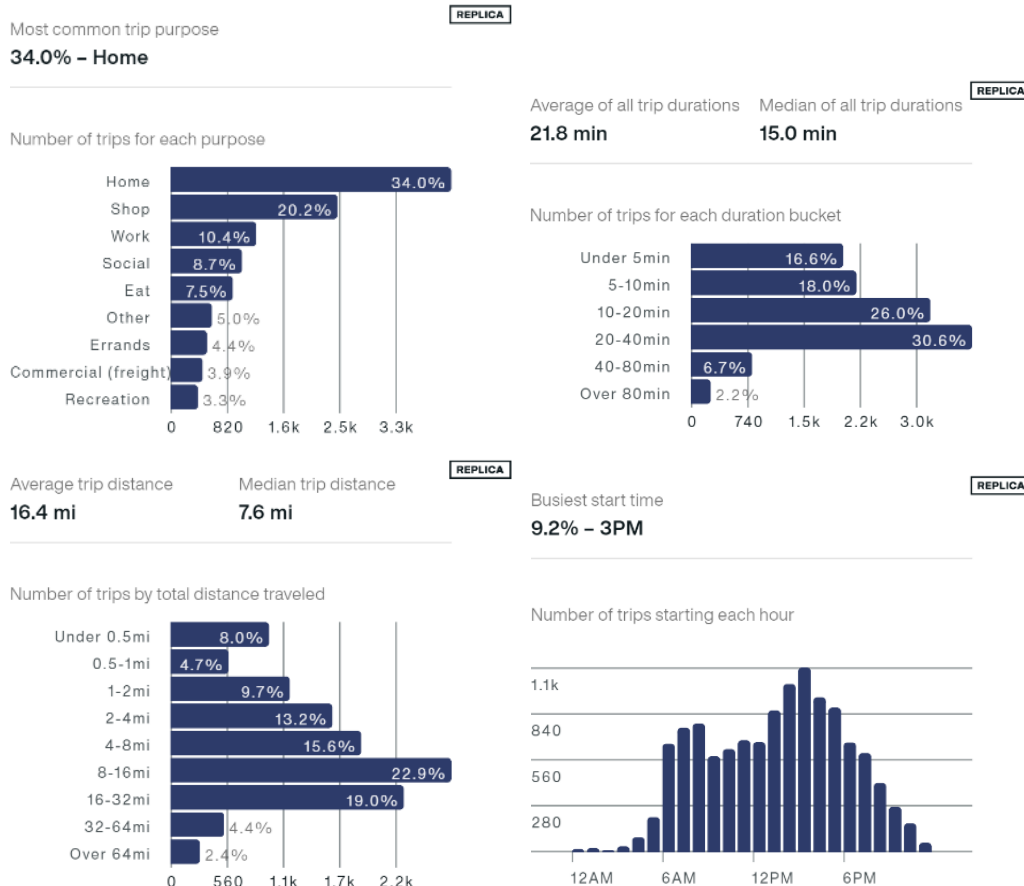
Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
Rural Estates	3,698	3,421	Central Naples	263	229
Orange Tree (Internal)	3,434	3,434	Immokalee	240	309
Urban Estates	1,341	990	East Naples	179	122
North Naples	1,084	737	San Carlos	135	101
Golden Gate	494	381	Out of Region	119	124
Heritage Bay	419	351	Estero	109	75
City of Naples	380	293	City of Marco Island	78	66
Bonita Springs	365	253	Corkscrew	61	51
South Naples	326	191	Fort Myers	53	90
Ave Maria	298	342	Lehigh Acres	52	68

#### 3.13.1 Trips Beginning in Subarea

Figure 66 documents characteristics of trips originating in Orange Tree, including trip purpose, trip distance, trip duration and start time. Trips originating from the Orange Tree area have a high home trip purpose at 34%. With an average trip distance of 16 miles and an average trip duration of 20 minutes, the distribution of trips indicates that short distance trips are not common. Figure 67 illustrates the geographic distribution of destinations for trips originating in the Orange Tree subarea and the clustering that occurs in the eastern portion of the county.



**Figure 66: Selected Trip Characteristics for Orange Tree Origins**



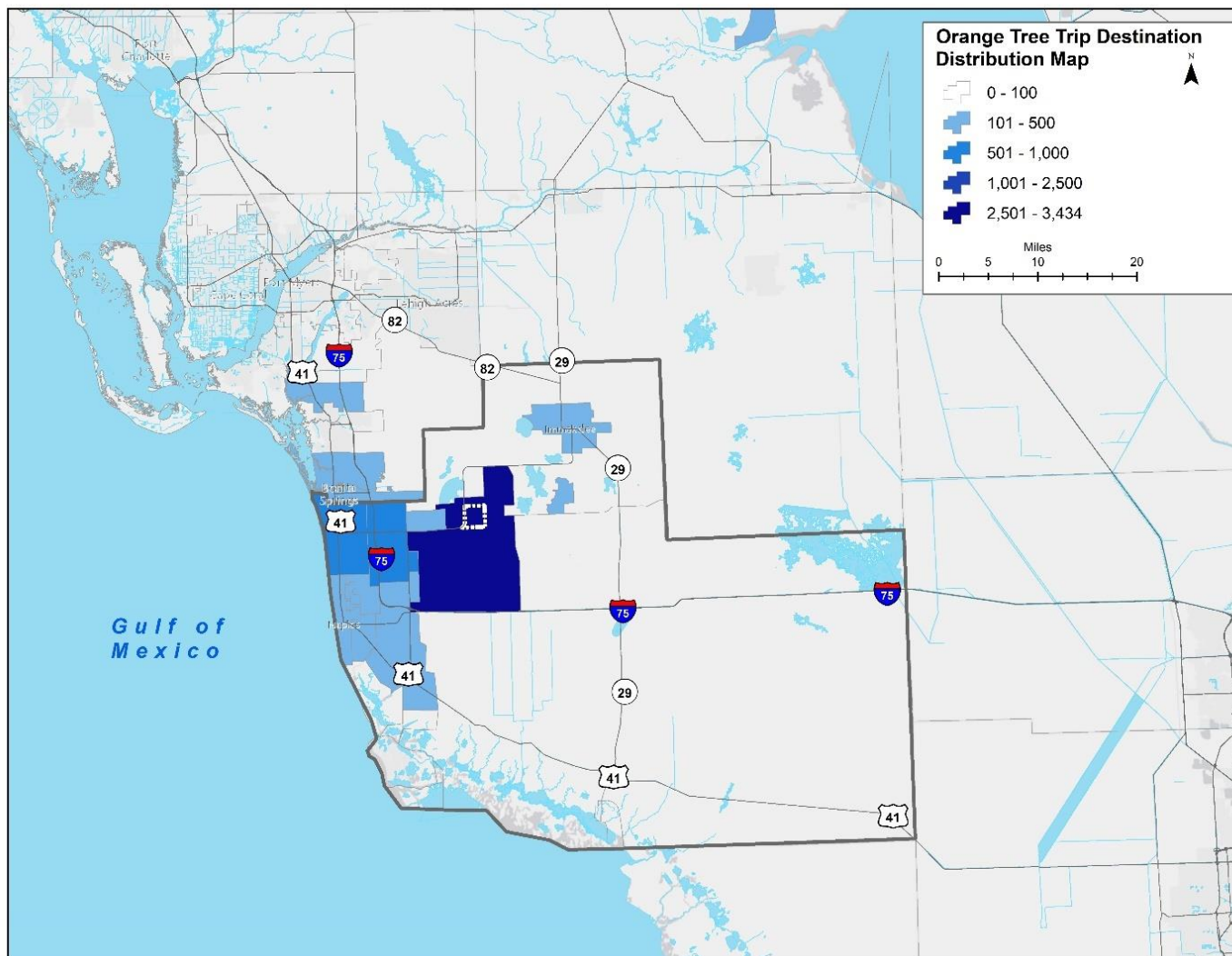
### 3.13.2 Trips Ending in Subarea

Figure 68 illustrates the characteristics of trips ending in Orange Tree. Trips ending in Orange Tree have a high shopping trip purpose 27% of total trips, while home trips purposes are slightly lower at 25% of total trips ending in the area. The average trip distance of 15 miles and average trip duration of 21 minutes are nearly equal to trips originating from the area. Additionally, the distribution of trips across the time and distance bands are comparable for the origin and destination trips. The distribution of these trips, shown in Figure 69, would also imply that there is a direct connection with trips being made for a single purpose rather than combining trips purposes since less than 20% of the trips are internal to the subarea. The distribution of trips made throughout the day is also comparable for trips ending in the area with those that originate there.



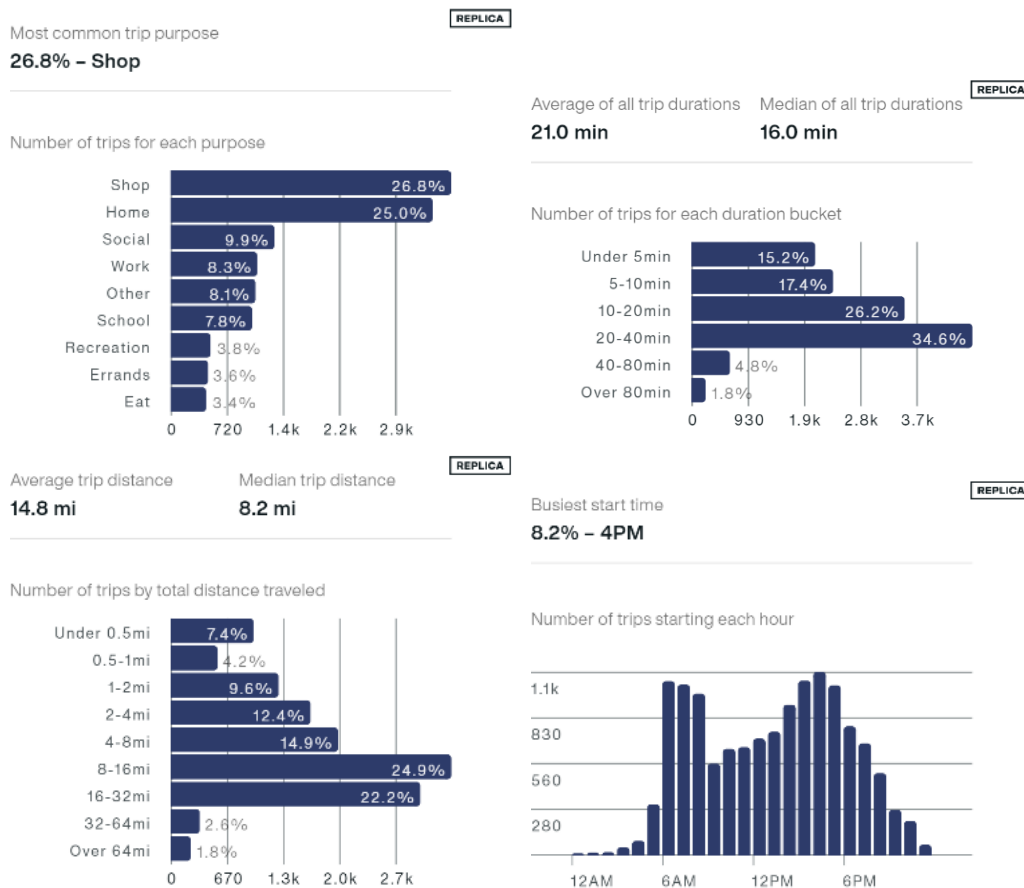


**Figure 67: Destinations for trips Originating in Orange Tree Subarea**





**Figure 68: Selected Trip Characteristics for Orange Tree Destinations**

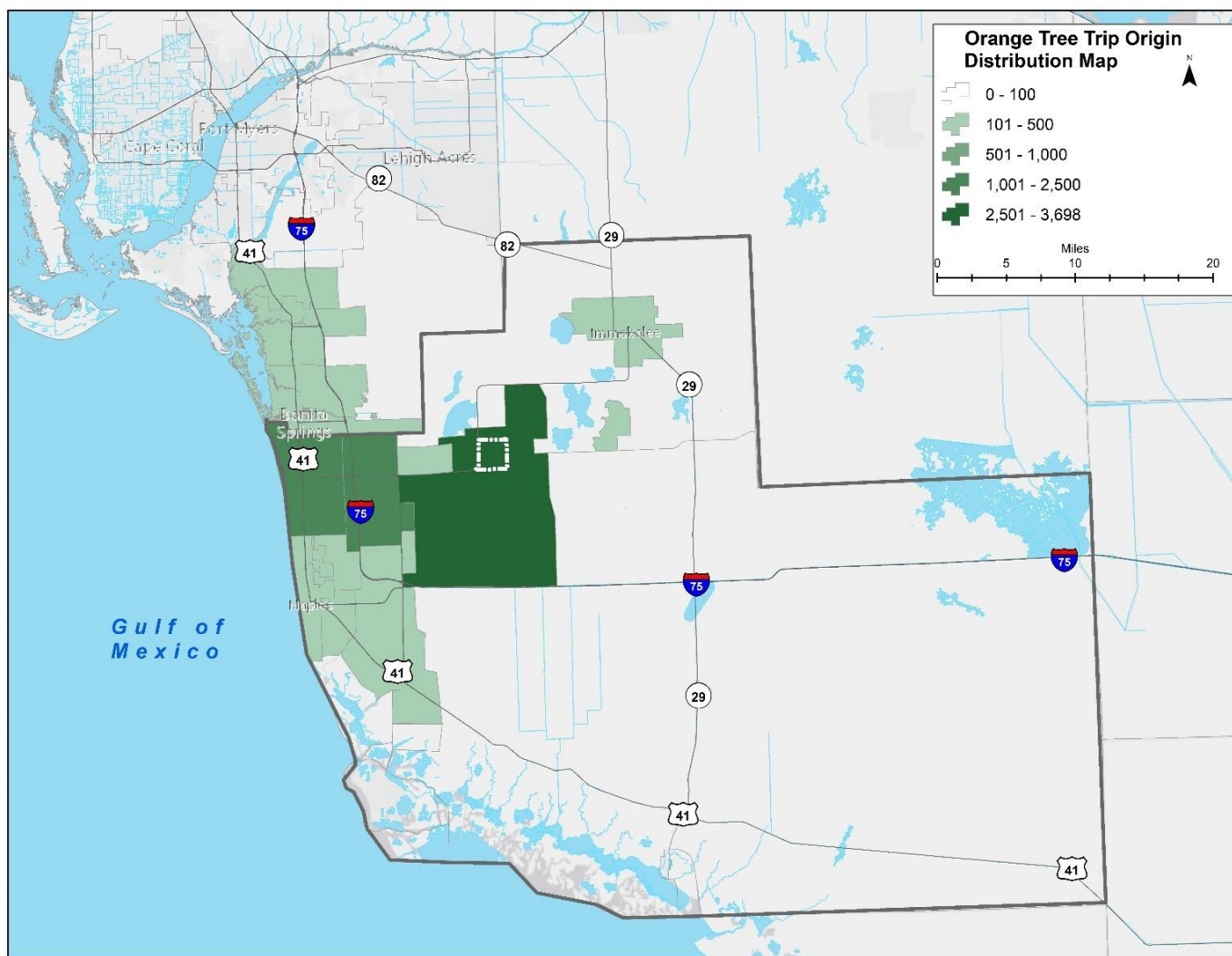


### 3.13.3 Work Location

Table 31 lists the top work locations for nearly 2,500 workers living in the Orange Tree subarea. No single area has a high percentage of employee location and only a small percentage of residents work in the Orange Tree subarea. Shown in Figure 70 are selected characteristics related to the work commute trip. Compared with trip time and distance for all trips originated within the study area, work trips on average are longer in time and distance and demonstrate a distinct A.M. peak pattern. This is reflective of the few numbers of workers that have jobs located within the subarea or nearby. Information regarding working from home is also made available through Replica. It was estimated that nearly 600 of the Orange Tree subarea's 4,600 residents (12.9%) worked from home during the Spring 2021 quarter.



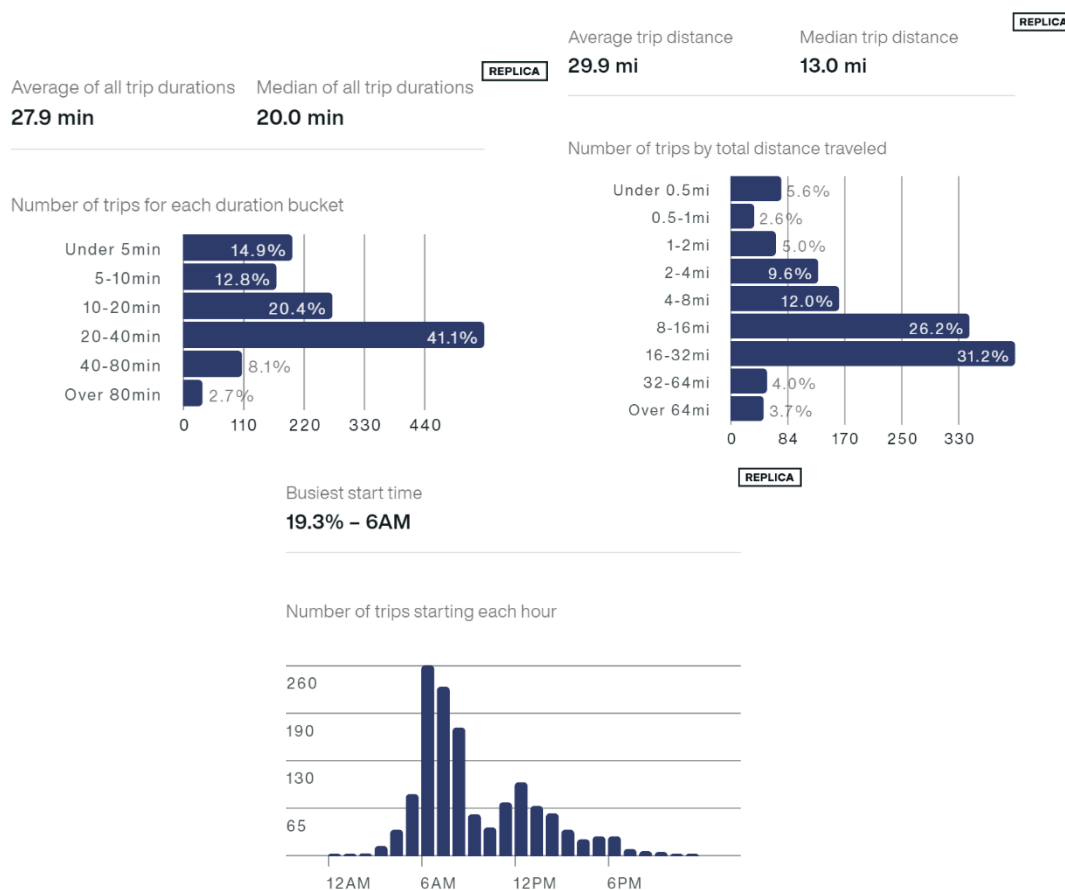
**Figure 69: Origins for trips Ending in Orange Tree Subarea**



**Table 31: Work Locations for Residents of Orange Tree**

Work Location	Population	Work Location	Population
North Naples	375	San Carlos	55
Rural Estates	230	Bonita Springs	51
City of Naples	224	Heritage Bay	39
Ave Maria	209	East Naples	32
Central Naples	170	Charlotte County	29
Urban Estates	134	City of Marco Island	29
Orange Tree	115	Out of Region	28
South Naples	90	South Fort Myers	28
Immokalee	72	Miami-Dade County	27
Golden Gate	61	Estero	26

**Figure 70: Orange Tree Home to Work Trip Characteristics**



### 3.14 Royal Fakapalm

The Royal Fakapalm subarea is the second largest subarea, and like the Corkscrew area is largely dominated by environmentally protected areas including the Florida Panther National Wildlife Refuge. Isolated areas of development include Port of the Islands and Royal Hammock along Tamiami Trail East as well as other rural communities.

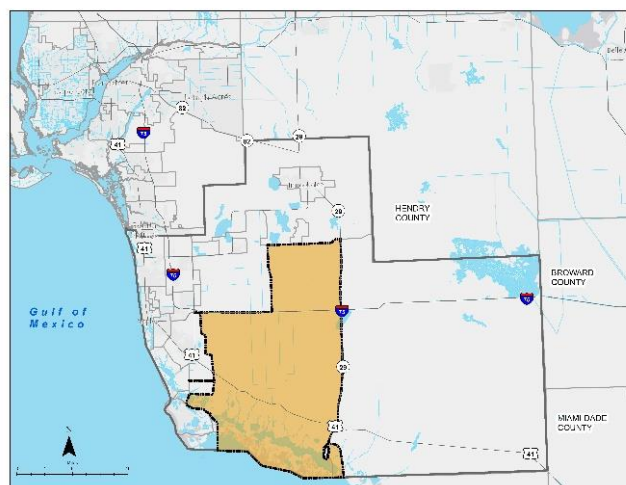


Table 32 shows the trip origin and destination for the top 20 subarea locations when at least one trip end takes place in the Royal Fakapalm subarea. The trip origin shows the number of trips that begin in the subareas with Royal Fakapalm as the destination and vice versa for the trip destination listed. More than 6,400 trips originated in the Royal Fakapalm on an average weekday during the Spring of 2021, with 24% of those trips staying internal to the subarea. Due to the nature of the developed portions of this subarea the South Naples subarea is also a high destination area for trips originating in the Royal Fakapalm subarea

**Table 32: Royal Fakapalm Trip Origins and Destinations**

Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
Royal Fakapalm (internal)	1,500	1,500	Out of region	163	162
South Naples	1,223	1,174	Broward County	144	120
City of Marco	457	433	Urban Estates	137	132
Rural Estates	313	331	Central Naples	136	134
Everglades City	273	301	Bonita Springs	109	104
East Naples	257	253	Big Cypress	86	84
Miami-Dade County	252	258	Fort Myers	83	61
North Naples	240	207	Immokalee	82	94
City of Naples	234	195	San Carlos	68	52
Golden Gate	216	217	Gateway/Airport	54	56

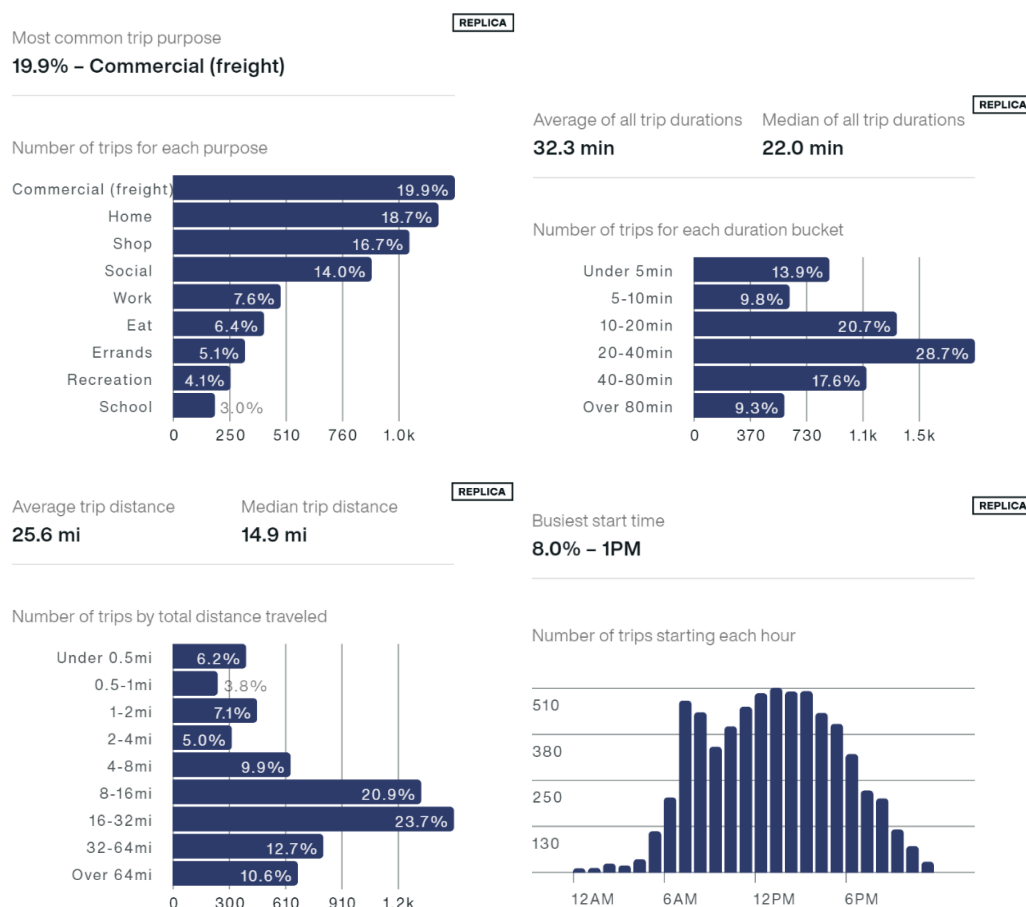
#### 3.14.1 Trips Beginning in Subarea

Figure 71 includes charts showing the purpose, duration, distance and start time of trips originating in the Royal Fakapalm subarea. Trips Originating in Royal Fakapalm have a high commercial (freight) trip purpose at about 20% of the daily trips generated in the subarea. The average of trip distance of more than 25 miles and the average trip duration of 32 minutes are among the highest averages for the subareas studied. Like the Big Cypress subarea, the influence of commercial trips could be influencing these higher averages. Unlike the Big Cypress subarea, agricultural land uses within the Royal Fakapalm subarea are contributing to these commercial trips. Less than 3% of the trips originating from this area have a destination outside of the South Florida region. Figure 75 illustrates the geographic distribution



of destinations for trips originating in the Royal Fakapalm subarea which shows the high association of trips within the area and the neighboring South Naples subarea.

**Figure 71: Selected Trip Characteristics for Royal Fakapalm Origins**



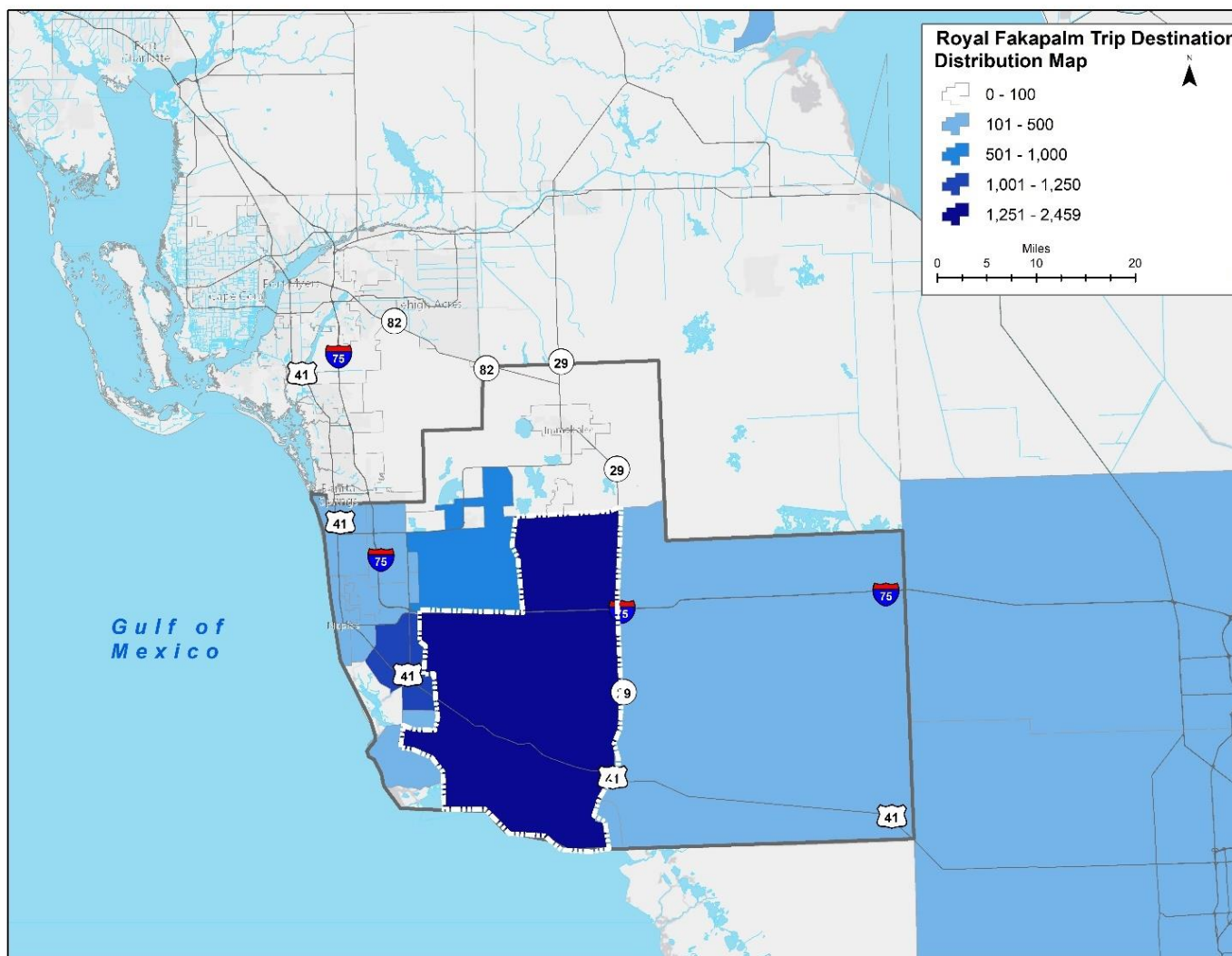
### 3.14.2 Trips Ending in Subarea

Like trips starting in the subarea, Figure 73 illustrates the trip characteristics for trips ending in the Royal Fakapalm subarea. These summary statistics suggest that roughly a quarter or 1,600 of the total trips ending in Royal Fakapalm are a return to home trip. The average trip distance of 26 miles and average trip duration of 33 minutes are comparable to those measures for the trips originating within the area. The distribution of trip lengths is indicative of the development pattern with very few short distance trips compared with those traveling between 16 and 32 miles. Figure 74 graphically illustrates the geographic distribution of origins for trips ending in the Royal Fakapalm subarea.



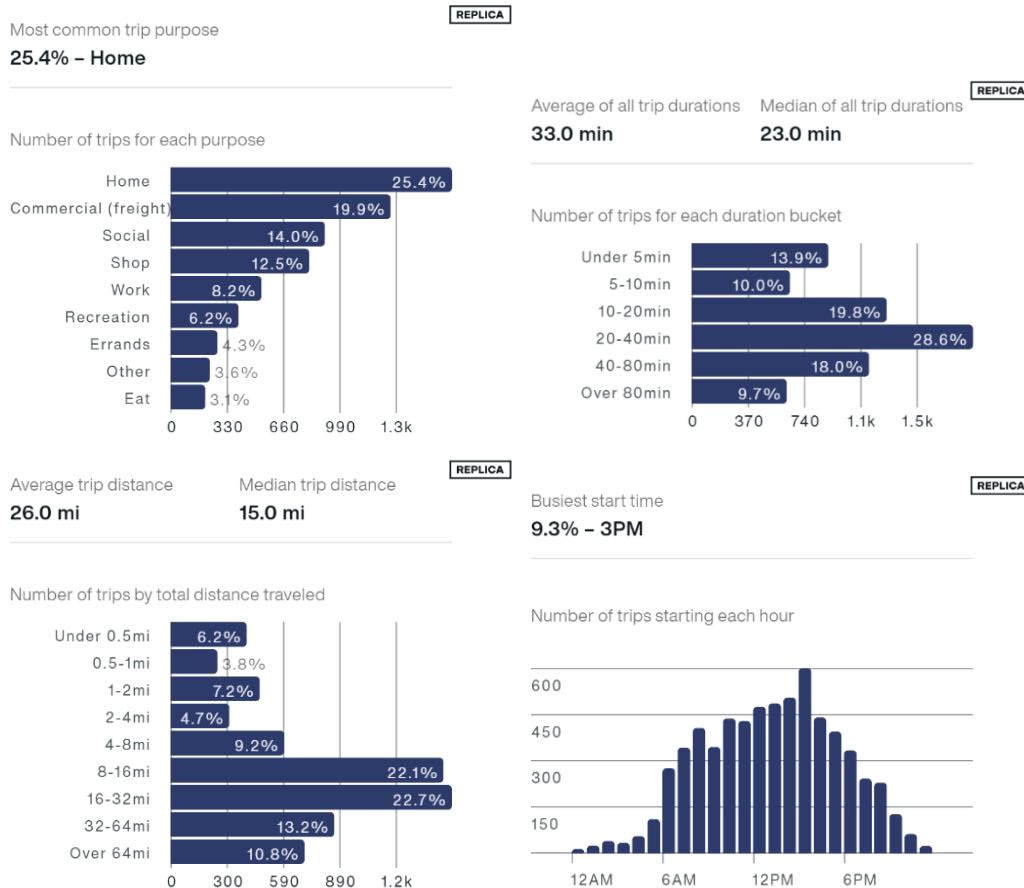


**Figure 72: Destinations for trips Originating in Royal Fakapalm Subarea**





**Figure 73: Selected Trip Characteristics for Royal Fakapalm Destinations**



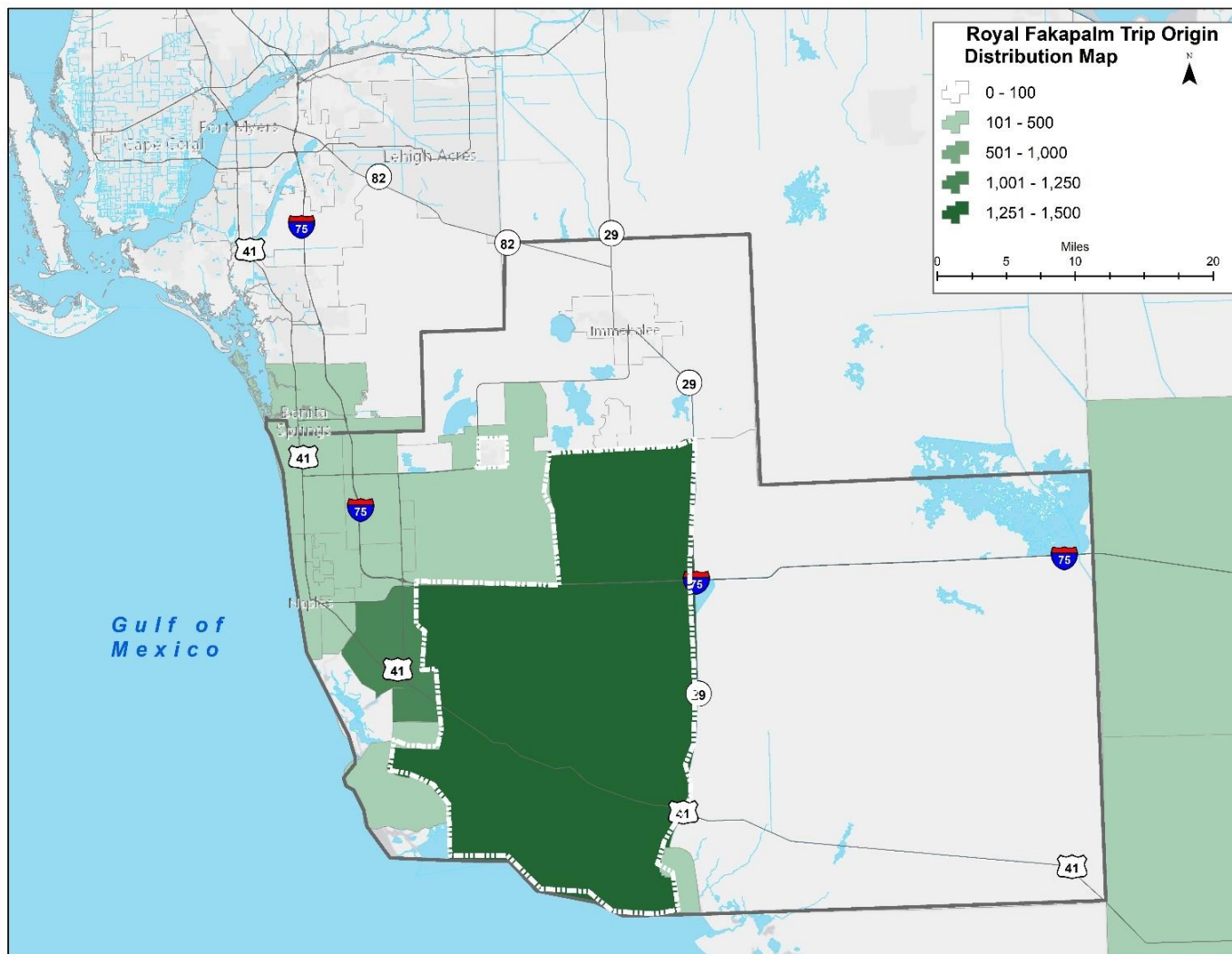
### 3.14.3 Work Location

Table 33 provides a breakdown of the top work subareas for 900 workers living in the Royal Fakapalm subarea. Due to the rural nature of this area and sparse development, more than 90% of these workers are required to travel outside of the subarea for employment. This is illustrated further in Figure 75 by the low percentage of home to work trips that are less than 5 miles in distance compared to those over 40 miles.

The statistics shown for the home to work commute eliminate any trip chaining and focuses on the single purpose trips. These trips have a distinct A.M. peak with a mid-day bump as well. Information regarding working from home is also made available through Replica. It was estimated that 250 or 11% of the 2,300 people residing in the Royal Fakapalm subarea worked from home during the Spring 2021 quarter.



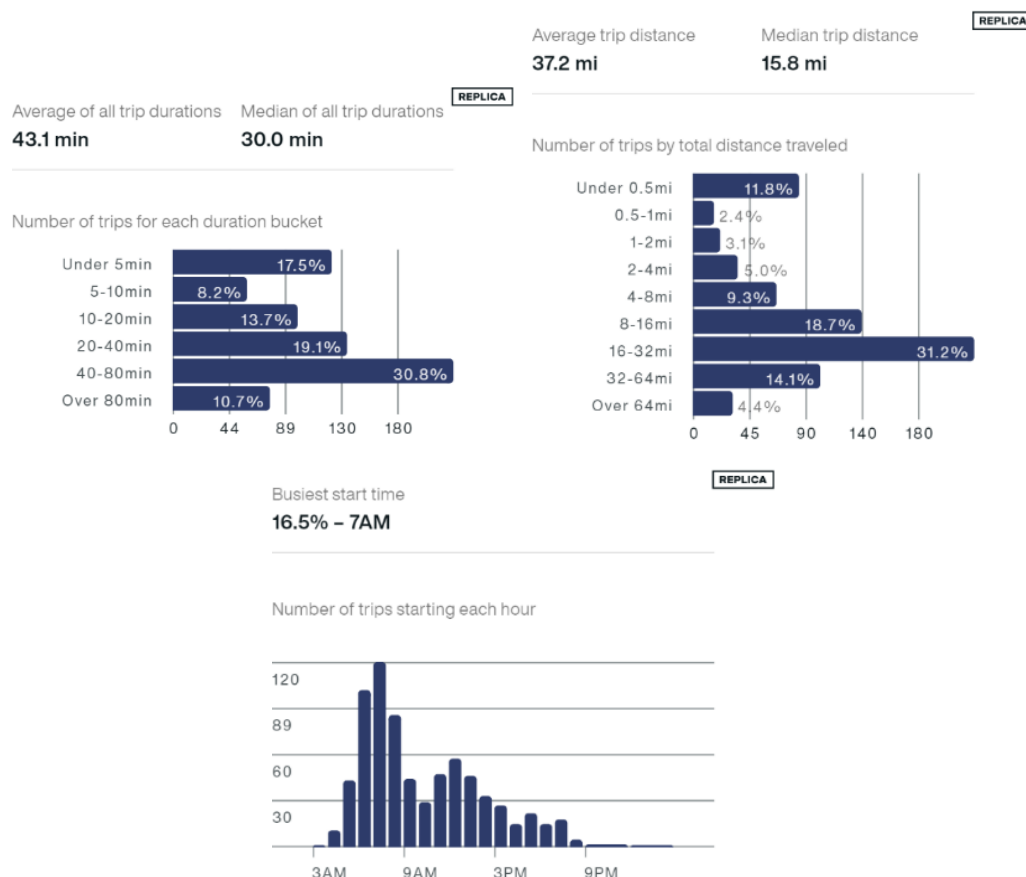
**Figure 74: Origins for trips Ending in Royal Fakapalm Subarea**



**Table 33: Work Locations for Residents of Royal Fakapalm**

Work Location	Population	Work Location	Population
South Naples	194	Central Naples	19
North Naples	97	San Carlos	18
East Naples	89	Big Cypress	17
City of Marco Island	76	Gateway/Airport	13
Royal Fakapalm	63	Ave Maria	11
City of Naples	59	Fort Myers	10
Everglades City	47	Golden Gate	9
Urban Estates	33	Rural Estates	9
Out of region	23	South Fort Myers	6
Miami-Dade County	22	Immokalee	5

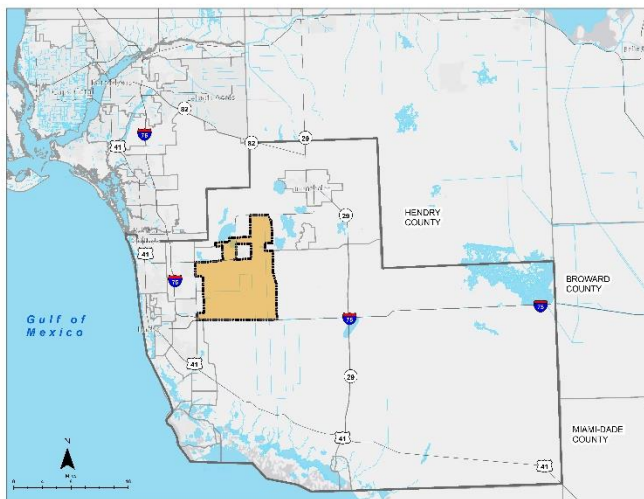
**Figure 75: Royal Fakapalm Home to Work Trip Characteristics**



### 3.15 Rural Estates

The Rural Estates subarea is dominated by large lot single-family land uses located east of CR 951. Much of the area is divided by canals and waterways with limited transportation routes connecting through the area and beyond.

Table 34 shows the trip origins and destinations for the top 20 subareas when at least one trip end takes place in the Rural Estates subarea. The trip origins are shown as the number of trips coming from the subareas having a destination within the Rural Estates and vice versa for the trip destinations listed as the trips going to that subarea. There are an estimated 69,000 trips made originating in the Rural Estates on an average weekday, one-third of the trips staying within the subarea.



**Table 34: Rural Estates Trip Origins and Destinations**

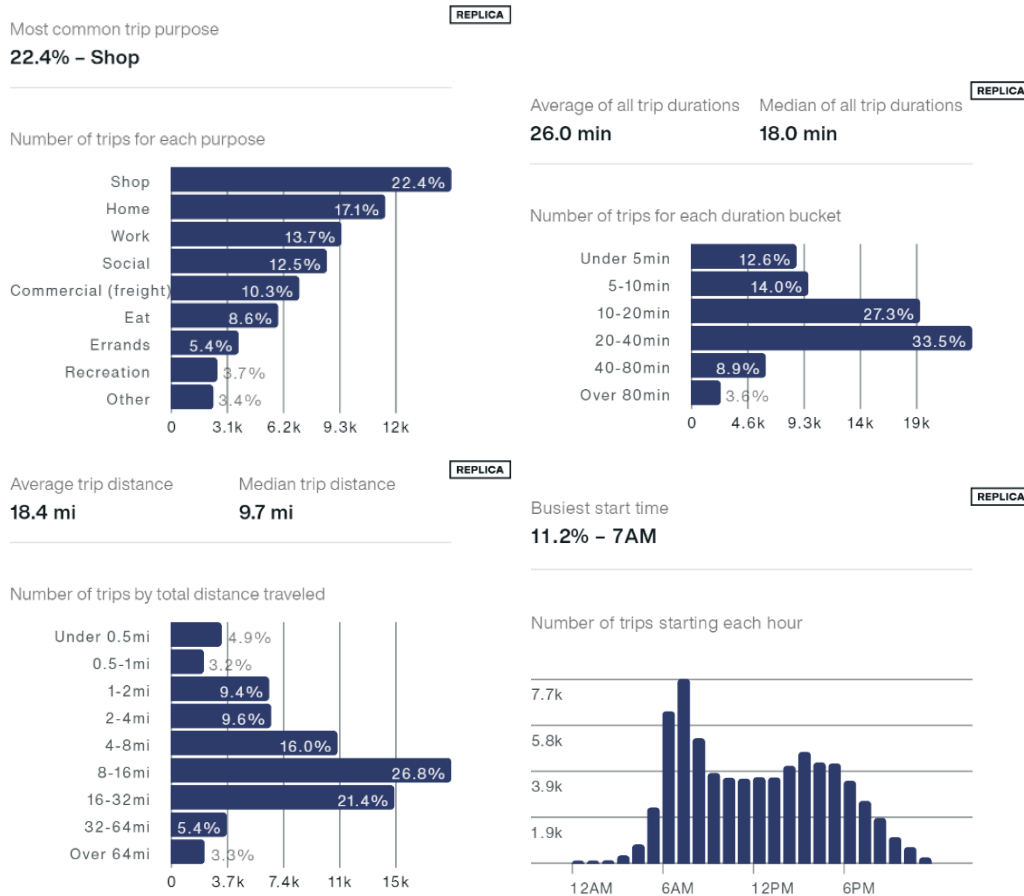
Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
Rural Estates (internal)	22,777	22,777	Bonita Springs	1,957	1,340
Urban Estates	9,501	8,782	Immokalee	1,150	1,258
North Naples	7,270	5,993	Out of Region	997	1,070
Golden Gate	5,667	5,348	Ave Maria	839	917
Orange Tree	3,421	3,698	San Carlos	689	674
City of Naples	3,089	2,781	Fort Myers	432	652
South Naples	3,167	2,491	City of Marco Island	926	576
Central Naples	2,677	2,409	Miami-Dade County	505	515
Heritage Bay	1,695	1,817	Estero	674	484
East Naples	1,881	1,538	Royal Fakapalm	527	463

#### 3.15.1 Trips Beginning in Subarea

Figure 76 illustrates trip purpose, trip duration, trip distance and start time for the trips originating in the Rural Estates. The trips have a high shopping trip purpose at account for more than 22% of the daily trips generated in the subarea. The average trip distance of 18 miles and the average trip duration of 26 minutes are influenced by the number of trips that travel longer distance. As is common with other areas of a more rural development pattern there is a lower percentage of short distance trips. Figure 77 illustrates the geographic distribution of destinations for trips originating in the Rural Estates subarea which includes a considerable number of trips traveling to locations outside of Collier County.



**Figure 76: Selected Trip Characteristics for Rural Estates Origins**



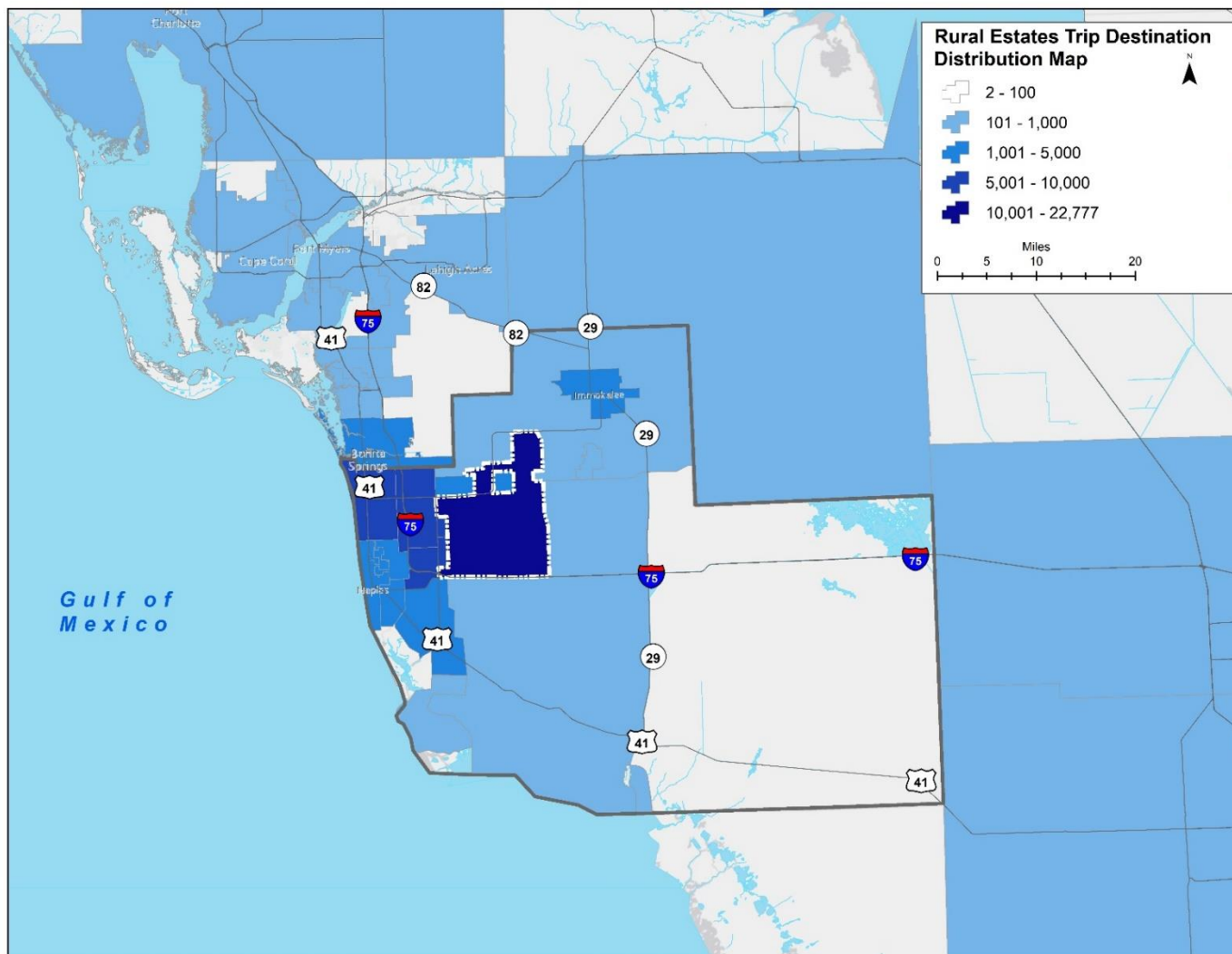
### 3.15.2 Trips Ending in Subarea

Figure 78 provides an overview of the characteristics for trips ending in the Rural Estates. This summary shows that nearly half of the ending in the Rural Estates are a return home trip. This is not unexpected given the predominately single-family land use of the area. While the distribution of trip purpose is different for the destination trips compared with the origin trips, the average trip distances and travel times are comparable. With a distinct A.M. peak for trip origins and P.M. peak for trip destinations, it's reasonable to conclude that these times are dominated by the journey to work trips. Figure 79 graphically illustrates the geographic distribution of origins for trips ending in the Rural Estates subarea.



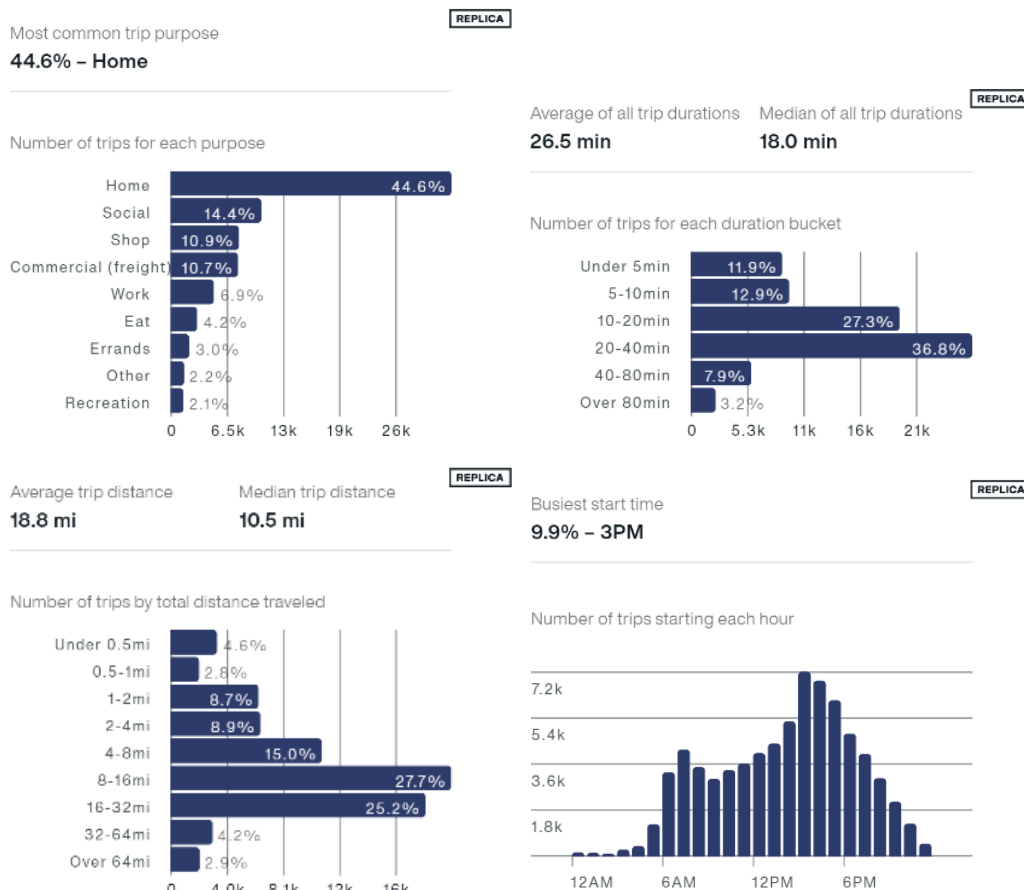


**Figure 77: Destinations for trips Originating in Rural Estates Subarea**





**Figure 78: Selected Trip Characteristics for Rural Estates Destinations**

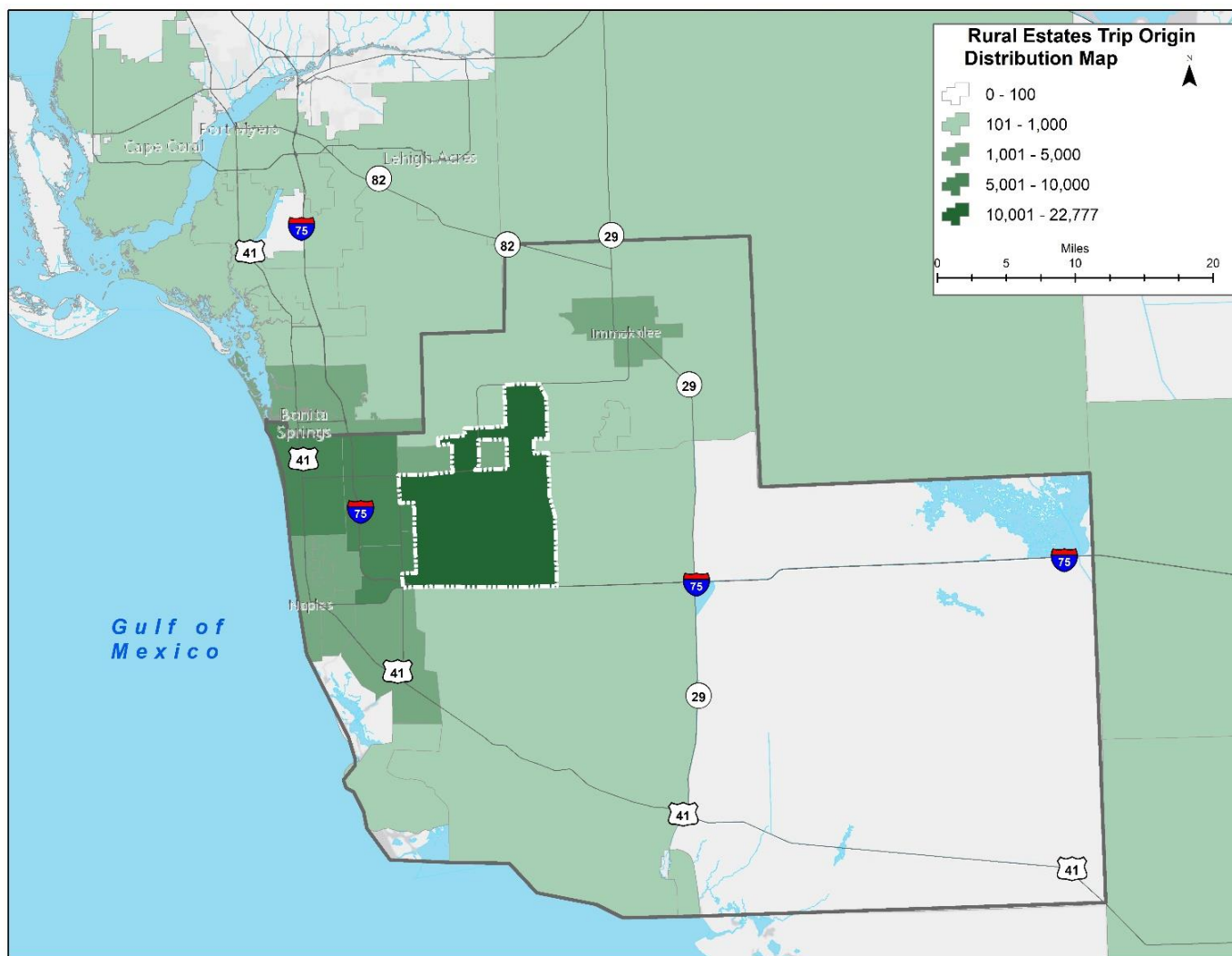


### 3.15.3 Work Location

Table 35 lists the top work locations for 20,100 workers living in the Rural Estates subarea. Shown in Figure 80 are characteristics related to the work commute trip. Compared with trip time and distance for all trips originating in the subarea, work trips on average are shorter in time but longer in distance. Information regarding working from home is also made available through Replica. It was estimated that 11.3% or 4,600 of the 41,000 people residing in the Golden Gate subarea worked from home during the Spring 2021 quarter.



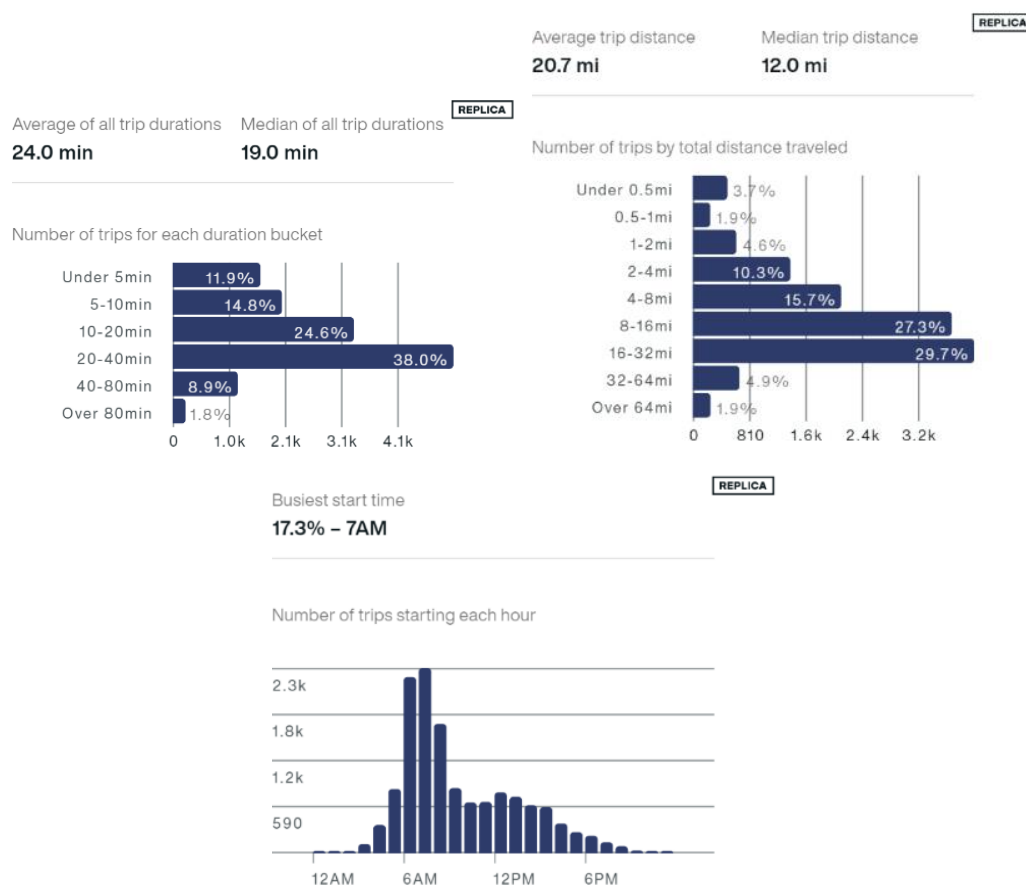
**Figure 79: Origins for trips Ending in Rural Estates Subarea**



**Table 35: Work Locations for Residents of Rural Estates**

Work Location	Population	Work Location	Population
North Naples	3,616	Golden Gate	538
Rural Estates	2,612	City of Marco Island	487
City of Naples	2,546	Immokalee	438
Urban Estates	1,680	Orange Tree	403
Central Naples	1,389	South Fort Myers	374
Ave Maria	1,078	Miami-Dade County	350
East Naples	1,072	Fort Myers	318
Bonita Springs	665	Estero	194
South Naples	653	Heritage Bay	193
San Carlos	575	Out of Region	158

**Figure 80: Rural Estates Home to Work Trip Characteristics**



### 3.16 South Naples

The South Naples Subarea was another of the initial planning communities that was expanded based on review of the GMP map. Areas east of Collier Blvd (CR 951) as well as areas south of Tamiami Trail East were consolidated into this area based on the similarity of land uses and development.

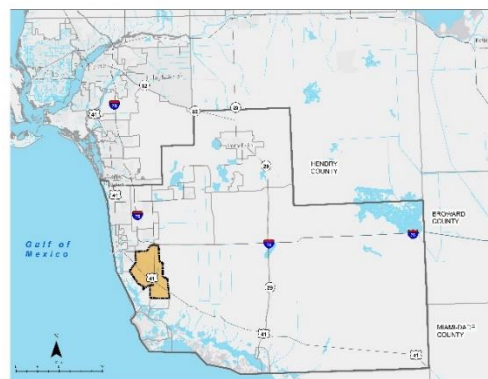


Table 36 identifies the number of trip origin and destination for the top 20 subarea locations when at least one trip end takes place in the South Naples subarea. The trip origins listed have a destination in the South Naples subarea and vice-versa for the destinations listed.

With 48% of the more than 120,000 average daily trips originating in the subarea staying internal, the South Naples subarea has one of the highest rates of trips staying within the area. This can be attributed to this subarea having one of the better mixes of land uses to accommodate multiple trip purposes. The nearby areas of East Naples, Golden Gate, City of Naples, and City of Marco Island also have a high trip interaction with the South Naples subarea.

**Table 36: South Naples Trip Origins and Destinations**

Subareas	Trips From	Trips To	Subarea	Trips From	Trips To
South Naples (internal)	57,338	57,338	Royal Fakapalm	1,147	1,163
East Naples	12,263	12,327	Bonita Springs	1,149	1,091
Golden Gate	7,881	8,381	Fort Myers	572	873
City of Naples	6,818	7,812	San Carlos	590	777
City of Marco Island	7,537	7503	South Fort Myers	378	554
North Naples	4,926	5,043	Cape Coral	248	551
Central Naples	3,742	4,197	Estero	454	542
Urban Estates	2,908	3,269	Lehigh Acres	265	512
Rural Estates	2,491	3,167	Gateway/Airport	268	495
Out of region	1,335	1,488	Miami-Dade County	521	490

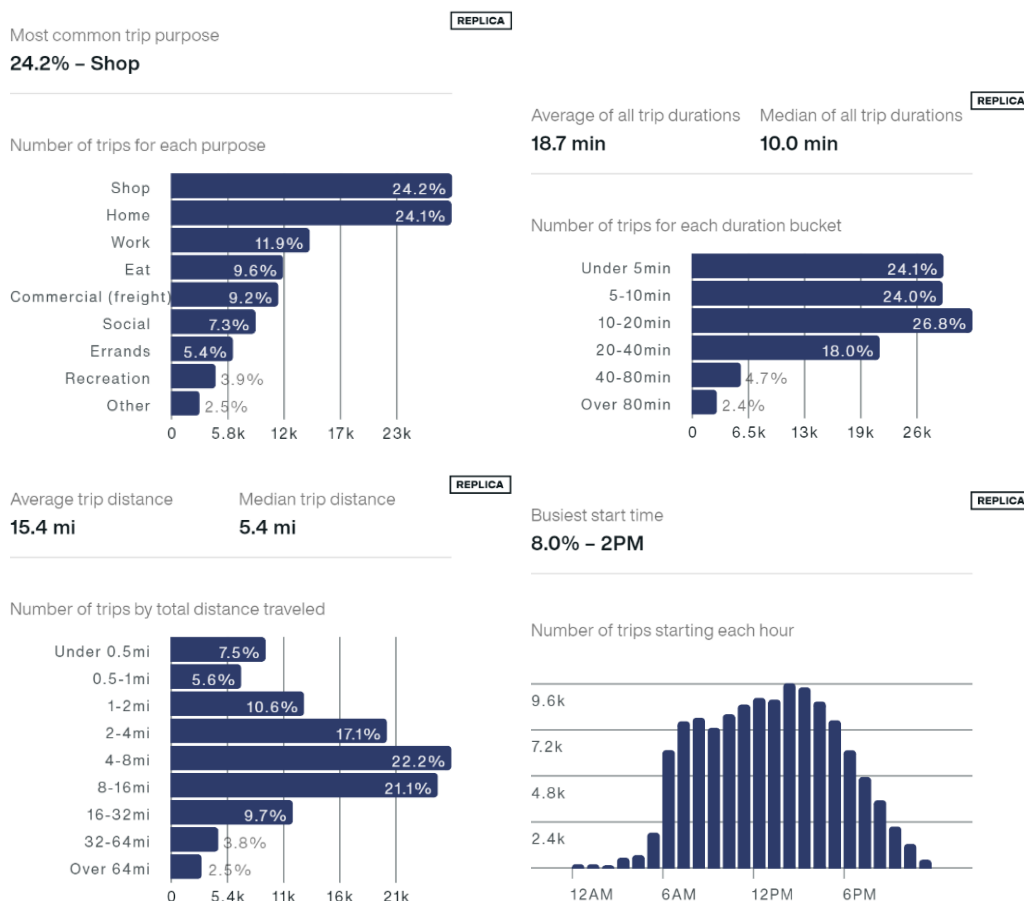
#### 3.16.1 Trips Beginning in Subarea

Figure 81 provides a summary of trip purpose, trip distance, trip duration and start time statistics. Nearly 50% of the trips originating in this area are for shopping or home purposes. These purposes seem to contribute to the large number of trips that can be taken in less than 10 minutes and less than 5 miles. Even with many short distance trips, the average trip distance for the South Naples subarea is 15 miles and the average trip duration is nearly 19 minutes. The distribution of trips throughout the day also



reflects a high rate of trips being produced throughout the day with the absence of a strong A.M or P.M. peak. Figure 82 illustrates the geographic distribution of destinations for trips originating in the South Naples subarea.

**Figure 81: Selected Trip Characteristics for South Naples Origins**



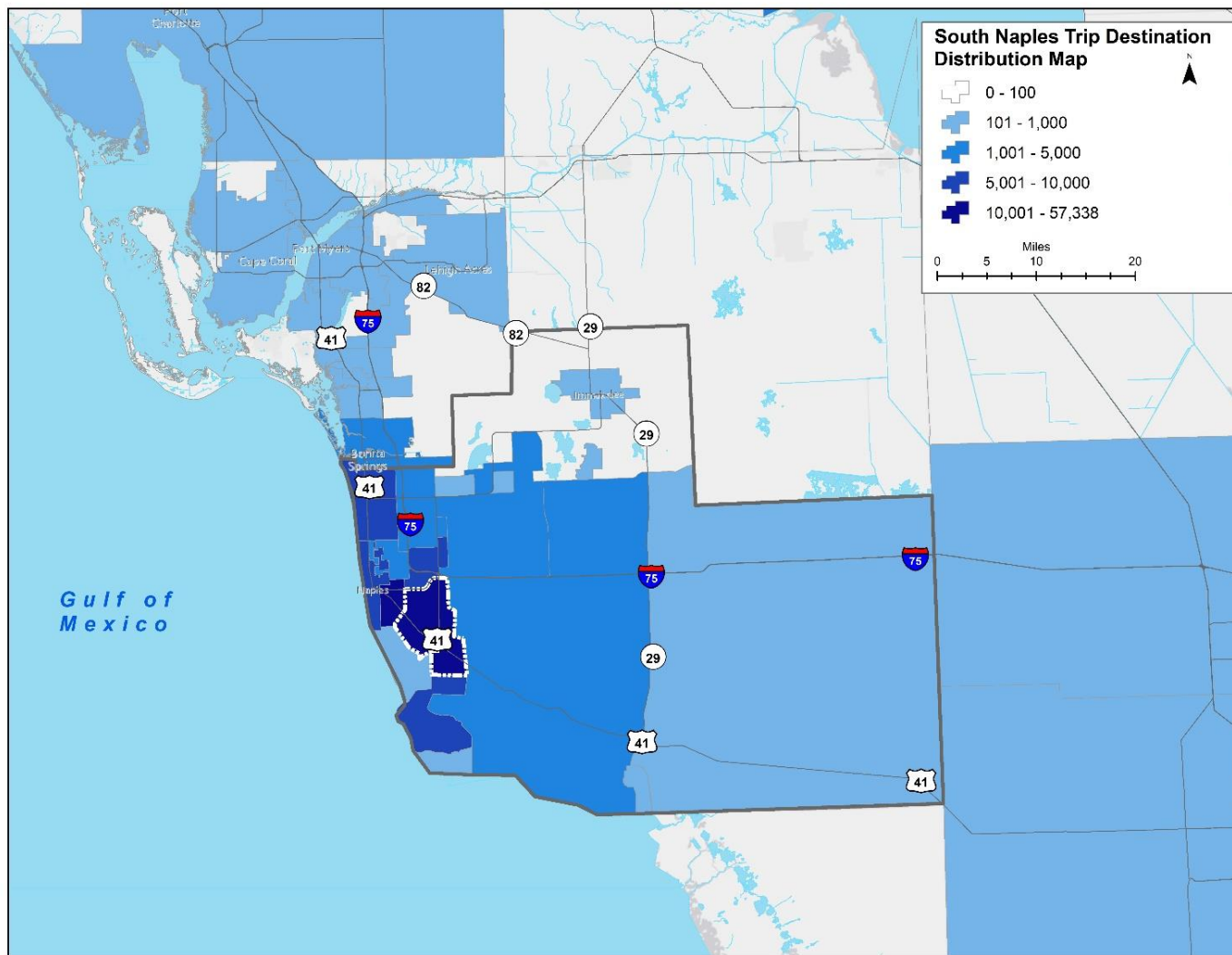
### 3.16.2 Trips Ending in Subarea

Figure 83 shows the purpose, distance, duration and start time for trips ending in the South Naples subarea. Trips ending in South Naples have a high home trip purpose at about 35% of average weekday trips. The average trip distance is around 15 miles and a travel time of 18 minutes. Like trips originating in this area, the number of trips increases throughout the day with a peak in the early afternoon. Figure 84 shows the geographic distribution of trips ending in the South Naples subarea.



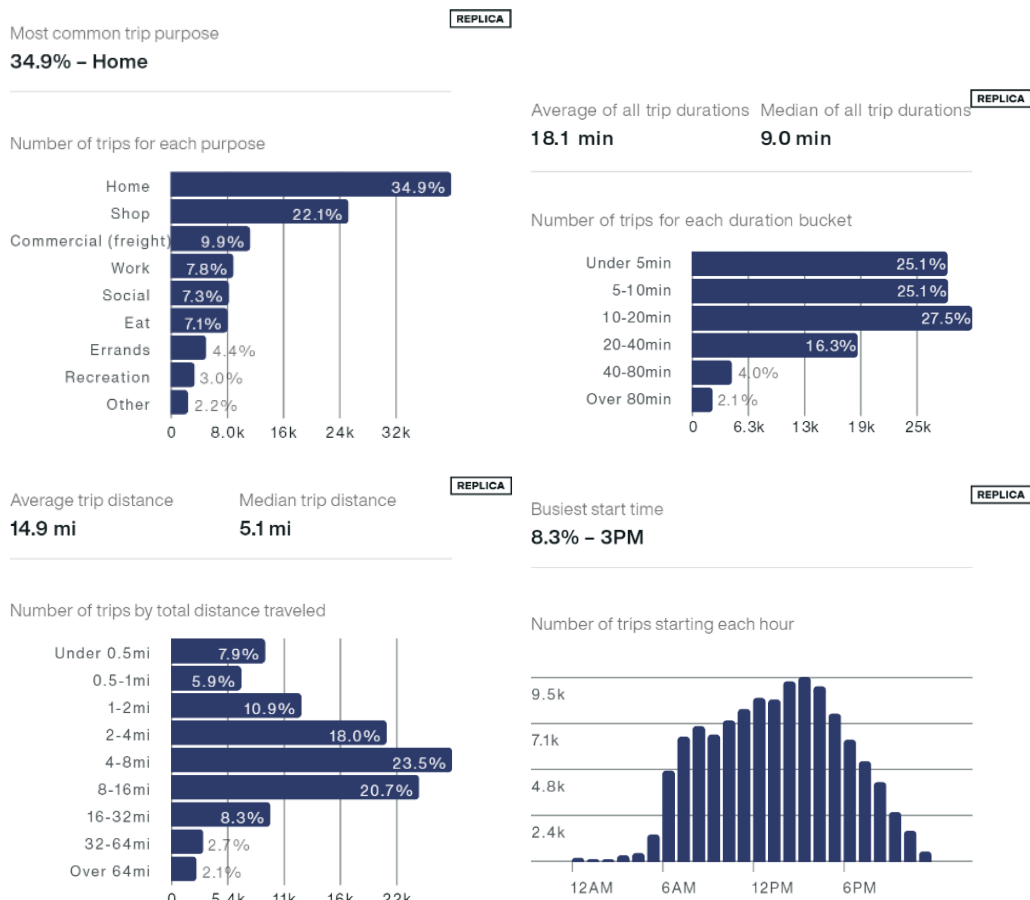


**Figure 82: Destinations for trips Originating in South Naples Subarea**





**Figure 83: Selected Trip Characteristics for South Naples Destinations**



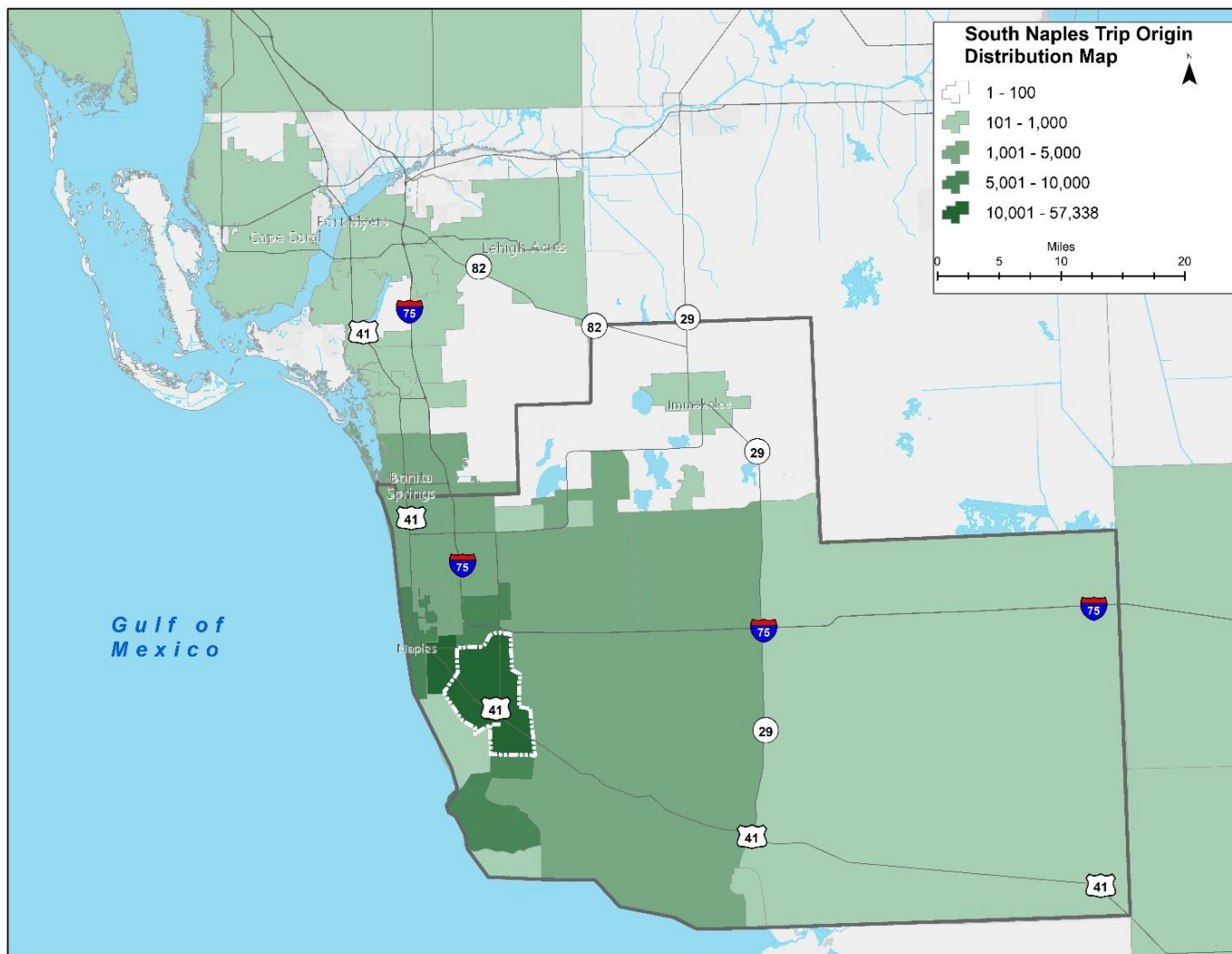
### 3.16.3 Work Location

Table 37 provides a list of the top work location subareas for 17,500 workers living in the South Naples subarea. This table indicates that residents of South Naples predominantly work in the South Naples subarea or one of the neighboring areas.

Shown in Figure 85 are selected characteristics related to the work commute trip. Even though a high number of residents work within the South Naples subarea, the home-to-work trips exhibit longer travel times and travel greater distances when compared with all trips generated daily. Information regarding working from home is also made available through Replica. It was estimated that 3,800 or 8% of residents in the South Naples subarea worked from home during the Spring 2021 quarter.



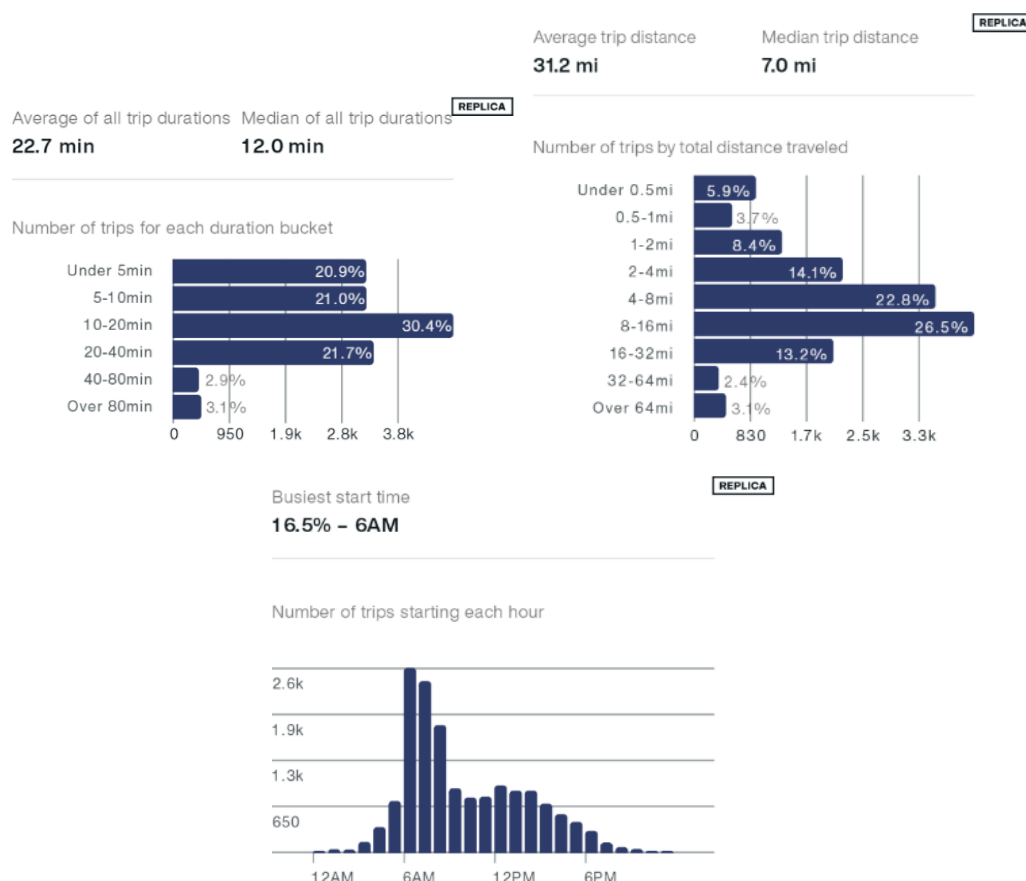
**Figure 84: Origins for trips Ending in South Naples Subarea**



**Table 37: Work Locations for Residents of South Naples**

Work Location	Population	Work Location	Population
South Naples	4,433	Rural Estates	335
City of Naples	2,706	Miami-Dade County	310
North Naples	2,015	Royal Fakapalm	281
City of Marco	1,600	Everglades City	264
East Naples	1,410	South Fort Myers	252
Central Naples	1,021	Ave Maria	235
Urban Estates	642	Bonita Springs	141
Golden Gate	475	Immokalee	127
Out of region	449	Big Cypress	113
San Carlos	444	Broward County	89

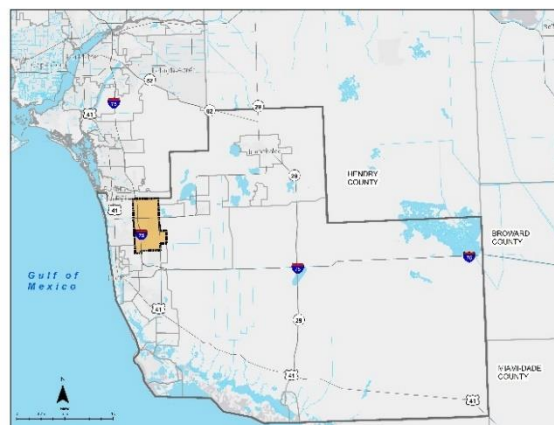
**Figure 85: South Naples Home to Work Trip Characteristics**



### 3.17 Urban Estates

The Urban Estates subarea is located west of CR 951 in northern Collier County. This area contains a mix of retail shopping centers, estate lot residences and gated single-family residential communities.

Table 38 identifies the number of trip origin and destination for the top 20 subarea locations when at least one trip end takes place in the Urban Estates subarea. The trip origins listed have a destination in the Urban Estates subarea and vice-versa for the destinations listed. The 55,270 trips originating in Urban Estates subarea and remaining within the area represents about 39% of the more than 140,000 trips originating within the area on an average weekday. There is also a strong connection between this area and adjacent North Naples subarea.



**Table 38: Urban Estates Trip Origins and Destinations**

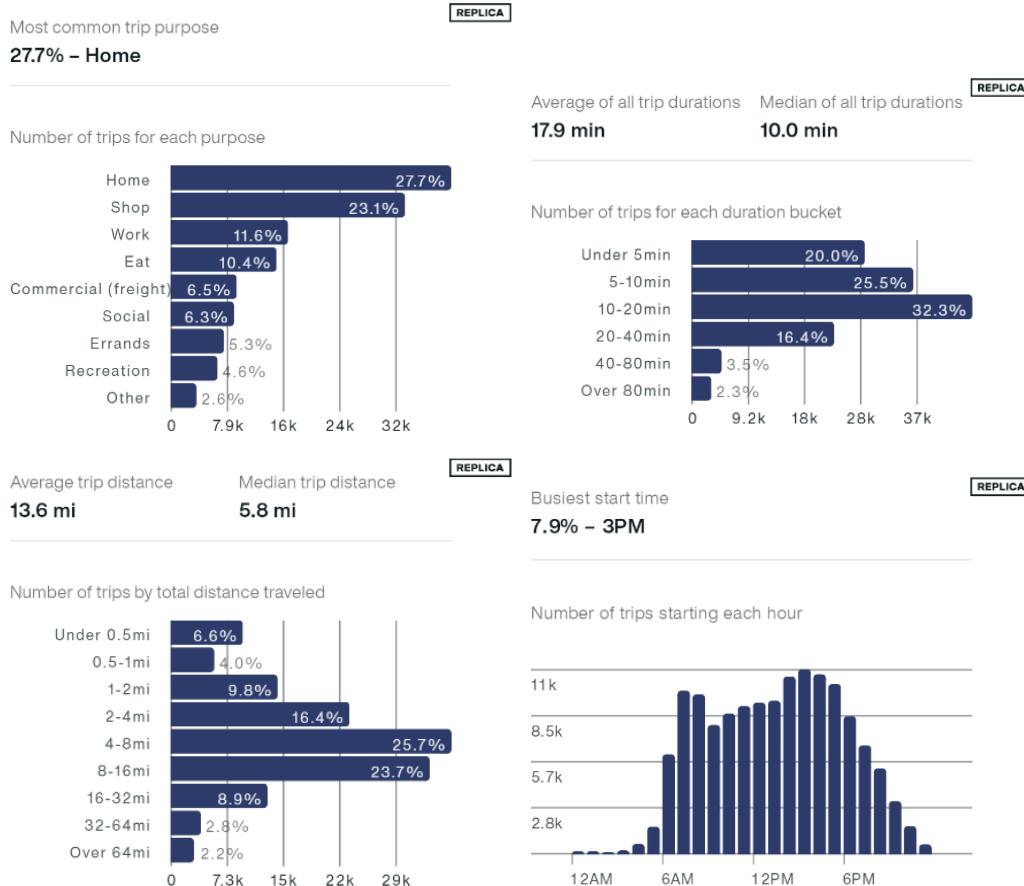
Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
Urban Estates (internal)	55,270	55,270	Out of region	1,617	1,929
North Naples	25,896	26,095	San Carlos	1,085	1,407
Rural Estates	8,782	9,501	Fort Myers	772	1,378
Golden Gate	8,291	8,311	Estero	1,452	1,360
City of Naples	6,550	6,857	Orange Tree	990	1,341
Central Naples	6,493	6,228	South Fort Myers	726	1,137
Bonita Springs	6,796	5,748	Lehigh Acres	472	912
South Naples	3,269	2,908	Gateway/Airport	437	903
East Naples	2,969	2,843	Immokalee	751	872
Heritage Bay	2,511	2,584	City of Marco Island	920	755

#### 3.17.1 Trips Beginning in Subarea

Figure 86 summarizes the trip purpose, trip distance, trip duration and start time for trips originating in the area. Trips originating in Urban Estates have a high home trip purpose at about 28% of the average daily weekday trips generated in the subarea. The average distance traveled is 13 miles and the average duration is estimated at 18 minutes for these trips. Figure 87 illustrates the geographic distribution of destinations for trips originating in the Urban Estates subarea. In addition to the high number of internal trips and trips to adjacent areas, there are a high number of trips to other areas within Collier County as well as subareas in southern Lee County.



**Figure 86: Selected Trip Characteristics for Urban Estates Origins**



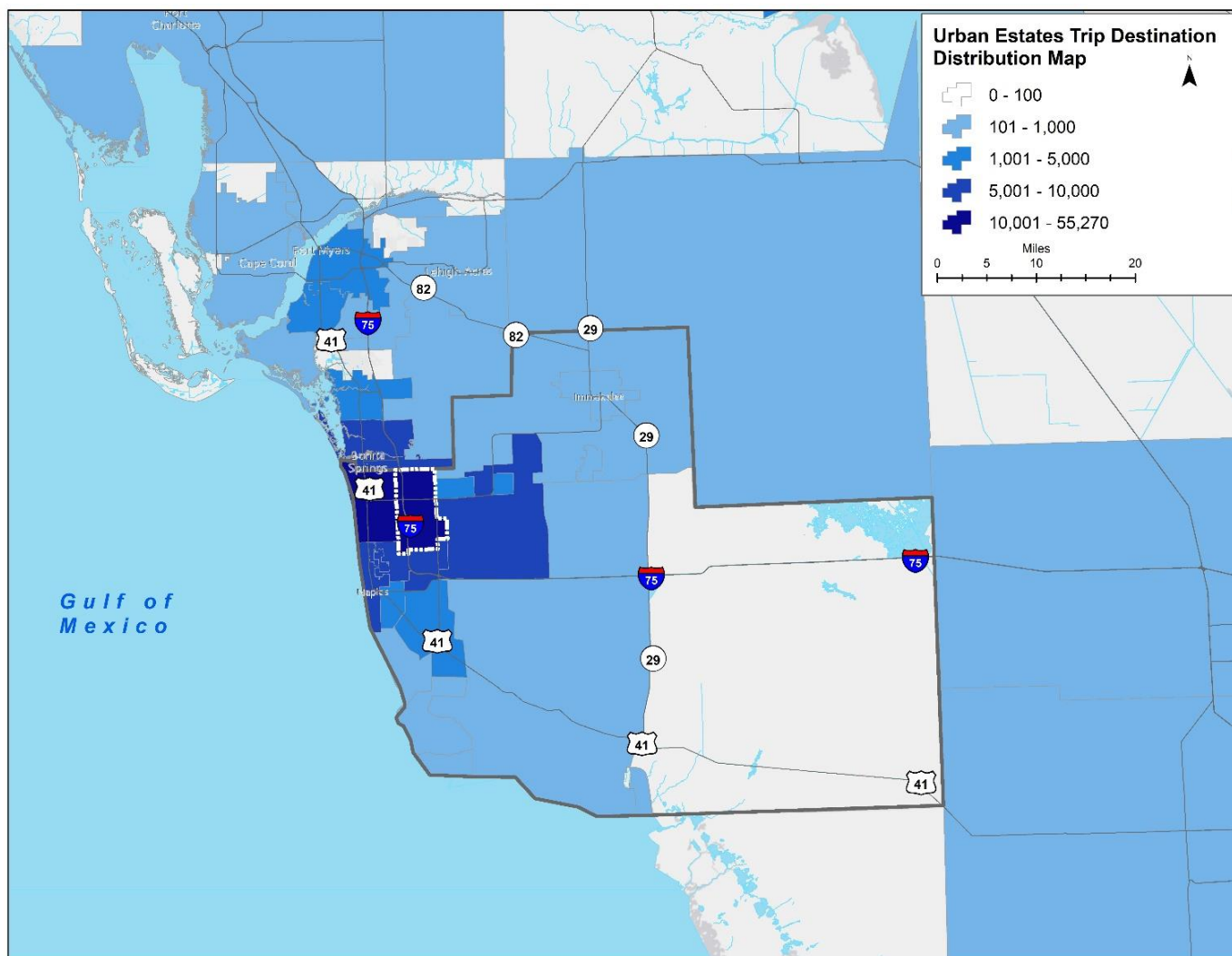
### 3.17.2 Trips Ending in Subarea

Figure 88 provides the trip characteristics summary for trips ending in the Urban Estates subarea. These summary statistics suggest that 30% in the Urban Estates have a home purpose. The consistent trip purposes of home and shopping for origin and destination trips speaks to the blend of land uses that exist within this area. While there are some short distance trips, the most common trips ending in this area are between 4-8 miles in length. Figure 89 graphically illustrates the geographic distribution of origins for trips ending in the Urban Estates subarea.



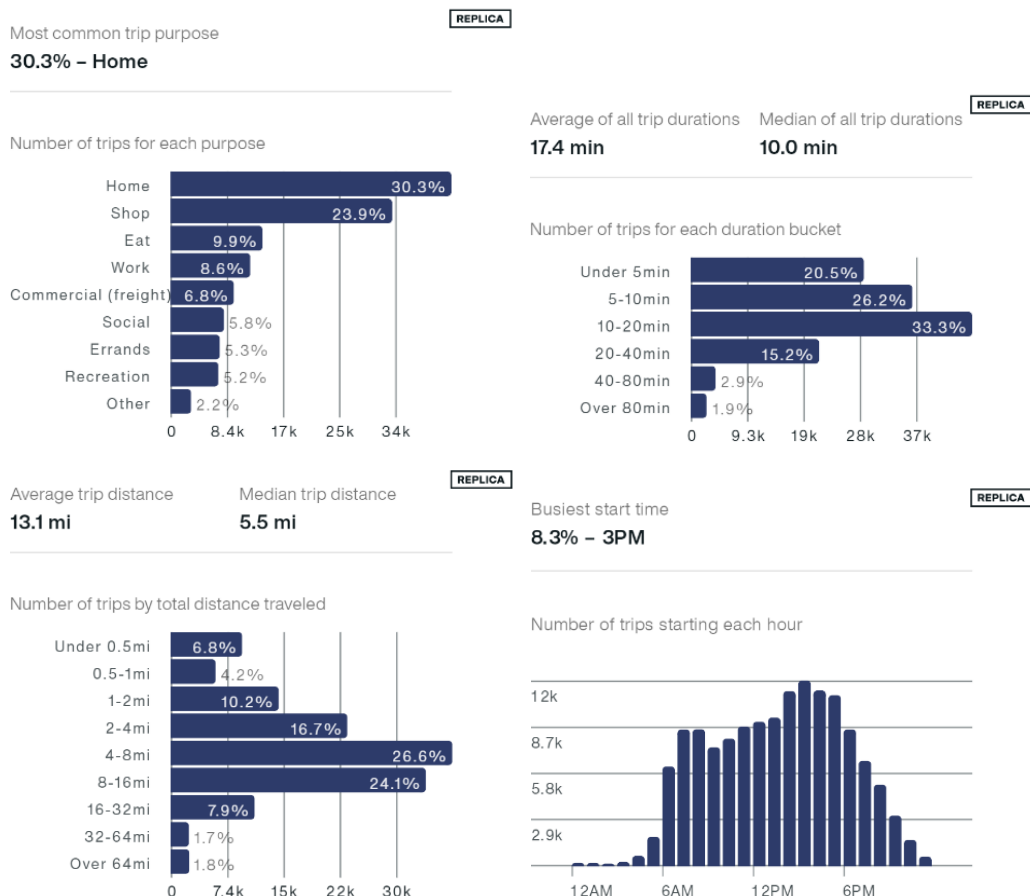


**Figure 87: Destinations for trips Originating in Urban Estates Subarea**





**Figure 88: Selected Trip Characteristics for Urban Estates Destinations**



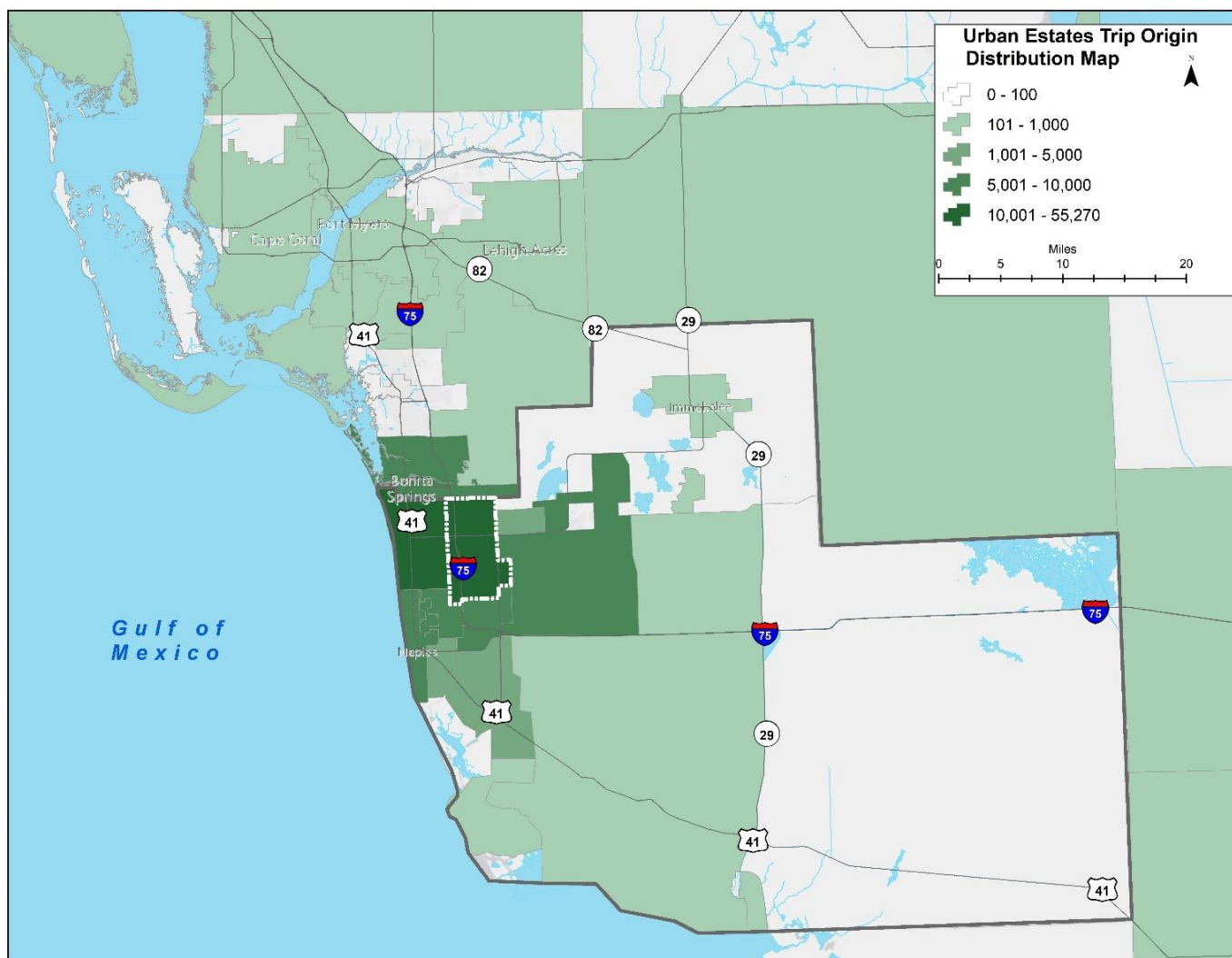
### 3.17.3 Work Location

Table 39 lists the top work location subareas for the 21,000 workers living in the Urban Estates subarea. While there is a high number of residents who work within the subarea, the highest number of jobs are held in the North Naples subarea.

Shown in Figure 90 are selected characteristics related to the work commute trip. Compared with trip time and distance for all trips originated within the study area, work trips on average are longer in time and distance. Information regarding working from home is also made available through Replica. It was estimated that 5,000 or 10.4% of the 48,500 residents in the Urban Estates subarea worked from home during the Spring 2021 quarter.



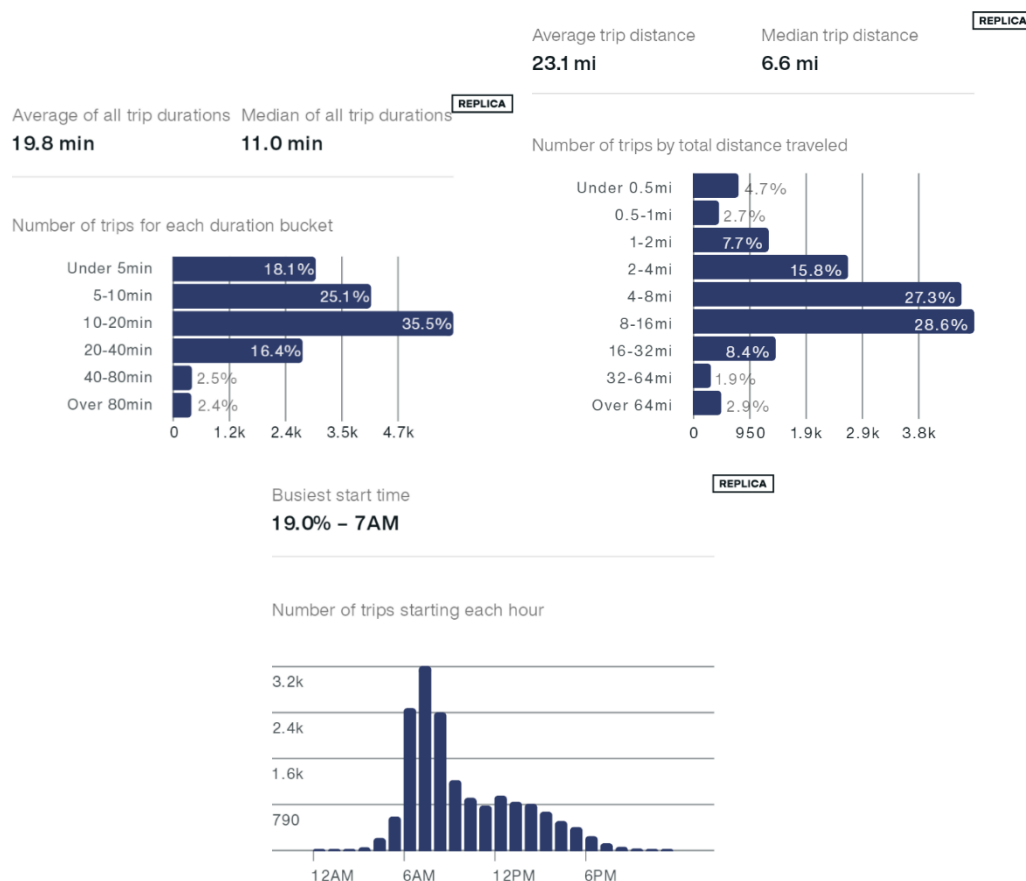
**Figure 89: Origins for trips Ending in Urban Estates Subarea**



**Table 39: Work Locations for Residents of Urban Estates**

Work Location	Population	Work Location	Population
North Naples	5403	Out of region	382
Urban Estates	4884	South Naples	376
City of Naples	2431	Miami-Dade County	325
Central Naples	1288	City of Marco	302
East Naples	1174	Immokalee	232
Golden Gate	642	Fort Myers	207
Rural Estates	595	Ave Maria	207
San Carlos	555	Broward County	193
South Fort Myers	477	Estero	121
Bonita Springs	462	Gateway/Airport	97

**Figure 90: Urban Estates Home to Work Trip Characteristics**



## 4.0 Appendices

### Appendix A: O&D Study Methodology



## 1.0 Purpose and Objective

The once distinct urbanized areas of Naples, Bonita Springs and Cape Coral have coalesced into a larger urbanized area within the context of the rapidly growing region of Southwest Florida. Facilitated through the regional transportation connections of Interstate 75, US 41 and SR 29, growth and connectivity in Collier and Lee Counties has resulted in continuous urban and suburban development patterns where trip-making patterns cross the county line with routine frequency. In Collier County population has grown from around 150,000 to 375,000, nearly 150%, from 1990 to 2020 based on the decennial Census. Additionally, recent growth in the eastern rural lanes of Collier County known as the Rural Lands Stewardship Area, has resulted in new travel patterns beginning to emerge with connections to the east coast of Florida.

As a result of this growth, as with other areas in the United States, transitioning from a smaller metro area to a medium-sized and large area brings with it the challenge of addressing congestion on the transportation system. Identifying root causes of congestion and prioritizing implementable solutions as part of the Congestion Management Process is a core requirement that the MPO is addressing. To that end, the Collier MPO desires to better understand trip origin and destination patterns to better plan for and develop the multimodal transportation system.

## 2.0 Approach

The Replica data platform will be used as the basis for conducting this origin and destination study. The Replica platform utilizes a composite set of data provided by third-party sources in order to extrapolate observed trip making patterns and travel behaviors to the entire population. These data sources include multiple types of mobile location data, consumer transaction data, census reported data and observed “ground-truth” data.

The data sources utilized by Replica are intended to cover a broad spectrum of sources and activities in order to minimize a sample size bias that may exist from relying on a single data source. This approach also provides a more resilient data stream to protect against disruptions in individual data sources. Below is a summary of each data source and its purpose.

- Mobile location data is used to create a representative sample of daily movement patterns. Four unique sources of data, collected from personal mobile devices and in-dash vehicle systems, are used to provide de-identified (anonymous) location and travel data.
  - a. Location-based services (LBS) data:
  - b. Cellular network data:
  - c. Vehicle in-dash GPS data
  - d. Point-of-interest (POI) data
- Consumer resident data provides demographic data from public and private sources for determining the basis of where people work and live, as well as the characteristics of the population.
- Land use / real estate data includes building, land use, and transportation network data that are used in determining where people travel and by what means the travel occurs.
- Credit transaction data provided by financial companies, this data captures consumer spending and is used to support levels of activity and spending by time and place.

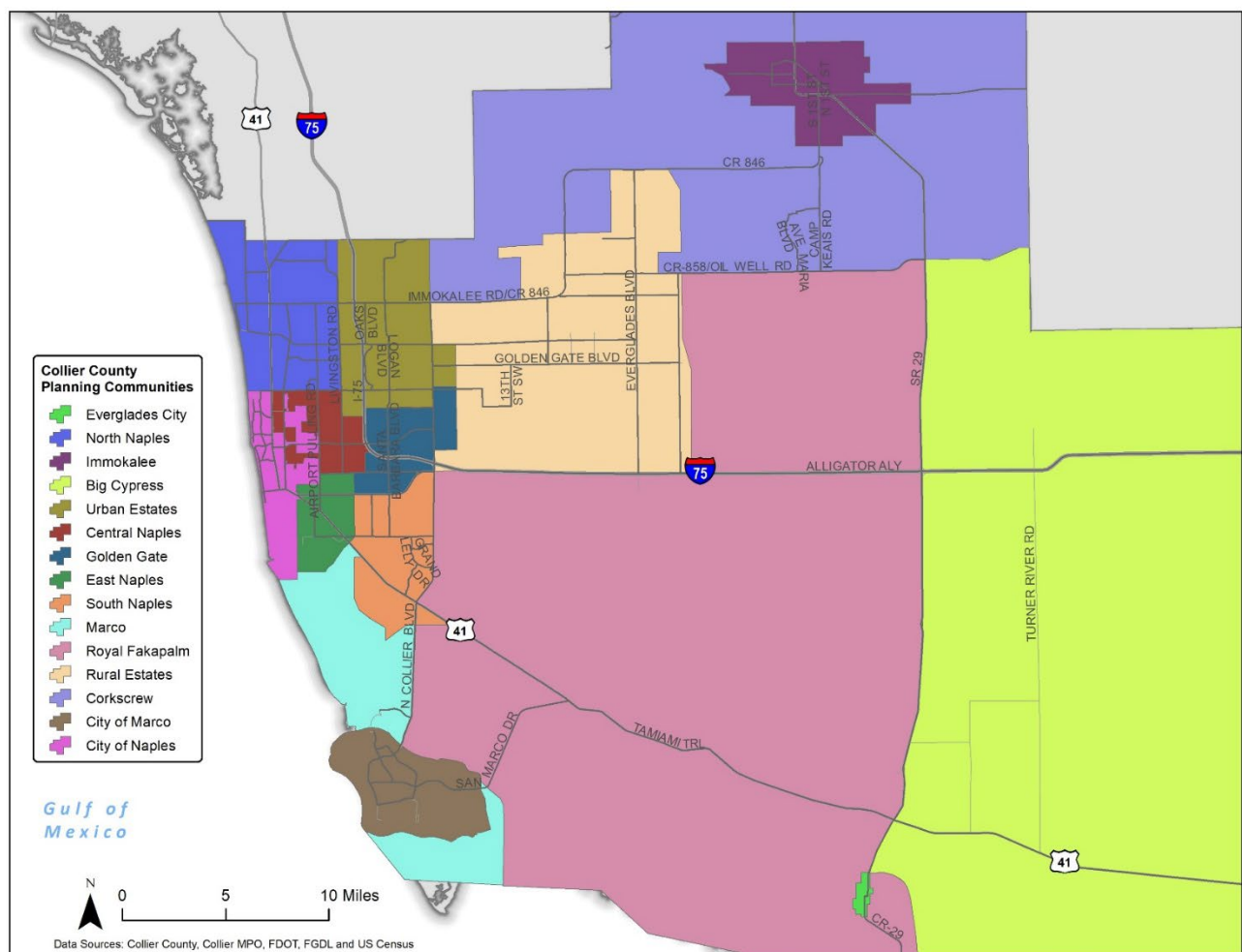


- Ground truth data is included as a final step in calibrating and improving overall accuracy of the Replica output. The ground truth data includes auto and freight volumes, transit ridership, and bicyclist and pedestrian counts.

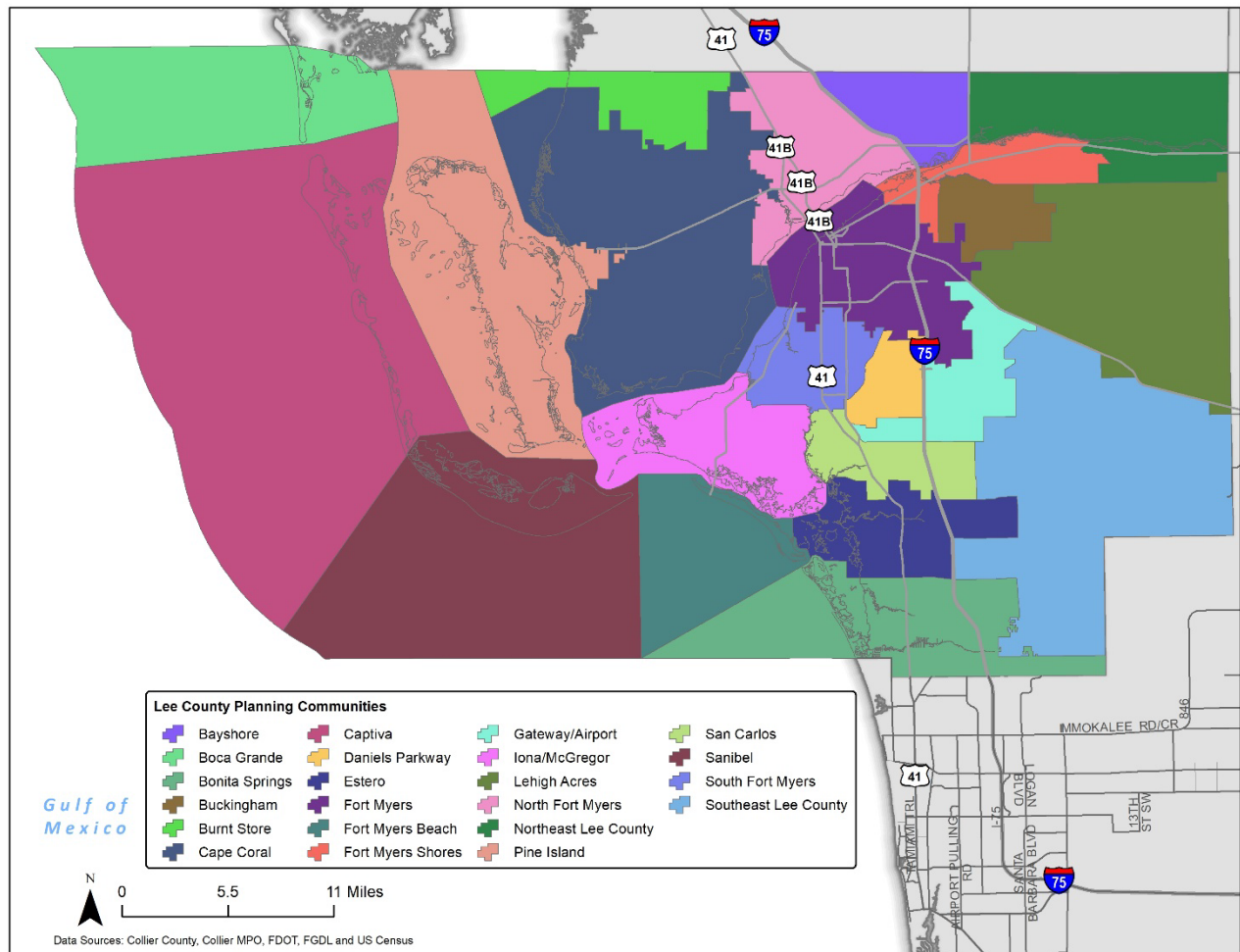
Utilizing the Places module within Replica allows for the creation of customized geographies and sub-areas for reporting travel. As the initial basis for evaluating trip origins and destination, a county-to-county level summary will be provided to illustrate the trips that are contained within Collier County, pass through Collier County without stopping, enter from outside with a destination in Collier and exit Collier County having an origin inside the county. The basis for this analysis is the average weekday travel observed during the Spring (March -May) 2021.

A further narrowing of areas used for reporting origins and destinations will utilize the Planning Community boundaries that have been established by Lee and Collier counties. Maps illustrating these areas are shown below in Figure 1 and Figure 2.

**Figure 1: Collier County Planning Communities**





**Figure 2: Lee County Planning Communities**

In addition to these 37 sub areas, trip origins and destinations will be summarized for the three adjacent counties of Broward, Hendry, and Miami-Dade, along with Charlotte County to the north of Lee County. Trips originating or destined for locations outside of these areas will be listed as other in the trip tables and will be included in the total trip count.

Trips that cross the Collier County line to the north or east will be summarized based on transportation facility. This summarization will be limited to the major regional facilities listed below.

1. Interstate 75
2. Livingston Road
3. SR 29
4. SR 82
5. US 41 / Tamiami Trail



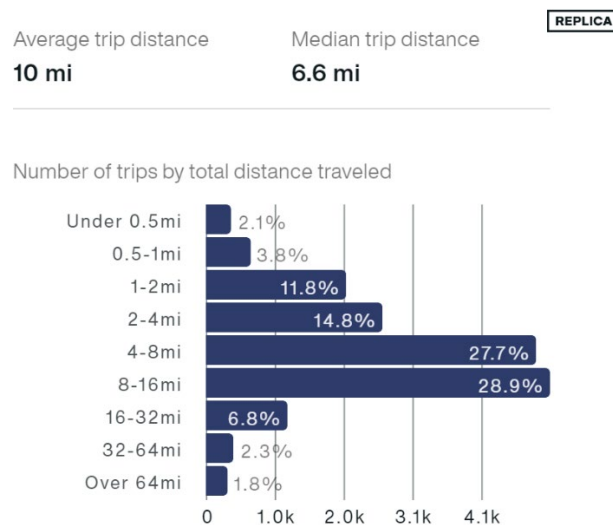
### 3.0 Analysis and Results

Adding the Planning Community Areas into the Replica data platform will provide trip characteristic information that can be summarized across multiple data elements. Maps illustrating travel patterns will be prepared to illustrate the highest destinations and origins paired with the Collier County Planning Areas. Additional details will be provided in tabular format and summarized to identify key patterns and observations. Focused on the county-wide travel patterns and the 15 Planning Communities in Collier County, it is anticipated that these summaries will be 3-5 pages in length.

Key variables to be summarized in tabular format will include trips made on a daily-basis as well as those made during the AM (6-9) and PM (4-7) peak periods. Characteristics such as trip purpose will also be presented to illustrate high origin-destination pairs for work trips in the AM peak and home trips in the PM peak. As discussed previously, trips passing through Collier County will be summarized as well to illustrate larger regional trip patterns. It is envisioned that these trip tables will aid the MPO in validating the regional travel demand model and other tools used in developing the Long Range Transportation Plan.

Additional charts and graphics illustrating averages and frequency distribution of trip characteristics such as trip length, trip distance, and trip purpose will also be prepared for each of the sub-area summaries. An example of one these charts is provided below in Figure 3.

**Figure 3: Example Trip Distance Chart**



## Appendix B: Subarea Origin and Destination Trip Matrix



Destinations	Collier County Subarea: Origins																
	Ave Maria	Big Cypress	Central Naples	City of Macro Island	City of Naples	Corkscrew	East Naples	Everglades City	Golden Gate	Heritage Bay	Immokalee	North Naples	Orange Tree	Royal Fakapalm	Rural Estates	South Naples	Urban Estates
Ave Maria	5,014	12	143	46	134	172	132	12	170	120	901	394	298	26	839	113	364
Big Cypress	18	349	14	37	37	25	17	122	18	1	45	30	5	86	50	101	17
Central Naples	167	17	19,331	847	13,102	32	5,763	35	6,938	316	364	13,643	263	136	2,677	3,742	6,493
City of Marco Island	39	35	814	43,800	1,560	24	1,470	171	1,263	70	129	1,276	66	419	576	7,503	755
City of Naples	165	45	12,924	1,566	52,570	39	10,465	57	7,159	337	407	17,337	380	234	3,089	6,818	6,550
Corkscrew	172	25	32	27	39	685	20	3	37	35	608	104	61	48	249	28	80
East Naples	164	26	5,781	1,495	10,454	20	28,132	77	6,962	197	328	5,449	179	257	1,881	12,263	2,969
Everglades City	10	67	42	146	74	3	86	1,668	63	4	27	76	1	273	23	368	52
Golden Gate	217	17	6,892	1,444	7,360	37	6,706	46	45,537	357	459	8,639	494	216	5,667	7,881	8,291
Heritage Bay	124	1	277	84	387	35	182	2	390	2,949	198	1,185	419	10	1,695	156	2,511
Immokalee	928	41	327	136	423	608	254	24	396	194	43,465	820	240	82	1,150	291	751
North Naples	507	33	13,657	1,418	18,196	104	5,230	64	8,427	1,239	902	111,944	1,084	240	7,270	4,926	25,896
Orange Tree	342	5	229	78	293	61	122	3	381	351	309	737	3,434	24	3,421	191	-
Royal Fakapalm	35	120	120	401	173	49	244	333	190	10	96	196	18	1,500	527	1,147	126
Rural Estates	917	46	2,409	926	2,781	249	1,538	12	5,348	1,817	1,258	5,993	3,698	313	22,777	2,491	8,782
South Naples	146	112	4,197	7,537	7,812	28	12,327	375	8,381	210	391	5,043	326	1,223	3,167	57,338	3,269
Urban Estates	457	26	6,228	920	6,857	80	2,843	27	8,311	2,584	872	26,095	1,341	137	9,501	2,908	55,270
Bayshore	1	3	8	7	4	3	12	-	16	-	19	41	5	3	18	11	21
Boca Grande	-	-	2	1	1	1	1	1	-	-	2	6	1	1	-	1	2
Bonita Springs	171	29	1,766	363	3,047	42	1,148	35	1,508	519	319	18,387	109	365	1,957	1,149	6,796
Buckingham	5	3	9	5	20	3	4	-	9	3	27	30	3	1	13	35	31
Burnt Store	-	-	5	2	5	-	1	-	4	-	1	5	-	-	2	1	3
Cape Coral	43	35	239	269	322	23	153	3	127	25	211	927	46	36	249	248	344
Captiva	-	2	5	9	15	-	6	2	8	6	1	35	4		2	4	10
Daniels Parkway	17	14	60	43	83	3	27	1	34	8	46	202	17	-	76	73	126
Estero	97	10	635	228	907	20	346	7	673	108	423	3,392	30	109	674	454	-
Fort Myers	124	41	470	334	574	53	304	11	341	64	967	1,649	83	53	432	572	772
Fort Myers Beach	7	6	48	44	146	-	33	9	47	5	29	538	6	11	38	48	155
Fort Myers Shores	39	5	40	37	84	7	37	9	29	9	144	157	9	9	76	45	72
Gateway/Airport	34	23	232	305	313	7	174	6	147	46	211	689	54	30	256	268	437
Iona/McGregor	11	13	89	46	196	5	66	8	101	16	104	460	12	10	103	97	191
Lehigh Acres	207	17	328	221	362	141	160	22	264	43	2,639	916	48	52	341	265	472
North Fort Myers	23	24	77	53	53	9	40	1	50	13	122	289	28	22	92	100	153
Northeast Lee County	8	2	10	14	9	4	10	1	8	-	47	31	10	3	11	18	15
Pine Island	2	3	14	14	49		6	1	5	5	14	33	2	1	28	11	10
San Carlos	67	14	756	268	668	31	307	8	773	112	453	1,950	68	135	689	590	-
Sanibel	11	3	19	46	56	6	22	7	26	7	9	138	11	18	70	43	115
South Fort Myers	55	14	337	235	461	24	252	11	263	63	328	1,438	34	42	332	378	726
Southeast Lee County	24	7	86	20	61	27	37	-	44	19	147	186	8	28	109	75	225
Broward County	90	254	180	305	336	59	166	64	304	23	153	366	144	22	310	215	290
Charlotte County	44	45	112	115	127	9	68	6	86	23	239	311	38	21	125	200	183
Hendry County	354	124	33	17	43	129	16	17	33	42	1,695	92	38	46	129	42	137
Miami-Dade County	117	275	268	376	527	58	230	115	465	28	144	630	252	51	505	521	467
Out of Region	203	291	915	1,651	2,404	132	788	261	732	111	1,073	3,044	163	119	997	1,335	1,617
Grand Total	11,176	2,234	80,160	65,936	133,125	3,047	79,945	3,637	106,068	12,089	60,326	234,903	13,530	6,412	72,193	115,064	135,546

Origins	Collier County Subarea: Destinations																
	Ave Maria	Big Cypress	Central Naples	City of Macro Island	City of Naples	Corkscrew	East Naples	Everglades City	Golden Gate	Heritage Bay	Immokalee	North Naples	Orange Tree	Royal Fakapalm	Rural Estates	South Naples	Urban Estates
Ave Maria	5,014	18	167	39	165	171	164	10	217	124	928	507	35	342	917	146	457
Big Cypress	12	349	17	35	45	29	26	67	17	1	41	33	120	5	46	112	26
Central Naples	143	14	19,331	814	12,924	33	5,781	42	6,892	277	327	13,657	120	229	2,409	4,197	6,228
City of Marco Island	46	37	847	43,800	1,566	27	1,495	146	1,444	84	136	1,418	78	401	926	7,537	920
City of Naples	134	37	13,102	1,560	52,570	46	10,454	74	7,360	387	423	18,196	173	293	2,781	7,812	6,857
Corkscrew	171	29	33	24	46	685	19	2	60	27	573	150	56	51	307	39	110
East Naples	132	17	5,763	1,470	10,465	19	28,132	86	6,706	182	254	5,230	244	122	1,538	12,327	2,843
Everglades City	12	122	35	171	57	2	77	1,668	46	2	24	64	333	3	12	375	27
Golden Gate	170	18	6,938	1,263	7,159	60	6,962	63	45,537	390	396	8,427	190	381	5,348	8,381	8,311
Heritage Bay	120	1	316	70	337	27	197	4	357	2,949	194	1,239	10	351	1,817	210	2,584
Immokalee	901	45	364	129	407	573	328	27	459	198	43,465	902	96	309	1,258	391	872
North Naples	394	30	13,643	1,276	17,337	150	5,449	76	8,639	1,185	820	111,944	196	737	5,993	5,043	26,095
Orange Tree	298	5	263	66	380	51	179	1	494	419	240	1,084	18	3,434	3,698	326	1,341
Royal Fakapalm	24	118	110	419	200	56	239	294	173	7	80	212	2,459	19	463	1,163	116
Rural Estates	839	50	2,677	576	3,089	307	1,881	23	5,667	1,695	1,150	7,270	527	3,421	22,777	3,167	9,501
South Naples	113	101	3,742	7,503	6,818	39	12,263	368	7,881	156	291	4,926	1,147	191	2,491	57,338	2,908
Urban Estates	364	17	6,493	755	6,550	110	2,969	52	8,291	2,511	751	25,896	126	990	8,782	3,269	55,270
Bayshore	-	2	10	7	24	1	10	-	29	6	17	75	7	2	26	34	38
Boca Grande	-	-	-	-	1	-	-	1	-	-	-	7	-	1	4	-	2
Bonita Springs	140	13	1,497	305	2,377	47	936	40	1,565	446	264	15,689	77	253	1,340	1,091	5,748
Buckingham	8	1	22	4	28	1	12	-	10	5	39	53	3	1	17	33	48
Burnt Store	-	-	4	2	4	-	1	-	6	-	3	7	-	-	3	-	4
Cape Coral	51	35	415	97	527	23	267	17	374	53	276	1,278	40	45	360	551	688
Captiva	-	-	7	16	22	-	3	-	3	1	4	49	2	1	2	6	11
Daniels Parkway	6	2	112	26	155	6	76	2	108	16	92	269	7	10	70	78	201
Estero	68	8	648	205	940	26	339	13	622	101	311	3,437	32	75	484	542	1,360
Fort Myers	112	79	635	234	820	32	487	27	687	106	1,230	2,051	59	90	652	873	1,378
Fort Myers Beach	7	7	47	26	97	1	34	4	34	9	30	424	6	5	41	47	132
Fort Myers Shores	40	4	103	16	145	9	91	6	86	10	186	308	11	16	79	111	193
Gateway/Airport	26	20	381	120	525	10	350	14	342	75	237	1,152	55	38	358	495	903
Iona/McGregor	11	11	92	66	173	7	61	13	67	19	135	384	10	13	86	71	152
Lehigh Acres	263	22	486	92	566	112	414	39	479	99	2,542	1,307	51	68	458	512	912
North Fort Myers	27	22	142	31	142	8	83	7	147	28	148	387	31	25	143	181	296
Northeast Lee County	9	-	12	8	18	3	7	4	16	-	48	66	6	-	8	31	31
Pine Island	4	2	28	5	31	1	12	4	14	3	26	41	2	3	26	19	28
San Carlos	69	9	754	168	791	34	441	17	907	105	439	2,539	41	101	674	777	-
Sanibel	11	2	17	46	57	4	26	2	25	9	13	124	3	14	54	28	83
South Fort Myers	62	18	475	134	569	15	390	21	565	91	534	1,554	33	62	452	554	1,137
Southeast Lee County	40	2	28	18	64	22	31	-	52	18	141	217	6	20	100	73	213
Broward County	174	286	270	170	657	42	221	78	374	35	201	562	116	43	425	439	571
Charlotte County	48	59	187	50	267	17	136	15	189	46	182	482	32	43	223	238	349
Hendry County	413	100	61	12	52	141	39	12	41	59	1,944	127	28	59	185	70	172
Miami-Dade County	125	271	242	393	545	53	214	108	413	31	191	561	208	63	515	490	460
Out of Region	221	286	1,035	1,522	2,466	150	896	268	836	127	1,001	3,357	234	124	1,070	1,488	1,929
Grand Total	10,822	2,269	81,551	63,743	132,178	3,150	82,192	3,715	108,231	12,092	60,327	237,662	7,028	12,454	69,418	120,665	141,505

Work Location	Collier County Subarea: Home Location																
	Ave Maria	Big Cypress	Central Naples	City of Macro Island	City of Naples	Corkscrew	East Naples	Everglades City	Golden Gate	Heritage Bay	Immokalee	North Naples	Orange Tree	Royal Fakapalm	Rural Estates	South Naples	Urban Estates
Ave Maria	226	6	38	25	35	30	86	4	275	156	626	105	270	11	1,078	235	207
Big Cypress	2	1	3	9	-	2	15	4	9	3	8	4	3	17	12	113	15
Central Naples	87	5	1,724	229	537	20	760	10	2,918	115	288	1,525	192	19	1,389	1,021	1,288
City of Marco Island	12	3	120	4,363	27	5	393	12	950	20	126	120	33	76	487	1,600	302
City of Naples	105	2	2,542	295	3,165	28	2,348	23	3,679	103	534	2,937	258	59	2,546	2,706	2,431
Corkscrew	15	1	5	-	-	13	1	-	18	10	211	32	14	1	111	6	8
East Naples	22	1	501	137	428	12	2,753	15	2,345	23	193	700	39	89	1,072	1,410	1,174
Everglades City	3	2	4	23	3	-	15	18	17	-	-	1	-	47	9	264	10
Golden Gate	19	-	299	45	106	2	379	1	4,260	16	159	607	72	9	538	475	642
Heritage Bay	51	-	7	-	-	7	13	-	41	32	115	24	48	3	193	45	49
Immokalee	64	1	157	25	16	101	107	2	132	39	5,737	102	107	5	438	127	232
North Naples	171	5	2,026	405	771	57	1,179	47	5,205	165	1,017	9,810	431	97	3,616	2,015	5,403
Orange Tree	32	1	5	10	5	2	9	-	51	26	86	26	138	2	403	51	38
Royal Fakapalm	3	6	10	35	1	-	28	11	22	-	4	6	2	63	12	281	18
Rural Estates	136	1	260	12	51	20	156	-	1,503	133	321	222	285	9	2,612	335	595
South Naples	43	13	295	399	110	17	567	62	1,067	36	159	336	97	194	653	4,433	376
Urban Estates	71	-	439	91	219	17	299	7	1,757	97	185	1,087	146	33	1,680	642	4,884
Bayshore	-	-	-	-	-	-	1	-	-	-	3	-	-	-	7	-	1
Boca Grande	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bonita Springs	56	-	53	3	90	4	70	-	409	31	164	876	57	1	665	141	462
Buckingham	-	-	-	-	-	1	-	-	-	-	7	5	-	-	-	-	-
Burnt Store	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cape Coral	1	-	1	6	41	-	-	-	-	1	59	22	2	-	52	1	45
Captiva	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daniels Parkway	1	-	-	-	-	-	-	-	9	6	-	18	2	-	11	-	21
Estero	10	-	27	11	12	5	23	-	236	13	492	248	29	-	194	53	121
Fort Myers	3	1	120	9	19	12	54	-	152	7	156	290	14	10	318	44	207
Fort Myers Beach	-	-	5	-	2	-	-	-	-	-	-	-	-	-	-	-	-
Fort Myers Shores	-	-	-	-	-	3	1	-	4	-	52	11	-	-	9	-	3
Gateway/Airport	-	-	5	3	8	1	-	2	11	2	7	29	-	13	83	39	97
Iona/McGregor	-	-	34	-	13	-	1	-	20	-	-	36	-	-	-	-	-
Lehigh Acres	1	-	10	-	6	5	-	-	31	-	77	4	-	-	30	2	38
North Fort Myers	12	-	-	-	-	1	-	-	26	20	42	8	25	-	84	-	-
Northeast Lee County	-	-	-	-	-	-	1	-	-	-	-	-	-	-	5	-	-
Pine Island	-	-	-	-	-	-	-	-	-	-	3	-	-	-	13	-	1
San Carlos	27	-	227	115	147	20	191	3	660	53	295	645	67	18	575	444	555
Sanibel	7	-	-	-	7	4	-	-	-	9	-	64	26	1	87	-	50
South Fort Myers	23	-	134	77	80	10	167	1	386	26	177	342	29	6	374	252	477
Southeast Lee County	15	-	3	-	3	1	-	-	-	7	32	9	10	-	56	-	8
Broward County	4	2	14	85	32	2	18	-	49	2	18	66	3	1	72	89	193
Charlotte County	8	-	-	-	4	1	-	-	-	9	7	-	31	-	111	-	-
Hendry County	1	-	-	-	-	-	-	-	17	-	8	-	-	-	-	-	11
Miami-Dade County	22	7	109	142	82	5	107	17	346	24	50	294	34	22	350	310	325
Out of Region	16	-	216	348	410	3	119	-	100	14	153	935	31	23	158	449	382
Grand Total	1,269	58	9,393	6,902	6,430	411	9,861	239	26,705	1,198	11,571	21,546	2,495	829	20,103	17,583	20,669



## Collier County Transportation Planning Comments/Responses

### General Comments:

- A short Executive Summary or Conclusion of the report would be helpful.
  - **Text was updated to clarify executive summary and key sub-categories**
- During the presentation to the TAC on 9/26/22, Benesch provided what seemed like a useful map of the higher volume areas. I believe this map may be very useful for determining patterns or traffic trends between subarea. That map and an explanation of what it depicts should be added to the report. Possibly in a conclusion section or ES section.
  - **Map and chart used in presentation have been added to the executive summary section**
- It would be helpful to have some trend analysis to be used in future plans or the AUIR. For example – can the quarterly or seasonal data provided in this report be extrapolated for annual trends? Can it be used in the AUIR, LRTP, Bike Ped Master Plan Update, congestion plan/report?
  - **I believe there is some value as indicated. One of the more recent opportunities Replica provides is the ability for us to grant access to our clients on a limited basis to explore the application and data. It comes with a presentation/introduction from Replica. I think there is value in letting you and others see/use the application to better understand the capabilities and uses. I'd like to discuss this with you to better understand your expectations before proceeding.**
- Could a reason for the larger amounts of people considered working from home data be that this was during season, and people may have come down to this area for a vacation but were also working remotely? Did the work from home trend increase in other jurisdictions (other areas of the country)? Is the work from home trend still increasing in other areas?
  - **It's possible that the relocation of people could be impacting the amount of people working from home. In the graph that was added, there was a higher number of people working from home in the summer of 2022 than in the spring of 2022.**
- Can some of the locations for the short trip data be used in the future when determining locations for sidewalks, bike lanes, SUP for a future Bike/Ped Master Plan? This could help determine potential usage areas.
  - **I definitely think there could be ways to explore this. I have seen some examples where others have created an index of expected walking potential based on land-use compared with walking data from Replica as a way of identifying areas where walking could be increase. It's also possible to look at where walking trips are occurring and overlaying that with existing/planned infrastructure.**

### Specific Comments:

- Page 1 – 5<sup>th</sup> paragraph – 1<sup>st</sup> Sentence should start with The remainder.... not This remainder....
  - **This was corrected.**
- Page 8 – Table 5. Define the label “Countywide Workers”. When all Residents Working are added (137,300 + 14,300 + 34,000 = 185,600) it does not equal the Countywide Worker total = 158,000. Should it? A better explanation of the categories would help.

- **Clarification was added to the table. Specifically, those working from home are a subset of the total workers.**
- Page 18-20 the text is 3.2.2 indicates 13 workers travel to South Naples from Big Cypress but Table 9 indicated only 12 people.
  - **This was changed for consistency between the table and text**
- Page 21 – 3.3.1 indicates that the predominant activity included golfing but page 22 – figure 14 does not specify golfing. Is that a recreational activity? Recreational purposes are not a large category in this location. Should there be a better explanation here?
  - **Golfing was removed since this was more indicative of the subarea's land use and not representative of the major trip generators.**



## Congestion Management Process Update: Origin-Destination Study

Technical and Citizens Advisory Committees  
November 28, 2022



1



## Origin-Destination Study

- Recap Origin-Destination Report
- Changes since September meeting
- Today's Action

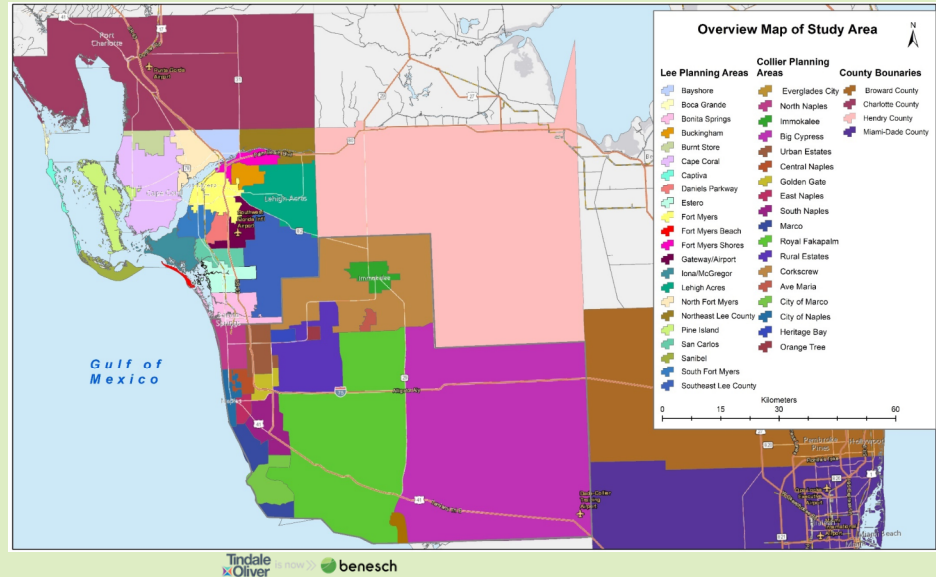


2



## Origin-Destination Report Overview

- 17 land-use / planning subareas in Collier County
- 22 planning subareas in Lee County
- 4 regional / neighboring counties

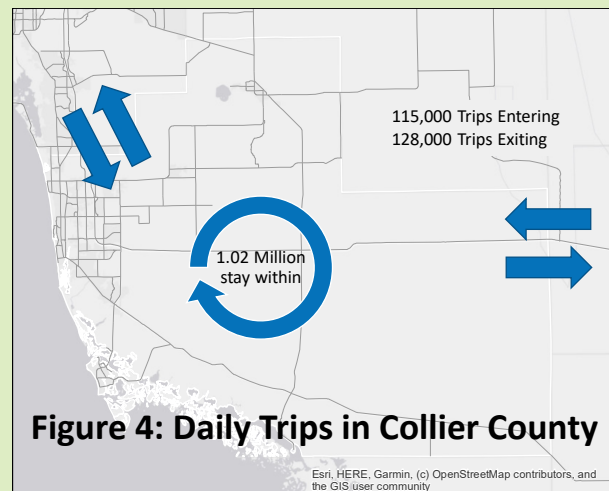


3



## Origin-Destination Report Overview

- Daily Trips Generated



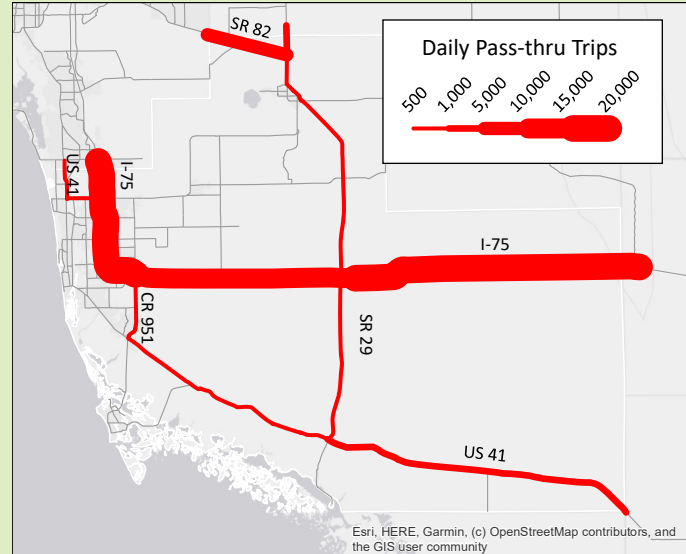
4



## Origin-Destination Report Overview

- Daily Trips Generated
- Trips Passing Through Collier County

Figure 5: Daily Pass-Through Trips at Key Gateways

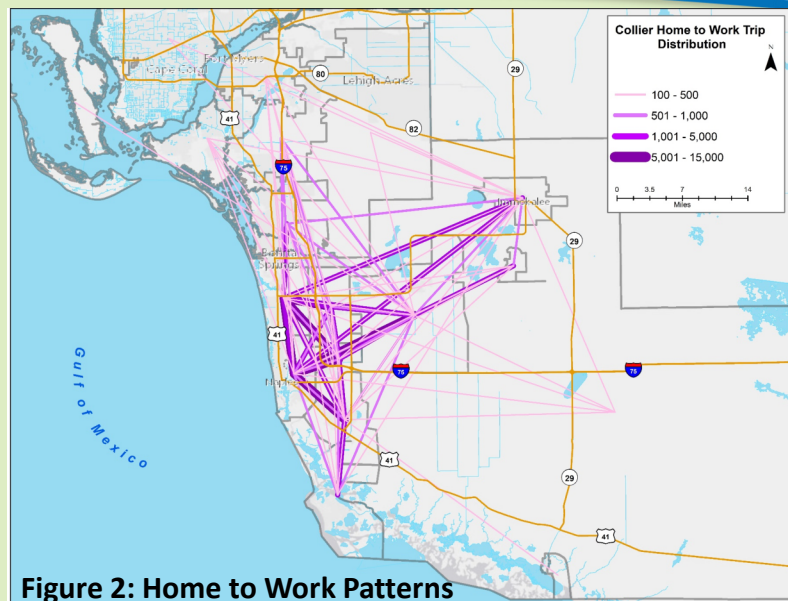


5



## Origin-Destination Report Overview

- Daily Trips Generated
- Trips Passing Through Collier County
- Home to Work Trip Patterns



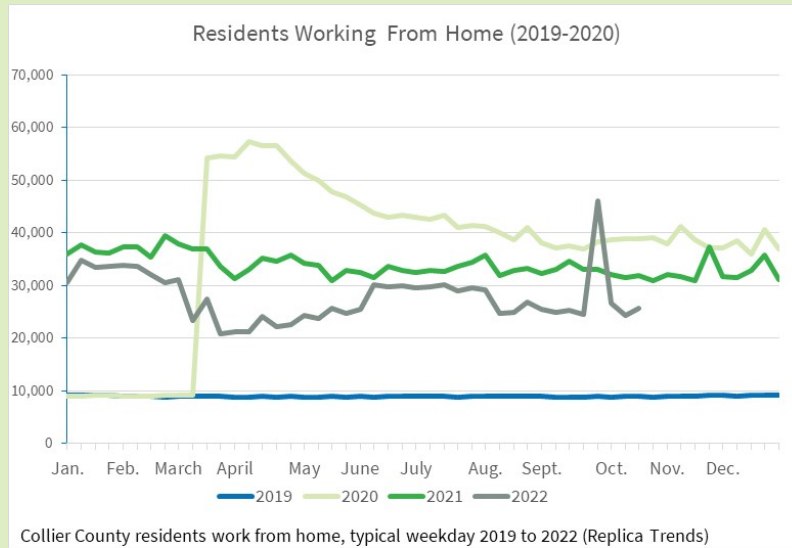
6



## Origin-Destination Report Overview

- Daily Trips Generated
- Trips Passing Through Collier County
- Home to Work Trip Patterns
- Work from Home

**Figure 3: Work from Home Trends**

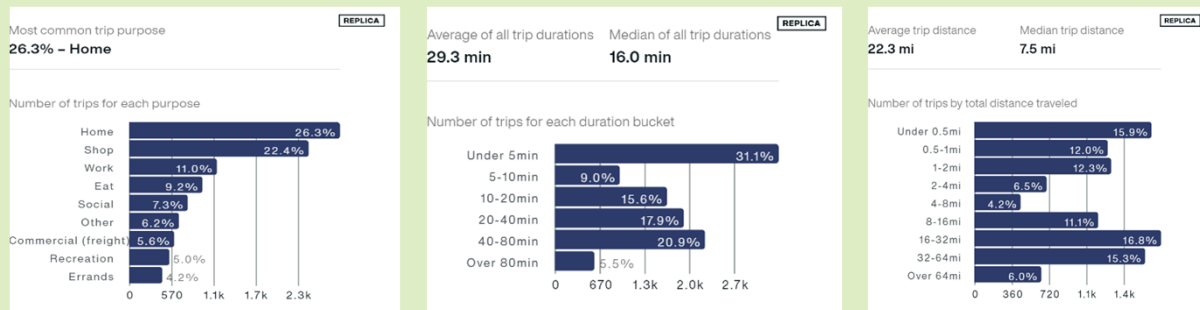


7



## Subarea Reporting

- Trip Characteristics for Origin, Destination, and Home-to-Work Trips



8





## Changes since September

- Corrections to typos and text inconsistencies with tables.
- Updates to the Executive Summary section;
  - Home-to-work detail added
  - Work from home trends added
- Clarification added to Table 5 and text for explaining work locations.
- Revised text describing the number of trips passing through Collier County with an origin and a destination in Lee County.

9



## Today's Action

CMC endorse the findings of the Origin-Destination Report and forward to MPO for approval.

10



## Contact

<p><b>Wally Blain, AICP</b>  <i>Benesch Project Manager</i>            615-241-6739  <a href="mailto:wblain@benesch.com">wblain@benesch.com</a></p>	<p><b>Anne McLaughlin</b>  <i>MPO Executive Director</i>            239-252-5884  <a href="mailto:Anne.mclaughlin@colliercountyfl.gov">Anne.mclaughlin@colliercountyfl.gov</a></p>
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Tindale & Oliver is now >> benesch

11




## Congestion Management Process Update: Origin-Destination Study

Congestion Management Committee  
November 16, 2022

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12

**EXECUTIVE SUMMARY**  
**COMMITTEE ACTION**  
**ITEM 7B**

**Endorse County's Updated Transit Asset Management Plan Performance Targets**

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**OBJECTIVE:** For the committee to endorse Collier County's updated Transit Asset Management (TAM) Plan performance targets.

**CONSIDERATIONS:** The Federal Transit Administration (FTA) published the final Transit Asset Management rule in July, 2016, requiring public transit agencies to develop and implement transit asset management plans. The rule became effective on October 1, 2018, and requires an update to the plan every four years. The rule also requires public transit agencies to set and report transit targets annually to the local MPO to ensure coordination and that the transit provider's projects and services are programmed in the MPO's Transportation Improvement Program (TIP). The MPO is also required to include the TAM targets as part of the planning efforts of the Long-Range Transportation Plan update and in the MPO's Transportation Improvement Program.

The MPO adopted the County's original TAM plan and performance targets on October 12, 2018. The Board of County Commissioners approved an updated TAM plan and performance targets on November 8, 2022. The new TAM performance targets are shown in **Attachment 1**. (See the BCC Executive Summary shown in **Attachment 2** for more information.)

Staff is bringing this item forward for endorsement, followed by Board adoption in December, in order to maintain consistency with the County's TAM plan and performance targets.

**STAFF RECOMMENDATION:** That the committee endorse the County's updated Transit Asset Management plan performance targets for adoption by the MPO.

Prepared By: Anne McLaughlin, MPO Director

Attachments:

1. TAM performance targets adopted by BCC on 11/8/22
2. Executive Summary BCC meeting 11/8/22

**TAM Plan Name:** Collier County  
**TAM Plan Type:** Tier II  
**Agency Name:** Collier County  
**Account Executive Name:** Michelle Arnold  
**Last Modified Date:** 09/22/2022

## Introduction

### Brief Overview

Collier Area Transit (CAT) provides Fixed Route, ADA Complementary Paratransit, and Transportation Disadvantages services for Collier County. CAT currently owns 67 Revenue Service Vehicles; 6 Service Vehicles; 2 Transfer Centers; 1 Administrative Building; 1 Maintenance/Operations Building; 1 Fueling Island and Storage Building; and 1 Bus Wash Facility. Maintenance of the facilities and buses is performed by Collier County, however, a contractor operates the bus services for CAT.

### Methods for Target-Setting

Collier Area Transit adheres to FTA and FDOT vehicle replacement requirements for useful life and mileage. Collier County Facilities targets are set utilizing Transit Economic Requirements Model (TERM) Scale and useful life.

### Performance Targets & Measures

Agency Name	Asset Category	Asset Class	2022 Target	2023 Target	2024 Target	2025 Target	2026 Target	2027 Target
Collier County	Equipment	Non Revenue/Service Automobile	25%	0%	100%	100%	100%	0%
Collier County	Equipment	Other Rubber Tire Vehicles	25%	0%	0%	0%	40%	60%
Collier County	Facilities	Maintenance	25%	100%	100%	100%	0%	0%
Collier County	Facilities	Passenger Facilities	0%	0%	0%	0%	0%	0%
Collier County	Facilities	Bus Wash Facility		0%	0%	0%	0%	0%
Collier County	Facilities	Fuel Station		0%	0%	0%	0%	0%
Collier County	Revenue Vehicles	BU - Bus	25%	0%	0%	4%	12%	12%
Collier County	Revenue Vehicles	CU - Cutaway	25%	0%	0%	4%	8%	0%
Collier County	Revenue Vehicles	VN - Van	25%	100%	25%	25%	0%	0%

## Capital Asset Inventory

### Asset Inventory Summary

Asset Category/Class	Total Number	Avg Age	Avg Mileage	Avg Replacement Cost/Value	Total Replacement Cost/Value
Revenue Vehicles	66	5.2	236,511	\$262,840.18	\$17,347,452.00
BU - Bus	32	6.6	378,345	\$454,679.00	\$14,549,728.00
CU - Cutaway Bus	30	3.4	102,748	\$82,286.00	\$2,468,580.00
VN - Van	4	7.0	105,064	\$82,286.00	\$329,144.00
Equipment	6	4.5	N/A	\$23,952.67	\$143,716.00
Non Revenue/Service Automobile	1	5.0	N/A	\$26,700.00	\$26,700.00
Other Rubber Tire Vehicles	5	4.4	N/A	\$23,403.20	\$117,016.00
Facilities	5	18.8	N/A	\$5,945,972.60	\$29,729,863.00
Maintenance	1	37.0	N/A	\$18,000,000.00	\$18,000,000.00
Passenger Facilities	2	22.5	N/A	\$5,120,185.00	\$10,240,370.00
Bus Wash Facility	1	5.0	N/A	\$921,800.00	\$921,800.00
Fuel Station	1	7.0	N/A	\$567,693.00	\$567,693.00

## Condition Assessment

Asset Condition Summary

Asset Category/Class	Total Number	Avg Age	Avg Mileage	Avg Replacement Cost/Value	Total Replacement Cost/Value	% At or Exceeds ULB	% of Track Miles in Slow Zone	Number of Facilities less than 3 on TERM scale
Revenue Vehicles	66	5.2	236,511	\$262,840.18	\$17,347,452.00	5%	N/A	N/A
BU - Bus	32	6.6	378,345	\$454,679.00	\$14,549,728.00	6%	N/A	N/A
CU - Cutaway Bus	30	3.4	102,748	\$82,286.00	\$2,468,580.00	0%	N/A	N/A
VN - Van	4	7.0	105,064	\$82,286.00	\$329,144.00	25%	N/A	N/A
Equipment	6	4.5	N/A	\$23,952.67	\$143,716.00	0%	N/A	N/A
Non Revenue/Service Automobile	1	5.0	N/A	\$26,700.00	\$26,700.00	0%	N/A	N/A
Other Rubber Tire Vehicles	5	4.4	N/A	\$23,403.20	\$117,016.00	0%	N/A	N/A
Facilities	5	18.8	N/A	\$5,945,972.60	\$29,729,863.00	N/A	N/A	1
Maintenance	1	37.0	N/A	\$18,000,000.00	\$18,000,000.00	N/A	N/A	1
Passenger Facilities	2	22.5	N/A	\$5,120,185.00	\$10,240,370.00	N/A	N/A	0
Bus Wash Facility	1	5.0	N/A	\$921,800.00	\$921,800.00	N/A	N/A	0
Fuel Station	1	7.0	N/A	\$567,693.00	\$567,693.00	N/A	N/A	0

Decision Support

Decision Support Tools

The following tools are used in making investment decisions:

Process/Tool	Brief Description
OMS CarteGraph	OMS Cartegraph, is a software system that tracks assets and work orders associated with such assets to help estimate necessary maintenance and replacement year for assets. An evaluation of our fleet is based on the year, mileage, and any other field specified in the report. The system produces an Overall Condition Index (OCI) that helps identify the replacement schedule.
Faster	Faster is a software system used by the County Fleet Division to track the maintenance, age, and mileage of the Transit fleet. This information is used to determine the replacement or overhauling of the fleet.

Investment Prioritization

The Florida Department of Transportation and the Federal Transit Administration determine the replacement schedule of assets purchased through grant funds. Collier Area Transit will replace vehicles and equipment per this policy. The maintenance schedules for vehicles and equipment will be established according to the original manufacturer's recommendations. Facility investments will be based on available funding and condition rating.

Proposed Investments

Project Name	Project Year	Asset Category	Asset Class	Cost	Priority	Updated Date
Replacement of 2 Support Vans	2026	Equipment	Other Rubber Tire Vehicles	\$46,000.00	Low	5/11/2022 3:41:42 PM
Replacement of Support Truck	2026	Equipment	Other Rubber Tire Vehicles	\$26,200.00	Low	
two (2) 40ft Bus Replacement	2025	Revenue Vehicles	BU - Bus	\$1,160,000.00	Medium	9/16/2022 12:24:26 PM
Five (5) 35ft Buses Replacement	2024	Revenue Vehicles	BU - Bus	\$2,800,000.00	Medium	
Replace 4 Cutaway Vehicles	2024	Revenue Vehicles	CU - Cutaway Bus	\$360,000.00	Medium	
Replacement Maintenance and Operations Facility	2024	Facilities	Maintenance	\$18,000,000.00	High	9/22/2022 4:40:59 PM
40' Bus Replacement	2023	Revenue Vehicles	BU - Bus	\$489,000.00	Medium	9/16/2022 12:21:32 PM
Support truck	2023	Equipment	Other Rubber	\$26,200.00	Medium	

replacement			Tire Vehicles			
Replace 3 Cutaway Vehicles	2023	Revenue Vehicles	CU - Cutaway Bus	\$250,000.00	Medium	

Signature

I, **Michelle Arnold** , hereby certify on **09/23/2022** that the information provided in this TAM Plan is accurate, correct and complete.



11/08/2022

**EXECUTIVE SUMMARY****Recommendation to approve the Transit Asset Management (TAM) Plan for Collier Area Transit (CAT).**

**OBJECTIVE:** To monitor and manage the capital assets of the public transit system to enhance safety; reduce maintenance costs; increase reliability; and improve performance.

**CONSIDERATIONS:** On July 26, 2016, the Federal Transit Administration (FTA) published the final Transit Asset Management rule requiring all recipients and subrecipients of Federal transit funding that own, operate, or manage public transportation capital assets to develop and implement transit asset management (TAM) plans. The rule also defines the term “state of good repair,” and requires that public transportation providers establish state of good repair standards and performance measures for four asset categories: rolling stock, equipment, transit infrastructure, and facilities. The rule became effective on October 1, 2018 and requires an update to the plan every four years.

The table below describes performance measures guidelines for each of the asset categories contained in the final rule for transit asset management.

<b>Asset Category</b>	<b>Performance Measure</b>
Equipment	Percentage of non-revenue, support-service and maintenance vehicles that have met or exceeded their useful life benchmark
Rolling Stock	Percentage of revenue vehicles within a particular asset class that have either met or exceeded their useful life benchmark
Infrastructure	Percentage of track segments with performance restrictions
Facilities	Percentage of facilities within an asset class rated below condition 3 on the TERM scale

The rule also requires public transportation agencies to set and report transit targets annually to the local Metropolitan Planning Organization (MPO) to ensure coordination and that the transit provider’s projects and services are programmed in the MPO’s Transportation Improvement Program (TIP). The MPO is also required to include the TAM targets as part of the planning efforts of the Long Range Transportation Plan (LRTP) update.

The Public Transit staff has prepared the attached updated TAM Plan in accordance with the rules and have established the following transit asset targets. Calculating performance measures helps transit agencies to quantify the condition of the assets, which facilitates setting targets that support local funding prioritization. Targets have been established based on FTA’s Useful Life Benchmark (ULB) as required. The ULB for equipment and rolling stock is based on the number of years in service while the ULB for facilities is based on the condition of the facility. FTA does provide a Transit Economic Requirements Model (TERM) scale for facilities and requires utilizing a goal of less than 3.0 on the TERM scale when determining a target (see TERM rating table below). Assets may exceed the ULB but because these are benchmarks, other aspects are utilized to determine whether an asset has reached its replacement life. For example, vehicles are evaluated based on vehicle miles, years in service and maintenance costs to determine the replacement life.

<b>TERM Rating</b>	<b>Condition</b>	<b>Description</b>
Excellent	4.8 - 5.0	No visible defects; new or near new condition; may still be under warranty if applicable
Good	4.0 - 4.7	Good condition, but no longer new; may be slightly defective or deteriorated, but is overall functional
Adequate	3.0 - 3.9	Moderately deteriorated or defective, but has not exceeded useful life
Marginal	2.0 - 2.9	Defective or deteriorated; in need of replacement; exceeded useful life
Poor	1.0 - 1.9	Critically damaged or in need of immediate repair; well past useful life

The table below provides the established targets for each major asset category that Collier Area Transit (CAT) has within its inventory. The target represents the percentage that each asset meets the performance measure (met or exceeded the ULB). For example, in 2023 100% of the maintenance facility will have met or exceeded the ULB. In the case of the maintenance facility, the useful life of that building is 35 years. In addition, an assessment was completed for that facility that concluded the facility cannot be brought up to current building codes. Therefore, based on the age of the facility and the building code factors the maintenance facility has met its useful life and remain with that rating until the condition of the facility is improved. It should be noted that staff is utilizing a template (TAMplate) provided by FTA for the preparation of the TAM Plan and associated tables. With the template, the targets for 2022 were imported from the prior year's report which evaluated the assets differently. Unfortunately, the 2022 targets cannot be edited and as a result causes some inconsistencies with the corrected targets reported for 2023 going forward.

### Performance Targets

Agency Name	Asset Category	Asset Class	2022 Target	2023 Target	2024 Target	2025 Target	2026 Target	2027 Target
Collier County	Equipment	Non-Revenue/Service Automobile	25%	0%	100%	100%	100%	0%
Collier County	Equipment	Other Rubber Tire Vehicles	25%	0%	0%	0%	40%	60%
Collier County	Facilities	Maintenance	25%	100%	100%	100%	0%	0%
Collier County	Facilities	Passenger Facilities	0%	0%	0%	0%	0%	0%
Collier County	Facilities	Bus Wash Facility	0%	0%	0%	0%	0%	0%
Collier County	Facilities	Fuel Station	0%	0%	0%	0%	0%	0%
Collier County	Revenue Vehicles	BU - Bus	25%	0%	0%	4%	12%	12%
Collier County	Revenue Vehicles	CU - Cutaway	25%	0%	0%	4%	8%	0%
Collier County	Revenue Vehicles	VN - Van	25%	100%	25%	25%	0%	0%

The Collier MPO staff has been provided the TAM Plan for an initial review. Once the Board approves the TAM Plan, the MPO Board will be asked to approve the performance measures and targets in support of the TAM Plan.

### 1. TAM Plan 2022(PDF)

County staff will utilize the state of good repair information when making recommendations to the Board for future grant opportunities.

### Board of County Commissioners

**LEGAL CONSIDERATIONS:** This item has been reviewed by the County Attorney, is approved as to form and legal effect, and requires majority vote for approval. -JAK

**FISCAL IMPACT:** Recommendation to approve the Transit Asset Management (TAM) Plan for Collier Area Transit (CAT). There is no fiscal impact associated with this item.

**GROWTH MANAGEMENT IMPACT:** There is no impact to the Growth Management Plan.

**Meeting Date:** 11/08/2022  
**RECOMMENDATION:** That the Board approve Transit Asset Management (TAM) Plan for Collier Area Transit (CAT).

**Prepared by:**

Prepared by: Omar Deleon, Transit Manager – PTNE Division  
 Title: Planner, Senior – Public Transit & Neighborhood Enhancement

Name: Omar Deleon

**ATTACHMENT(S)**

**Submitted by:**

Title: Division Director - Pub Tran & Nbrhd Enh – Public Transit & Neighborhood Enhancement

Name: Michelle Arnold

10/11/2022 10:18 AM

### COLLIER COUNTY

**Approved By:**

**Review:**

Growth Management Department	Jeanne Marcella	Growth Management Department	Completed	10/11/2022 10:30 AM
Public Transit & Neighborhood Enhancement		Michelle Arnold	Director Review	Completed 10/11/2022 3:31 PM
Public Transit & Neighborhood Enhancement		Yousi Cardeso	Additional Reviewer	Completed 10/11/2022 4:56 PM
Growth Management Operations Support		Nicole Diaz	Additional Reviewer	Completed 10/11/2022 6:12 PM
Growth Management Operations Support		Brandy Otero	Additional Reviewer	Completed 10/12/2022 1:48 PM
Growth Management Operations Support		Michelle DAndrea	Additional Reviewer	Completed 10/12/2022 2:53 PM
Growth Management Department	Trinity Scott	Transportation	Completed	10/17/2022 10:09 AM
Grants	Erica Robinson	Level 2 Grants Review	Completed	10/20/2022 1:15 PM
Office of Management and Budget	Debra Windsor	Level 3 OMB Gatekeeper Review	Completed	10/20/2022 1:28 PM
Grants	Therese Stanley	Additional Reviewer	Completed	10/21/2022 7:31 AM
County Attorney's Office	Jeffrey A. Klatzkow	Level 3 County Attorney's Office Review	Completed	10/26/2022 9:15 AM
Office of Management and Budget	Christopher Johnson	Additional Reviewer	Completed	10/31/2022 7:49 AM
County Manager's Office	Amy Patterson	Level 4 County Manager Review	Completed	11/02/2022 11:22 AM
Board of County Commissioners	Geoffrey Willig	Meeting Pending		11/08/2022 9:00 AM

**EXECUTIVE SUMMARY**  
**COMMITTEE ACTION**  
**ITEM 7C**

**Endorse Transit Regional Service and Fare Study Scope**

---

**OBJECTIVE:** For the committee to endorse the Transit Regional Service and Fare Study Scope.

**CONSIDERATIONS:** The County Public Transit & Neighborhood Enhancement (PTNE) Division, Jacobs Engineering Group and Collier MPO staff have reached consensus on the Scope of Professional Services for the Collier Area Transit Regional Service and Fare Study shown in **Attachment 1**.

The Study will evaluate the prospect of implementing additional regional bus service between Collier and Lee Counties, including the evaluation of and recommendation for a regional fare structure that would be implemented with any future service. The study is designed to help guide County PTNE and the MPO in the development of transit service strategies to connect and create mobility options for residents of Collier and Lee County.

The project is funded in the MPO's Unified Planning Work Program (UPWP) for FYs 2023-2024. The solicitation process will follow the County Procurement Division's protocol under the MPO's General Planning Contract.

The Transit Regional Service and Fare Study Scope will be placed on the MPO Board's December 9, 2022, agenda for approval.

**STAFF RECOMMENDATION:** That the committee endorse the Transit Regional Service and Fare Study Scope.

Prepared By: Anne McLaughlin, MPO Director

**ATTACHMENT(S):**

1. Transit Regional Service and Fare Study Scope



JACOBS  
9010 Strada Stell Cr.  
Suite 108  
Naples, FL 34109  
United States  
www.jacobs.com

**JACOBS ENGINEERING GROUP INC.**  
**SCOPE OF PROFESSIONAL SERVICES FOR**  
**“COLLIER AREA TRANSIT**  
**REGIONAL SERVICE AND REGIONAL FARE STUDY”**

**PROFESSIONAL SERVICES: METROPOLITAN PLANNING**  
**CONTRACT NO. 18-7432-MP**  
**November 9, 2022**

## **1.0 INTRODUCTION**

The general objective for this task is to contract outside Consultant Engineering Services from Jacobs Engineering Group, Inc. (referred to hereafter as CONSULTANT) for the Collier County Public Transit & Neighborhood Enhancement (PTNE) Division and Collier Metropolitan Planning Organization (MPO) (PTNE and MPO referred to hereafter as COUNTY), to provide transportation planning services for a Regional Transit Service and Regional Fare Study (Study).

The Study will evaluate the prospect of implementing additional regional bus service between Collier County and Lee County, including the evaluation of and recommendation for a Regional Fare structure that would be implemented with any future service. The study is designed to help guide the COUNTY in the development of transit service strategies to connect and create mobility options for the residents of Collier and Lee County.

As identified within the PTNE Transit Development Plan, further study would be necessary to evaluate regional service and regional fares. The Study will gather appropriate information to assist the analysis and decision-making of technical staff and policy makers regarding potential cross-jurisdictional transit projects.

## **2.0 SERVICES TO BE PERFORMED**

In accordance with the general scope of Basic Services stated herein, the CONSULTANT shall perform services necessary to complete the following tasks:

- Task 1: Project Kick-Off, Data Collection and Analysis
- Task 2: Transit Investment and Policy Assessment
- Task 3: Regional Travel Pattern and Market Analysis
- Task 4: Regional Transit Vision Framework
- Task 5: Scenario Development and Recommendations
- Task 6: Develop Cost Estimates and List of Funding Opportunities
- Task 7: Public Participation and Committee/Board Meetings

## **TASK I: PROJECT KICK-OFF, DATA COLLECTION AND ANALYSIS**

### **Project Kick-Off**

The CONSULTANT shall meet with appropriate COUNTY representatives at a kick-off meeting. The purpose of the meeting shall include but not be limited to:

- Identify CONSULTANT and COUNTY staff project roles and responsibilities
- Review project objectives
- Establish any ground rules upon which the Study process will be conducted
- Transfer and Review of project information and needs (COUNTY will provide all relevant information in its possession)
- Prepare milestone schedule of deliverables (COUNTY and CONSULTANT mutual agreement)
- Identify members of the Leadership Committee, and the vision, goals, and action plan

Note: Leadership Committee is anticipated to comprise of members of PTNE and PTAC.

### **Data Collection and Analysis**

Immediately following the Notice to Proceed, the CONSULTANT shall begin collecting information and materials relative to planning and evaluating a regional service and fare structure. The information should include data necessary for:

- Preparation of a transportation services inventory to include formal and informal transportation providers
- Establishing a base transit condition – Analyze the existing conditions for transit and evaluate the level of current and latent demand (Lee-Collier intercounty)
- Identifying passenger needs and cross jurisdictional service gaps, including consideration of specific groups or geographic areas
- Developing service strategies
- Identify data gaps and make recommendations for resolving

A meeting will be held with COUNTY staff to summarize findings from the data analysis and identify gaps in any information missing/needed.

Deliverables: Technical Memorandum summarizing data collection, data analysis and gap analysis and Meeting minutes (when applicable).

## **TASK II: TRANSIT INVESTMENT AND POLICY ASSESSMENT**

CONSULTANT will review and analyze existing local and neighboring government transit supportive plans and policies. CONSULTANT will review and consider findings of transit and transit-related studies and plans completed for Collier and neighboring counties. The CONSULTANT will:

- Review documents, including but not limited to LeeTran Transit Development Plan (TDP), MOU's and agreements for regional service with neighboring counties such as Tampa, Manatee and Sarasota Counties



- Summarize the transit planning landscape, identify implemented service proposals, and articulate how these transit studies can be integrated
- Summarize existing vision, goals, and recommended strategies
- Evaluate current fare policy and financial implications of administering a “joint-fare” Structure
- Document financial and operational implications of administering a joint fare structure

A meeting will be held with COUNTY staff to discuss findings and recommended strategies to advance.

Deliverables: Technical Memorandum summarizing data collection and findings and Meeting minutes (when applicable).

### **TASK III: REGIONAL TRAVEL PATTERN AND MARKET ANALYSIS**

CONSULTANT will review transit options to serve and provide greater mobility to the citizens (Collier-Lee only) that have cross-jurisdictional needs because they live and/or work within adjacent counties.

Note: LeeTran currently provides a route which drops off to the CAT system in Collier County. The intention of all proposed regional routes is for a CAT bus to drop off in Lee County, to connect to the LeeTran system.

The CONSULTANT will explore the potential for greater connectivity to citizens when partnered with other transit systems. The goal is to target the non-user. Tasks include:

- Provide an overview of the existing passenger transportation patterns across jurisdictions and ways the data may be utilized as a starting point for the initiation of a regional system
  - Analysis of traffic patterns shall be consistent with TDP and Long Range Plan(s)
  - Includes analysis of the draft Collier MPO Origin and Destination Report (provided by Collier MPO)
- Identify key activity centers and workforce commutes to major employment centers, and identify connections across transit networks in support of regional and economic community benefits
- Analyze ridership for the last five fiscal years of available data for CAT and Lee County transit (LeeTran). Note: will consider/evaluate/exclude any anomalies in the data due to the COVID pandemic.
- Demographic analysis for Collier and Lee County to identify areas with populations most likely to use public transportation
- Develop a ranking system (quantitative and/or qualitative) to evaluate priority Origin-Destination pairs
- After analyzing transit markets evaluate the Regional Corridors identified in the CAT TDP further, and evaluate additional corridors (up to two if identified) to provide effective interregional public transit connections

The “Regional Corridors” to be considered/ further studied, as identified in the CAT TDP are:

**New UF/IFAS and Lehigh Acres Route** – A need to connect Immokalee to the University of Florida/IFAS satellite campus and Lehigh Acres. Existing, roadway constraints do not allow for transit vehicles to enter and exit the UF/IFAS campus. The CONSULTANT will evaluate alignment and endpoint of this route and to determine the demand and costs. This service should be explored jointly by CAT and LeeTran based on mutual considerations and consensus.

**I-75 Premium Express** – It is envisioned that this route would be a premium express commuter service operating along managed lanes on I-75. The Route would begin service at the Government Center, head north on Airport Pulling Road, turn east on Radio Road, north on Livingston Road, east on Golden Gate Parkway and go north on I-75 before ending in the vicinity of the Florida Gulf Coast Town Center. The northern terminus and operating plan requires coordination with LeeTran. The route would require one vehicle to provide 90-minute headway service from 6 AM to 8 PM. The CONSULTANT will evaluate an alignment and endpoint of this route and to determine the demand and costs.

- **Note:** CONSULTANT can recommend other “Regional Corridors” (Up to two) if additional options are deemed feasible.

A meeting will be held with the COUNTY to review the analysis. Corridors advanced by the Leadership Committee at this meeting will be included in the subsequent tasks.

Deliverables: Technical Memorandum to document information presented, ranking system methodology developed, data analyzed, and corridors identified and Meeting minutes (when applicable).

#### **TASK IV: REGIONAL TRANSIT VISION FRAMEWORK**

CONSULTANT shall assist PTNE staff with the development of a regional transit vision framework. Tasks include:

- Draft vision and goals statement
- Draft strategy performance measures
- Vision decision making framework or workplan
- Developing Strategies for Advancing Conceptual Regional Transit Vision - Work with staff and the Leadership Committee in the creation of a regional passenger transportation vision, supplemented with guiding goals, objectives and strategies
- Identifying the Conceptual Regional Transit Vision – The consultant will work with the Leadership Committee, to be sure to include public involvement from participants on and off site, to lead a conversation to develop a regional definition of transportation needs

A meeting will be held with the COUNTY to review the proposed regional transit vision and finalize the goals statement, measures, and framework.

Deliverables: Meeting minutes to document the final vision goals statement, strategy performance measures, and decision-making framework.

#### **TASK V: SCENARIO DEVELOPMENT AND RECOMMENDATIONS**

CONSULTANT will assist PTNE staff with development of a Regional Service and Regional Fare Study (not a fare price study) based on recommended “Regional Corridors.” The plan will include:

- Route development including stops, frequency, span of service, turnaround, layover, rest areas, vehicles, etc.
- Funding needs/gaps
- Fare policy
- Fare revenue allocation

CONSULTANT will meet with the COUNTY and LeeTran representatives to identify a plan for revenue sharing and items to include in a potential MOU between the associated agencies. Any vision

framework items that do not reach a consensus in the meeting will be identified for further coordination/negotiation in the Study report. The MOU will include discussion and recommendations regarding revenue split between agencies and utilization of farebox media.

Deliverables: Technical Memorandum that documents the results of the Regional Service and Regional Fare Study and include all analysis, peer review, public and agency comments, potential Title VI impacts, any necessary mitigation measures, and a recommendation for modification to the fare structure.

## **TASK VI: DEVELOP COST ESTIMATES AND LIST OF FUNDING OPPORTUNITIES**

CONSULTANT will analyze applicable data and information to evaluate regional fares and develop a recommended fare cost allocation for recommended “Regional Corridors.” CONSULTANT will provide recommendations for technical staff and policy makers towards potential cross-jurisdictional transit projects. The study will be used to support transit agencies, MPO, and FDOT coordinated transit planning efforts.

Data that will be used to evaluate cost estimates based on existing agency budgets for:

- Total and revenue miles and hours
- Fuel volumes and prices
- Cost per revenue/platform hour and mile
- Annual operating cost
- Route and service modifications enacted

Note: CAT and LeeTran to provide previous annual operating and capital cost data by platform and revenue hours and miles.

CONSULTANT will develop conceptual level cost estimates for the capital and annual operating costs for recommended “Regional Corridors.” The CONSULTANT will identify potential funding opportunities for recommended regional routes. Potential funding sources will be evaluated by:

- Identifying High Priority Transit Investments – Focus on realistic service expansion options that can be pursued by individual providers or through partnerships in order to leverage funding. Funding strategies identified with its associated regional route.
- Identifying Existing and Future Funding Gaps – COUNTY to provide information on existing and future funding with their service.

Deliverables: List of Funding opportunities, applicable cost estimates along with cost allocation and fare allocation strategies.

## **TASK VII: PUBLIC PARTICIPATION AND COMMITTEE/BOARD MEETINGS**

CONSULTANT shall be prepared to attend up to four presentations to committee/board meetings. CONSULTANT shall perform a ridership outreach as part of the study consisting of:

### **Surveys**

CONSULTANT will prepare surveys (up to two) and email blasts for the COUNTY to distribute and advertise as appropriate. The CONSULTANT will prepare information and materials for distribution. The COUNTY will prepare the distribution list.

- Each survey will consist of a paper and online survey in coordination with the COUNTY to solicit and compile public comments. Survey advertisements will include a QR code. The COUNTY will advertise the online survey on board busses, local agencies, and COUNTY webpages. The COUNTY advertisements may also be placed in libraries, government centers, malls, airport, local business bulletin boards, etc.

- Content of surveys will be developed along with PTNE staff to garner required/desired information regarding existing and potential future CAT services and facilities.

The CONSULTANT will work with the COUNTY to ensure that survey materials are multi-lingual (English – Spanish) and persons have access to multi-lingual staff (English – Spanish – Creole) for information dissemination and questions in accordance with the CAT Limited English Proficiency (LEP) Plan.

### **Interviews**

A maximum of two CAT bus operator interviews and two LeeTran bus operator interviews (by CAT staff) will be facilitated to receive input and comments on proposed regional routes (such as ridership, traffic delays, etc.).

Interviews with riders at a maximum of three CAT bus stops will be conducted (by CAT staff) in order to gain feedback on needs for regional service. Bilingual staff will be available to perform interviews.

- Need to Survey additional riders (by CAT/LeeTran staff) will be evaluated

### **Agency Review**

A maximum of four telephone/Microsoft teams interviews with CAT and LeeTran staff will be facilitated to receive agency input on the analysis for incorporation into the report.

### **Committee/Board Meetings**

A maximum of five presentations will be given based on direction/request from CAT. It is anticipated that these presentations will be given to the Technical Advisory Committee (TAC), Citizens Advisory Committee (CAC), Public Transit Advisory Committee (PTAC), and the Collier MPO Board.

- TAC – 1 meeting
- CAC – 1 meeting
- PTAC - 2 meetings
- Collier MPO Board – 1 meeting

Deliverables: Public Involvement summary of all interviews and surveys included in Study report. Committee/Board PowerPoint presentation(s).

Note: It is assumed the Study report will be on consent to the Board of County Commissioners meeting and will not require a presentation.

## **TASK VIII: REGIONAL STUDY REPORT**

The CONSULTANT will document the results of Tasks I through VIII of the Study. The draft report will be prepared for review and comment by the COUNTY prior to producing the final report. Deliverables include:

- **Draft Report** - Prepare a draft report to document the results of the study. A “Draft” MOU will be included as an appendix to the report.
- **Final Report** – The draft report will be updated to reflect COUNTY comments and changes resulting from any public and committee/board participation. Following public participation, sufficient time for all comments, the CONSULTANT will make recommendations and prepare the final report. Note: A “Final” MOU may not be completed as part of this study and may be completed (by others) as part of a future study.

### **3.0 SCOPE EXCLUSIONS AND ASSUMPTIONS**

#### **Scope Assumptions**

The following assumptions are made when preparing the scope of work for this Work Order.

- COUNTY will be responsible for all distribution of and advertisement of public involvement materials (surveys, notices)
- LeeTran and CAT will provide ridership and fare data for the last three fiscal years, as well as annual operating and capital cost data as well as revenue hours and miles
- Origin-Destination Studies will NOT be performed as part of this study
- CONSULTANT will rely on existing/available ridership and cost data for analysis

#### **Scope Exclusions**

The following tasks are not included in the Scope of Work for this Work Order:

1. Services other than those specifically listed above including, but not limited to:
  - Fare Elasticity Model

#### **CONSULTANT's Cost Opinions:**

In providing opinions of cost, financial analyses, economic feasibility projections, and schedules for the PROJECT, CONSULTANT has no control over cost or price of labor and materials; unknown or latent conditions of existing equipment or structures that may affect operation or maintenance costs; competitive bidding procedures and market conditions; time or quality of performance by operating personnel or third parties; and other economic and operational factors that may materially affect the ultimate PROJECT cost or schedule. Therefore, CONSULTANT makes no warranty that COUNTY's actual PROJECT costs, financial aspects, economic feasibility, or schedules will not vary from CONSULTANT's opinions, analyses, projections, or estimates.

### **4.0 REQUIREMENTS AND PROVISIONS FOR WORK**

#### **Project Schedule**

Consultant shall be ready to begin work immediately upon Notice to Proceed (NTP). Overall Work Order Schedule shall not extend beyond 365 Calendar Days from NTP unless mutually agreed to and extended by Collier County.

Detailed milestone schedule will be developed with PTNE staff upon NTP.

#### **Progress Billing**

The CONSULTANT shall provide written progress reports that detail the work performed. Progress reports shall be delivered to the County concurrently with the monthly Invoice. The Project Manager will make judgment on whether work of sufficient quality and quantity has been accomplished by comparing the reported percentage complete against the actual work accomplished.

#### **Consultants Compensation**

The COUNTY will compensate the CONSULTANT a Fee of \$119,838.00 for the above Tasks on a LUMP SUM basis, per the Fee Schedule agreed upon under Contract No. 18-7432 Professional Services: Metropolitan planning (MP) – Schedule B.

A man-hour estimate for the above Scope of Services has been prepared for the sole purpose of establishing the maximum upset limit for this Task Work Order not to exceed \$119,838.00.

**EXECUTIVE SUMMARY**  
**COMMITTEE ACTION**  
**ITEM 7D**

**Endorse Transfer of \$2.5 Million in FY23 SU Funds to CAT Maintenance & Operations Facility Replacement Project**

---

**OBJECTIVE:** For the committee to endorse transferring up to \$2.5 million in FY23 Surface Transportation Block Grant – Urban (SU) funds to the Collier Area Transit (CAT) Maintenance & Operations Facility Replacement Project.

**CONSIDERATIONS:** The Florida Department of Transportation (FDOT) notified Collier MPO that \$3.5 million remains unprogrammed in Financial Project Number (FPN) 405016-1 SU funds in FY 2023. Approximately \$1 million of that balance is slated to cover cost over-runs on two County bike/ped projects according to Board action taken during the September 9, 2022 meeting, leaving \$2.5 million unprogrammed. FDOT has the option of transferring the contract authority (obligation limitation) associated with the unprogrammed balance to another MPO if Collier MPO does not have a viable project to obligate the funds to in the current State fiscal year (23), which ends on June 30, 2023.

The CAT Maintenance & Operations Facility Replacement Project is ranked number 1 in the MPO's 2022 Transit Priorities list adopted on June 10, 2022. (**Attachment 1**). The total estimated cost of the project is \$7.9 million. The MPO Board previously approved the transfer of \$3 million in FY22 SU funds to the Project at the February 11, 2022 meeting. The additional \$2.5 million would bring the MPO's total contribution to \$5.5 million.

The proposed transfer of funds would constitute an administrative amendment to the FY 2023-2027 TIP. MPO staff is following the policy outlined in MPO Resolution 2018-02 (**Attachment 2**) by bringing the proposal to the TAC/CAC for endorsement, then to the MPO Board for approval at the December 9, 2022 meeting.

**STAFF RECOMMENDATION:** That the committee endorse the transfer of up to \$2.5 million in FY23 SU Funds to the CAT Maintenance & Operations Facility.

Prepared By: Anne McLaughlin, MPO Director

Attachments:

1. 2022 Transit Priorities (CAT M&O Facility highlighted)
2. MPO Resolution 2018-2



2022 Transit Priorities Adopted 6-10-22							
Improvement	Category	Ranking	Implementation Year	Annual Cost	3-Year Operating Cost	10-Year Operating Cost	Capital Cost
Maintenance and Operations Facility Replacement	Transit Asset Management (TAM)	1	2025	\$ -	\$ -	\$ -	\$7,900,000
Administration/Passenger Station Roof Replacement	Transit Asset Management (TAM)	2	2022	\$ -	\$ -	\$ -	\$357,000
Route 15 from 90 to 45 minutes	Increase Frequency	3	2023	\$163,238	\$489,715	\$1,632,384	\$503,771
Route 11 from 30 to 20 minutes	Increase Frequency	4	2023	\$652,954	\$1,958,861	\$6,529,536	\$503,771
Route 12 from 90 to 45 minutes	Increase Frequency	5	2023	\$282,947	\$848,840	\$2,829,466	\$503,771
Route 16 from 90 to 45 minutes	Increase Frequency	6	2024	\$156,105	\$468,316	\$1,561,054	\$503,771
Immokalee Transfer Facility (Building)	Transit Asset Management (TAM)	7	2025		\$0		\$585,000
Fixed Route Bus - Replacement	Transit Asset Management (TAM)	8	2023	\$ -	\$ -	\$ -	\$520,000
Route 14 from 60 to 30 minutes	Increase Frequency	9	2024	\$243,915	\$731,744	\$2,439,146	\$512,698
Site SL-15 Creekside	Park and Ride	10	2024	\$ -	\$ -	\$ -	\$564,940
Beach Lot Vanderbilt Beach Rd	Park and Ride	11	2024	\$ -	\$ -	\$ -	\$2,318,200
Route 17/18 from 90 to 45 minutes	Increase Frequency	12	2024	\$258,550	\$775,649	\$2,585,495	\$503,771
Route 13 from 40 to 30 minutes	Increase Frequency	13	2024	\$83,712	\$251,135	\$837,115	\$512,698
New Island Trolley	New Service	14	2025	\$551,082	\$1,653,246	\$5,510,821	\$864,368
Study: Mobility on Demand	Other Improvements	15	2025	\$ -	\$ -	\$ -	\$150,000
Study: Fares	Other Improvements	16	2025	\$ -	\$ -	\$ -	\$150,000
Support Vehicle - Replacement	Transit Asset Management (TAM)	17	2024	\$ -	\$ -	\$ -	\$30,000
New Bayshore Shuttle	New Service	18	2026	\$201,000	\$602,999	\$2,009,995	\$531,029
Support Vehicle - Replacement	Transit Asset Management (TAM)	19	2025	\$ -	\$ -	\$ -	\$30,000
Radio Rd Transfer Station Lot	Park and Ride	20	2027	\$ -	\$ -	\$ -	\$479,961
Beach Lot Pine Ridge Rd	Park and Ride	21	2027	\$ -	\$ -	\$ -	\$2,587,310
Immokalee Rd - Split Route 27 creating EW Route	Route Network Modifications	22	2028	\$189,885	\$569,654	\$1,898,846	\$550,016
Fixed Route Bus - Replacement	Transit Asset Management (TAM)	23	2027	\$ -	\$ -	\$ -	\$525,000
Collier Blvd - Split Route 27 creating NS Route	Route Network Modifications	24	2028	\$189,885	\$569,654	\$1,898,846	\$550,016
Fixed Route Bus - Replacement	Transit Asset Management (TAM)	25	2027	\$ -	\$ -	\$ -	\$525,000
New Route 19/28 - Extend Hours to 10:00 PM	Service Expansion	26	2028	\$29,288	\$87,863	\$292,876	\$0
Fixed Route Bus - Replacement	Transit Asset Management (TAM)	27	2027	\$ -	\$ -	\$ -	\$525,000
Route 24 - Extend Hours to 10:00 PM	Service Expansion	28	2028	\$30,298	\$90,893	\$302,976	\$0
Fixed Route Bus - Replacement	Transit Asset Management (TAM)	29	2027	\$ -	\$ -	\$ -	\$525,000
Goodlette Frank Rd - Split Route 25 creating NS Route	Route Network Modifications	30	2028	\$183,805	\$551,416	\$1,838,052	\$550,016
MOD – North Naples	New Service	31	2030	\$81,723	\$245,169	\$817,230	\$81,961
New Autonomous Circulator	New Service	32	2030	\$52,411	\$157,232	\$524,105	\$569,681
MOD – Marco Island	New Service	33	2030	\$108,912	\$326,736	\$1,089,119	\$81,961
MOD – Golden Gate Estates	New Service	34	2030	\$163,446	\$490,338	\$1,634,460	\$81,961
New Naples Pier Electric Shuttle	New Service	35	2030	\$82,213	\$246,638	\$822,125	\$569,681
MOD – Naples	New Service	36	2030	\$193,889	\$581,666	\$1,938,887	\$81,961

## **RESOLUTION 2018-02**

### **A RESOLUTION OF THE COLLIER METROPOLITAN PLANNING ORGANIZATION ESTABLISHING A POLICY REGARDING THE REPROGRAMMING AND USE OF SURFACE TRANSPORTATION – URBAN FUNDS TO COVER COST OVER-RUNS ON LOCAL AGENCY AND FDOT-MANAGED PROJECTS.**

**WHEREAS**, the Collier Metropolitan Planning Organization (“MPO”) is authorized to establish policy regarding the reprogramming and use of Surface Transportation-Urban funds allocated to the MPO as a Transportation Management Area; and

**WHEREAS**, the Florida Department of Transportation (“FDOT”) reserves a variable amount of Surface Transportation-Urban funds in the Collier MPO Work Program on an annual basis (under the project description “Collier MPO Identified Operational Improvements Funding”) for use in covering cost-over runs on Local Agency Projects (“LAP”) and FDOT-managed projects; and

**WHEREAS**, on occasion the FDOT may contact the MPO Director and request the MPO’s concurrence if an opportunity arises to tap into the reserved Surface Transportation-Urban funds to cover cost-over-runs on LAP and FDOT-managed projects; and

**WHEREAS**, the MPO wishes to establish a policy to guide the MPO Director’s future handling of such requests requiring MPO concurrence.

### **NOW, THEREFORE, BE IT RESOLVED BY THE COLLIER METROPOLITAN PLANNING ORGANIZATION THAT:**

1. The Collier MPO is authorized to establish a policy regarding the reprogramming and use of Surface Transportation-Urban funds allocated to the MPO as a Transportation Management Area.
2. To be considered eligible for reprogramming to use Surface Transportation-Urban funds to cover cost over-runs, a project must meet the following criteria:
  - a. FDOT recommends the project be considered; and
  - b. The project is either programmed and underway in the fiscal year that Surface Transportation-Urban funds are available or the project is on an MPO Board-approved list of prioritized projects awaiting funding; and
  - c. The sponsoring agency is capable of meeting FDOT’s deadlines to obligate, encumber and expend the available funds.
3. If the above criteria are met, the process for bringing a recommended project(s) to the MPO Board for approval is as follows:
  - a. If FDOT deadlines and the MPO advisory committee schedule allows, the MPO Director shall submit eligible projects for endorsement by the Citizen and Technical Advisory Committees prior to bringing a recommended list of projects to the MPO to consider authorizing the



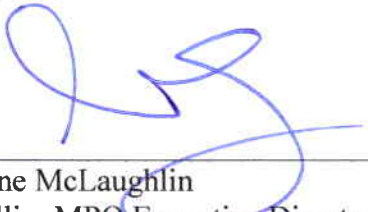
reprogramming and use of the available Surface Transportation-Urban funds.

- b. If FDOT timelines require more immediate action, such that there is not sufficient time for consideration and a recommendation by the MPO advisory committees, the MPO Director will place the list of eligible recommended projects for the reprogramming and use of available Surface Transportation-Urban funds before the MPO on the next available agenda for its consideration and a final decision.

This Resolution was PASSED and DULY ADOPTED by the Collier Metropolitan Planning Organization Board on May 11, 2018.

Attest:

By:

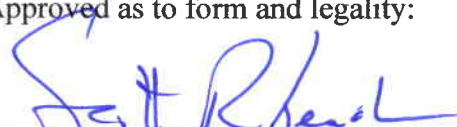
  
Anne McLaughlin  
Collier MPO Executive Director

COLLIER COUNTY METROPOLITAN  
PLANNING ORGANIZATION

By:

  
Commissioner William L. McDaniel, Jr.  
MPO Chair

Approved as to form and legality:

  
Scott R. Teach  
Deputy County Attorney

**EXECUTIVE SUMMARY**  
**DISTRIBUTION**  
**ITEM 10A**

**Revised/Final Congestion Management Process (CMP) Corridor Fact Sheets**

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**OBJECTIVE:** For the committee to receive copies of the revised/final CMP corridor fact sheets.

**CONSIDERATIONS:** The CMP corridor fact sheets shown in **Attachment 1** have been revised in response to comments received since the prior distribution.

**STAFF RECOMMENDATION:** N/A

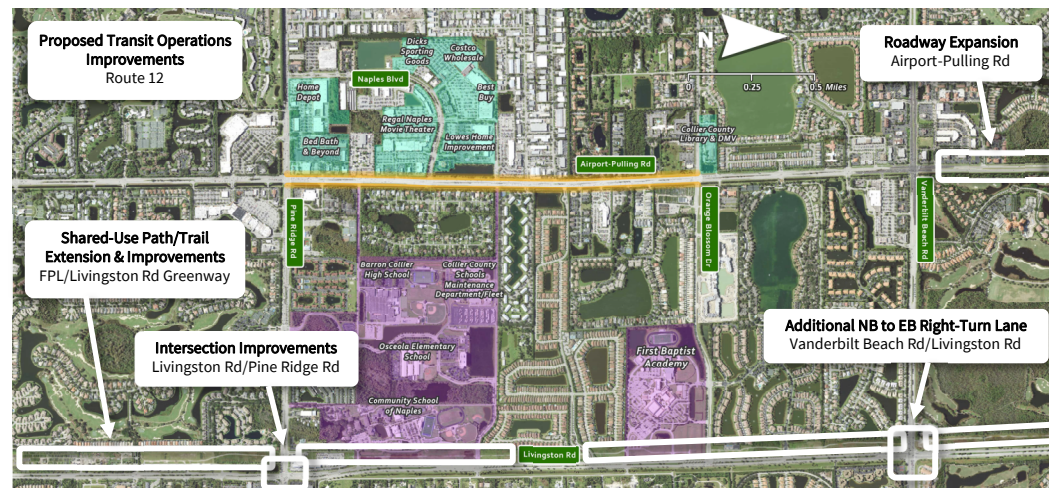
Prepared By: Anne McLaughlin, MPO Director

**ATTACHMENT(S):**

1. Revised/Final Corridor Fact Sheets



## What Improvements Are Planned for This Corridor?



## What Else Can Be Done to Reduce Congestion?

Although CMP strategies are focused on reducing traffic congestion, they are more than just roadway improvements and adding new lanes. In fact, well-planned CMP strategies can include multiple modes of transportation and often produce low-cost projects that can be completed in a short timeframe. In addition to the improvements shown on the map above, strategies that may help address congestion along this corridor if pursued by the MPO and its transportation partner agencies include:

- Evaluate the feasibility of removing the bulbout north of Cougar Dr to allow existing right-turn lane to be extended and used as an auxiliary/merge lane for school buses exiting the County facility
- Consider expanding traffic signal capabilities through technology and communications improvements
- Conduct a study to evaluate possible intersection improvements at Pine Ridge Rd and Airport-Pulling Rd
- Work with local schools to stagger arrival/dismissal times if possible, and optimize signal timing at Cougar Dr during times of increased school traffic
- Evaluate the feasibility of and estimated right-of-way needed for constructing additional turn lanes at the J and C Blvd / Airport-Pulling Rd intersection to better accommodate truck traffic
- Evaluate the feasibility of a new southbound dedicated right-turn lane at YMCA Rd (Bed Bath & Beyond Plaza), or extending the existing turn at Pine Ridge Rd back to this location
- Consider increasing transit frequency and/or expand hours of operation for routes along and adjacent to the corridor so that it becomes a more viable option for employees in the area
- Evaluate the feasibility of removing the striping south of Cougar Dr to extend the northbound right-turn lane queue length and allow for additional school traffic vehicles
- Conduct a study to develop alternatives for a new buffered bike lane or shared-use path along the corridor, which has been identified as a network gap priority by the most recent Bicycle & Pedestrian Master Plan based on public feedback

## What Can I Do to Help Reduce Congestion?

Common strategies that people can use to help with congestion include:

- Changing your trips to less busy time periods when possible
- Checking for alternate routes based on traffic conditions
- Using transit when possible
- Walking or biking for short trips
- Joining or starting a carpool with nearby coworkers or commuters
- Taking advantage of flex schedule or telecommuting opportunities if offered by your employer
- Practicing safe driving techniques to avoid crash incidents

### Transit Routes Available:

<b>R12</b>	Airport Rd to Creekside Commerce Park
<b>R20</b>	Pine Ridge Road
<b>R26</b>	Pine Ridge Road/ Naples Blvd/ Clam Pass

RideCAT.com 

## How Do I Get Involved?

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**We want to hear your feedback!**



This fact sheet was created by the Collier MPO, and has been financed in part through grants from the FHWA, FTA, and U.S. DOT, under the Metropolitan Planning Program, 23 USC Sections 134 & 135.

## COLLIER METROPOLITAN PLANNING ORGANIZATION

Fall 2022

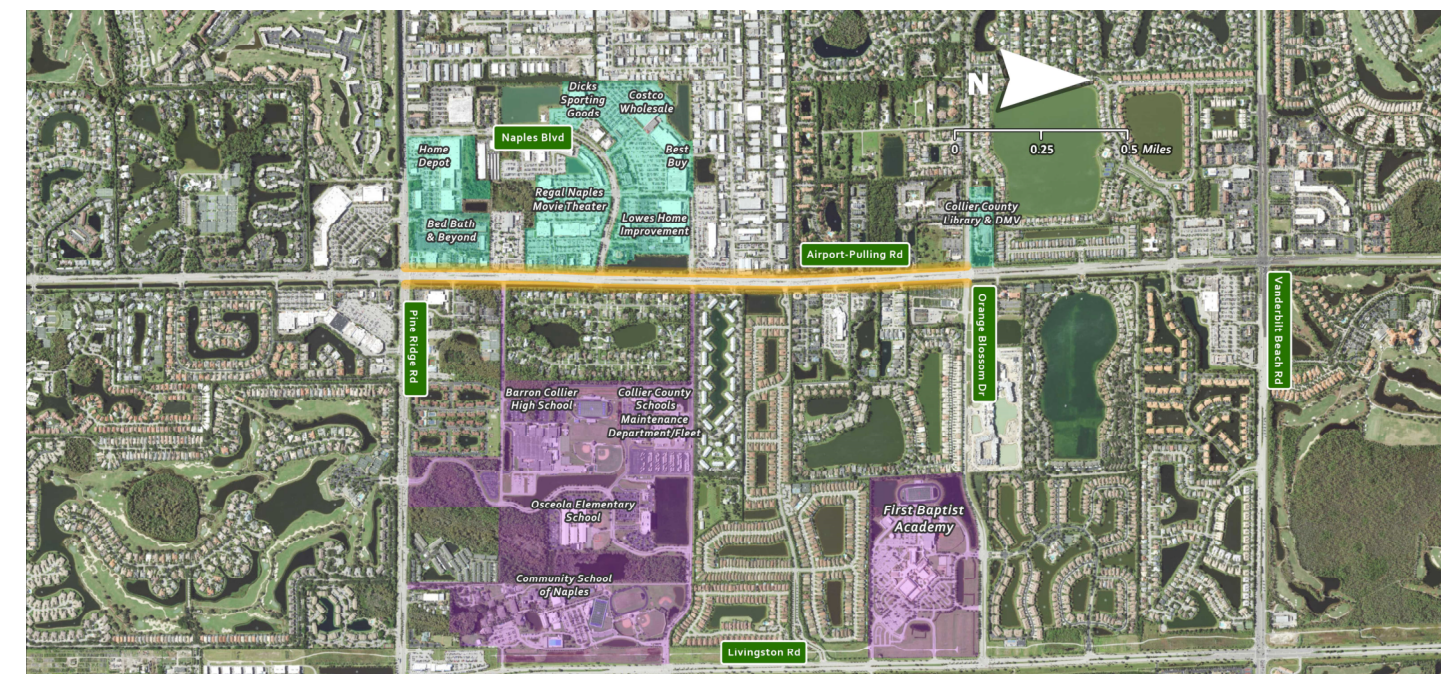


10A Attachment 1  
TAC/CAC 11/28/22

## Collier County's Congestion Hotspots

## CR 31 / Airport-Pulling Rd

(From CR 896 / Pine Ridge Rd to Orange Blossom Dr)



## What is Congestion Management?

Congestion management describes all of the activities used to help reduce the negative impacts of traffic congestion and improve roadway performance in urban areas.

Transportation planning agencies, such as the Collier MPO, follow a detailed Congestion Management Process (CMP) when making decisions about the best ways to address traffic congestion in specific areas, and eventually how improvement strategies should be prioritized for available funding.

Once a congestion reduction strategy or policy decision has been implemented, the CMP then evaluates its effectiveness using measurable data to determine if the intended outcome was achieved or if other solutions may be needed.

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As a part of the ongoing effort to reduce congestion on Collier County roadways, the MPO regularly identifies corridors with high levels of recurring traffic congestion. This usually occurs every two years when the MPO's Transportation System Performance (TSP) Report is updated. This process consists of traffic data analysis and forecasting that is based on other MPO planning efforts such as the Long Range Transportation Plan (L RTP).

The corridor featured in this fact sheet was identified in the most recent TSP Report as having unmet needs related to safety, congestion, or other causes that are not likely to be addressed by currently planned improvements. The MPO is now evaluating it in greater detail to develop potential improvement strategies and better understand which strategies could be the most effective based on current conditions.



Visit us at:  
[www.colliermpo.org](http://www.colliermpo.org)  
Scan the QR code with your smart phone camera to access our website.

Collier MPO  
2885 S. Horseshoe Dr., Naples, FL 34104  
(239) 252-5814





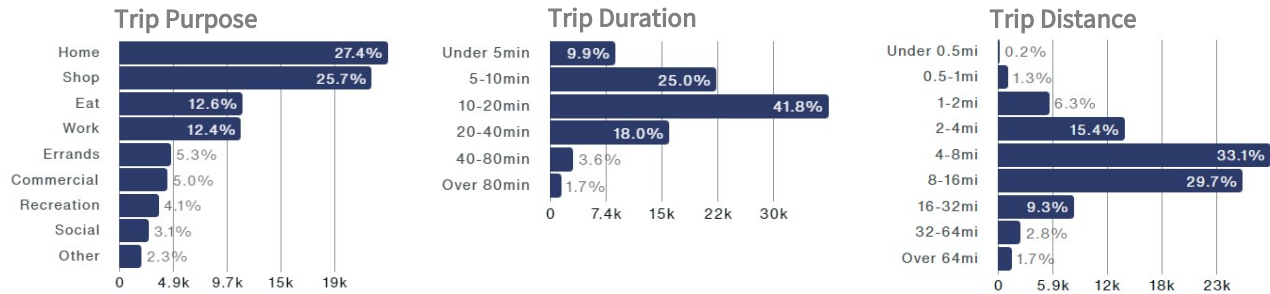
Collier County's Congestion Hotspots  
CR 31 / Airport-Pulling Rd (From CR 896 / Pine Ridge Rd to Orange Blossom Dr)

Quick Facts

Corridor Length: 1.4 Miles  
Number of Major Intersections: 5  
Number of Daily Trips (Avg. Weekday): ~89k

~14 min  
Avg. Daily Duration of Bottleneck Conditions

~7k  
Annual Vehicle Hours of Delay



Corridor Challenges

- Freight & Small Truck Traffic:** Truck traffic accessing the large industrial/warehouse area west of the corridor can worsen traffic congestion when making trips to/from Pine Ridge Rd and the I-75 interchange.
  - School Traffic:** Multiple schools east of the corridor, along with the County school bus maintenance facility, can create additional stress on the corridor during times of heavy activity.
  - Signal Coordination:** Four signalized intersections exist along this relatively short corridor. Additional traffic signals also exist along Pine Ridge Road creating challenges related to timing and coordination.
- Corridor Opportunities**
- Naples Boulevard:** Most of the large concentration of retail stores and restaurants on the southwest end of the corridor is already accessed primarily by a large signalized intersection at Naples Boulevard, which reduces the number of turning movements along the corridor and connects to Pine Ridge Road.
  - Canal Right-of-Way:** The canal along the east side the corridor provides an opportunity for creating future multi-use path segments for recreation and connecting to other non-motorized facilities or transit stop locations.

Where is Congestion Usually the Worst?



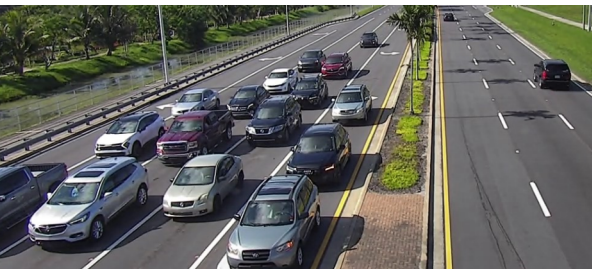
Direction  
Southbound

Location  
Approaching  
Pine Ridge Rd

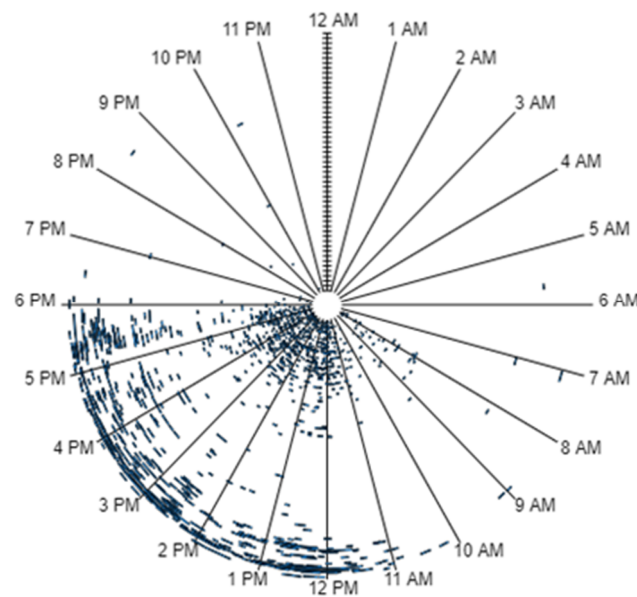
Time  
12-6 PM

Bottleneck Occurrences

Each line in this circular graph represents a traffic bottleneck during 2021 in the southbound direction at Pine Ridge Rd. The length of the line shows how long it lasted. The line placement shows the time of day throughout the year, with January 1 at the center of the circle and December 31 at the outside edge. Bottlenecks at this location occurred more often during the early-afternoon and PM peak period at the beginning and end of the year. These conditions are noticeably less common during the middle of the year.



Airport-Pulling Rd at Orange Blossom Dr – Facing South



Congestion Throughout the Year...

The seasonal patterns of congestion occurring along this corridor during months when visitors and part-time residents are more common can be seen in the longer travel times from roughly November to March. Not only is congestion worse due to seasonal patterns, but delay is also more unpredictable. The grey lines on these graphs show the amount of additional time needed for “planning ahead” to arrive on time, which also increases. A similar pattern is shown below by the higher monthly delay costs. Expressed in terms of relative costs, months with higher delay costs are shown as red and orange where lower delay costs are shown as shades of green.



Estimated Traffic Delay Costs

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	\$\$\$	\$\$\$\$	\$\$\$	\$\$\$								
2021	\$\$\$	\$\$\$	\$\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$\$	\$\$\$
2020	\$\$\$\$	\$\$\$\$	\$\$\$	\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$\$
2019	\$\$\$	\$\$\$	\$\$	\$\$	\$\$	\$	\$\$	\$\$\$	\$\$\$	\$\$\$\$	\$\$\$\$	\$\$\$\$

**Data Sources:** All data shown or referenced on these two pages is from 2021 unless otherwise noted. Information related to congestion, delay, travel times, travel speeds, and bottleneck conditions is from RITIS HERE data. Information related to trip characteristics is from Replica.

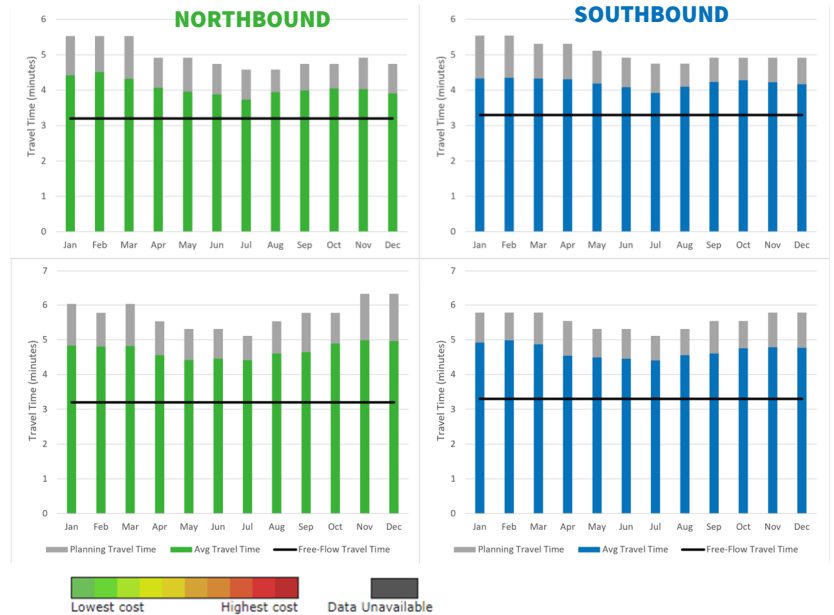


Congestion Throughout the Day...

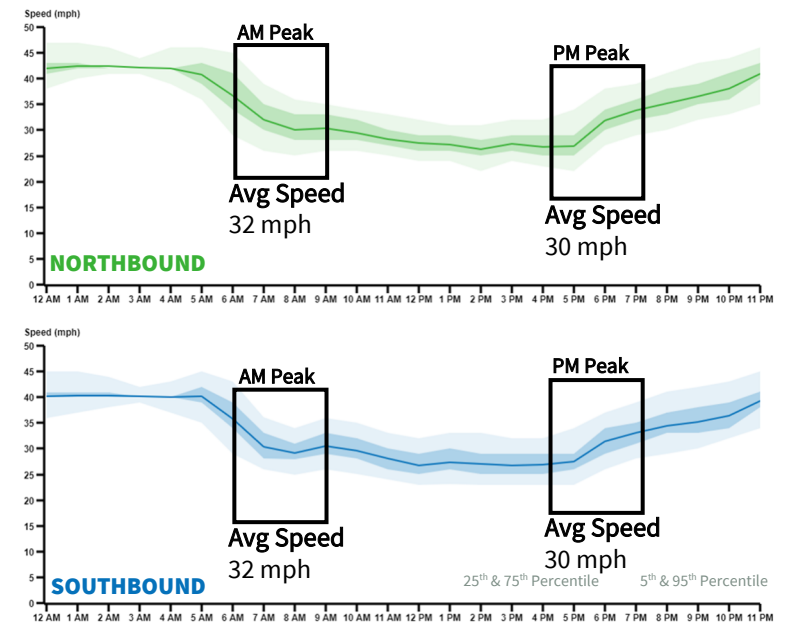
Recurring congestion patterns vary during the average weekday based on time period. Typically, roadway activity is higher in the morning and evening during what are known as the peak periods. The graph on the right shows how average travel speeds change throughout the day along this corridor that has a posted speed limit of 45 MPH. Although speeds drop noticeably during the AM and PM peak periods, they become the lowest in both directions during mid-afternoon, reaching roughly 26 MPH and remaining at similar levels until the end of the PM peak. As shown in the circular graph to the left, most bottlenecks occur during this same time, roughly between 12 and 6 PM. Trip purposes also change throughout the day. Work trips are most common in the morning and home trips in evening. Shopping trips are numerous in this area throughout the day, and when combined with trips home, account for almost 70% of all trips made on this corridor during the PM peak.



Average Weekday Travel Times & Reliability



Average Weekday Travel Speeds





## What Improvements Are Planned for This Corridor?



## What Else Can Be Done to Reduce Congestion?

Although CMP strategies are focused on reducing traffic congestion, they are more than just roadway improvements and adding new lanes. In fact, well-planned CMP strategies can include multiple modes of transportation and often produce low-cost projects that can be completed in a short timeframe. In addition to the improvements shown on the map above, strategies that may help address congestion along this corridor if pursued by the MPO and its transportation partner agencies include:

- Incorporate Complete Streets principles on new roadways and identify opportunities to add new bike facilities to existing roadways to make better connections to the existing share-use path along the canal on the east side of the corridor
- Provide funding assistance for promoting existing car/vanpool awareness and app availability
- Consider upgrading signage and pavement markings at locations where the shared-use path crosses roadways and driveway entrances to make drivers more aware of potential conflicts and enhance safety conditions
- Consider Alternative Intersection Design concepts at major intersections following the construction of the Vanderbilt Beach Drive Extension project
- Evaluate the feasibility of extending the southbound right-turn lane used for accessing Oakridge Middle School, and work with the school to identify feasible locations for curbing/waiting areas that will not obstruct traffic patterns and create delays while parents are waiting to drop off/pick up their students

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**We want to hear your feedback!**



COLLIER METROPOLITAN  
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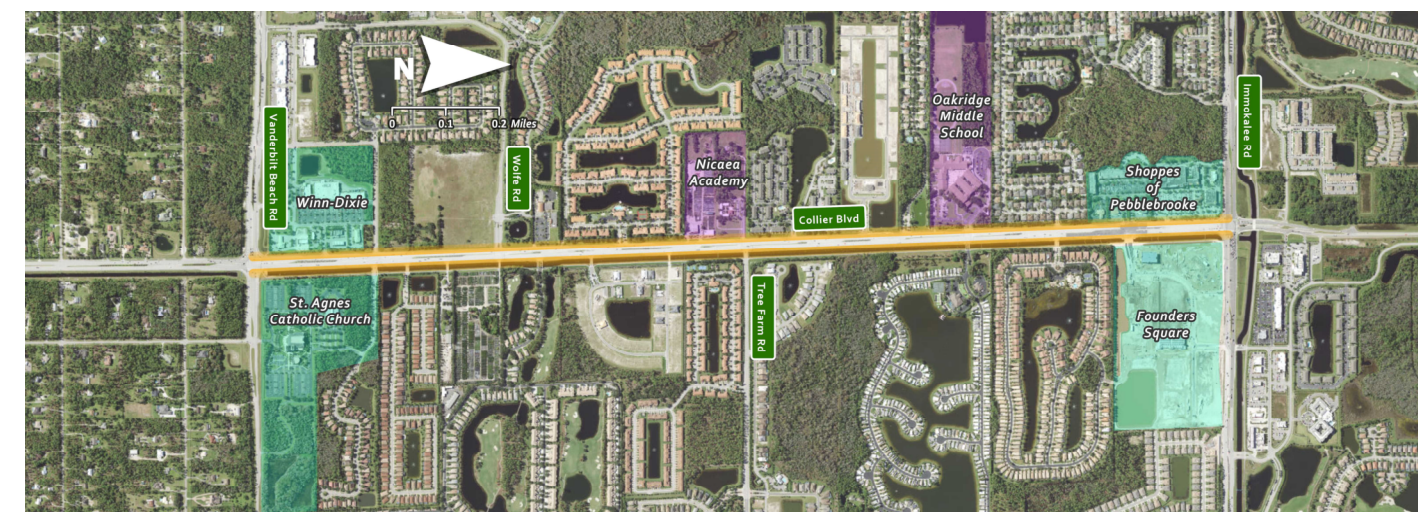
Fall 2022



Collier County's Congestion Hotspots

**CR 951 / Collier Blvd**

(From CR 862 / Vanderbilt Beach Rd to CR 846 / Immokalee Rd)



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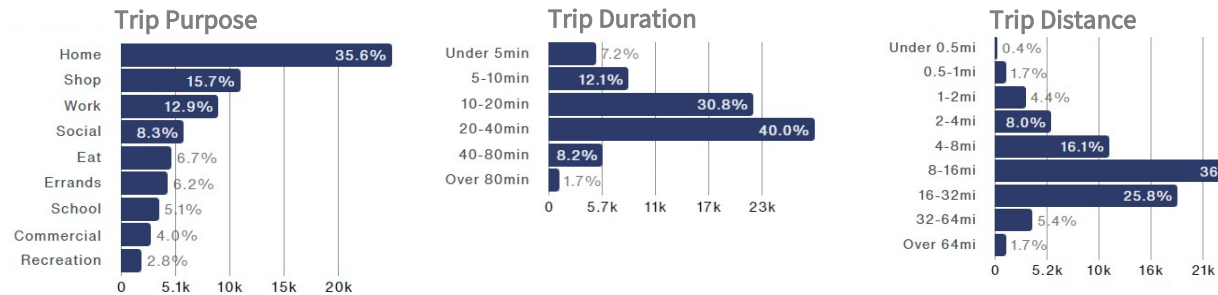
Collier County's Congestion Hotspots  
CR 951 / Collier Blvd (From CR 862 / Vanderbilt Beach Rd to CR 846 / Immokalee Rd )

Quick Facts

Corridor Length: 2.01 Miles  
Number of Major Intersections: 6  
Number of Daily Trips (Avg. Weekday): ~72k

~1 min  
Avg. Daily Duration of Bottleneck Conditions

~4k  
Annual Vehicle Hours of Delay



Corridor Challenges

- Surrounding Roadway Network:** The layout of newer residential developments on both sides of the corridor does not provide many alternatives for making short trips or re-routing without using major arterial roadways.
- Access to I-75:** A limited number of access points to I-75 in the area can create additional congestion along the corridor from commuters trying to access the Immokalee Road interchange and those trying to avoid it by using Vanderbilt Beach Road instead.

Corridor Opportunities

- Additional Commuting Options:** The upcoming Vanderbilt Road Extension Project should help relieve congestion along this corridor to some degree as it provides east-west commuters with an alternative route.
- Residential Traffic Patterns:** The congestion along this corridor is mostly generated from residential land uses, which would indicate that it's less affected by surges in seasonal visitors and can be easier to manage than corridors with a mix of trip types and destinations.

Where is Congestion Usually the Worst?



Direction  
Southbound

Location  
Approaching  
Vanderbilt Beach Rd

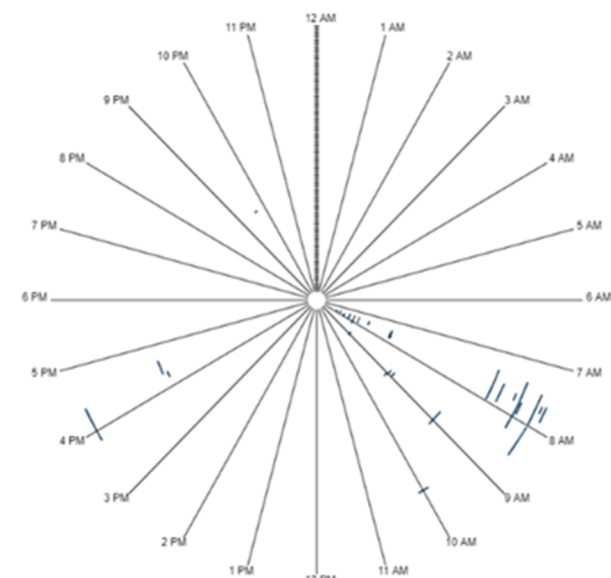
Time  
7-9 AM

Bottleneck Occurrences

Each line in this graph represents a traffic bottleneck during 2021 in the southbound direction at Vanderbilt Beach Rd. The length of the line shows how long it lasted. The line placement shows the time of day throughout the year, with January 1 at the center of the circle and December 31 at the outside edge. Bottlenecks at this location occurred mostly during the AM peak period and during the second half of the year.



Collier Blvd at Immokalee Rd – Facing South



Congestion Throughout the Year...

The seasonal patterns of congestion occurring along this corridor are not as pronounced as in some areas, but can still be seen in the longer travel times from roughly September to May, which coincides with school activity. Not only is congestion worse due to seasonal patterns, but delay is also more unpredictable. The grey lines on these graphs show the amount of additional time needed for “planning ahead” to arrive on time, which also increases during the same months. A similar pattern is shown below by the higher monthly delay costs over the past two years. Expressed in terms of relative costs, months with higher delay costs are shown as red and orange where lower delay costs are shown as shades of green.



Estimated Traffic Delay Costs

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	\$\$\$\$	\$\$\$\$	\$\$\$\$	\$\$\$\$								
2021	\$\$	\$\$	\$\$\$	\$\$\$	\$\$\$	\$\$	\$	\$\$	\$\$\$	\$\$\$	\$\$\$	\$\$\$
2020	\$\$	\$\$	\$	\$	\$	\$	\$	\$\$	\$\$	\$\$	\$\$	\$\$
2019	\$	\$	\$	\$	\$	\$	\$	\$\$	\$\$	\$\$\$	\$\$\$	\$\$\$

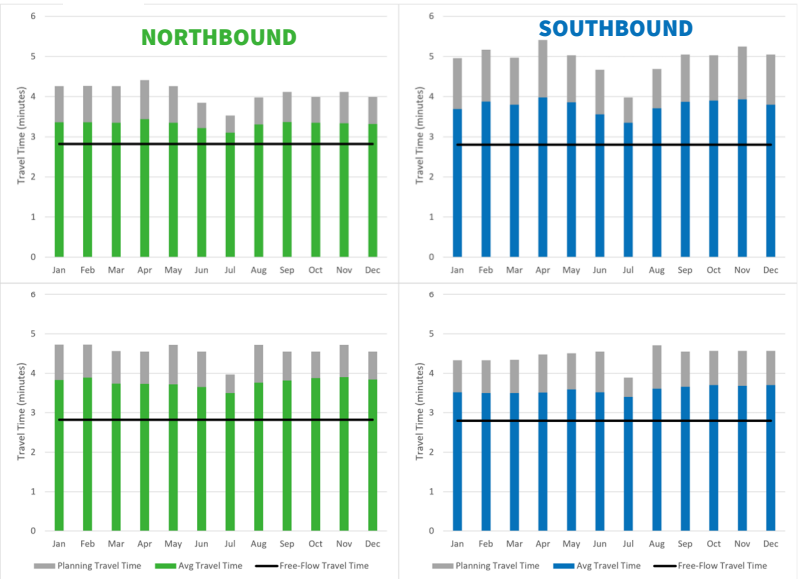
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Congestion Throughout the Day...

Recurring congestion patterns vary during the average weekday based on time period. Typically, roadway activity is higher in the morning and evening during what are known as the peak periods. The graph on the right shows how average travel speeds change throughout the day along this corridor that has a posted speed limit of 45 MPH. Speeds are lowest during the AM and PM peak periods at roughly 30 MPH, with a slight recovery period in between those two times. As shown in the circular graph to the left, most bottlenecks only occur during the peak periods and are not overly common occurrences. Trip purposes also change throughout the day. While home trips are most common throughout the entire day and even more so during the PM peak period, school trips along this corridor are equally as common as work trips during the AM peak period with each accounting for roughly 26% of all trips made.



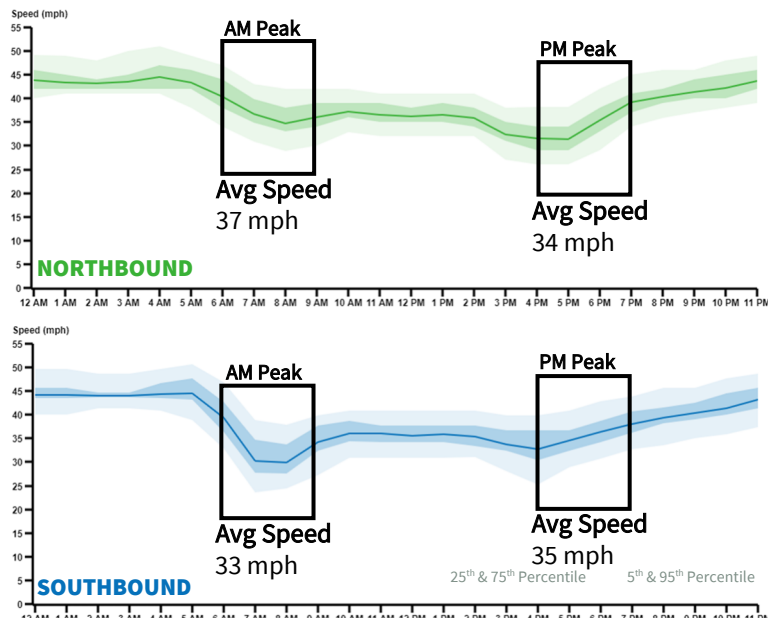
Average Weekday Travel Times & Reliability



Lowest cost Highest cost Data Unavailable

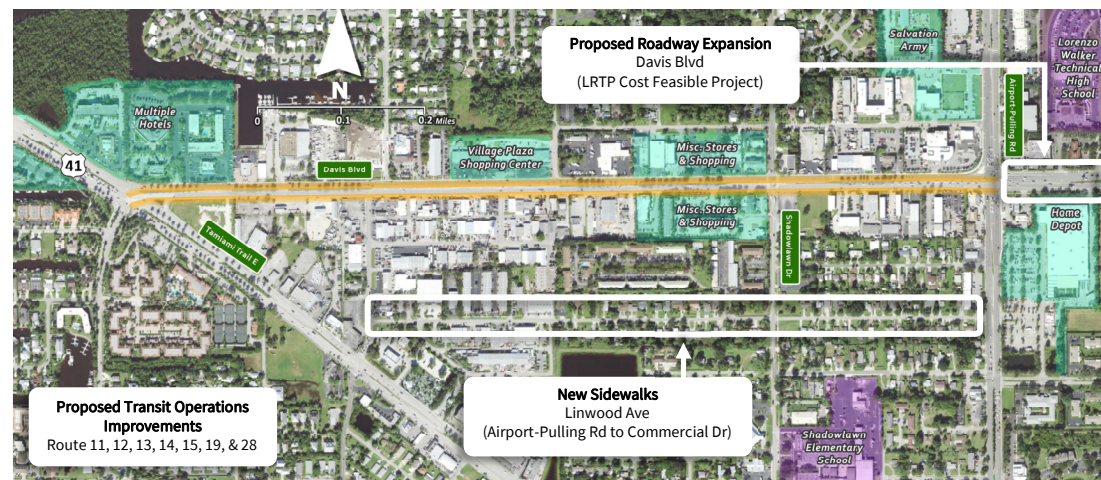


Average Weekday Travel Speeds





## What Improvements Are Planned for This Corridor?



## What Else Can Be Done to Reduce Congestion?

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- Work with FDOT to conduct an access management study to identify opportunities for consolidating driveways, limiting left turn locations, or implementing other solutions for reducing potential vehicle conflict points
- Consider increasing transit frequency and/or expanding hours of operation for routes in this area so that it becomes a more viable option for employees in the area, as well as those making trips to the Lorenzo Walker Technical College and the Salvation Army Social Services/Youth Center
- Evaluate the feasibility of constructing new dedicated right-turn lanes in key areas with high levels of activity during peak periods such as the eastbound approach to Airport-Pulling Rd, shopping center entrances, or smaller roadways used for accessing neighborhoods or multiple businesses
- Coordinate with the City of Naples and Collier County to create appropriate and place-specific policies that encourage mixed-use, dense, and transit-oriented development patterns in the areas surrounding the corridor
- Incorporate Complete Streets principles into the planning and design of the surrounding roadway network as new development and improvement projects are approved and advanced
- Provide funding assistance promoting awareness of and incentives for using existing carpool/vanpool and transit options for commuters who pass through the corridor while traveling from home to work and back on a regular basis

## What Can I Do to Help Reduce Congestion?

Common strategies that people can use to help with congestion include:

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- Walking or biking for short trips
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### Transit Routes Available:

<b>R11</b>	US 41 to Creekside Commerce Park	<b>R13</b>	NCH & Coastland Center Mall
<b>R12</b>	Airport Rd to Creekside Commerce Park	<b>R16</b>	Golden Gate City (Santa Barbara)
<b>R14</b>	Bayshore Drive to Coastland Mall	<b>R19</b>	Golden Gate Estates & Immokalee
<b>R15</b>	Golden Gate City (Santa Barbara)	<b>R28</b>	Golden Gate Estates Everglades Blvd, Ave Maria

RideCAT.com



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COLLIER METROPOLITAN  
PLANNING ORGANIZATION

Fall 2022



## Collier County's Congestion Hotspots

### SR 84 / Davis Blvd

(From US 41 / Tamiami Trail to CR 31 / Airport-Pulling Rd)



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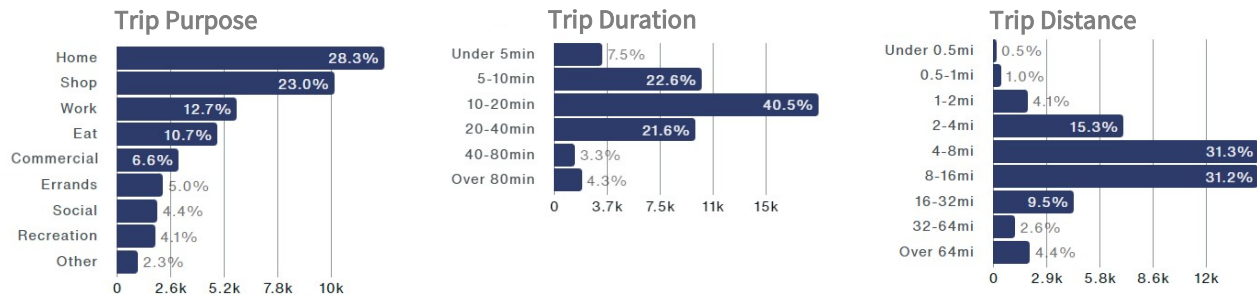
Collier County's Congestion Hotspots  
SR 84 / Davis Blvd (From US 41 / Tamiami Trail to CR 31 / Airport-Pulling Rd)

Quick Facts

Corridor Length: 1.01Miles  
Number of Major Intersections: 3  
Number of Daily Trips (Avg. Weekday): ~46k

~9 min  
Avg. Daily Duration of Bottleneck Conditions

~1k  
Annual Vehicle Hours of Delay



Corridor Challenges

- Traffic on US 41:** The west end of the corridor intersects with another busy corridor, which can worsen traffic problems during times of high activity.
- Freight & Small Truck Traffic:** Industrial, warehouse, or repair/service businesses are numerous along the corridor. Frequent freight trucks, box trucks, or other similar vehicles can worsen traffic congestion.

Corridor Opportunities

- Transit-Oriented Development (TOD):** The corridor's existing density provides a long-term option of developing a variety of land uses that provide housing, employment, and recreation activities in one area, which makes non-motorized and transit trips easier and more practical.
- Location & Proximity:** The location of this corridor allows it to be one of the primary gateways to the City of Naples. Proximity to the City's Community Redevelopment Agency (CRA) District also offers additional benefits for planning and implementing transportation improvements, as well as "placemaking" elements that could make the corridor inviting for users of all types of transportation in the future.

Where is Congestion Usually the Worst?



Direction  
Eastbound

Location  
Approaching  
Airport-Pulling Rd

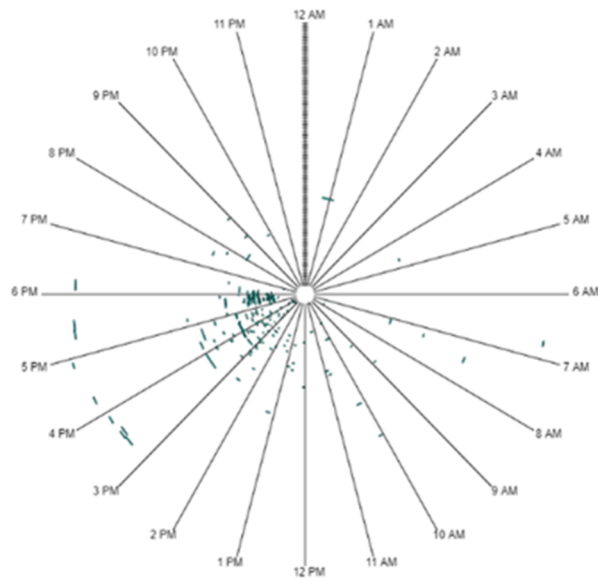
Time  
3-6 PM

Bottleneck Occurrences

Each line in this graph represents a traffic bottleneck during 2021 in the eastbound direction at Airport-Pulling Rd. The length of the line shows how long it lasted. The line placement shows the time of day throughout the year, with January 1 at the center of the circle and December 31 at the outside edge. Bottlenecks at this location occurred more often during the PM peak period towards the beginning and the year.



Davis Blvd at Airport-Pulling Rd – Facing West



Congestion Throughout the Year...

The seasonal patterns of congestion occurring along this corridor can be seen in the longer travel times during the first part of the year, especially in the eastbound direction. Seasonal patterns in travel time may not be as distinct along this corridor because of its short length, but additional unpredictability associated with delay is present throughout the year. The grey lines on these graphs show the amount of additional time needed for "planning ahead" to arrive on time, which also increases at the beginning of the year. A similar pattern is shown below by the higher monthly delay costs from 2019 through 2021. Expressed in terms of relative costs, months with higher delay costs are shown as red and orange where lower delay costs are shown as shades of green.



Estimated Traffic Delay Costs

Year	Estimated Traffic Delay Costs											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	\$	\$\$	\$\$	\$								
2021	\$\$\$	\$\$\$	\$\$\$	\$\$\$	\$\$	\$	\$	\$	\$	\$	\$	\$
2020	\$\$\$	\$\$\$\$	\$\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$
2019	\$\$\$	\$\$\$	\$\$\$	\$\$	\$\$	\$\$	\$\$	\$\$\$	\$\$\$	\$\$\$	\$\$\$	\$\$\$

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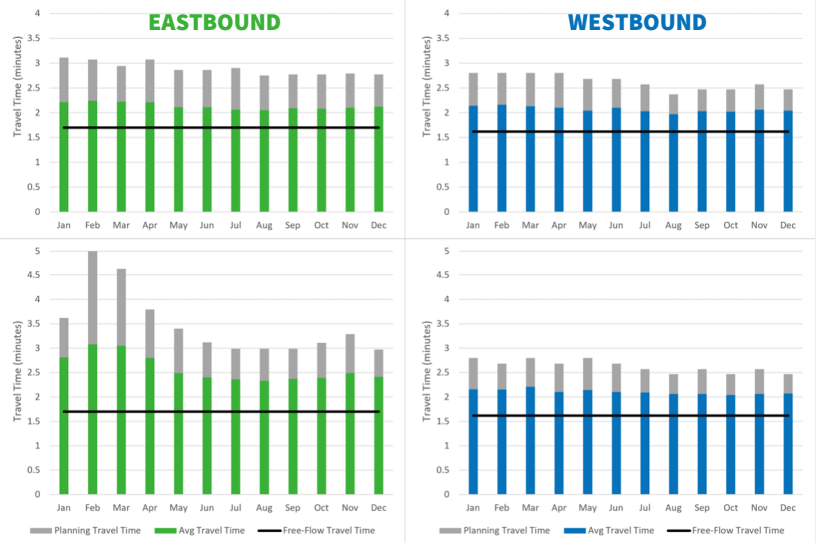


Congestion Throughout the Day...

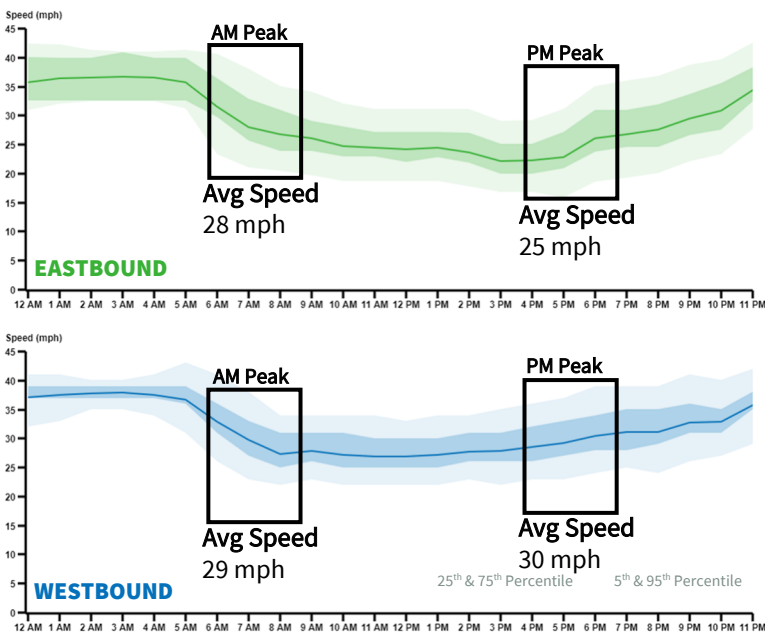
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Average Weekday Travel Times & Reliability

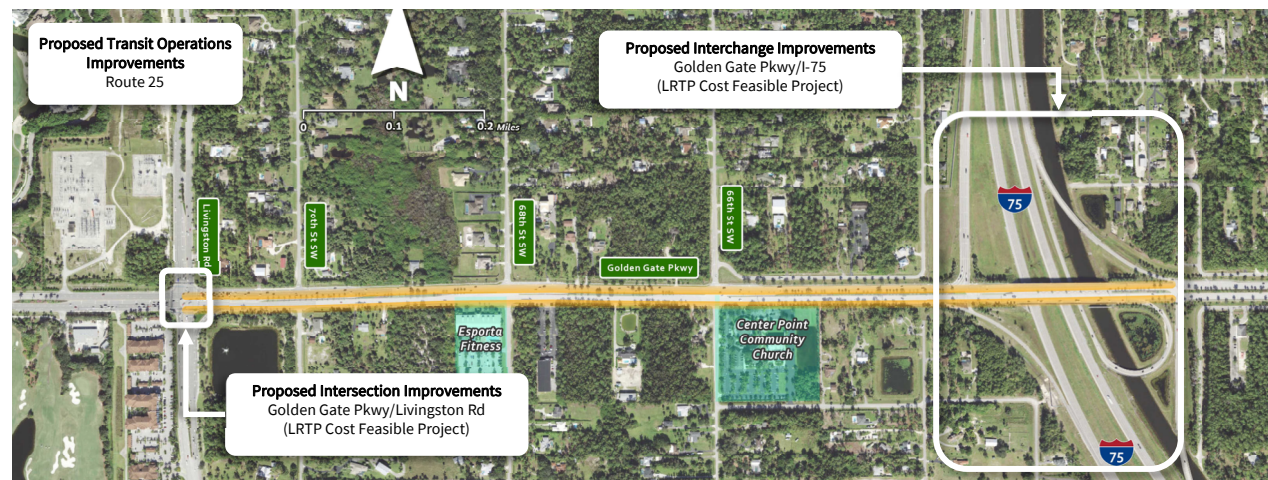


Average Weekday Travel Speeds





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- Provide funding assistance for promoting existing car/vanpool awareness and app availability
- Evaluate the feasibility of a grade-separated intersection at Golden Gate Pkwy and Livingston Rd
- Consider expanding regional transit options to provide express bus service for commuters routinely traveling to/from southwest Collier County during peak hours, as well as identifying potential opportunities for dedicated bus lanes that could help improve travel times for passengers
- Consider expanding traffic signal capabilities through technology and communications improvements
- Coordinate with the analysis performed as part of the upcoming intersection improvements at Livingston Rd to identify opportunities for reducing crossing-related conflicts and delays once future regional greenway connections are made and non-motorized crossings become more frequent
- Program funding for the evaluation, design, and construction of interchange improvements at Golden Gate

## What Can I Do to Help Reduce Congestion?

Common strategies that people can use to help with congestion include:

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**We want to hear your feedback!**



### Transit Routes Available:



## COLLIER METROPOLITAN PLANNING ORGANIZATION

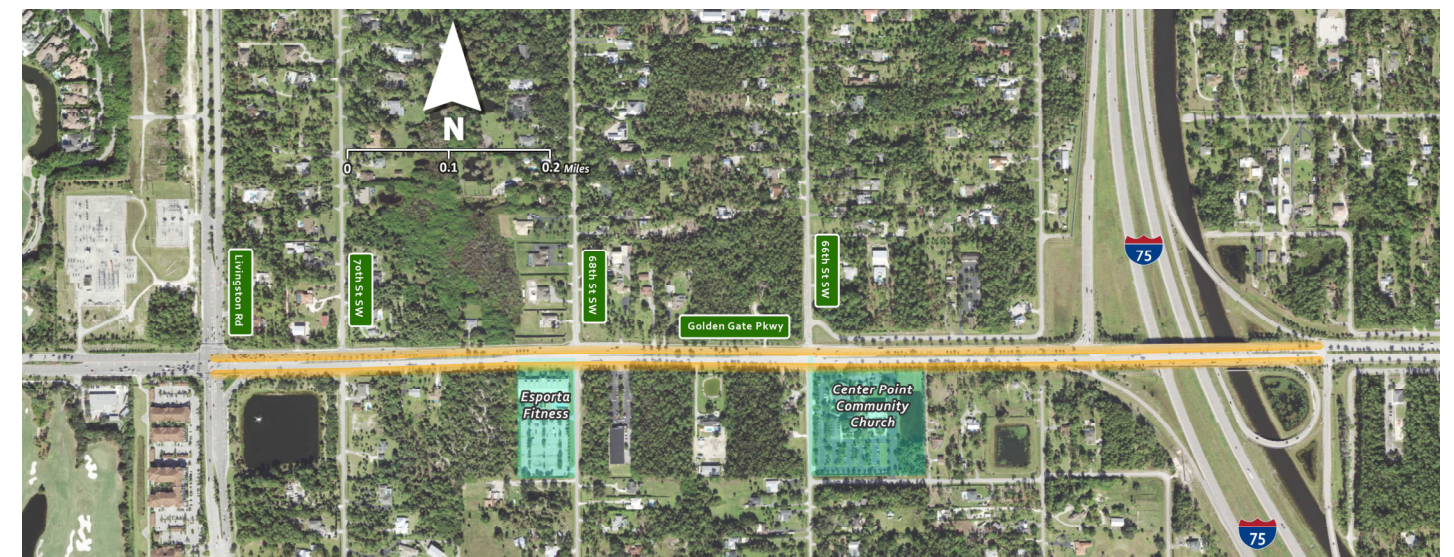
Fall 2022



## Collier County's Congestion Hotspots

## CR 886 / Golden Gate Pkwy

(From CR 881 / Livingston Rd to I-75)



## What is Congestion Management?

Congestion management describes all of the activities used to help reduce the negative impacts of traffic congestion and improve roadway performance in urban areas.

Transportation planning agencies, such as the Collier MPO, follow a detailed Congestion Management Process (CMP) when making decisions about the best ways to address traffic congestion in specific areas, and eventually how improvement strategies should be prioritized for available funding.

Once a congestion reduction strategy or policy decision has been implemented, the CMP then evaluates its effectiveness using measurable data to determine if the intended outcome was achieved or if other solutions may be needed.

## Why is the MPO Evaluating Hotspot Corridors?

As a part of the ongoing effort to reduce congestion on Collier County roadways, the MPO regularly identifies corridors with high levels of recurring traffic congestion. This usually occurs every two years when the MPO's Transportation System Performance (TSP) Report is updated. This process consists of traffic data analysis and forecasting that is based on other MPO planning efforts such as the Long Range Transportation Plan (LRTP).

The corridor featured in this fact sheet was identified in the most recent TSP Report as having unmet needs related to safety, congestion, or other causes that are not likely to be addressed by currently planned improvements. The MPO is now evaluating it in greater detail to develop potential improvement strategies and better understand which strategies could be the most effective based on current conditions.





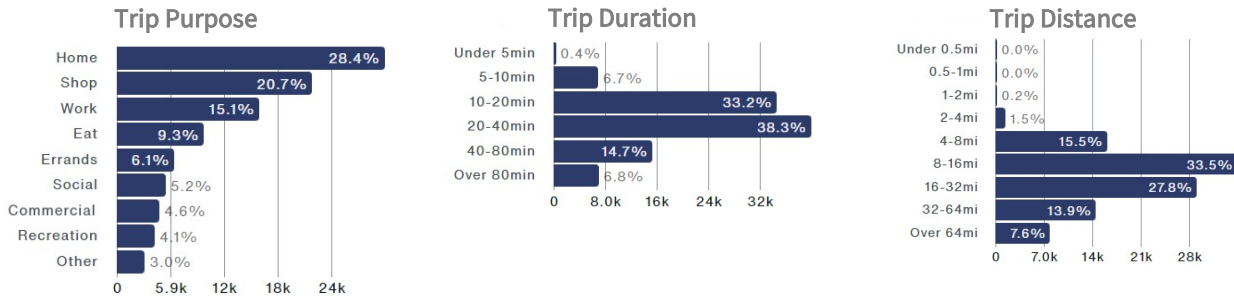
Collier County's Congestion Hotspots  
CR 886 / Golden Gate Pkwy (From CR 881 /Livingston Rd to I-75)

Quick Facts

Corridor Length: 1.03 Miles  
Number of Major Intersections: 3  
Number of Daily Trips (Avg. Weekday): ~100k

~11 min  
Avg. Daily Duration of Bottleneck Conditions

~6k  
Annual Vehicle Hours of Delay



Corridor Challenges

- Commuter Traffic:** This corridor experiences high congestion levels during AM and PM peak hours primarily because it becomes overloaded by commuter traffic traveling between the southwest part of the County and the I-75 interchange, as well as the Golden Gate area east of I-75.
- Freight & Small Truck Traffic:** Truck traffic from the large industrial/warehouse area south of the Golden Gate Canal between Airport-Pulling Rd and Livingston Rd can add to commuter traffic and worsen congestion when using this corridor to access I-75.

Corridor Opportunities

- Lack of Development Density:** The large lot sizes and less-dense development patterns along the corridor on both sides of the I-75 interchange do not currently contribute to worsening congestion levels, and can provide flexibility for future development and transportation improvements.
- Regional Greenway Connections:** This corridor provides important east-west connection opportunities to/from the existing shared-use path/greenway along Livingston Road both west to the Gordon River Greenway and east along the proposed Golden Gate Canal Greenway (Paradise Coast Trail).

Where is Congestion Usually the Worst?



Direction  
Westbound

Location  
Approaching  
Livingston RD

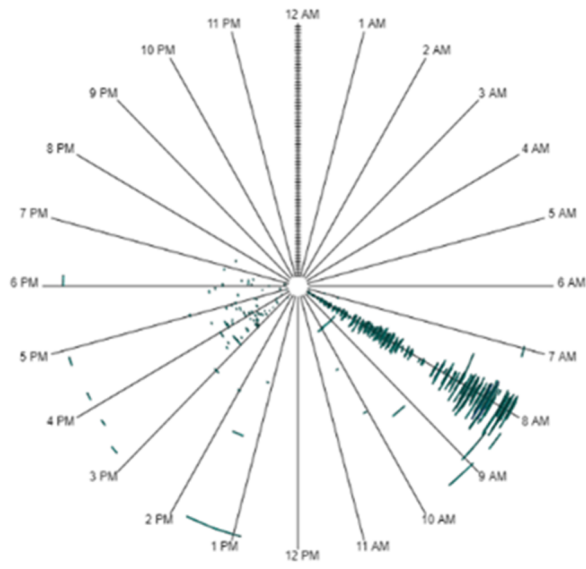
Time  
7-9 AM

Bottleneck Occurrences

Each line in this graph represents a traffic bottleneck during 2021 in the westbound direction at Livingston Rd. The length of the line shows how long it lasted. The line placement shows the time of day throughout the year, with January 1 at the center of the circle and December 31 at the outside edge. Bottlenecks at this location occurred mostly during the AM peak period just before and after 8 AM. These conditions are noticeably less common during the middle of the year.



Golden Gate Pkwy at I-75 – Facing West



Congestion Throughout the Year...

The seasonal patterns of congestion occurring along this corridor can be seen in the longer travel times from roughly September to May, which coincides with school activity and may be worsened by seasonal visitors at the beginning and end of the year combined with commuting patterns. Not only is congestion worse due to seasonal patterns, but delay is also more unpredictable. The grey lines on these graphs show the amount of additional time needed for “planning ahead” to arrive on time, which also increases during the same months. A similar, though less consistent, pattern is shown below by the higher monthly delay costs. Expressed in terms of relative costs, months with higher delay costs are shown as red and orange where lower delay costs are shown as shades of green.



Estimated Traffic Delay Costs

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	\$\$	\$\$	\$\$	\$\$								
2021	\$\$\$	\$\$	\$\$\$	\$\$	\$\$	\$\$	\$	\$	\$	\$	\$\$	\$\$
2020	\$\$\$\$	\$\$\$\$	\$\$\$	\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$
2019	\$\$\$	\$\$\$	\$\$	\$\$	\$\$	\$	\$\$	\$\$\$	\$\$\$\$	\$\$\$\$	\$\$\$\$	\$\$\$

**Data Sources:** All data shown or referenced on these two pages is from 2021 unless otherwise noted. Information related to congestion, delay, travel times, travel speeds, and bottleneck conditions is from RITIS HERE data. Information related to trip characteristics is from Replica.

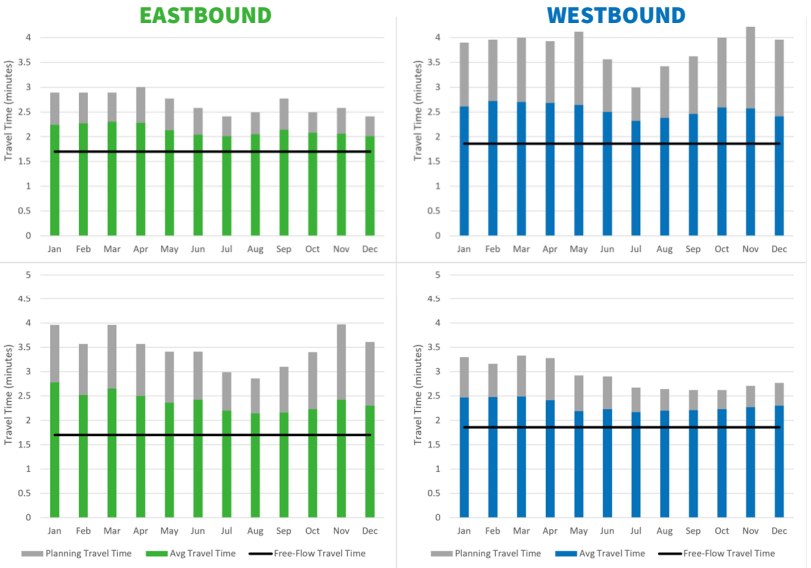


Congestion Throughout the Day...

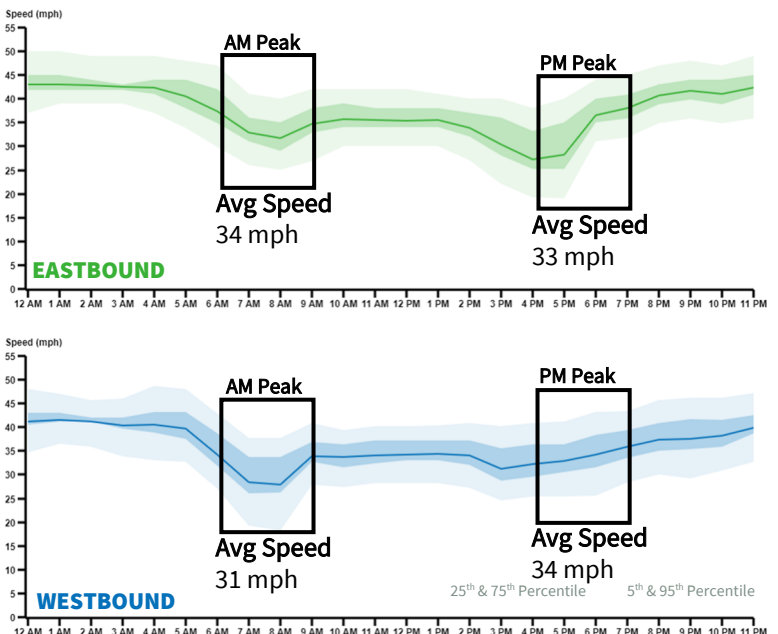
Recurring congestion patterns vary during the average weekday based on time period. Typically, roadway activity is higher in the morning and evening during what are known as the peak periods. The graph on the right shows how average travel speeds change throughout the day along this corridor that has a posted speed limit of 45 MPH. Speeds are lowest during the AM and PM peak periods at roughly 27 MPH, with a slight recovery period in between those two times. As shown in the circular graph to the left, most bottlenecks only occur during the peak periods with those in the westbound direction mostly just before and after 8 AM. Trip purposes also change throughout the day. Work trips are most common in the morning and home trips in evening. School trips and shopping trips are the second most common during AM and PM peak periods, respectively.



Average Weekday Travel Times & Reliability

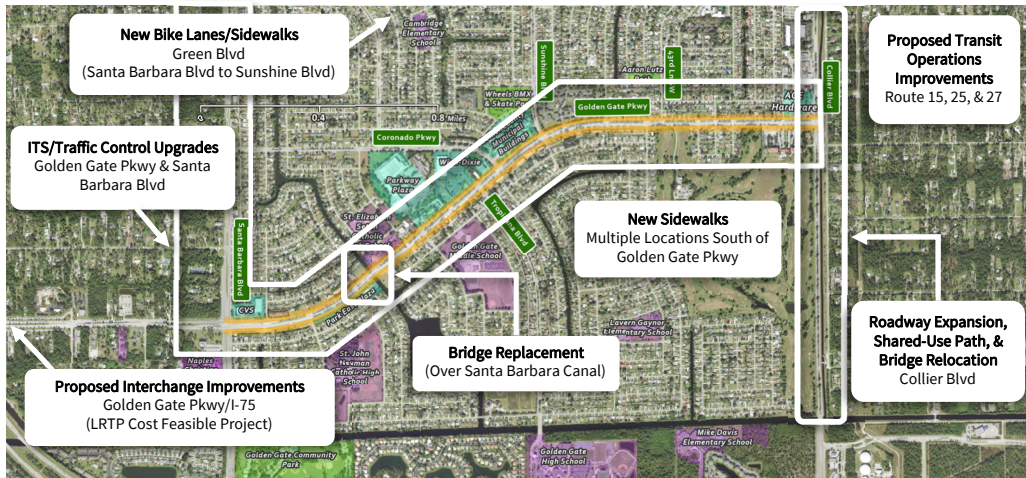


Average Weekday Travel Speeds





What Improvements Are Planned for This Corridor?



What Else Can Be Done to Reduce Congestion?

Although CMP strategies are focused on reducing traffic congestion, they are more than just roadway improvements and adding new lanes. In fact, well-planned CMP strategies can include multiple modes of transportation and often produce low-cost projects that can be completed in a short timeframe. In addition to the improvements shown on the map above, strategies that may help address congestion along this corridor if pursued by the MPO and its transportation partner agencies include:

- Work with nearby private schools, especially on the west side of the corridor, to identify feasible locations for off-site parking lots and/or curbing/waiting zones that will not obstruct traffic patterns and create delays while parents are waiting to drop off/pick up their students
- Consider upgrading crosswalk visibility at intersections providing non-motorized access to nearby schools, and consider pedestrian signals/beacons in high-activity locations
- Conduct a localized public awareness campaign to help reduce careless driving behavior and create a safer environment for the large number of school children in the area
- Advance the recommended improvements from the MPO's recent Golden Gate City Walkable Community Study to enhance safety conditions and add new non-motorized options along surrounding roadways to better connect existing schools, parks, and other destinations, including the proposed Golden Gate Canal Greenway
- Consider a new limited-stop Express Bus pilot route from the Golden Gate Community Center lot that is intended for residents of the surrounding area commuting to/from high employment areas in the western part of the County
- Work with local schools to stagger arrival and/or dismissal times if possible, and optimize corridor signal timing during times with increased school traffic

What Can I Do to Help Reduce Congestion?

Common strategies that people can use to help with congestion include:

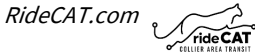
- Changing your trips to less busy time periods when possible
- Checking for alternate routes based on traffic conditions
- Using transit when possible
- Walking or biking for short trips
- Joining or starting a carpool with nearby coworkers or commuters
- Taking advantage of flex schedule or telecommuting opportunities if offered by your employer
- Practicing safe driving techniques to avoid crash incidents

How Do I Get Involved?

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We want to hear your feedback!

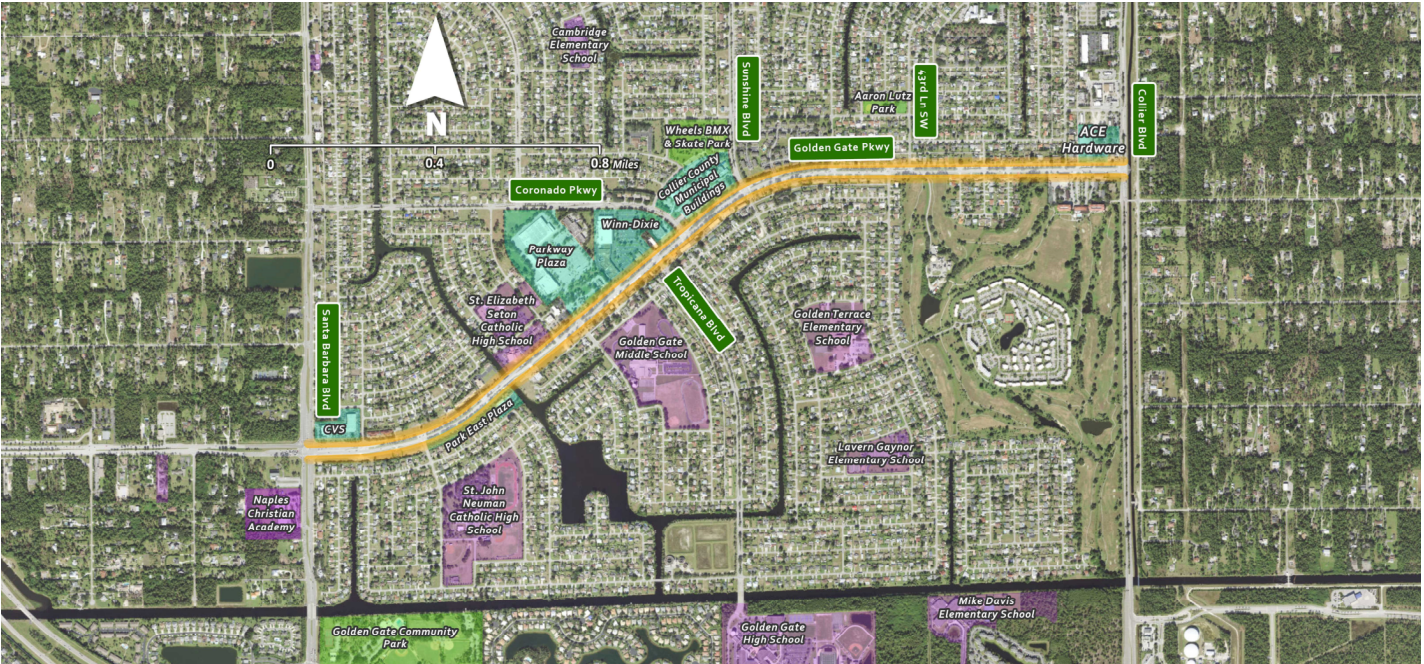
This fact sheet was created by the Collier MPO, and has been financed in part through grants from the FHWA, FTA, and U.S. DOT, under the Metropolitan Planning Program, 23 USC Sections 134 & 135.



COLLIER METROPOLITAN PLANNING ORGANIZATION  
Fall 2022



Collier County's Congestion Hotspots  
CR 886 / Golden Gate Pkwy  
(From Santa Barbara Blvd to CR 951 / Collier Blvd)



What is Congestion Management?

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Visit us at:  
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Scan the QR code with your smart phone camera to access our website.

Collier MPO  
2885 S. Horseshoe Dr., Naples, FL 34104  
(239) 252-5814





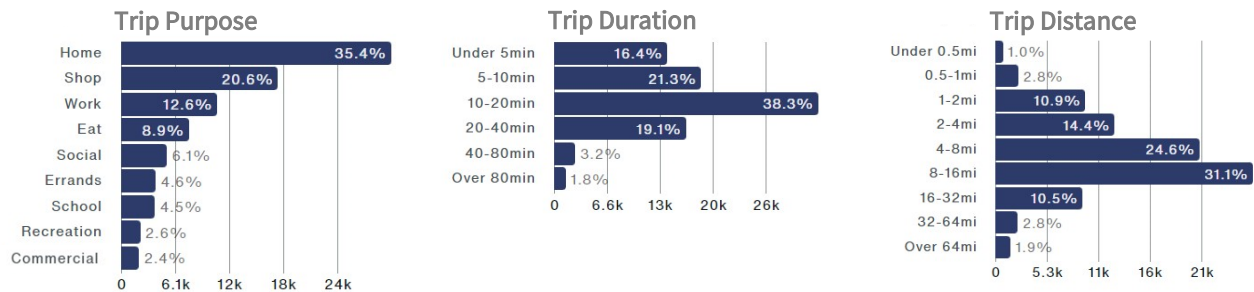
Collier County's Congestion Hotspots  
CR 886 / Golden Gate Pkwy (From Santa Barbara Blvd to CR 951 / Collier Blvd)

Quick Facts

Corridor Length: 2.19 Miles  
Number of Major Intersections: 8  
Number of Daily Trips (Avg. Weekday): ~86k

~8 min  
Avg. Daily Duration of Bottleneck Conditions

~2k  
Annual Vehicle Hours of Delay



Corridor Challenges

- School Traffic:** The high concentration of schools along this corridor creates spikes in traffic volumes on a roadway not designed so support them.
- Trips from Surrounding Neighborhoods:** Multiple signalized intersections connecting to residential areas can create situations in which traffic along the corridor is stopped at frequent intervals for a small number of vehicles.
- Local & Regional Traffic:** This corridor provides access to an I-75 interchange from either end, which can intensify congestion when regional "pass through" trips coincide with local or school-related traffic.

Corridor Opportunities

- Non-Motorized Improvements:** The combination of schools, residential areas, and parallel streets with minimal traffic provides options and increases the benefits for new bicycle and pedestrian facilities that can be used for both neighborhood recreation and short trips to destinations in the Golden Gate area.
- Roadway Connections:** Despite residential development patterns that lack a full grid roadway network, the areas surrounding the corridor contain several alternative routes that make connections to major roadways without using Golden Gate Parkway.
- Existing Transit Routes:** This corridor offers a sizeable number of options for existing transit services and transfer opportunities to/from a variety of destinations due to centralized location.

Where is Congestion Usually the Worst?



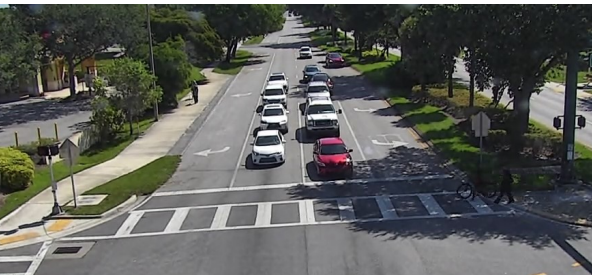
Direction  
Eastbound

Location  
Approaching  
Sunshine Blvd

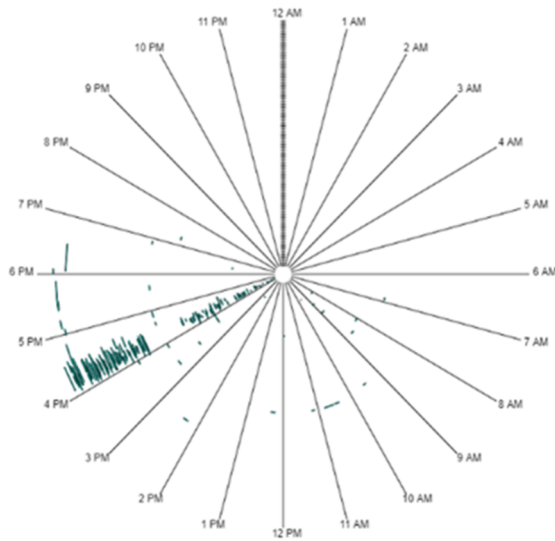
Time  
4-5 PM

Bottleneck Occurrences

Each line in this graph represents a traffic bottleneck during 2021 in the eastbound direction at Sunshine Blvd. The length of the line shows how long it lasted. The line placement shows the time of day throughout the year, with January 1 at the center of the circle and December 31 at the outside edge. Bottlenecks at this location occurred mostly during the early PM peak period between 4 and 5 PM at the beginning and end of the year. These conditions are noticeably less common during the middle of the year.



Golden Gate Pkwy at 50th St – Facing East



Congestion Throughout the Year...

The seasonal patterns of congestion occurring along this corridor can be seen in the longer travel times from roughly September to May, which coincides with activity from the numerous schools in the area. Not only is congestion worse due to seasonal patterns, but delay is also more unpredictable. The grey lines on these graphs show the amount of additional time needed for "planning ahead" to arrive on time, which also increases during the same months. A similar pattern is shown below by the higher monthly delay costs, especially during the first part of the year. Expressed in terms of relative costs, months with higher delay costs are shown as red and orange where lower delay costs are shown as shades of green.



Estimated Traffic Delay Costs

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	\$\$	\$\$	\$\$	\$\$								
2021	\$\$	\$\$	\$\$	\$\$	\$\$	\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$
2020	\$\$\$\$	\$\$\$\$	\$\$\$	\$	\$\$	\$	\$	\$	\$\$	\$\$	\$\$	\$\$
2019	\$\$\$	\$\$\$	\$\$\$	\$\$\$	\$\$\$	\$\$	\$\$	\$\$\$\$	\$\$\$\$	\$\$\$\$	\$\$\$\$	\$\$\$\$

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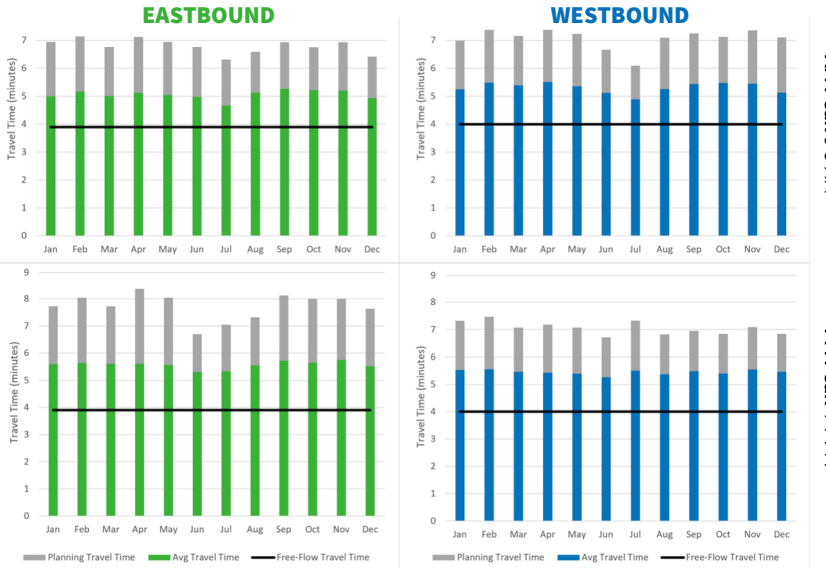


Congestion Throughout the Day...

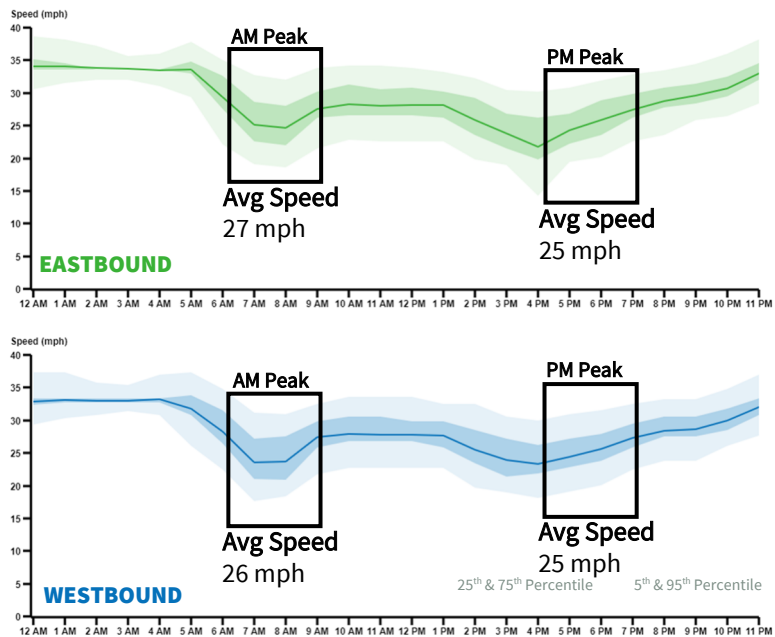
Recurring congestion patterns vary during the average weekday based on time period. Typically, roadway activity is higher in the morning and evening during what are known as the peak periods. The graph on the right shows how average travel speeds change throughout the day along this corridor that has a posted speed limit of 35 MPH. Although speeds reach their lowest during the PM peak period in the eastbound direction at roughly 21 MPH, they also experience a noticeable but slightly less severe drop in the westbound direction to roughly 24 MPH during both peak periods. As shown in the circular graph to the left, most bottlenecks only occur during the peak periods with those in the eastbound direction mostly just after 4 PM. Trip purposes also change throughout the day. Work trips are most common in the morning and home trips in evening. School trips are also common, accounting for nearly 20% of all trips along this corridor during the AM peak period.



Average Weekday Travel Times & Reliability

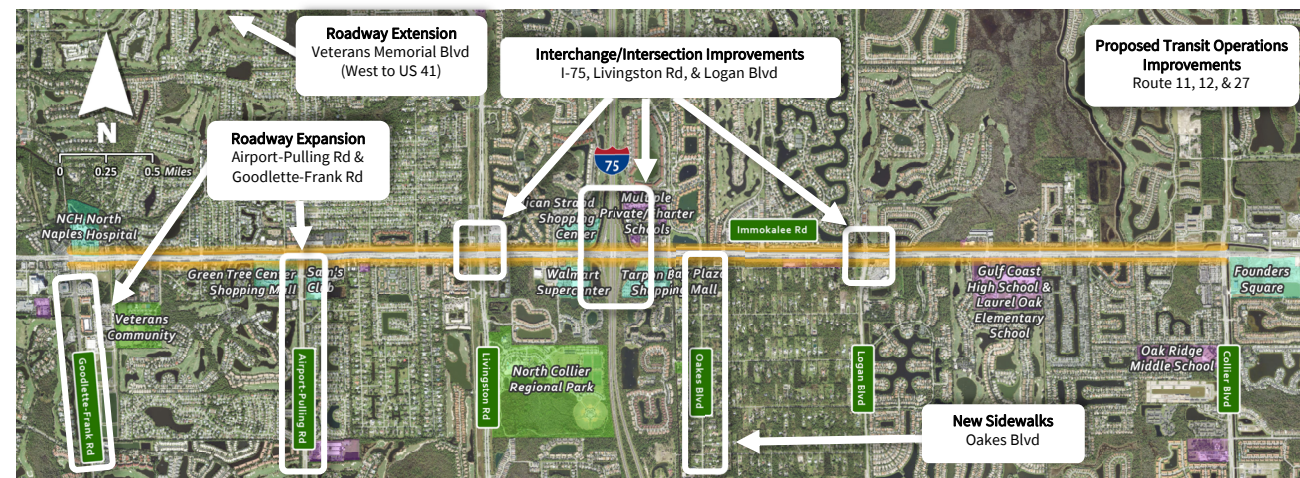


Average Weekday Travel Speeds





## What Improvements Are Planned for This Corridor?



## What Else Can Be Done to Reduce Congestion?

Although CMP strategies are focused on reducing traffic congestion, they are more than just roadway improvements and adding new lanes. In fact, well-planned CMP strategies can include multiple modes of transportation and often produce low-cost projects that can be completed in a short timeframe. In addition to the improvements shown on the map above, strategies that may help address congestion along this corridor if pursued by the MPO and its transportation partner agencies include:

- Improve incident management, especially near I-75 to account for higher crash rate
- Consider a new Park-and-Ride lot with an Express Bus route to serve longer commute trips to Lee County, Naples, Marco Island, or other parts of Collier
- Conduct a study to develop alternatives for new or improved bicycle/pedestrian facilities that can connect to the shared-use path on the north side of the corridor (west of Northbrooke Dr) to encourage non-motorized trips
- Identify opportunities for making parallel roadway connections to create alternate routes for short vehicle trips along the corridor
- Provide funding assistance for promoting car/vanpool awareness and app availability
- Consider expanding traffic signal capabilities through technology and communications improvements
- Evaluate carpool or ridesharing program options for nearby schools, and identify potential funding sources

## What Can I Do to Help Reduce Congestion?

Common strategies that people can use to help with congestion include:

- Changing your trips to less busy time periods when possible
- Checking for alternate routes based on traffic conditions
- Using transit when possible
- Walking or biking for short trips
- Joining or starting a carpool with nearby coworkers or commuters
- Taking advantage of flex schedule or telecommuting opportunities if offered by your employer
- Practicing safe driving techniques to avoid crash incidents

### Transit Routes Available:

<b>LINC</b>	LinC Lee-Collier
<b>R11</b>	US 41 to Creekside Commerce Park
<b>R12</b>	Airport Rd to Creekside Commerce Park
<b>R27</b>	Immokalee Road

RideCAT.com 

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**We want to hear your feedback!**



## COLLIER METROPOLITAN PLANNING ORGANIZATION

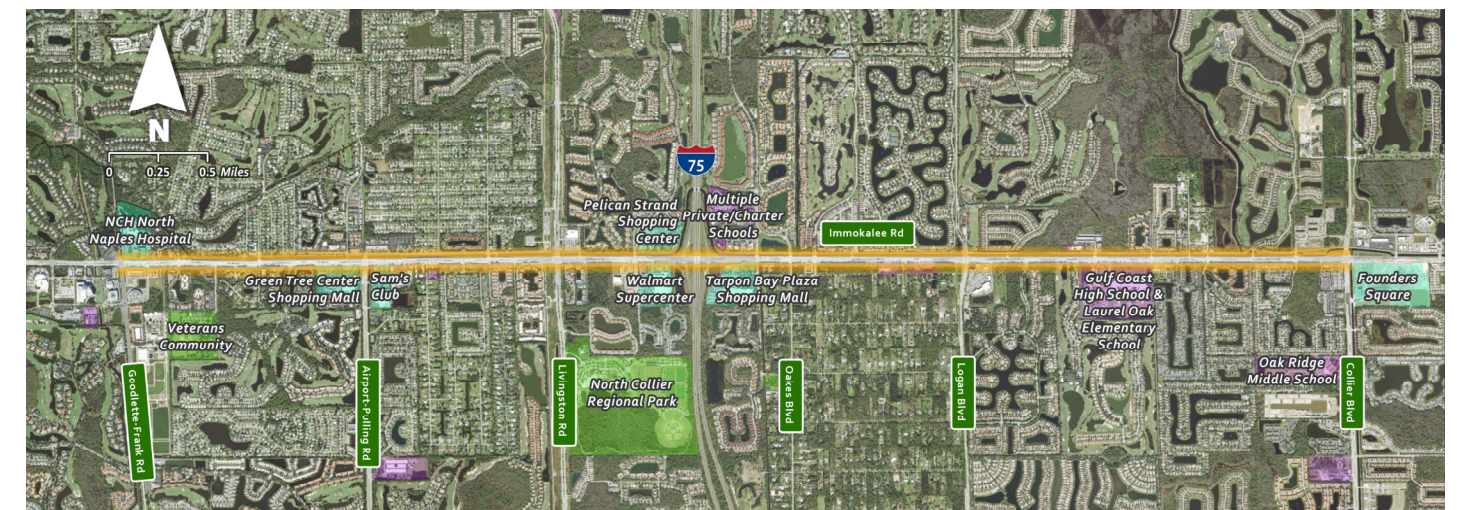
Fall 2022



## Collier County's Congestion Hotspots

## CR 846 / Immokalee Road

(From CR 851 / Goodlette-Frank Road to CR 951 / Collier Blvd)



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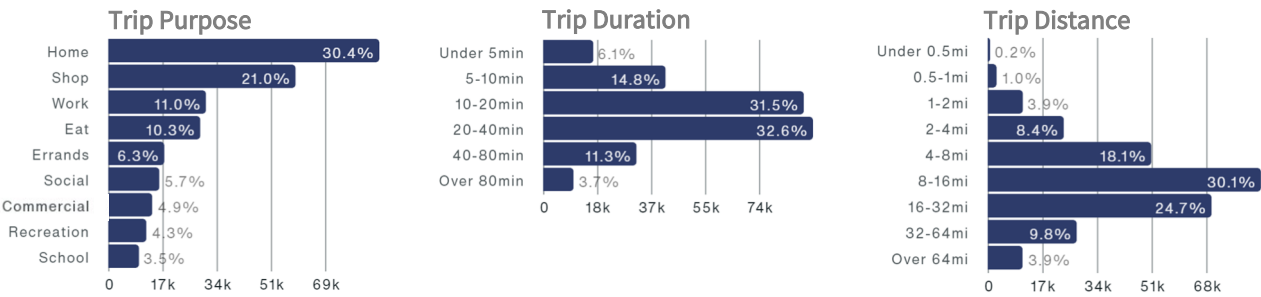


Collier County's Congestion Hotspots  
CR 846 / Immokalee Road (From CR 851 / Goodlette-Frank Road to CR 951 / Collier Blvd)

**Quick Facts**  
Corridor Length: 6.25 Miles  
Number of Major Intersections: 14  
Number of Daily Trips (Avg. Weekday): ~280k

**~32 min**  
Avg. Daily Duration of Bottleneck Conditions

**~90k**  
Annual Vehicle Hours of Delay



Corridor Challenges

- I-75 Interchange:** Vehicles going to/from I-75 result in higher traffic volumes and more “pass through” trips along the corridor with more growth expected in the future.
- High-Intensity Land Uses:** Major activity generators which include a mix of retail, office, school, and residential land uses are also found on all four corners of I-75.

Corridor Opportunities

- Right-of-Way:** Unused right-of-way and median space could allow for new turn lanes or intersection upgrades in key locations to be implemented more easily.
- Parallel Facilities:** Existing roadways, such as Piper Boulevard or 24th Avenue, and existing segments of shared use path on the north side of the Cocohatchee Canal west of Livingston Road could provide the foundation for alternative travel routes used for local or non-motorized trips along the corridor.

Where is Congestion Usually the Worst?



Direction  
Eastbound

Location  
Approaching I-75

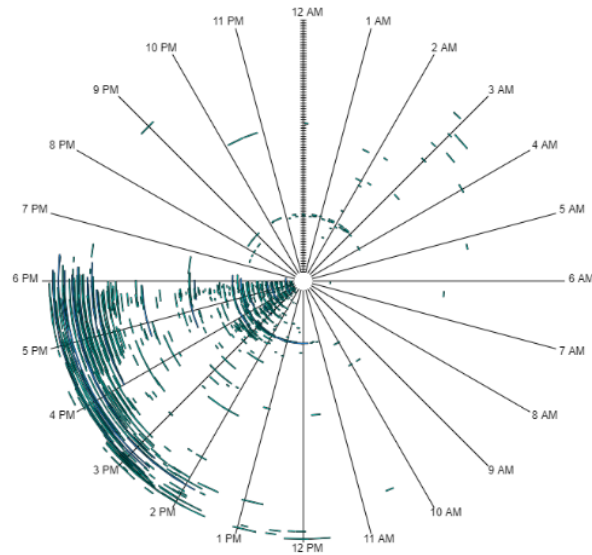
Time  
3-6 PM

Bottleneck Occurrences

Each line in this graph represents a traffic bottleneck during 2021 in the eastbound direction at I-75. The length of the line shows how long it lasted. The line placement shows the time of day throughout the year, with January 1 at the center of the circle and December 31 at the outside edge. Bottlenecks at this location occurred more often during the mid-afternoon and PM peak period at the beginning and end of the year. These conditions are noticeably less common during the middle of the year.



Immokalee Rd at Strand Blvd – Facing West



Congestion Throughout the Year...

The seasonal patterns of congestion occurring along this corridor during months when visitors and part-time residents are more common can be seen in the longer travel times from roughly October to March. Not only is congestion worse due to seasonal patterns, but delay is also more unpredictable. The grey lines on these graphs show the amount of additional time needed for “planning ahead” to arrive on time, which also increases. The same pattern is shown below by the higher monthly delay costs. Expressed in terms of relative costs, months with higher delay costs are shown as red and orange where lower delay costs are shown as shades of green.



Estimated Traffic Delay Costs

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	\$\$\$	\$\$\$\$	\$\$\$	\$\$\$								
2021	\$\$	\$\$\$	\$\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$\$	\$\$\$
2020	\$\$\$\$	\$\$\$\$	\$\$\$	\$	\$\$	\$\$	\$	\$	\$\$	\$\$	\$\$	\$\$
2019	\$\$	\$\$	\$\$	\$	\$	\$	\$	\$\$	\$\$	\$\$\$	\$\$\$	\$\$\$

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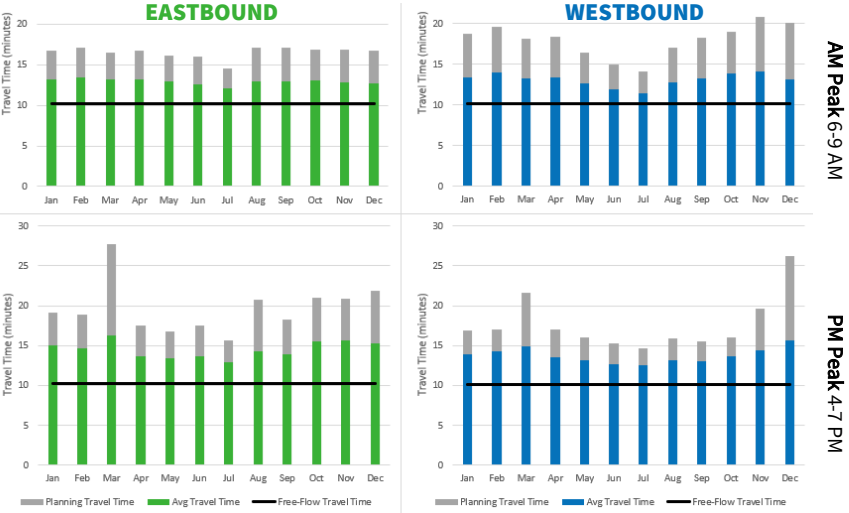


Congestion Throughout the Day...

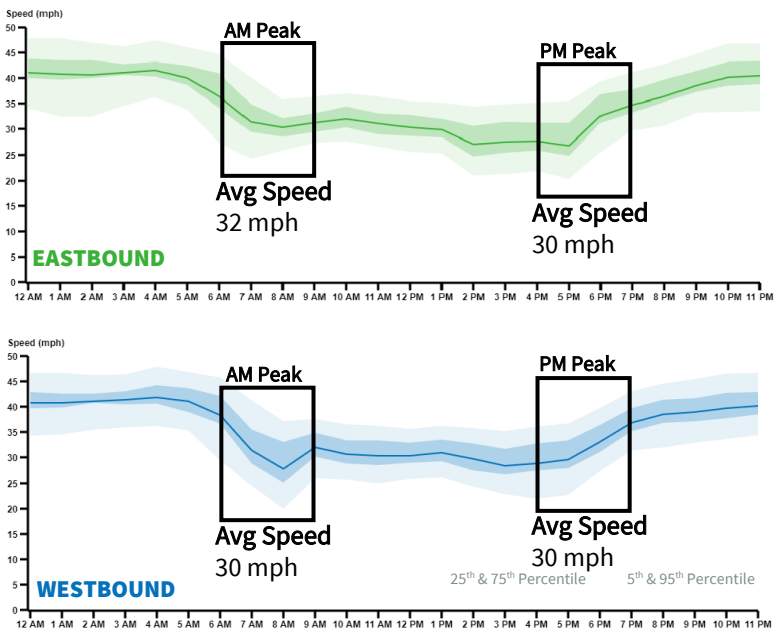
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Average Weekday Travel Times & Reliability



Average Weekday Travel Speeds





This map illustrates the proposed transportation improvements along the US 41 corridor, extending from Naples in the west to Wiggins Pass Rd in the east. The corridor is highlighted in orange. Key features include:

- Proposed Transit Operations Improvements:** Route 11, indicated by a white box in the upper left.
- Proposed Intersection Improvements:** US 41/Vanderbilt Beach Rd (LRTP Cost Feasible Project), indicated by a white box on the left side.
- Roadway Expansion & Improvements:** Vanderbilt Beach Rd, indicated by a white box on the left side.
- Roadway Expansion:** Goodlette-Frank Rd & Airport-Pulling Rd, indicated by a white box in the lower center.
- Proposed Intersection Improvements:** US 41/Immakalee Rd (LRTP Cost Feasible Project), indicated by a white box in the lower center.
- Proposed Complete Streets & TSM&O Improvements:** US 41 (LRTP Cost Feasible Project), indicated by a white box in the upper center.
- Proposed Roadway Expansion:** Old US 41 (LRTP Cost Feasible Project & Ongoing PD&E Study), indicated by a white box in the lower right.
- Roadway Extension:** Veterans Memorial Blvd (West to Old US 41), indicated by a white box in the lower right.
- New Sidewalks:** Wiggins Pass Rd, indicated by a white box in the upper right.

The map also shows various landmarks, including Naples Park Elementary School, Gateway Shopping Center, and several shopping centers like Goodlette Shopping Center and Granada Shopping Center. A scale bar indicates distances up to 1 mile, and a north arrow is present in the upper left.

- Consider establishing a new regional Bus Rapid Transit (BRT) or Express Bus service along US 41, with the potential for dedicated bus lanes to help improve travel times and a new Park-and-Ride lot at the Creekside Transfer Center
- Coordinate with FDOT to identify innovative, effective Connected Vehicle (CV) technologies associated with the US 41 Florida's Regional Advanced Mobility Elements (FRAME) effort in Lee County, and adopt complimentary strategies that can be deployed along this corridor
- Consider expanding traffic signal capabilities through technology and communications improvements
- Improve incident management, especially during times of the year with additional seasonal visitors on the roadways
- Consider upgrading and adding pedestrian facilities such as signage, signals, crosswalks, and other pavement markings near areas with high vehicle turning movements, especially near transit stops, to improve safety conditions for bicyclists and pedestrians
- Program funding for the evaluation, design, and construction of intersection improvements at US 41 and Immokalee Rd, as called out in the MPO's 2045 LRTP

- *Changing your trips to less busy time periods when possible*
- *Checking for alternate routes based on traffic conditions*
- *Using transit when possible*
- *Walking or biking for short trips*
- *Joining or starting a carpool with nearby coworkers or commuters*
- *Taking advantage of flex schedule or telecommuting opportunities if offered by your employer*
- *Practicing safe driving techniques to avoid crash incidents*



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(239) 252-5814





Collier County's Congestion Hotspots

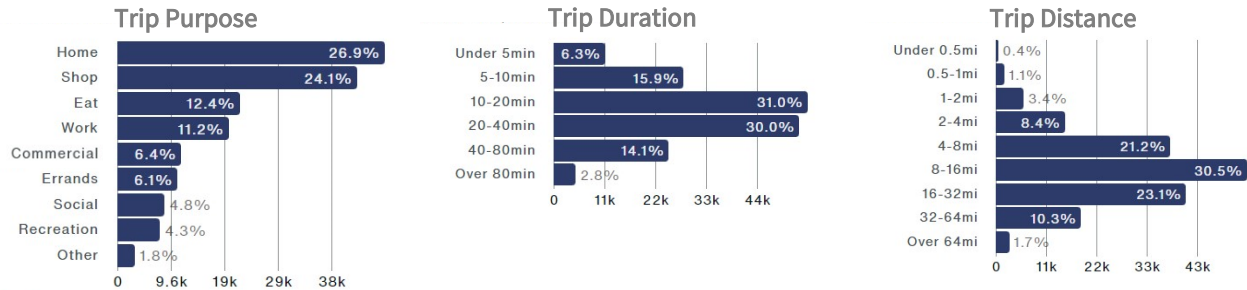
US 41 / Tamiami Trail (From CR 862 / Vanderbilt Beach Rd to CR 887 / Old US 41)

Quick Facts

Corridor Length: 3.25 Miles  
Number of Major Intersections: 9  
Number of Daily Trips (Avg. Weekday): ~180k

~4 min  
Avg. Daily Duration of Bottleneck Conditions

~87k  
Annual Vehicle Hours of Delay



Corridor Challenges

- Regional Traffic:** Being one of the few continuous north-south corridors that can be used for regional trips between Lee and Collier counties, and the primary one in the western part of the county, results in higher traffic volumes.
- High Activity Areas & Visitor Destinations:** Big box retail, dining, and recreational clusters are common on multiple corners of all three major intersections along this corridor. This activity is intensified during seasonal months when visitors add to traffic conditions.

Corridor Opportunities

- Lack of Development Density:** A combination of conservation/drainage areas and undeveloped land on the north end of the corridor can provide opportunities for Collier and Lee counties to plan and control future growth and development, which can help limit the worsening of traffic congestion.
- Right-of-Way & Setback Space:** Wide right-of-way conditions and median areas along this corridor, combined with large areas of adjacent parking lots, can provide flexibility and additional options for designing roadway improvements or dedicating space for premium, limited-stop regional transit services in the future.

Where is Congestion Usually the Worst?



Direction  
Northbound

Location  
Approaching Immokalee Rd

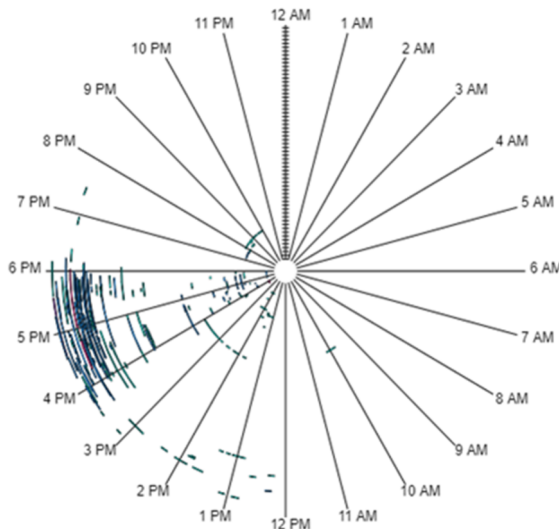
Time  
4-6 PM

Bottleneck Occurrences

Each line in this graph represents a traffic bottleneck during 2021 in the northbound direction at Immokalee Rd. The length of the line shows how long it lasted. The line placement shows the time of day throughout the year, with January 1 at the center of the circle and December 31 at the outside edge. Bottlenecks at this location occurred more often during the PM peak period and are noticeably more common towards the end of the year.



US 41 at Immokalee Rd – Facing North



Congestion Throughout the Year...

The seasonal patterns of congestion occurring along this corridor during months when visitors and part-time residents are more common can be seen in the longer travel times from roughly October to March, especially during the PM peak period. Not only is congestion worse due to seasonal patterns, but delay is also more unpredictable. The grey lines on these graphs show the amount of additional time needed for “planning ahead” to arrive on time, which also increases. A similar pattern is shown below by the higher monthly delay costs, especially during the first part of the year. Expressed in terms of relative costs, months with higher delay costs are shown as red and orange where lower delay costs are shown as shades of green.



Estimated Traffic Delay Costs

Year	Month											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	\$\$\$	\$\$\$	\$\$\$	\$\$								
2021	\$\$	\$\$	\$\$\$	\$\$	\$	\$	\$	\$	\$	\$	\$\$	\$\$
2020	\$\$\$\$	\$\$\$\$	\$\$	\$	\$	\$	\$	\$	\$	\$	\$	\$\$
2019	\$\$	\$\$	\$\$	\$	\$	\$	\$	\$	\$	\$\$	\$\$\$	\$\$\$

Data Sources: All data shown or referenced on these two pages is from 2021 unless otherwise noted. Information related to congestion, delay, travel times, travel speeds, and bottleneck conditions is from RITIS HERE data. Information related to trip characteristics is from Replica.

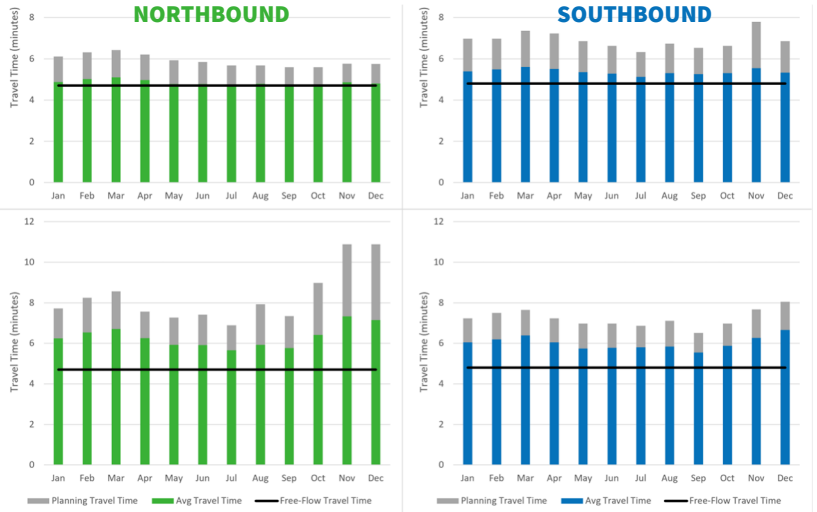


Congestion Throughout the Day...

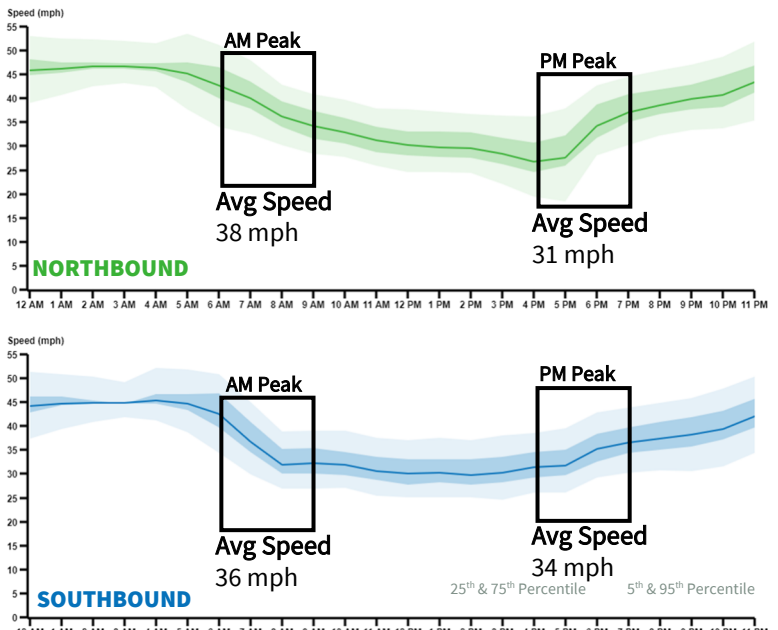
Recurring congestion patterns vary during the average weekday based on time period. Typically, roadway activity is higher in the morning and evening during what are known as the peak periods. The graph on the right shows how average travel speeds change throughout the day along this corridor that has a posted speed limit of 50-55 MPH. Speeds reach their lowest during the PM peak period in the northbound direction at roughly 26 MPH, but experience a more prolonged and less severe drop in the southbound direction beginning during the AM peak period and reaching a low of roughly 29 MPH during mid-day. As shown in the circular graph to the left, most bottlenecks occur during the peak periods with those in the northbound direction mostly between 4 and 6 PM. Trip purposes also change throughout the day. Typically, work trips are most common in the morning and home trips in evening. Along this corridor, however, shopping trips are more common than trips to work during the AM peak period and only slightly less common than trips home during the PM peak period.



Average Weekday Travel Times & Reliability

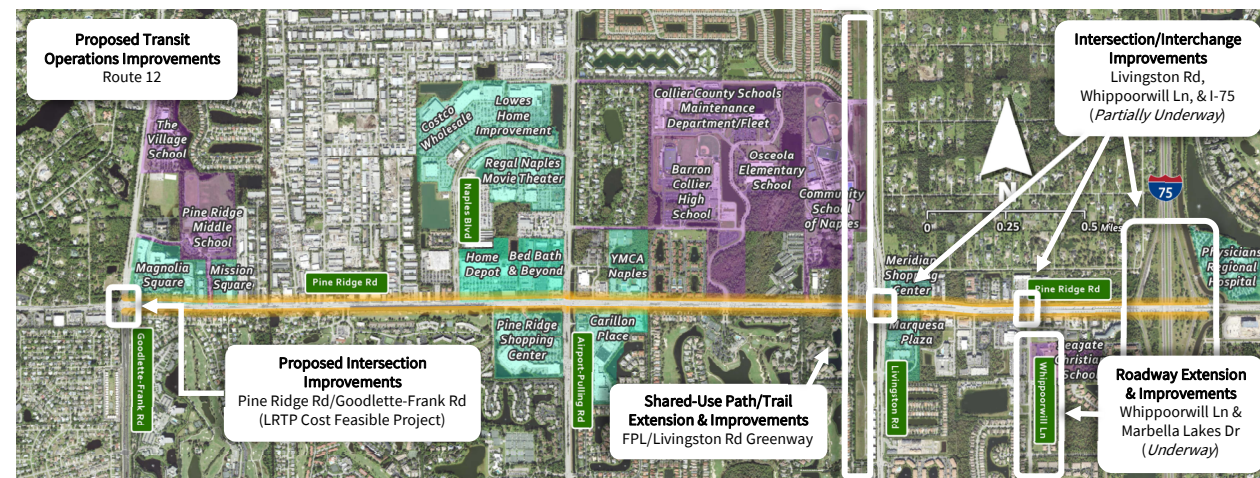


Average Weekday Travel Speeds





## What Improvements Are Planned for This Corridor?



## What Else Can Be Done to Reduce Congestion?

Although CMP strategies are focused on reducing traffic congestion, they are more than just roadway improvements and adding new lanes. In fact, well-planned CMP strategies can include multiple modes of transportation and often produce low-cost projects that can be completed in a short timeframe. In addition to the improvements shown on the map above, strategies that may help address congestion along this corridor if pursued by the MPO and its transportation partner agencies include:

- Consider a new Park-and-Ride lot at Physicians Regional Hospital with an Express Bus route to serve longer commute trips
- Provide funding assistance for promoting existing car/vanpool awareness and app availability, and evaluate the potential for new carpool or ridesharing programs for nearby schools
- Consider increasing transit frequency and/or expanding hours of operation for routes along and adjacent to the corridor so that it becomes a more viable option for employees in the area
- Improve incident management, especially near I-75 to account for a higher crash rate
- Advance the intersection improvement recommendations at Livingston Rd, Whippoorwill Ln, and I-75 made by the County's recent Corridor Congestion Study, and evaluate the feasibility of similar intersection improvements at Airport-Pulling Rd
- Evaluate the need for and feasibility of constructing additional turn lanes or extending existing storage capacity for accessing Osceola Trail from both directions to accommodate potential spikes in school traffic at this location
- Work with schools to stagger arrival/dismissal times if possible, and optimize signal timing at Airport-Pulling Rd, Osceola Trail, and Livingston Rd for times of increased school traffic

## What Can I Do to Help Reduce Congestion?

Common strategies that people can use to help with congestion include:

- Changing your trips to less busy time periods when possible
- Checking for alternate routes based on traffic conditions
- Using transit when possible
- Walking or biking for short trips
- Joining or starting a carpool with nearby coworkers or commuters
- Taking advantage of flex schedule or telecommuting opportunities if offered by your employer
- Practicing safe driving techniques to avoid crash incidents

### Transit Routes Available:

<b>R12</b>	Airport Rd to Creekside Commerce Park
<b>R20</b>	Pine Ridge Road
<b>R25</b>	Golden Gate Parkway & Goodlette – Frank
<b>R26</b>	Pine Ridge Road/ Naples Blvd/ Clam Pass

RideCAT.com 

## How Do I Get Involved?

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**We want to hear your feedback!**



## COLLIER METROPOLITAN PLANNING ORGANIZATION

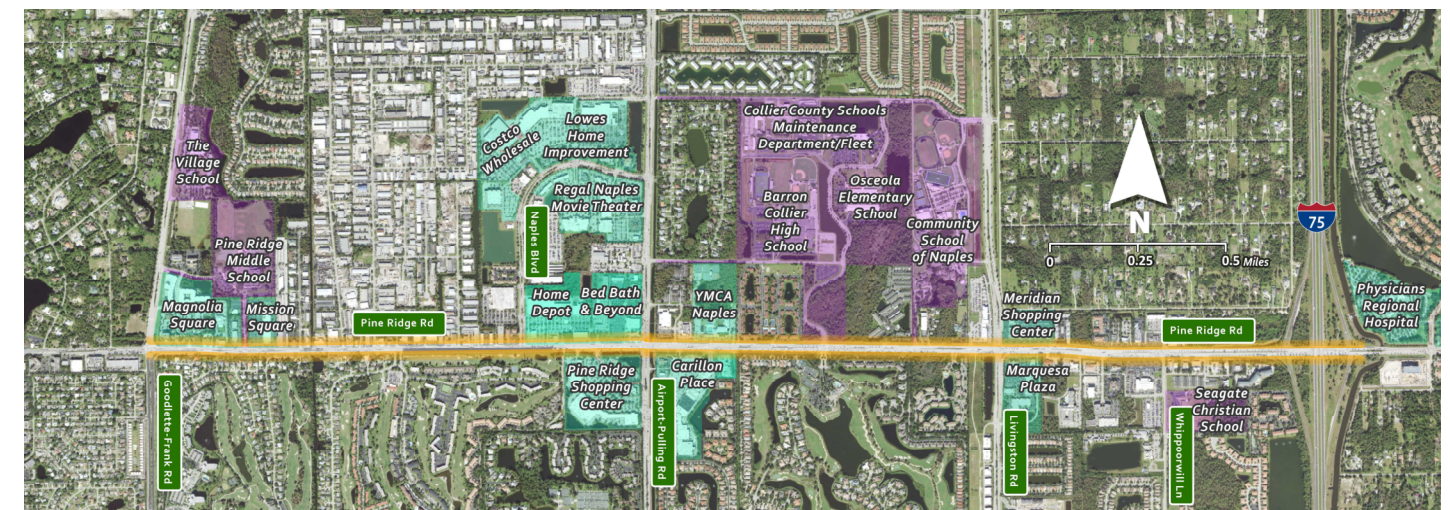
Fall 2022



## Collier County's Congestion Hotspots

### CR 896 / Pine Ridge Rd

(From CR 851 / Goodlette-Frank Rd to I-75)



## What is Congestion Management?

Congestion management describes all of the activities used to help reduce the negative impacts of traffic congestion and improve roadway performance in urban areas.

Transportation planning agencies, such as the Collier MPO, follow a detailed Congestion Management Process (CMP) when making decisions about the best ways to address traffic congestion in specific areas, and eventually how improvement strategies should be prioritized for available funding.

Once a congestion reduction strategy or policy decision has been implemented, the CMP then evaluates its effectiveness using measurable data to determine if the intended outcome was achieved or if other solutions may be needed.

## Why is the MPO Evaluating Hotspot Corridors?

As a part of the ongoing effort to reduce congestion on Collier County roadways, the MPO regularly identifies corridors with high levels of recurring traffic congestion. This usually occurs every two years when the MPO's Transportation System Performance (TSP) Report is updated. This process consists of traffic data analysis and forecasting that is based on other MPO planning efforts such as the Long Range Transportation Plan (LRTP).

The corridor featured in this fact sheet was identified in the most recent TSP Report as having unmet needs related to safety, congestion, or other causes that are not likely to be addressed by currently planned improvements. The MPO is now evaluating it in greater detail to develop potential improvement strategies and better understand which strategies could be the most effective based on current conditions.



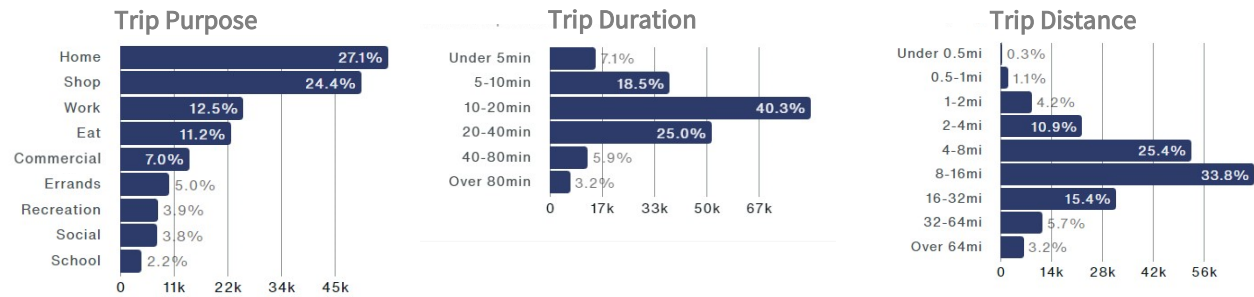


Quick Facts

Corridor Length: 3.67 Miles  
Number of Major Intersections: 13  
Number of Daily Trips (Avg. Weekday): ~210k

~22 min  
Avg. Daily Duration of Bottleneck Conditions

~277k  
Annual Vehicle Hours of Delay



Corridor Challenges

- I-75 Interchange:** This corridor's access to I-75 creates demand from other neighboring arterial roadways, resulting in higher traffic volumes and more "pass through" trips.
- Mix of Trip Purposes:** The variety of commuter traffic, trucks associated with warehouse/ industrial areas, shopping/recreational trips, and school traffic can create a high number of vehicles and difficulty proposing solutions to address all activity effectively.

Corridor Opportunities

- Regional Non-Motorized Connections:** This corridor intersects with multiple north-south shared-use path segments. These areas could become opportunities for bicycle and pedestrian connections to the larger countywide greenway network in the future.
- Existing Transit Routes:** This corridor offers a variety options for existing transit services and transfer opportunities for traveling in multiple directions throughout the county.

Where is Congestion Usually the Worst?



Direction  
Eastbound

Location  
Approaching  
Livingston Rd

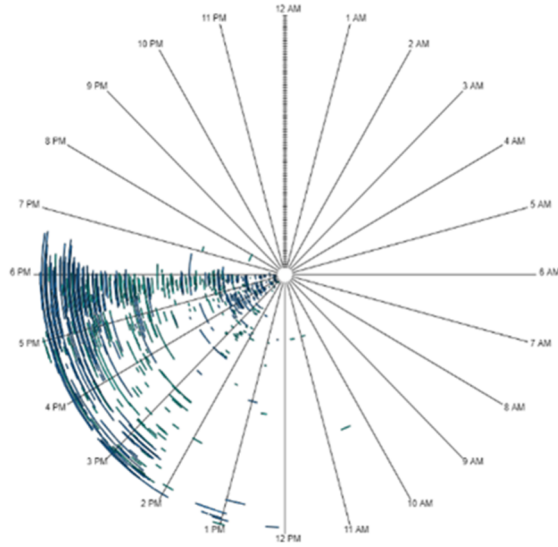
Time  
4-6 PM

Bottleneck Occurrences

Each line in this graph represents a traffic bottleneck during 2021 in the eastbound direction at Livingston Rd. The length of the line shows how long it lasted. The line placement shows the time of day throughout the year, with January 1 at the center of the circle and December 31 at the outside edge. Bottlenecks at this location occurred more often during the mid-afternoon and PM peak period. These conditions are less common during the middle of the year, especially those occurring before 5 PM.



Pine Ridge Rd at Livingston Rd – Facing West



Congestion Throughout the Year...

The seasonal patterns of congestion occurring along this corridor can be seen in the longer travel times from roughly September to May, which coincides with school activity and may be worsened by seasonal visitors at the beginning and end of the year combined with commuting patterns. Not only is congestion worse due to seasonal patterns, but delay is also more unpredictable. The grey lines on these graphs show the amount of additional time needed for "planning ahead" to arrive on time, which also increases during the same months. A similar pattern is shown below by the higher monthly delay costs. Expressed in terms of relative costs, months with higher delay costs are shown as red and orange where lower delay costs are shown as shades of green.



Estimated Traffic Delay Costs

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	\$\$\$	\$\$\$	\$\$\$	\$\$\$								
2021	\$\$\$	\$\$\$	\$\$\$	\$\$	\$\$	\$\$	\$	\$	\$\$	\$\$	\$\$\$	\$\$\$
2020	\$\$\$\$	\$\$\$\$	\$\$\$	\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$\$
2019	\$\$\$	\$\$	\$\$	\$\$	\$\$	\$	\$\$	\$\$\$	\$\$	\$\$\$	\$\$\$\$	\$\$\$\$

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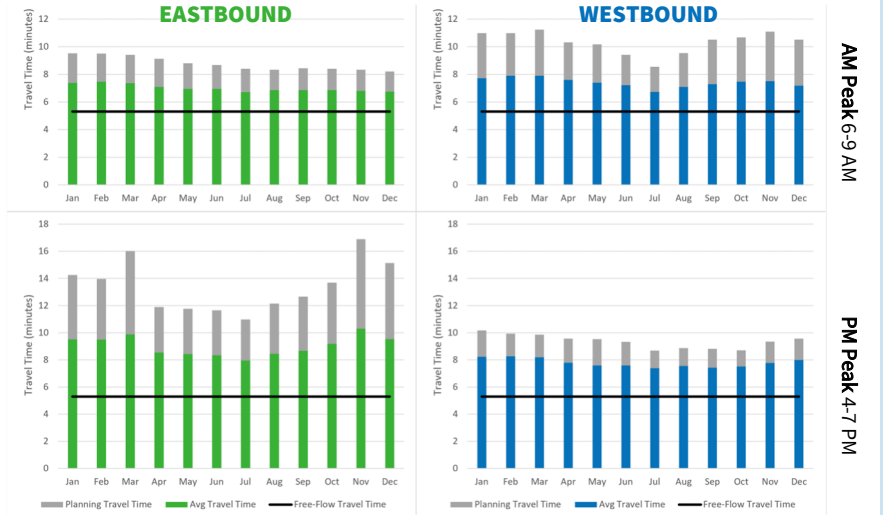


Congestion Throughout the Day...

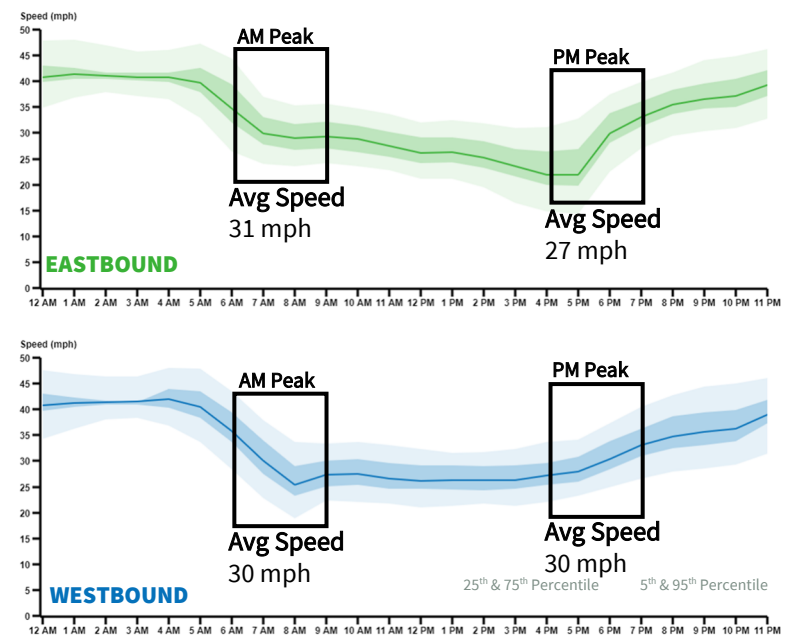
Recurring congestion patterns vary during the average weekday based on time period. Typically, roadway activity is higher in the morning and evening during what are known as the peak periods. The graph on the right shows how average travel speeds change throughout the day along this corridor that has a posted speed limit of 40-45 MPH. Although speeds drop noticeably during both peak periods, they become the lowest in the eastbound direction during the PM peak period at roughly 22 MPH. Travel speeds in the westbound direction drop sharply in the morning to roughly 25 MPH and then remain at this relatively low level throughout the afternoon. As shown in the circular graph to the left, most bottlenecks occur roughly between 12 and 6 PM in the eastbound direction, becoming more common later in the afternoon. Trip purposes also change throughout the day. Work trips are most common in the morning and home trips in evening. Shopping trips are the second most common purpose throughout the day.



Average Weekday Travel Times & Reliability



Average Weekday Travel Speeds





## What Improvements Are Planned for This Corridor?



## What Else Can Be Done to Reduce Congestion?

Although CMP strategies are focused on reducing traffic congestion, they are more than just roadway improvements and adding new lanes. In fact, well-planned CMP strategies can include multiple modes of transportation and often produce low-cost projects that can be completed in a short timeframe. In addition to the improvements shown on the map above, strategies that may help address congestion along this corridor if pursued by the MPO and its transportation partner agencies include:

- Consider upgrading non-motorized crossing facilities on the west side of the Livingston Rd intersection to improve safety conditions and accommodate additional greenway crossings in the future without affecting traffic conditions
- Consider expanding traffic signal capabilities through technology and communications improvements to optimize turning movements during peak periods at Livingston Rd
- Evaluate the feasibility of adding capacity and additional turn lanes to Orange Blossom Dr to serve as an alternative route for accessing Airport-Pulling Rd and Livingston Rd
- Provide funding assistance for promoting existing car/vanpool awareness and app availability
- Evaluate the feasibility of a new interchange at Vanderbilt Beach Rd and I-75
- Advance the displaced-left design concept from the Transportation Systems Performance Report Action Plan or evaluate other innovative intersection solutions at Vanderbilt Beach Rd and Livingston Rd to accommodate additional traffic volumes once the Vanderbilt Beach Rd Extension Project is completed

## What Can I Do to Help Reduce Congestion?

Common strategies that people can use to help with congestion include:

- Changing your trips to less busy time periods when possible
- Checking for alternate routes based on traffic conditions
- Using transit when possible
- Walking or biking for short trips
- Joining or starting a carpool with nearby coworkers or commuters
- Taking advantage of flex schedule or telecommuting opportunities if offered by your employer
- Practicing safe driving techniques to avoid crash incidents

## How Do I Get Involved?

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**We want to hear your feedback!**



### Transit Routes Available:



## COLLIER METROPOLITAN PLANNING ORGANIZATION

Fall 2022



## Collier County's Congestion Hotspots

## CR 862 / Vanderbilt Beach Rd

(From CR 31 / Airport-Pulling Rd to CR 881 / Livingston Rd)



## What is Congestion Management?

Congestion management describes all of the activities used to help reduce the negative impacts of traffic congestion and improve roadway performance in urban areas.

Transportation planning agencies, such as the Collier MPO, follow a detailed Congestion Management Process (CMP) when making decisions about the best ways to address traffic congestion in specific areas, and eventually how improvement strategies should be prioritized for available funding.

Once a congestion reduction strategy or policy decision has been implemented, the CMP then evaluates its effectiveness using measurable data to determine if the intended outcome was achieved or if other solutions may be needed.

## Why is the MPO Evaluating Hotspot Corridors?

As a part of the ongoing effort to reduce congestion on Collier County roadways, the MPO regularly identifies corridors with high levels of recurring traffic congestion. This usually occurs every two years when the MPO's Transportation System Performance (TSP) Report is updated. This process consists of traffic data analysis and forecasting that is based on other MPO planning efforts such as the Long Range Transportation Plan (L RTP).

The corridor featured in this fact sheet was identified in the most recent TSP Report as having unmet needs related to safety, congestion, or other causes that are not likely to be addressed by currently planned improvements. The MPO is now evaluating it in greater detail to develop potential improvement strategies and better understand which strategies could be the most effective based on current conditions.





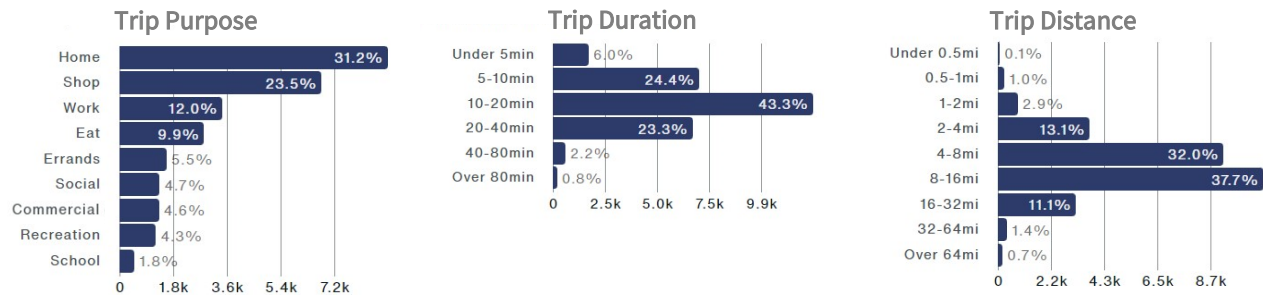
Collier County's Congestion Hotspots  
CR 862 / Vanderbilt Beach Rd (From CR 31 / Airport-Pulling Rd to CR 881 / Livingston Rd)

Quick Facts

Corridor Length: 1.01 Miles  
Number of Major Intersections: 2  
Number of Daily Trips (Avg. Weekday): ~29k

~3 min  
Avg. Daily Duration of Bottleneck Conditions

~2k  
Annual Vehicle Hours of Delay



Corridor Challenges

- Commuter Traffic:** This corridor experiences surges in commuter traffic in the morning and afternoon, especially in the eastbound direction during the PM peak period, which is likely worsened by vehicles trying to access the I-75 interchanges and creating a burden on turning capacity at the Livingston Road intersection.
- Potential Bicycle & Pedestrian Conflicts:** As future connections and improvements are made to the greenway along Livingston Rd, the crossing at this corridor could experience increased activity that could lead to safety problems without adequate investments in facility upgrades.

Corridor Opportunities

- Lack of Development Density:** The combination of natural areas, parks, golf courses, and undeveloped land north of this corridor do not currently contribute to the significant worsening of congestion levels.

Where is Congestion Usually the Worst?



Direction  
Eastbound

Location  
Approaching  
Livingston Rd

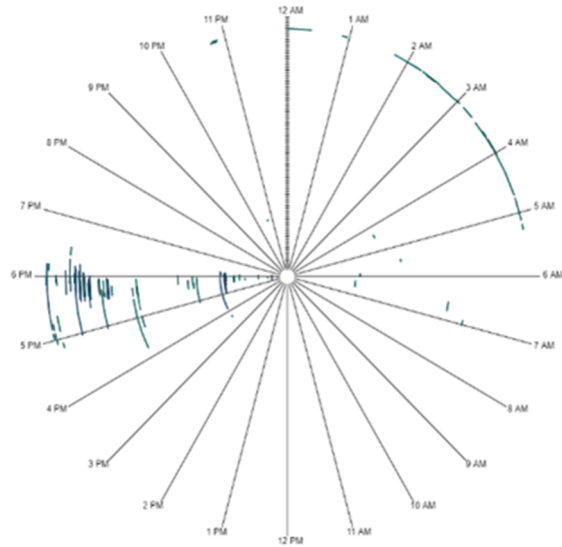
Time  
5-6 PM

Bottleneck Occurrences

Each line in this graph represents a traffic bottleneck during 2021 in the eastbound direction at Livingston Rd. The length of the line shows how long it lasted. The line placement shows the time of day throughout the year, with January 1 at the center of the circle and December 31 at the outside edge. Bottlenecks at this location occurred more often during the PM peak period between 5 and 6 PM. Note that the overnight bottleneck conditions occurring 2 and 5 AM towards the end of the year are likely related to planned maintenance or construction activity.



Vanderbilt Beach Rd at Livingston Rd - Facing West



Congestion Throughout the Year...

The seasonal patterns of congestion occurring along this corridor can be seen in the longer travel times from roughly September to May, which coincides with school activity and may be worsened by seasonal visitors at the beginning and end of the year combined with commuting patterns. Not only is congestion worse due to seasonal patterns, but delay is also more unpredictable. The grey lines on these graphs show the amount of additional time needed for "planning ahead" to arrive on time, which also increases during the same months. A similar, although less pronounced, pattern is shown below by the higher monthly delay costs. Expressed in terms of relative costs, months with higher delay costs are shown as red and orange where lower delay costs are shown as shades of green.



Estimated Traffic Delay Costs

Year	Estimated Traffic Delay Costs											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	\$	\$\$	\$\$	\$								
2021	\$\$	\$\$	\$\$	\$	\$	\$	\$	\$	\$	\$	\$	\$\$
2020	\$\$\$\$	\$\$\$\$	\$\$	\$	\$	\$	\$	\$	\$	\$	\$	\$\$
2019	\$	\$	\$	\$	\$	\$	\$	\$\$\$	\$\$\$	\$\$\$\$	\$\$\$\$	\$\$\$\$

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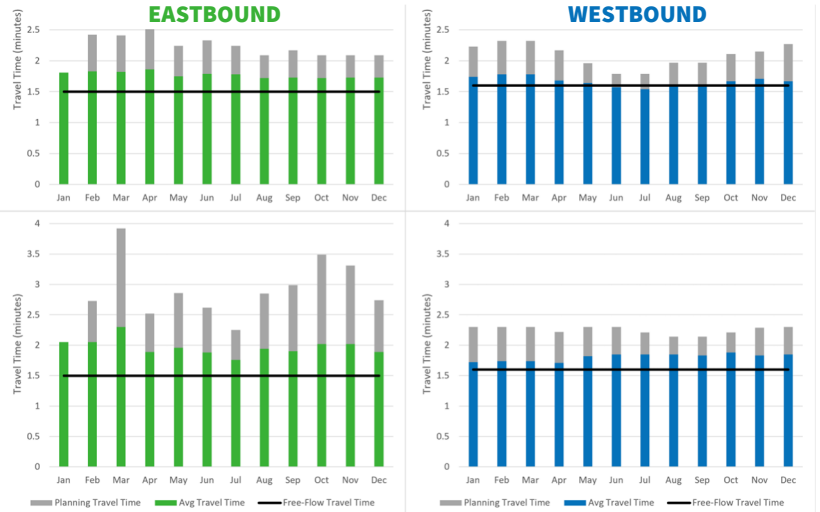


Congestion Throughout the Day...

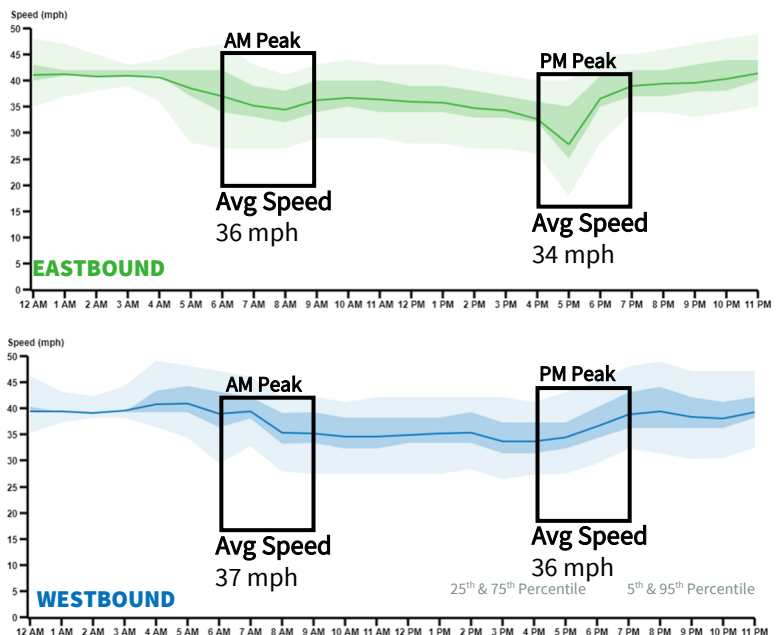
Recurring congestion patterns vary during the average weekday based on time period. Typically, roadway activity is higher in the morning and evening during what are known as the peak periods. The graph on the right shows how average travel speeds change throughout the day along this corridor that has a posted speed limit of 45 MPH. Although speeds drop most severely during the PM peak period in the eastbound direction, they remain relatively more stable in the westbound direction throughout the day. As shown in the circular graph to the left, most bottlenecks occur roughly between 5 and 6 PM in the eastbound direction. Trip purposes also change throughout the day. Work trips are most common in the morning and home trips in evening. Shopping trips are the second most common purpose throughout the day.



Average Weekday Travel Times & Reliability

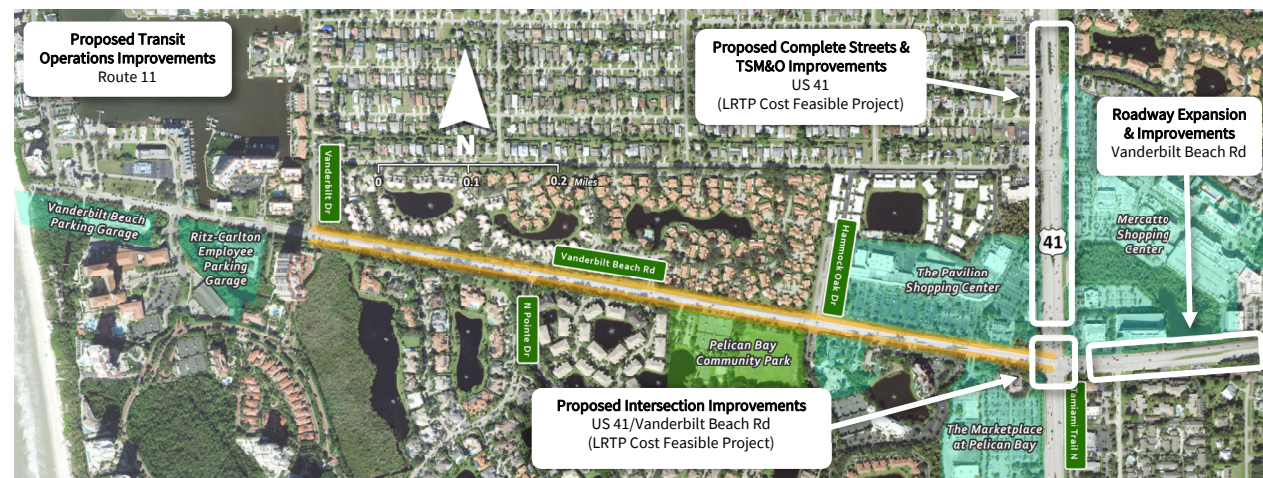


Average Weekday Travel Speeds





## What Improvements Are Planned for This Corridor?



## What Else Can Be Done to Reduce Congestion?

Although CMP strategies are focused on reducing traffic congestion, they are more than just roadway improvements and adding new lanes. In fact, well-planned CMP strategies can include multiple modes of transportation and often produce low-cost projects that can be completed in a short timeframe. In addition to the improvements shown on the map above, strategies that may help address congestion along this corridor if pursued by the MPO and its transportation partner agencies include:

- Develop a pilot project for a community shuttle/circulator route connecting the Creekside Transfer Center to the commercial areas surrounding US 41/Vanderbilt Beach Rd intersection via Gulf Shore Dr
- Evaluate the feasibility of converting existing off-street sidewalk into a shared-use path to encourage non-motorized transportation and reduce short vehicle trips from surrounding hotels and condominiums
- Consider expanding traffic signal capabilities through technology and communications improvements to optimize traffic flow at US 41 during seasonal months
- Consider upgrading existing bike lanes with additional signage, pavement markings, green paint, audible pavement markings, and/or traffic separators to increase safety conditions, and extending west to Gulfshore Dr, which has been identified as a network gap priority by the most recent Bicycle & Pedestrian Master Plan based on public feedback
- Evaluate the feasibility of constructing a roundabout at Hammock Oak Dr, Vanderbilt Dr, and/or Gulf Shore Dr
- Evaluate the feasibility of a new dedicated right-turn lane at the eastbound entrance to the Vanderbilt Beach Public

## What Can I Do to Help Reduce Congestion?

Common strategies that people can use to help with congestion include:

- Changing your trips to less busy time periods when possible
- Checking for alternate routes based on traffic conditions
- Using transit when possible
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**We want to hear your feedback!**



This fact sheet was created by the Collier MPO, and has been financed in part through grants from the FHWA, FTA, and U.S. DOT, under the Metropolitan Planning Program, 23 USC Sections 134 & 135.

COLLIER METROPOLITAN  
PLANNING ORGANIZATION

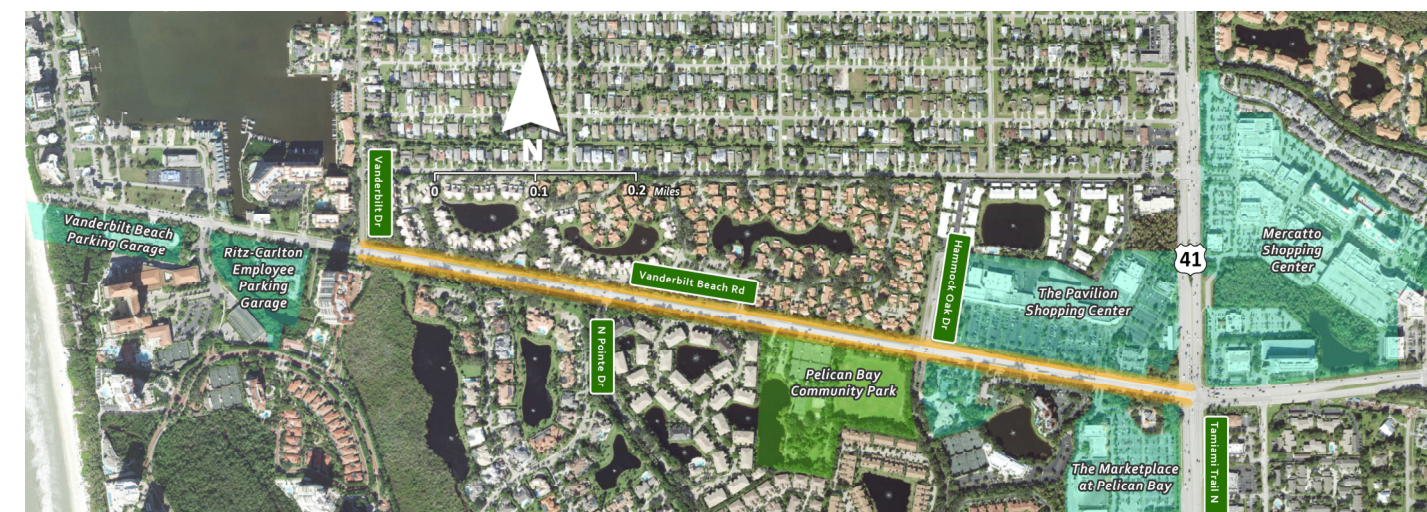
Fall 2022



Collier County's Congestion Hotspots

## CR 862 / Vanderbilt Beach Rd

(From CR 901 / Vanderbilt Dr to US 41 / Tamiami Trail)



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Visit us at:  
[www.colliermpo.org](http://www.colliermpo.org)  
Scan the QR code with your smart phone camera to access our website.

Collier MPO  
2885 S. Horseshoe Dr., Naples, FL 34104  
(239) 252-5814





Collier County's Congestion Hotspots

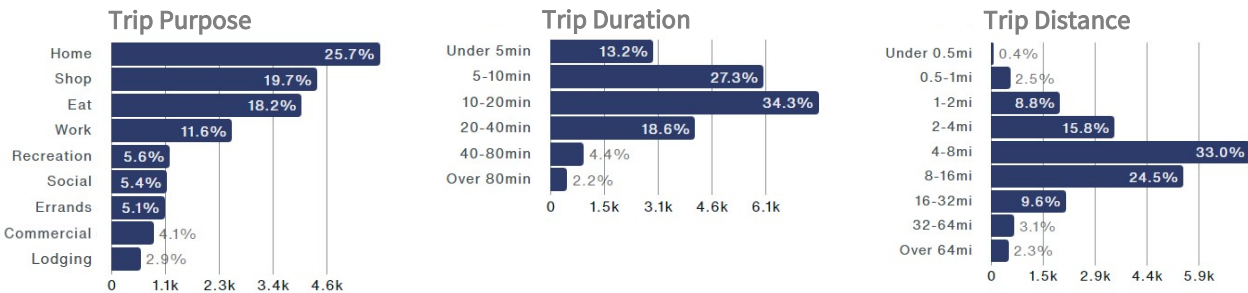
CR 862 Vanderbilt Beach Rd (From CR 901 / Vanderbilt Dr to US 41 / Tamiami Trail)

Quick Facts

Corridor Length: 1 Mile  
Number of Major Intersections: 4  
Number of Daily Trips (Avg. Weekday): ~22k

~2 min  
Avg. Daily Duration of Bottleneck Conditions

~1k  
Annual Vehicle Hours of Delay



Corridor Challenges

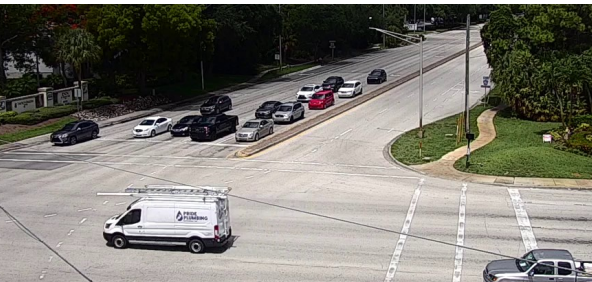
- Seasonality:** This corridor is a small roadway that is highly susceptible to spikes in traffic during months with increased seasonal visitors because of its location between coastal hotels/condominiums and shopping/dining destinations to the east.
- Beach Trips:** The public beach parking on the far west end, combined with "turnaround trips" and regular traffic from local residents and visitors, can create congestion that accumulates and eventually affects this corridor.

Corridor Opportunities

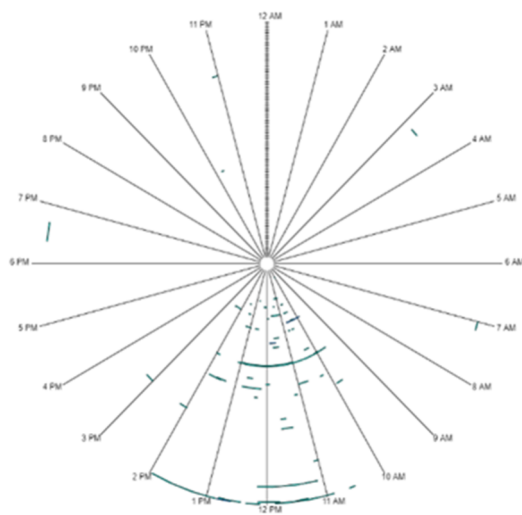
- Non-Motorized Facilities:** The existing space along this corridor provides an opportunity for upgrading and expanding the existing sidewalk into a larger share-use path. The surrounding density of hotels/condominiums and proximity to the beach could likely produce a high demand for recreational and short non-motorized trips for other purposes.
- Alternative Route Options:** The grid network of neighborhood streets east of Vanderbilt Drive can provide multiple alternative northern routes to US 41 that could be modified to incorporate elements of Complete Streets or used for re-routing in cases of severe delays or crash incidents.
- Employee Shuttles/Vanpools:** The concentration of hotels and resorts in this area could provide an opportunity to provide alternative transportation options to employees who use this corridor on a regular basis for commuting to work.

Bottleneck Occurrences

Each line in this graph represents a traffic bottleneck during 2021 in the westbound direction at Gulfshore Dr. The length of the line shows how long it lasted. The line placement shows the time of day throughout the year, with January 1 at the center of the circle and December 31 at the outside edge. Unlike roadways with a high degree of commuter traffic, bottlenecks at this location occurred more often during mid-day rather than the AM and PM peak periods typically associated with congestion. These conditions are consistent with recreational trips by seasonal visitors/retirees and regular beach activity in the area.



Vanderbilt Beach Rd at US 41 – Facing West



When is Congestion Usually the Worst?



Direction  
Eastbound

Time  
11AM- 4PM



Congestion Throughout the Year...

The seasonal patterns of congestion occurring along this corridor during months when visitors and part-time residents are more common can be seen in the longer travel times from roughly November to June. Not only is congestion worse due to seasonal patterns, but delay is also more unpredictable. The grey lines on these graphs show the amount of additional time needed for "planning ahead" to arrive on time, which also increases. A similar pattern is shown below by the higher monthly delay costs, especially during the first part of the year. Expressed in terms of relative costs, months with higher delay costs are shown as red and orange where lower delay costs are shown as shades of green.



Estimated Traffic Delay Costs

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	\$\$	\$\$\$	\$\$\$	\$\$								
2021	\$\$	\$\$	\$\$\$	\$\$	\$\$	\$\$	\$	\$	\$	\$	\$	\$\$
2020	\$\$\$\$	\$\$\$\$	\$\$\$	\$	\$	\$	\$	\$	\$	\$	\$	\$\$
2019	\$\$	\$\$\$	\$\$\$	\$	\$	\$	\$\$	\$\$\$	\$\$\$	\$\$	\$\$\$	\$\$\$

**Data Sources:** All data shown or referenced on these two pages is from 2021 unless otherwise noted. Information related to congestion, delay, travel times, travel speeds, and bottleneck conditions is from RITIS HERE data. Information related to trip characteristics is from Replica.

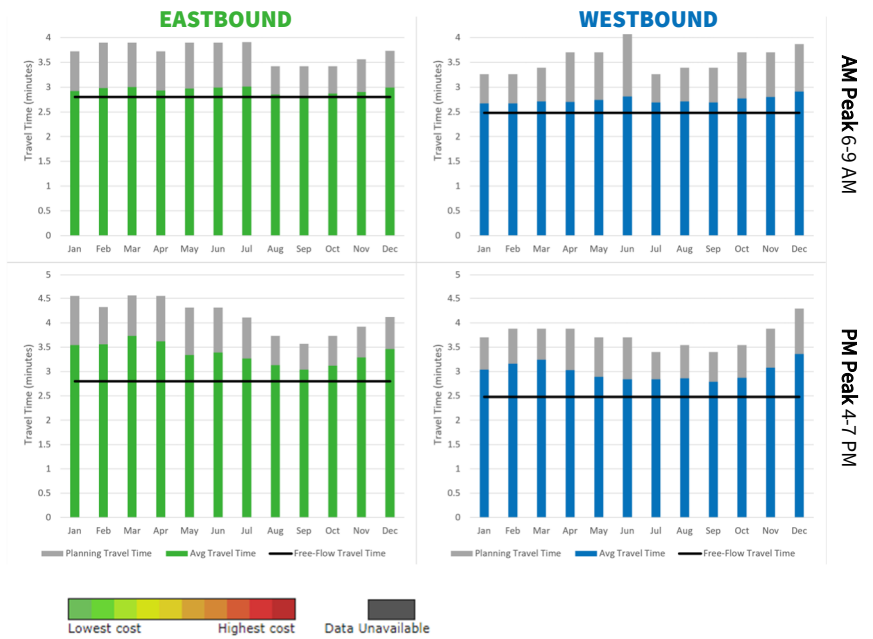


Congestion Throughout the Day...

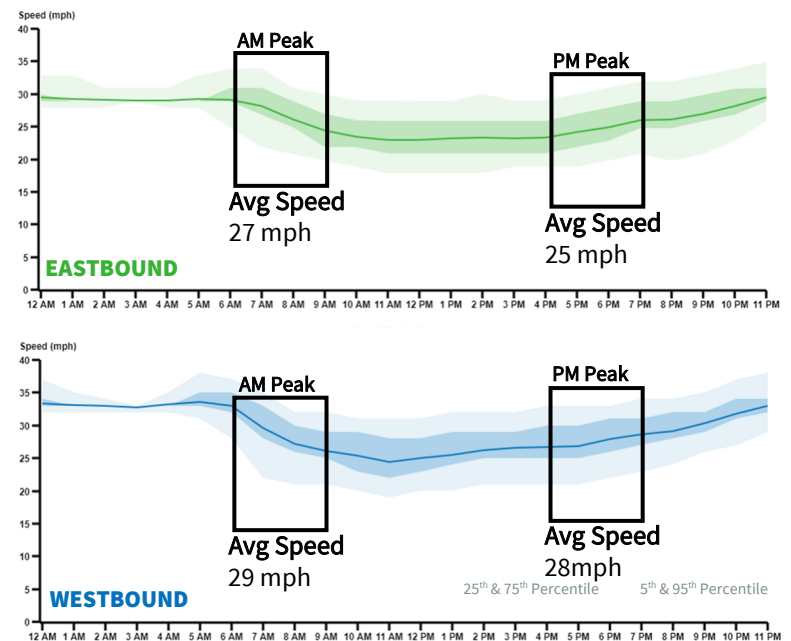
Recurring congestion patterns vary during the average weekday based on time period. Typically, roadway activity is higher in the morning and evening during what are known as the peak periods. The graph on the right shows how average travel speeds change throughout the day along this corridor that has a posted speed limit of 35 MPH. Reductions in speed to do not follow the typical peak pattern for most congested corridors, but rather decline more gradually as morning activity increases, remain relatively low throughout the mid-day, and then gradually recover again in the late afternoon. This reflects the lack heavy commuting traffic and high level of visitors or recreational trips to the beach using the corridor. Similarly, the circular graph to the left shows that most bottlenecks occur between 10 AM and 2 PM, and are not overly common occurrences. Trip purposes also indicate a similar pattern of mid-day visitor or non-work-related activity, with trips for shopping, eating, recreational, or social purposes accounting for nearly 50% of all activity along the corridor.



Average Weekday Travel Times & Reliability



Average Weekday Travel Speeds





**EXECUTIVE SUMMARY**  
**DISTRIBUTION**  
**ITEM 10B**

**Draft 2023 MPO Meeting Calendar**

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**OBJECTIVE:** For the committee to receive a copy of the draft 2023 MPO Meeting Calendar.

**CONSIDERATIONS:** The draft 2023 MPO Meeting Calendar is provided in **Attachment 1**. The MPO Board is expected to approve a final 2023 Meeting Calendar at their December 9<sup>th</sup> meeting.

**STAFF RECOMMENDATION:** N/A.

Prepared By: Anne McLaughlin, MPO Director

**ATTACHMENT(S):**

1. Draft 2023 MPO Meeting Calendar



# 2023 Meeting Schedule

Collier Metropolitan Planning Organization (MPO)  
2885 S. Horseshoe Drive, Naples, FL 34104  
[www.CollierMPO.com](http://www.CollierMPO.com)  
(239) 252-5814

**STRIKETHROUGH = CANCELLED MEETING**  
**DATES IN RED = ADDED MEETING**

## 10/14/2022 MPO BOARD MEETING DRAFT

**\*Note that locations have changed for meetings previously held in Conference Room 609/610, Collier County Growth Management Division, Planning & Regulation Bldg., 2800 North Horseshoe Drive, Naples, FL, due to unavailability of the Conference Room.**

<b>Metropolitan Planning Organization (MPO) – Monthly at 9:30 a.m.</b>			
MPO Board Meetings are held on the second Friday of the month at the Board of County Commissioners Chambers, Admin. Bldg. F, 3299 Tamiami Trail East, Naples, FL, 34112, unless otherwise noted.			
February 10, 2023	March 10, 2023	April 14, 2023	May 12, 2023
June 9, 2023	September 8, 2023	October 13, 2023	*November 17, 2023
December 8, 2023			
*TENTATIVE JOINT MEETING with Lee County MPO, location and time TBD. Date subject to change.			

<b>Technical Advisory Committee (TAC) – Monthly at 9:30 a.m.</b>			
TAC Meetings are held on the fourth Monday of the month at the County Transportation Management Services Bldg., Main Conference Room, 2885 South Horseshoe Drive, Naples, FL, 34104, unless otherwise noted.			
January 23, 2023	February 27, 2023	March 27, 2023	April 24, 2023
May 22, 2023	August 28, 2023	September 25, 2023	*October 23, 2023
November 27, 2023			
* TENTATIVE JOINT MEETING with Lee County TAC, location and time TBD. Date subject to change.			

<b>Citizen Advisory Committee (CAC) – Monthly at 2:00 p.m.</b>			
CAC Meetings are held on the fourth Monday of the month at the County Transportation Management Services Bldg., Main Conference Room, 2885 South Horseshoe Drive, Naples, FL, 34104, unless otherwise noted.			
January 23, 2023	February 27, 2023	March 27, 2023	April 24, 2023
May 22, 2023	August 28, 2023	September 25, 2023	*October 23, 2023
November 27, 2023			
* TENTATIVE JOINT MEETING with Lee County CAC, location and time TBD. Date subject to change.			

<b>Bicycle/Pedestrian Advisory Committee (BPAC) – Monthly at 9:00 a.m.</b>			
BPAC Meetings are held on the third Tuesday of the month at the Collier County Government Center, Admin. Bldg. F, IT Training Room, 5th Floor, 3299 Tamiami Trail East, Naples, 34112, unless otherwise noted.			
January 17, 2023	February 21, 2023	March 21, 2023	April 18, 2023
May 16, 2023	August 15, 2023	September 19, 2023	*October 17, 2023
November 21, 2023			
* TENTATIVE JOINT MEETING with Lee County BPCC, location and time TBD. Date subject to change.			

<b>Congestion Management Committee (CMC) – Bi-Monthly at 2:00 p.m.</b>			
CMC Meetings are held on the third Wednesday of every other month at the Collier County Transportation Management Services Bldg., South Conference Room, 2885 South Horseshoe Drive, Naples, FL, 34104, unless otherwise noted.			
January 18, 2023	March 15, 2023	May 17, 2023	July 19, 2023
September 20, 2023	November 15, 2023		

<b>Local Coordinating Board (LCB) for the Transportation Disadvantaged – Quarterly at 1:30 p.m.</b>			
LCB Meetings are held quarterly on the first Wednesday of the corresponding month at the Collier County Government Center, Admin. Bldg. F, IT Training Room, 5th Floor, 3299 Tamiami Trail East, Naples, 34112, unless otherwise noted.			
March 1, 2023	May 3, 2023	September 6, 2023	December 6, 2023