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**
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 Addition of Funds to Cover Cost Increases on Eden Park Elementary and 111th Ave. Projects
   B. Review Congestion Management Process (CMP) Origin and Destination (O & D) Study
   C. Potential Agenda Topics for Joint Meeting with Lee County MPO
   D. Endorse FDOT Vision Zero Safety Targets for Calendar Year 2023
   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*

PLEASE NOTE:

The meetings of the advisory committees of the Collier Metropolitan Planning Organization (MPO) are open to the public and citizen input is encouraged. Any person wishing to speak on any scheduled item may do so upon recognition of the Chairperson. Any person desiring to have an item placed on the agenda should contact the MPO Director at least 14 days prior to the meeting date. Any person who decides to appeal a decision of the advisory committee will need a record of the proceedings pertaining thereto, and therefore may need to ensure that a verbatim record of the proceeding is made, which record includes the testimony and evidence upon which the appeal is to be based. In accordance with the Americans with Disabilities Act, any person requiring special accommodations to participate in this meeting should contact the Collier Metropolitan Planning Organization 72 hours prior to the meeting by calling (239) 252-5814. The MPO's planning process is conducted in accordance with Title VI of the Civil Rights Act of 1964 and Related Statutes. Any person or beneficiary who believes that within the MPO's planning process they have been discriminated against because of race, color, religion, sex, age, national origin, disability, or familial status may file a complaint with the Collier MPO Title VI Specialist Ms. Dusty Siegler (239) 252-5814 or by email at: Dusty.Siegler@colliercountyfl.gov , or in writing to the Collier MPO, attention: Ms. Siegler, at 2885 South Horseshoe Dr., Naples, FL 34104.

TECHNICAL ADVISORY COMMITTEE of the
COLLIER METROPOLITAN PLANNING ORGANIZATION
MEETING MINUTES
August 22, 2022, 9:30 a.m.

1. Call to Order

Ms. Lantz called the meeting to order at 9:32 a.m.

2. Roll Call

Mr. Philips called the roll and confirmed a quorum was present.

TAC Members Present
Lorraine Lantz, Chair, Collier County Transportation Planning
Allison Bickett, Vice Chair, City of Naples
Michelle Arnold, Collier County Public Transit and Neighborhood Enhancement (PTNE)
Ute Vandersluis, Naples Airport Authority
Dave Rivera, City of Naples
Don Scott, Lee MPO
Margaret Wuerstle, Southwest Florida Regional Planning Council

TAC Members Absent
Andrew Bennett, Collier County Airport Authority
Daniel Smith, City of Marco Island
Tim Brock, Everglades City
Dan Hall, Collier County Traffic Operations

MPO Staff
Brandy Otero, Principal Planner
Scott Philips, Principal Planner

Others Present
Victoria Peters, FDOT

3. Approval of the Agenda

Ms. Bickett *moved to approve the agenda.* ***Ms. Arnold*** *seconded. Carried unanimously.*

4. Approval of the May 23, 2022 Meeting Minutes

Ms. Arnold *moved to approve the May 23, 2022 meeting minutes.* ***Ms. Wuerstle*** *seconded. Carried unanimously.*

5. Public Comments for Items not on the Agenda

None.

6. Agency Updates

A. FDOT

- Mobility Week is October 21-28; FDOT to keep committee posted on events.
- Adopted Work Program to be sent at the end of the week or early next week.

B. MPO Executive Director

- MPO hired a new administrative assistant.

7. Committee Action

A. Endorse Roll Forward Amendment #1 FY 2023-2027 TIP and Authorizing Resolution

Ms. Otero noted that transit grants are not typically included in the FDOT Roll Forward Reports. **Ms. Arnold** asked MPO to get status of a transit grant roll forward report. **Ms. Otero** stated that MPO will follow up with FDOT for additional information.

Ms. Arnold *moved to endorse Roll Forward Amendment #1 FY 2023-2027 TIP and Authorizing Resolution with the caveat that the MPO follow up with FDOT regarding status of transit grant roll forward reports.* ***Ms. Bickett*** *seconded. Carried unanimously.*

B. Endorse Unified Planning Work Program (UPWP) Amendment #1

Ms. Otero advised that the Amendment is necessary to add a new federally required Zero Emission Transition Plan to the UPWP for the Public Transit and Neighborhood Enhancement Division, and to add FTA §5307 and reallocate §5305(d) funds in the UPWP to pay for study. **Ms. Lantz**: who leads the study? **Ms. Otero**: MPO and PTNE work together. **Ms. Arnold**: CAT usually uses the MPO's consultant contract. Study is required for future grants.

Mr. Scott *moved to endorse UPWP Amendment #1.* ***Ms. Wuerstle*** *seconded. Carried unanimously.*

8. Reports and Presentation (May require Committee Action)

None.

9. Member Comments

Mr. Rivera asked about getting volume counts from the MPO? City is adding 16 new count stations. **Ms. Otero** Stantec recently compiled 2019 Base Year data for MPO; will discuss what's available with Anne McLaughlin.

Mr. Scott: New Bipartisan Infrastructure Law (BIL) funding may not be available until FY 2024.

Ms. Otero reviewed notes on new funding programs and explained the State must give FDOT budget authority to program funding. FDOT will issue letters of consistency for grant applications as long as the projects are consistent with the Long Range Transportation Plan. **Mr. Scott**: it may take FDOT six weeks to issue letter. **Ms. Peters** stated to contact her if it's been more than six weeks or if you don't have six weeks and she will put letter together and get it signed. **Mr. Scott**: FDOT can also apply for up to three grants; FDOT is interested in partnering with MPOs; FDOT also needs to know what grants are being applied for so the department is not competing with MPOs.

10. Distribution Items

A. Replacement Page FY 23-27 Transportation Improvement Program

Item distributed.

B. Updated 2022 Calendar – Collier/Lee Joint Meeting Dates

Ms. Otero: we are working on the Collier/Lee Joint Meeting Dates; November Board meeting is a joint meeting with Lee MPO, scheduled at North Collier Regional Park; working on joint TAC meeting; considering SWAO.

Ms. Peters: contact us and we will work with you.

11. Next Meeting Date

September 26, 2022– 9:30 a.m. – in person

12. Adjournment

Ms. Lantz adjourned the meeting at 10:09 a.m.

EXECUTIVE SUMMARY
COMMITTEE ACTION
ITEM 7A

Endorse Addition of Funds to Cover Cost Increases on Eden Park Elementary and 111th Ave. Projects

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OBJECTIVE: For the committee to endorse the addition of funds to cover cost increases on Eden Park Elementary and 111th Ave Projects.

CONSIDERATIONS: The process that is required for use of the urbanized area funds, requires cost estimates to be completed at time of application, however, programming of construction funds may be delayed multiple years due to funding availability. Furthermore, once the projects are programmed in the Florida Department of Transportation Work Program, programmed amounts are not updated to reflect inflationary fluctuations. Collier County, like many other entities have experienced unprecedented increases for both professional services and construction costs. Labor costs and rising prices of materials coupled with supply chain delays have contributed to the increased costs. The County has been able to cover many of the increases on ongoing projects, however, two bike/ped projects have been identified in the current Work Program cycle that need additional funding for construction:

FPN: 441846-1 111th Ave North Paved Shoulders – this project constructs paved shoulders along 111th Ave North/Bluebill Ave from the east foot of the Bluebill Ave bridge to 7th St N. The construction cost estimate for this project was produced in 2013 and FDOT programmed this project in 2017/18. Engineering plans for the project were recently completed and the revised construction cost estimate has now increased.

2013 Construction Cost Estimate	$467,400
2022 Construction Cost Estimate	$1,100,000
Programmed SU Funds - Construction	$467,400
Programmed Collier County Funds – Construction	$507,600
Construction Funding Shortfall	**$125,000**

The Construction Engineering & Inspection (CEI) costs were also estimated in 2013 and programmed in 2017/18. The CEI costs also increased, however, Collier County has been able to secure additional funding to cover the increase.

FPN: 441480-1 Eden Park Elementary Safe Routes to School (SRTS) Sidewalk project – Carson Rd from the back entrance to Eden Park Elementary to Westclox Street in Immokalee. The construction cost estimate for this project was produced in 2016 and FDOT programmed this project in 2018/19. Engineering plans for the project were recently completed and the revised construction cost estimate is now increased.

2016 Construction Cost Estimate	$759,484
2022 Construction Cost Estimate	$1,475,000
Programmed SU Funds - Construction	$607,585
Programmed Collier County Funds – Construction	$67,418
Construction Funding Shortfall	**$799,997**

The CEI costs were also estimated in 2016 and programmed in 2018/19. The CEI costs also increased, however, Collier County has been able to secure additional funding to cover the increase.

According to FDOT's Five Year Work Program (9/15/22 update), there is $3.3 million in FY 2023 in the MPO's SU Box, as shown in **Attachment 1**, and $519,357 in TALU in FY23. Funding is available to cover the amount the County is requesting.

STAFF RECOMMENDATION: That the committee endorse the addition of funds to cover cost increases on the Eden Park Elementary and 111th Ave Projects.

Prepared By: Anne McLaughlin, MPO Director

ATTACHMENT(S):

1. MPO SU Box FY23 - FDOT 5-Year Work Program (9/15/22)

Office of Work Program and Budget Cynthia Lorenzo - Director

Updated: 9/15/2022 12:28 AM

Five Year Work Program

Selection Criteria	
District 01	**2023-2027 AD**
Collier County	**Item Number:**405106-1

Display current records in a Report Style
Display current records in an Excel Document

Project Summary

Transportation System: INTRASTATE STATE HIGHWAY — District 01 - Collier County
Description: COLLIER MPO IDENTIFIED OPERATIONAL IMPROVEMENTS FUNDINGCONTINGENCY
Type of Work: TRAFFIC OPS IMPROVEMENT — View Scheduled Activities
Item Number: 405106-1

Project Detail

Fiscal Year:	2023	2024	2025	2026	2027
Highways/Construction					
Amount:	$3,271,643		$2,090,157	$2,170,984	$1,818,628

EXECUTIVE SUMMARY
COMMITTEE ACTION
ITEM 7B

Review Congestion Management Process (CMP) Origin and Destination Report

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

CONSIDERATIONS: As part of the MPO's CMP Update, the consultant is required to complete an O & D Report. The Congestion Management Committee reviewed the draft report at their September 21 meeting. The draft report is included as **Attachment 1**.

The consultant will provide an overview of the report at the meeting. The final report will be brought back to the Committee in November for approval.

STAFF RECOMMENDATION: Review and comment on the draft CMP O & D report.

Prepared By: Brandy Otero, Collier MPO Principal Planner

ATTACHMENT(S):

1. Draft CMP Origin and Destination Report

7B - Attachment 1
9/26/22 TAC/CAC

COLLIER Metropolitan Planning Organization

Congestion Management Process

Origin and Destination Report

Prepared by

Tindale Oliver is now benesch

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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) Places data platform for conducting this analysis. The methodology proposed for this analysis was reviewed by the MPO's Congestion Management Committee on May18th 2022 is included in Appendix A.

The Replica Places module allows for analysis of trip making patterns and characteristics as 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.

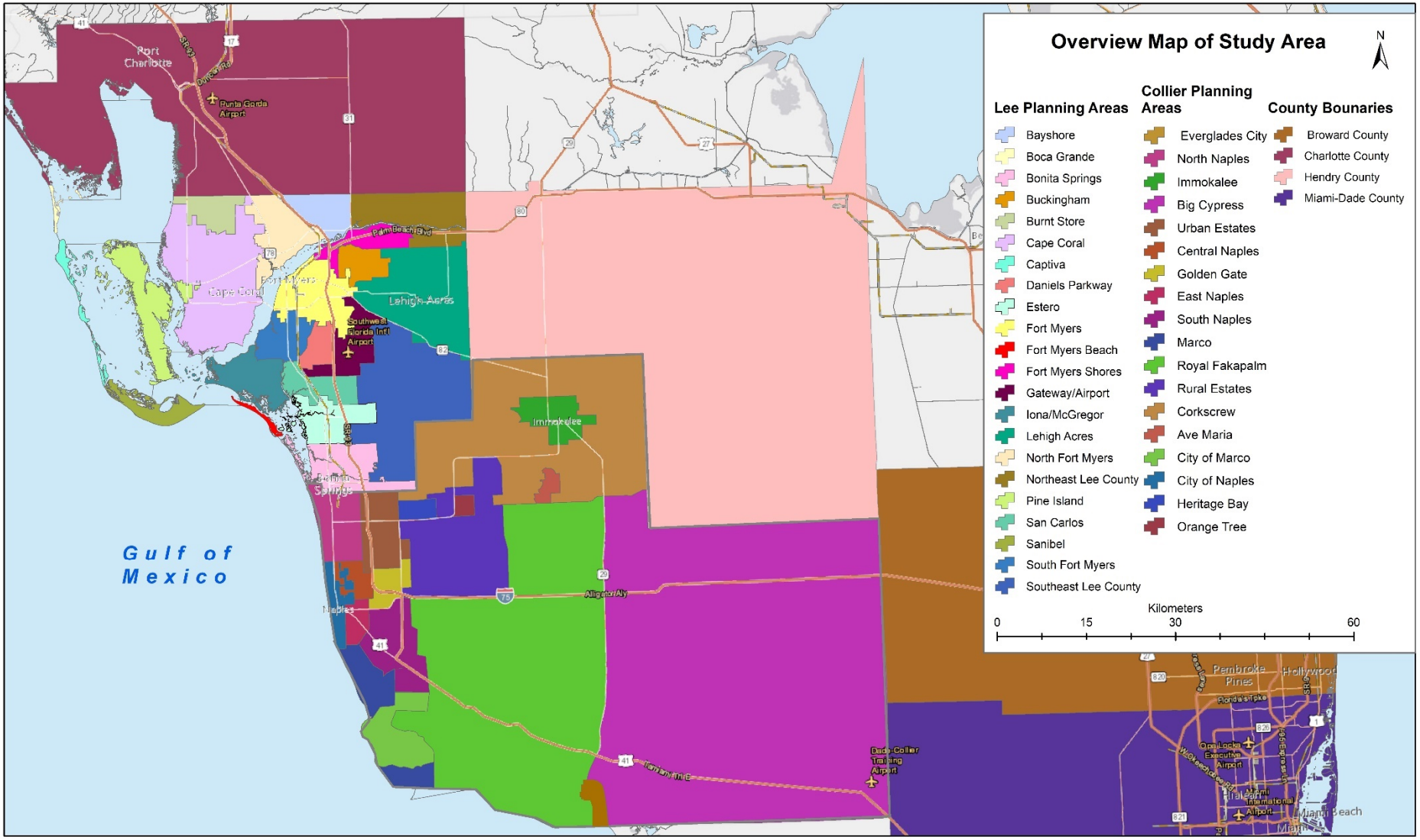
In total 17 subareas were identified for Collier County following this approach. Other areas included in the analysis outside of Collier County include the 22 planning communities identified in Lee County as well as Broward County, Charlotte County, Miami-Dade County, and Glades County.

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.

This 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.

Many of the County's subareas are well established from a land use perspective and 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.

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 2, 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 or 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 2: Daily Trips in Collier County

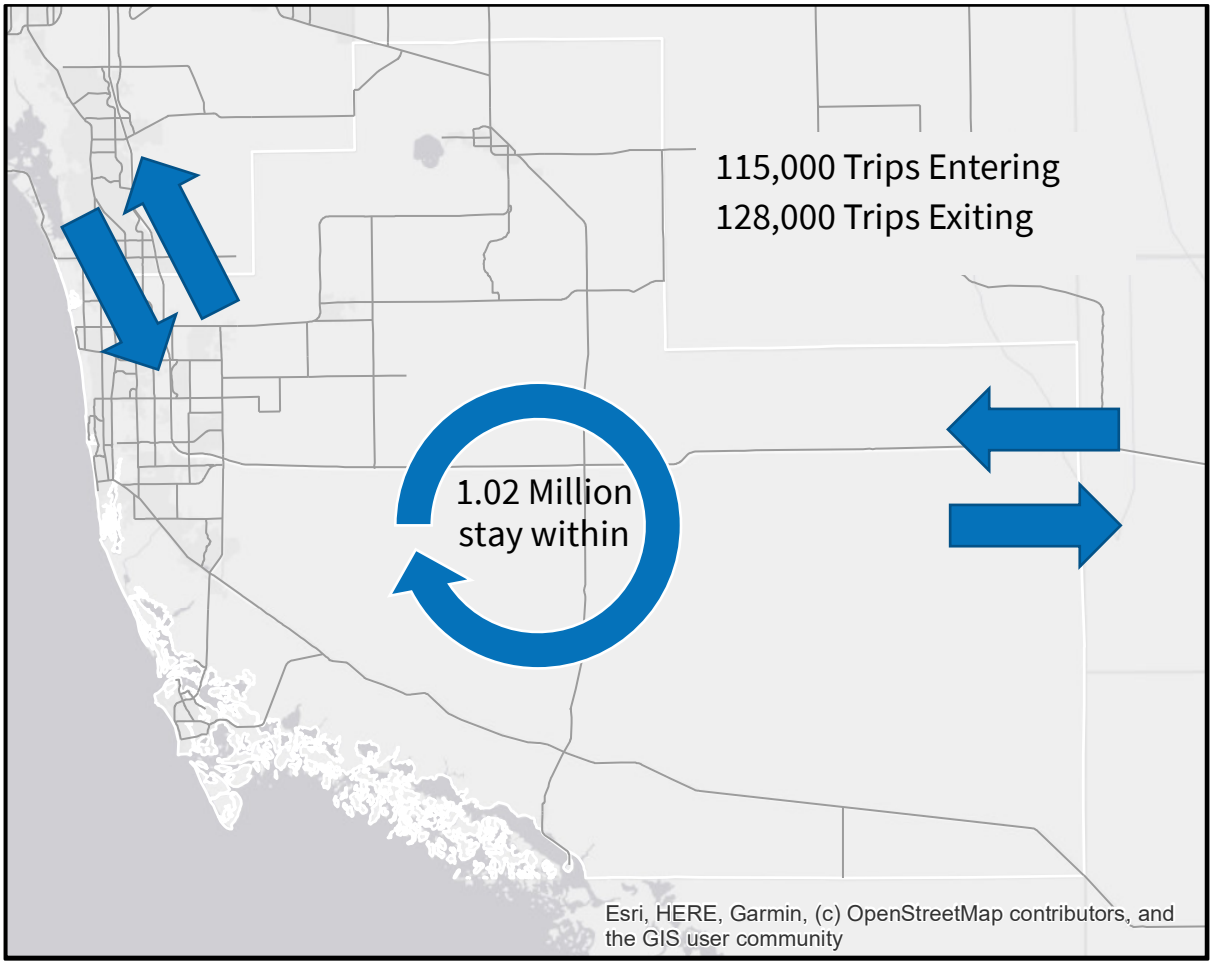


Table 2: Daily Trip Origins and Destinations by County

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

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

Looking closer at the routes of these pass-through trips, Figure 3 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 3: Daily Pass-Through Trips at Key Gateways

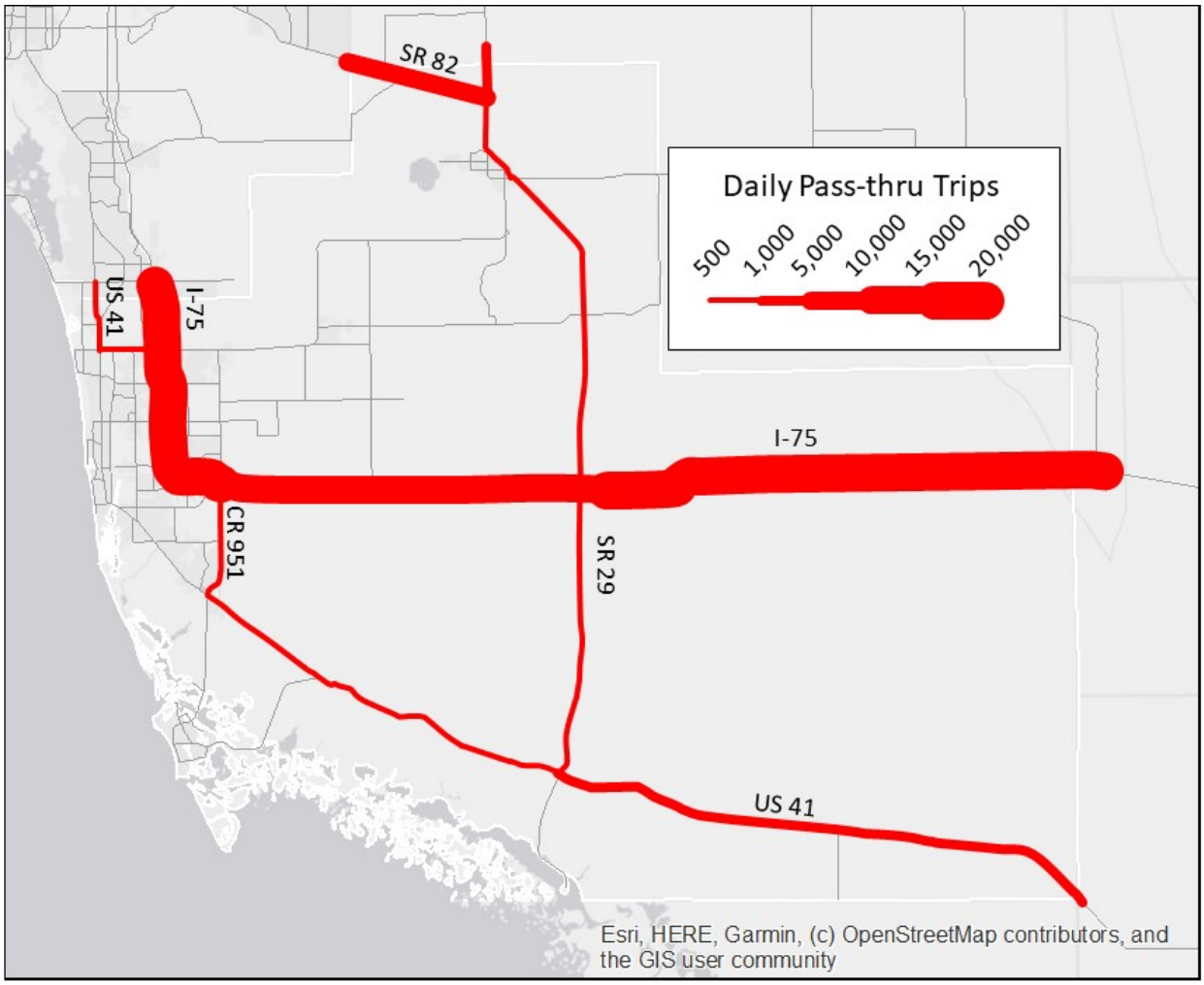


Table 4: Daily Trips at Major County Line Crossings

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

Table 5: Select Countywide Trip Characteristics

Measure	Countywide Value
Average Trip Length	17.4 miles
Median Trip Length	4.7 miles
Average Trip Duration	20 minutes
Median Trip Duration	9 minutes
Countywide Residents	373,600
Countywide Workers	158,000
Residents Working in Collier County	137,300
Residents Working in Lee County	14,300
Residents Working from Home	34,000

Source: Replica 2021 Spring Season)

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.

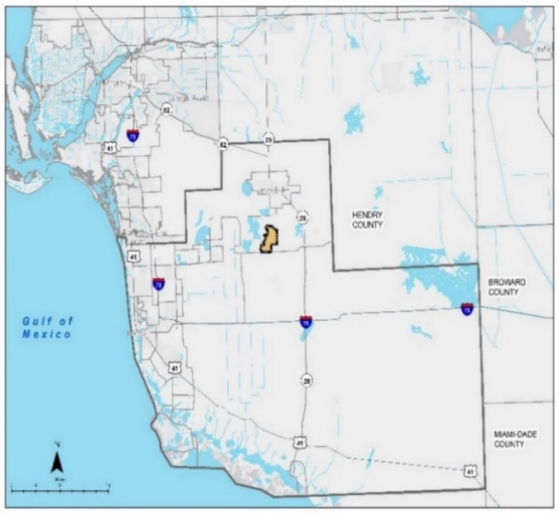


Table 6 identifies the trip origins and destinations for the top 20 subarea locations when at least one trip end takes place in Ave Maria subarea. The trip origins listed have a destination in the Ave Maria subarea and vice-versa for the destinations listed. The 5,014 trips originating daily within the 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 4. 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 5 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 4: Selected Trip Characteristics for Ave Maria Origins

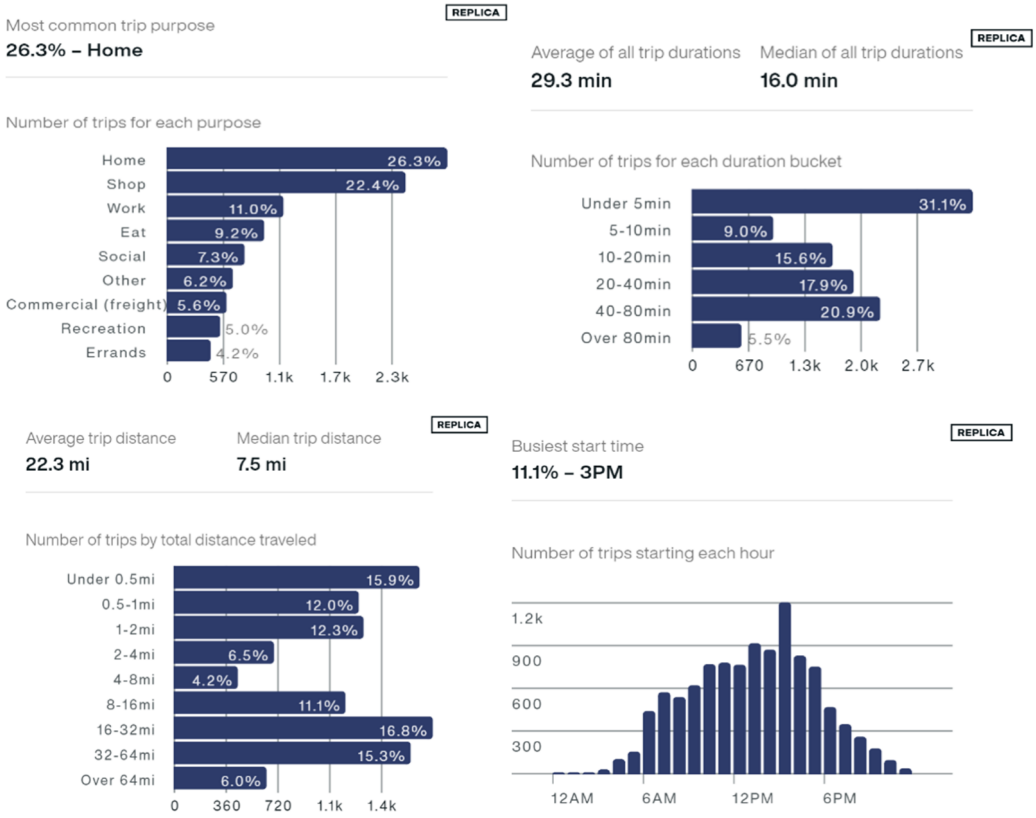
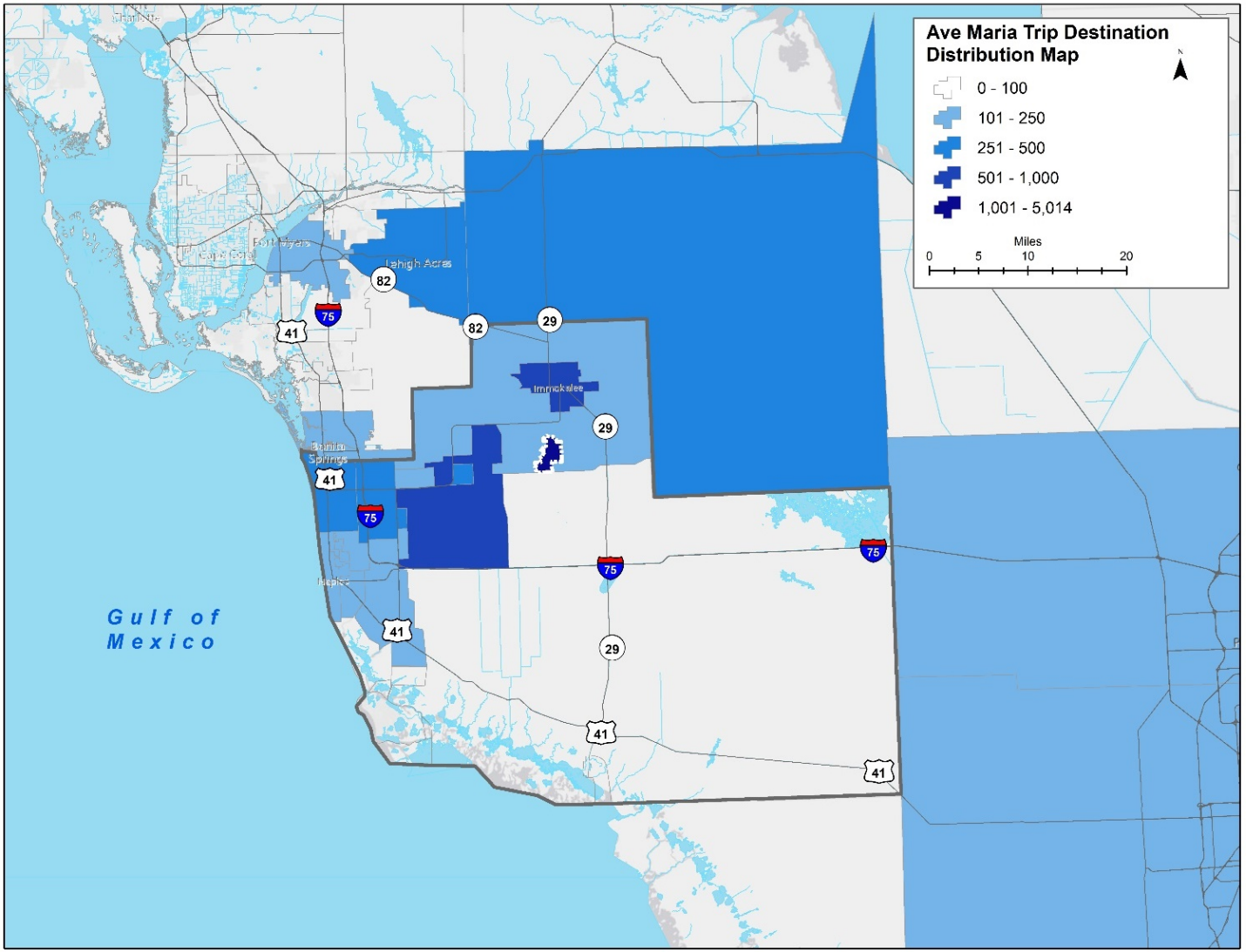


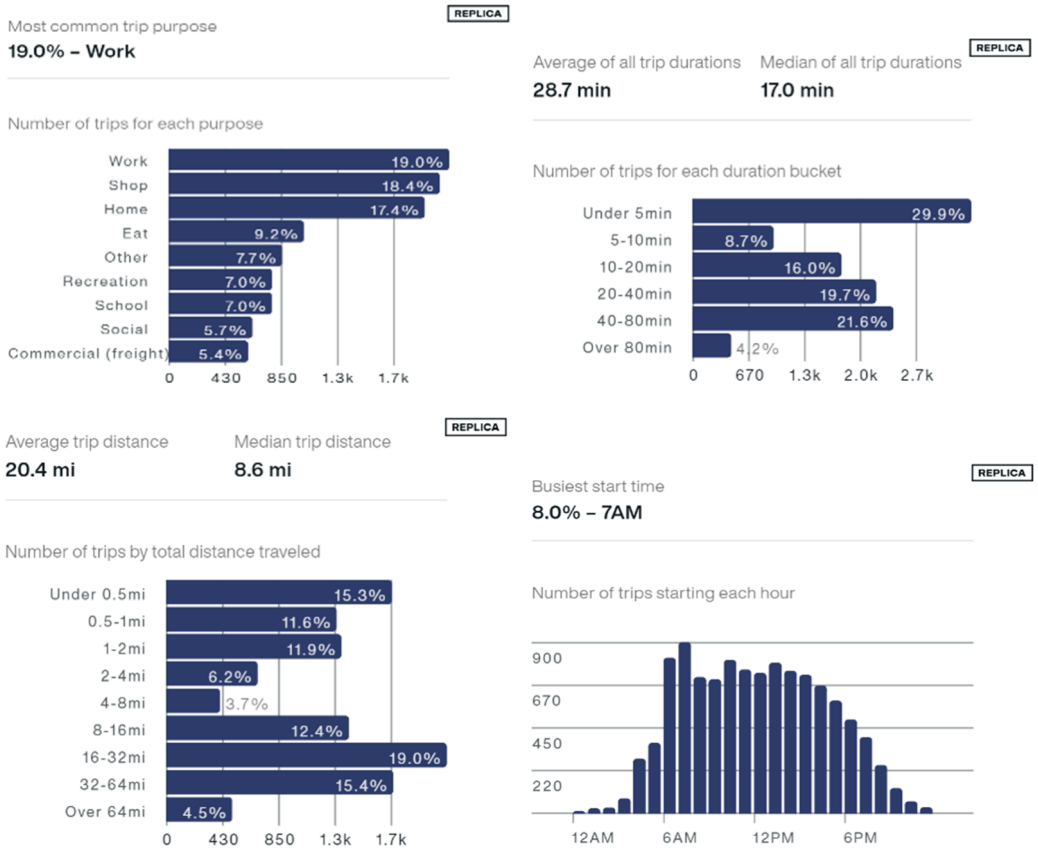
Figure 5: Destinations for trips Originating in Ave Maria Subarea



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 6. 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 7 illustrates the geographic distribution of origins for trips ending in the Ave Maria subarea.

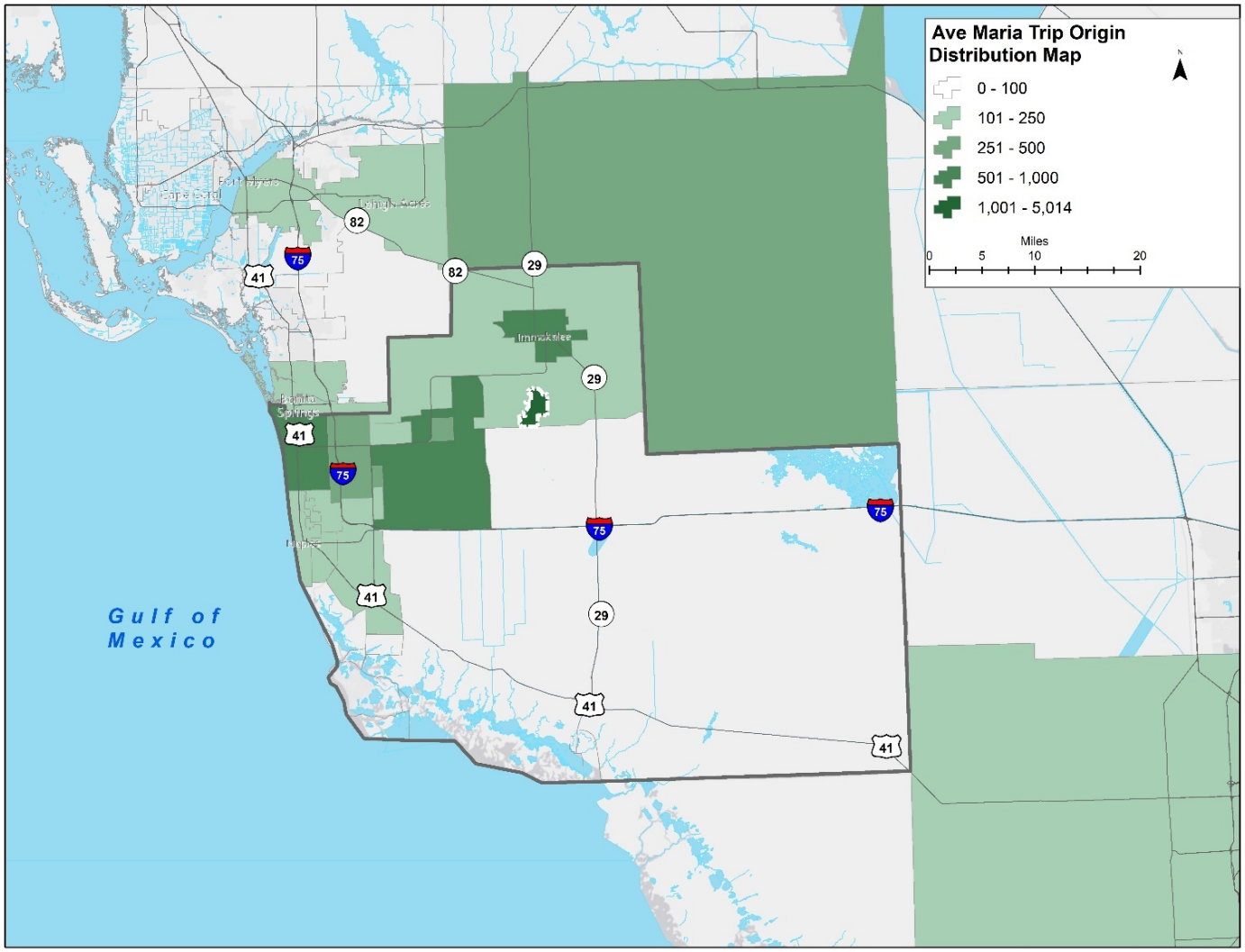
Figure 6: Selected Trip Characteristics for Ave Maria Destinations



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 7: Origins for trips Ending in Ave Maria Subarea

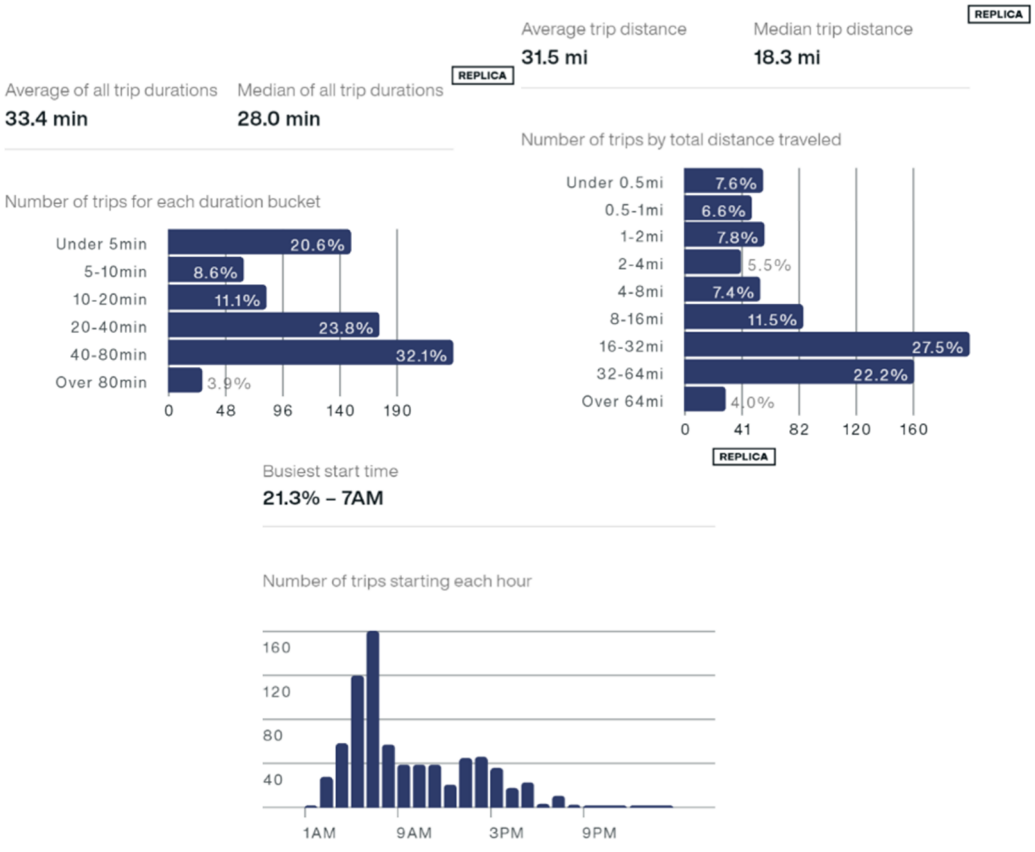


Shown in Figure 8 are selected characteristics related to the work commute trip. Compared with trip time and distance for all trips originated within the study area, work trips on average are longer in time and distance and demonstrate a distinct A.M. peak pattern. Information regarding working from 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 8: 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.

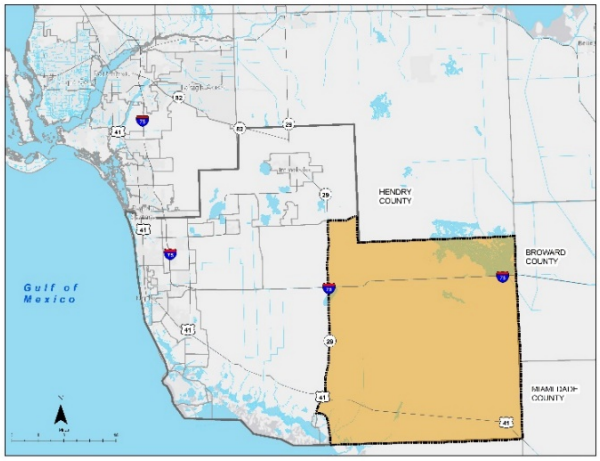


Table 8 shows the trip origin and destination for the top 20 subarea locations when at least one trip end takes place in the Big Cypress subarea. The trip origins listed have a destination in the Big Cypress subarea and vice-versa for the destinations listed. While the number of trips that originate 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.

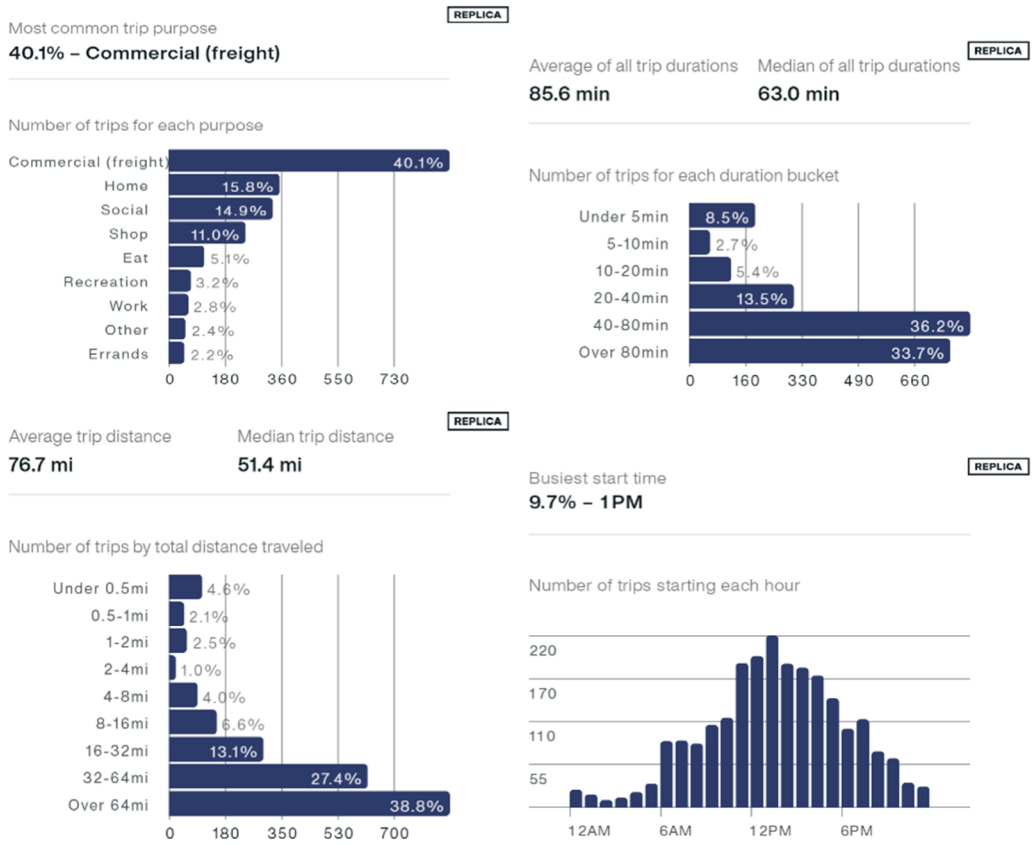
Table 8: Big Cypress Trip Origins and Destinations

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 9. 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 10 illustrates the geographic distribution of destinations for trips originating in the Big Cypress subarea.

Figure 9: Selected Trip Characteristics for Big Cypress Origins



3.2.2 Trips Ending in Subarea

Figure 11 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 12 illustrates the geographic distribution of origins for trips ending in the Big Cypress subarea.

Figure 10: Destinations for trips Originating in Big Cypress Subarea

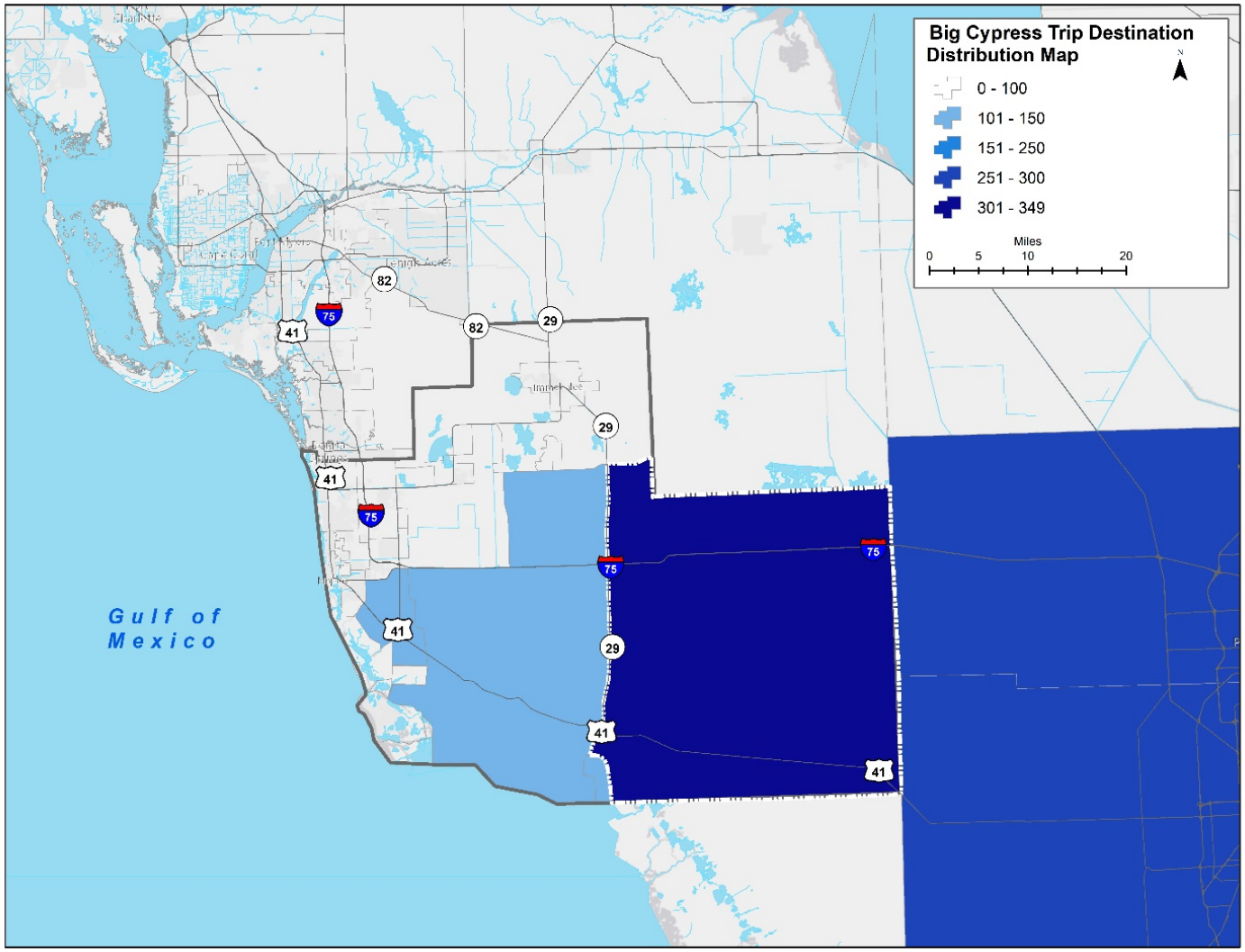
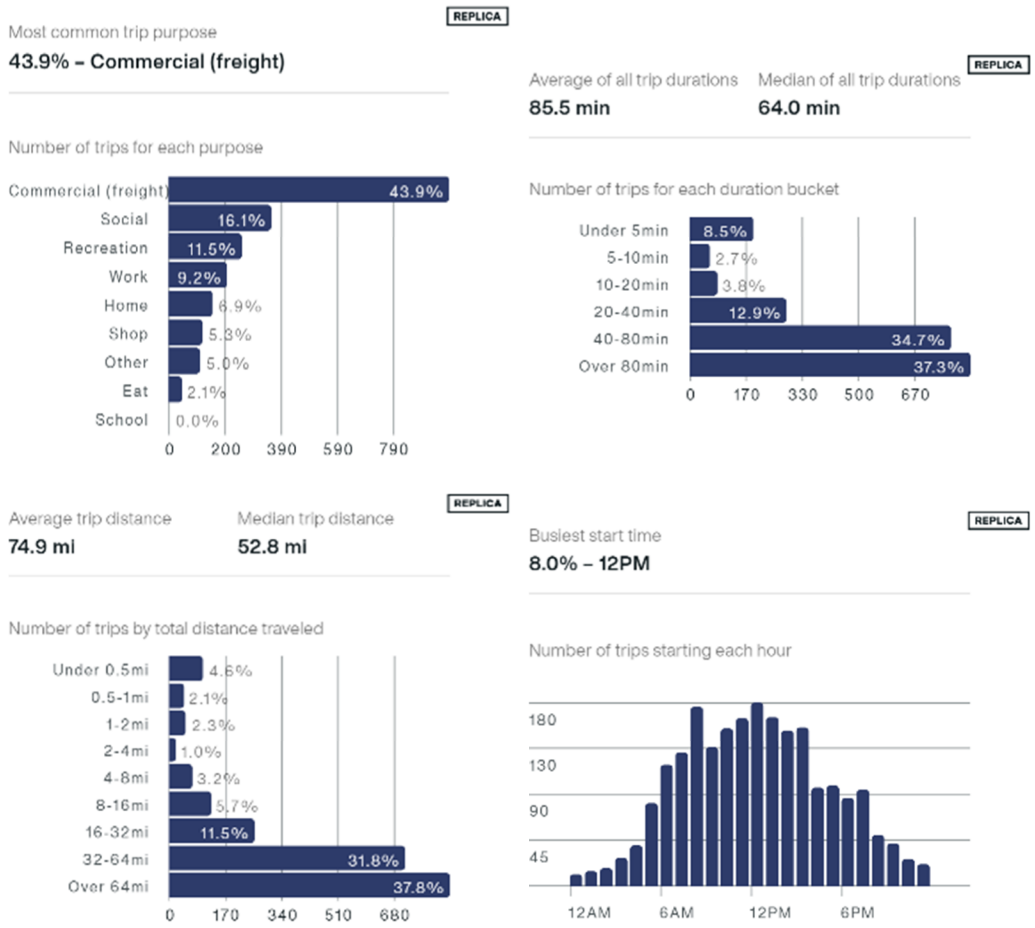


Figure 11: Selected Trip Characteristics for Big Cypress Destinations



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 13 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 12: Origins for trips Ending in Big Cypress Subarea

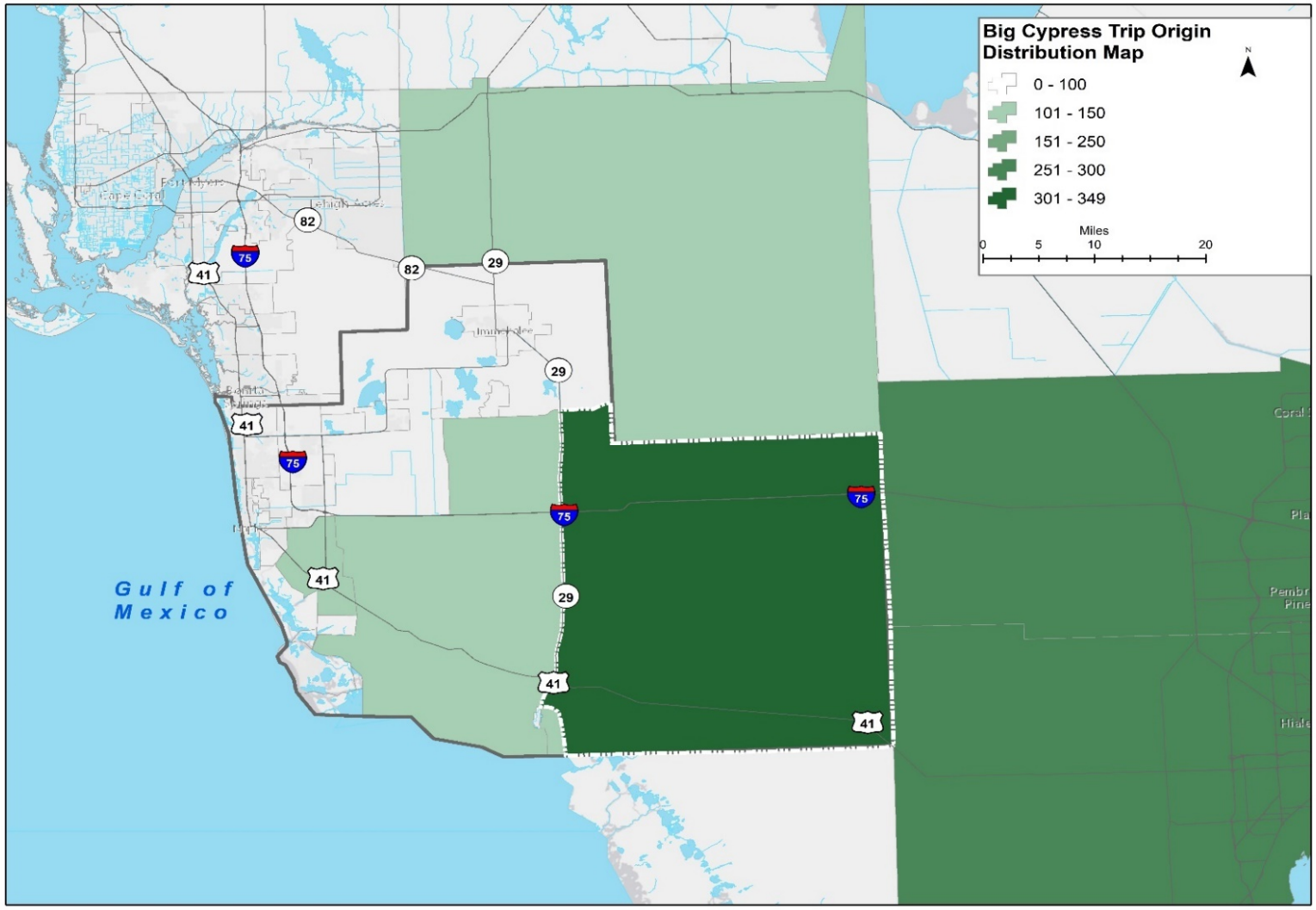
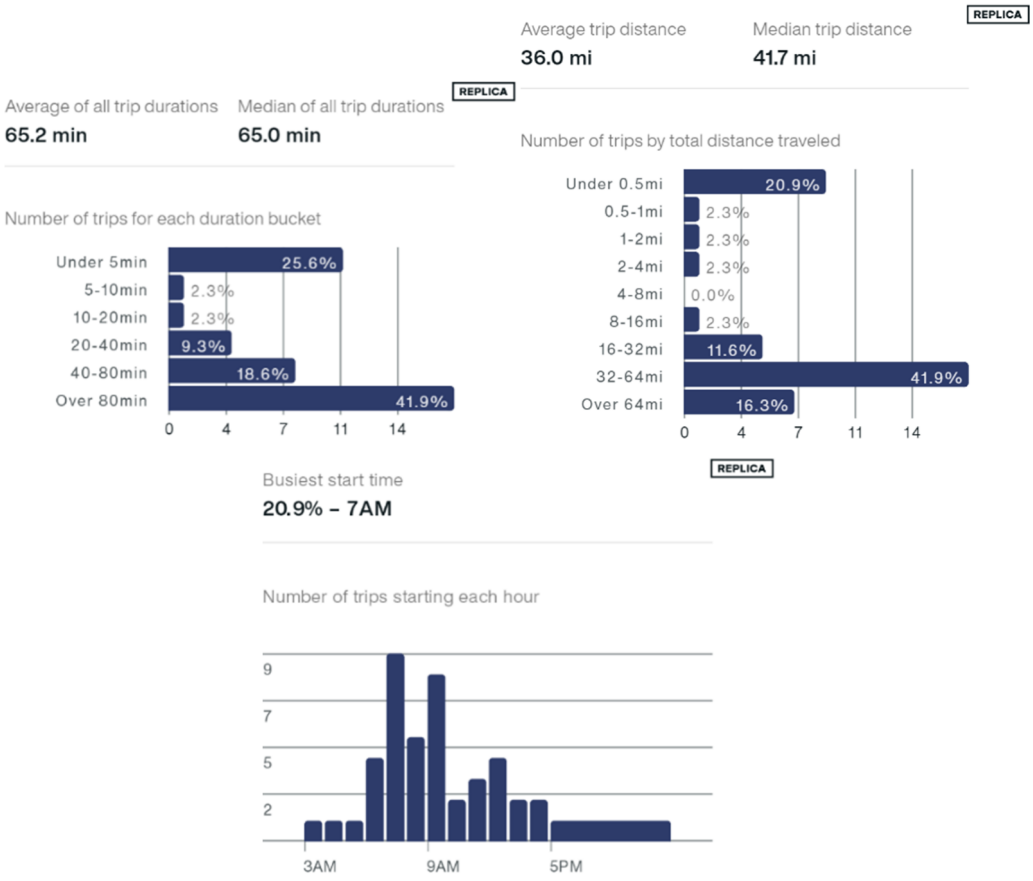


Table 9: Work Locations for Residents of Big Cypress

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 13: 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.

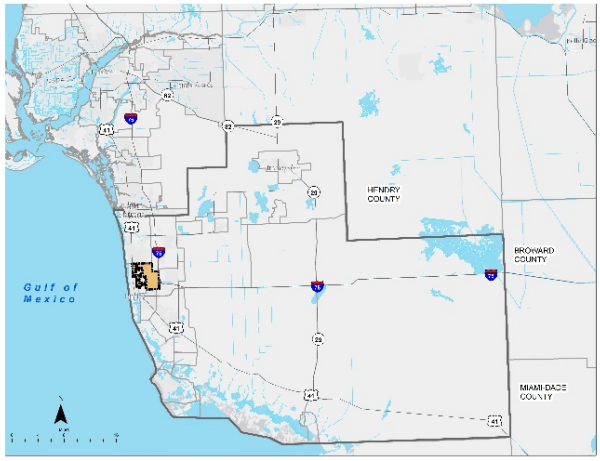


Table 10 identifies the number of trip origin and destination for the top 20 subarea locations when at least one trip end takes place in the Central Naples subarea. The trip origins listed have a destination in the Central Naples subarea and vice-versa for the destinations listed. Of the 82,000 daily 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

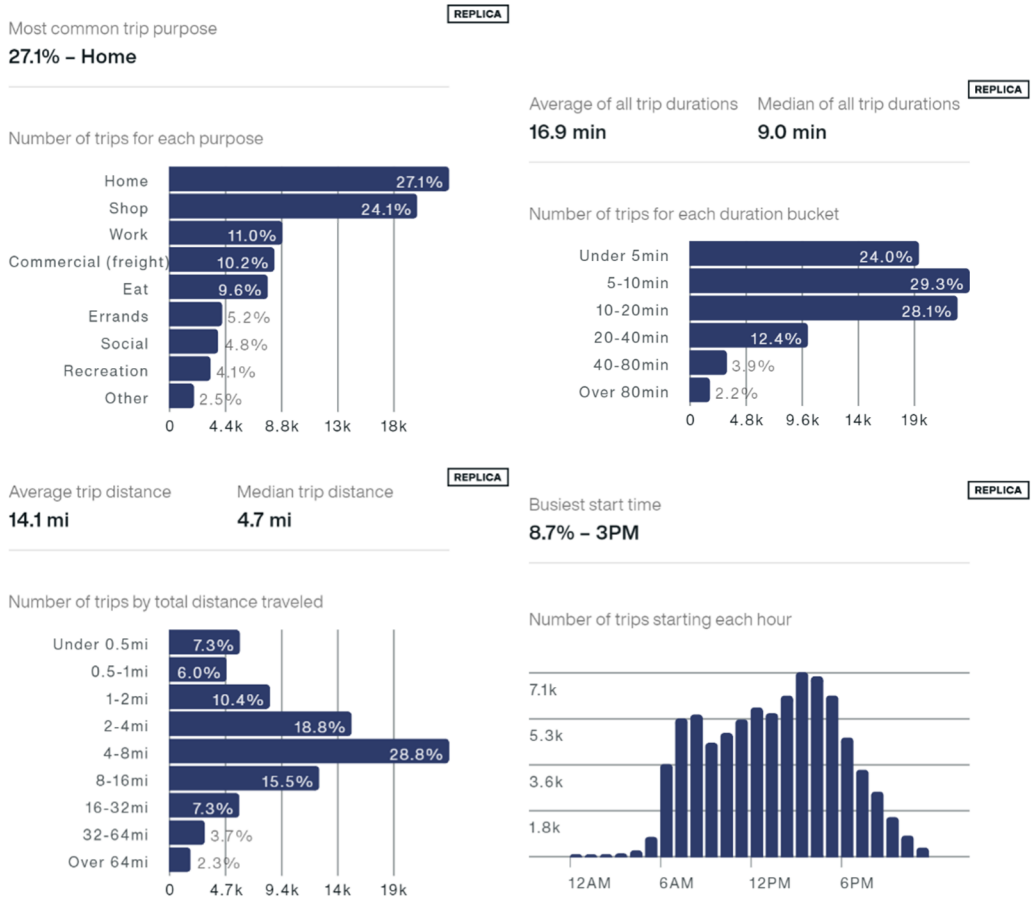
Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
Central Naples (internal)	19,331	19,331	City of Marco Island	847	814
North Naples	13,657	13,643	San Carlos	756	754
City of Naples	12,924	13,102	Estero	635	648
Golden Gate	6,892	6,938	Fort Myers	470	635
Urban Estates	6,228	6,493	South Fort Myers	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 14 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

in this subarea can be considered short distance trips. Figure 15 illustrates the geographic distribution of destinations for trips originating in the Central Naples subarea.

Figure 14: Selected Trip Characteristics for Central Naples Origins



3.3.2 Trips Ending in Subarea

Figure 16 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 17 illustrates the geographic distribution of origins for trips ending in the Central Naples subarea.

Figure 15: Destinations for trips Originating in Central Naples Subarea

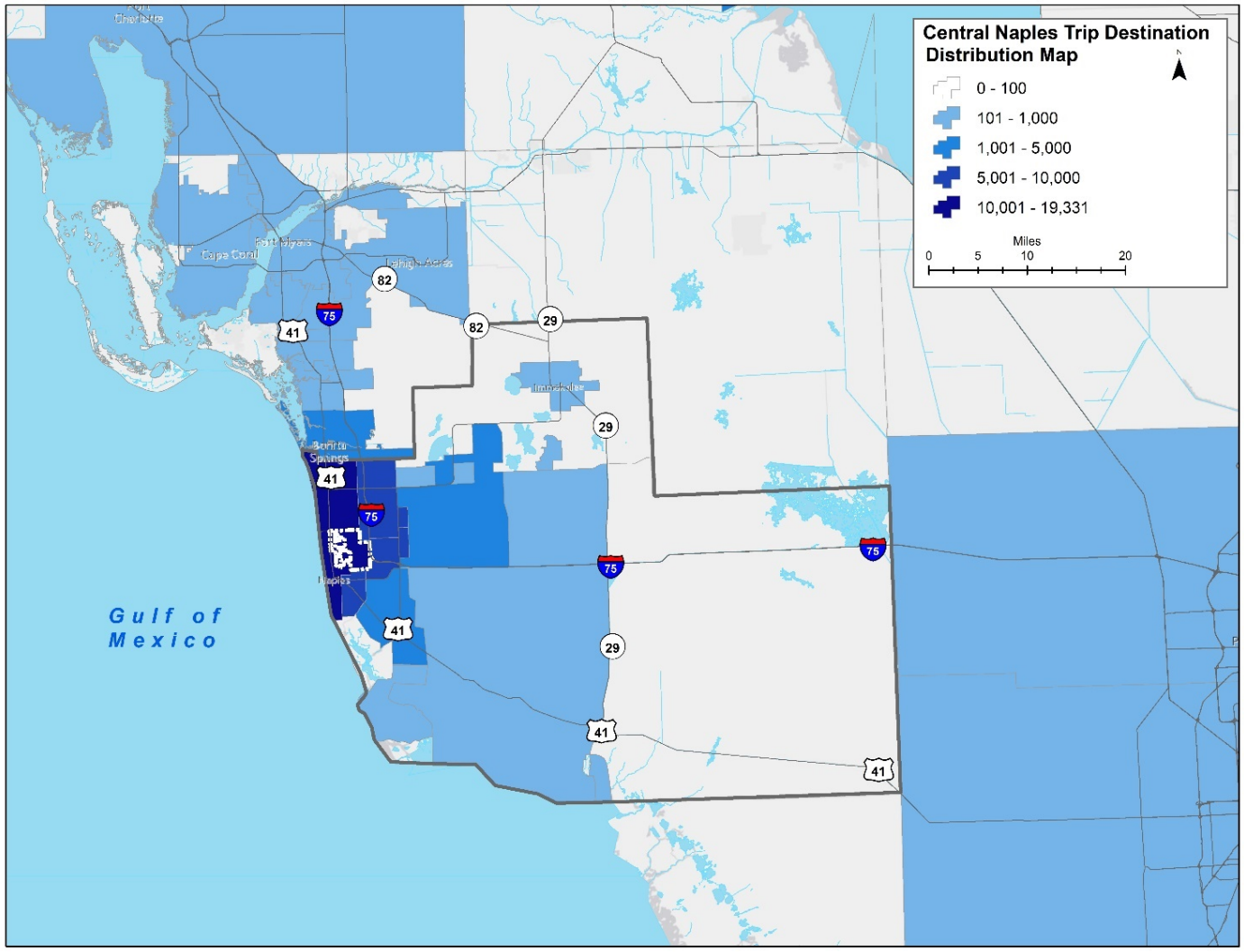
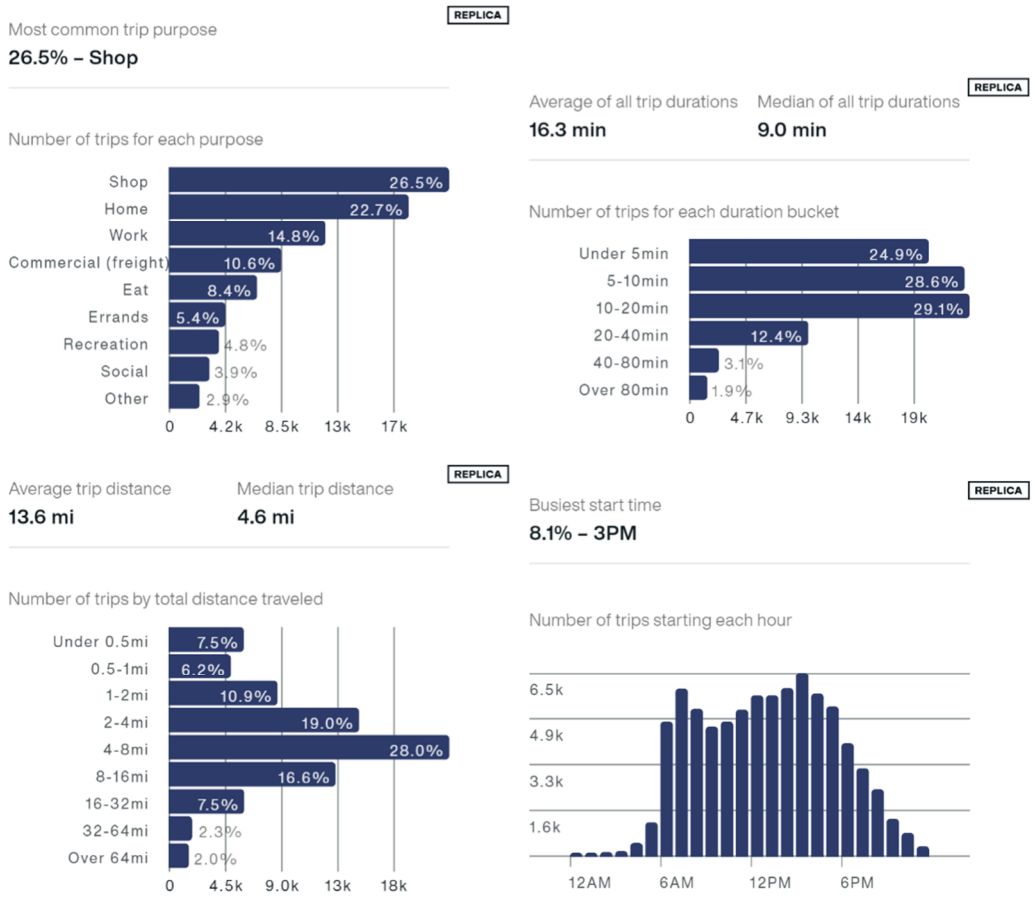


Figure 16: Selected Trip Characteristics for Central Naples Destinations



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 18 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 17: Origins for trips Ending in Central Naples Subarea

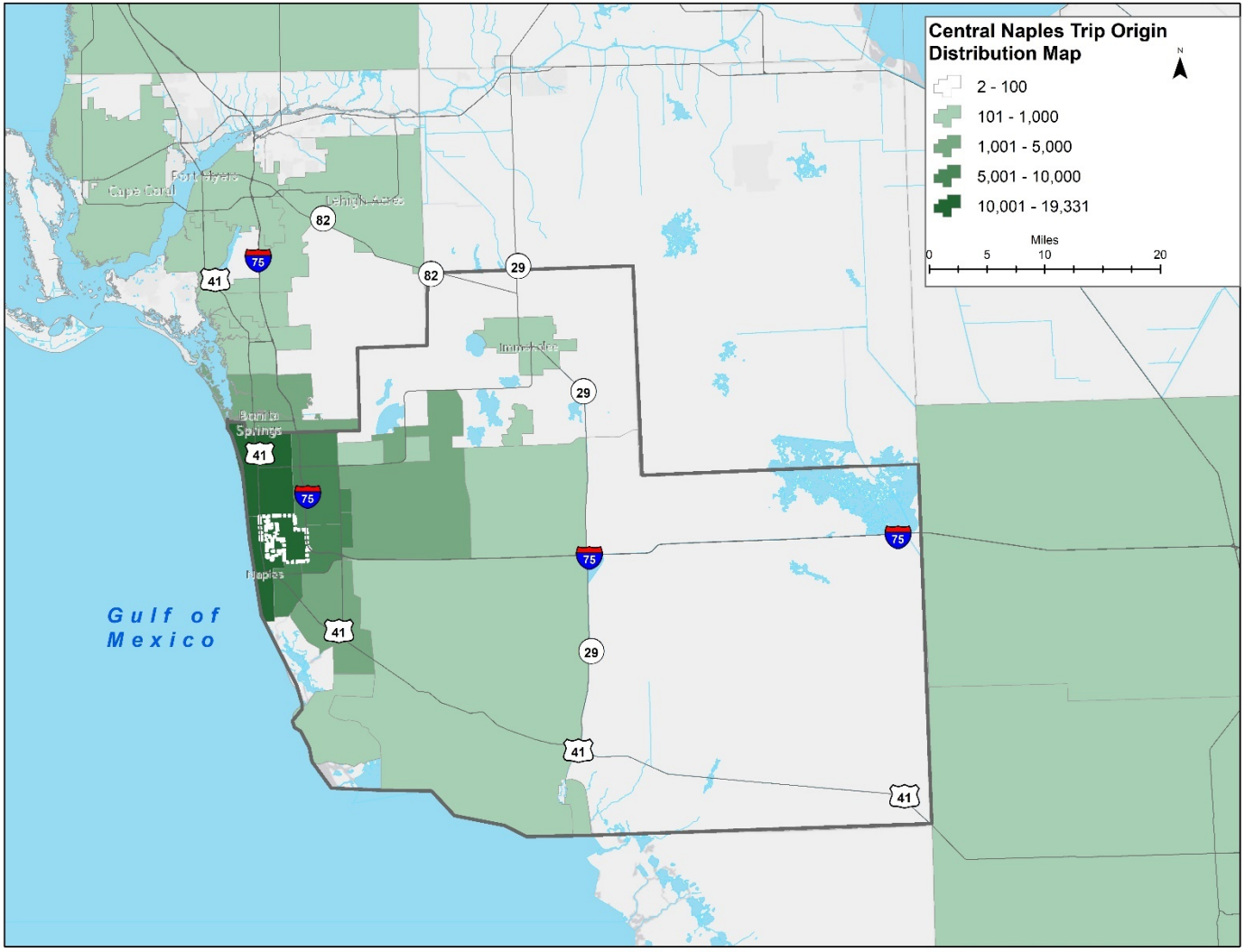
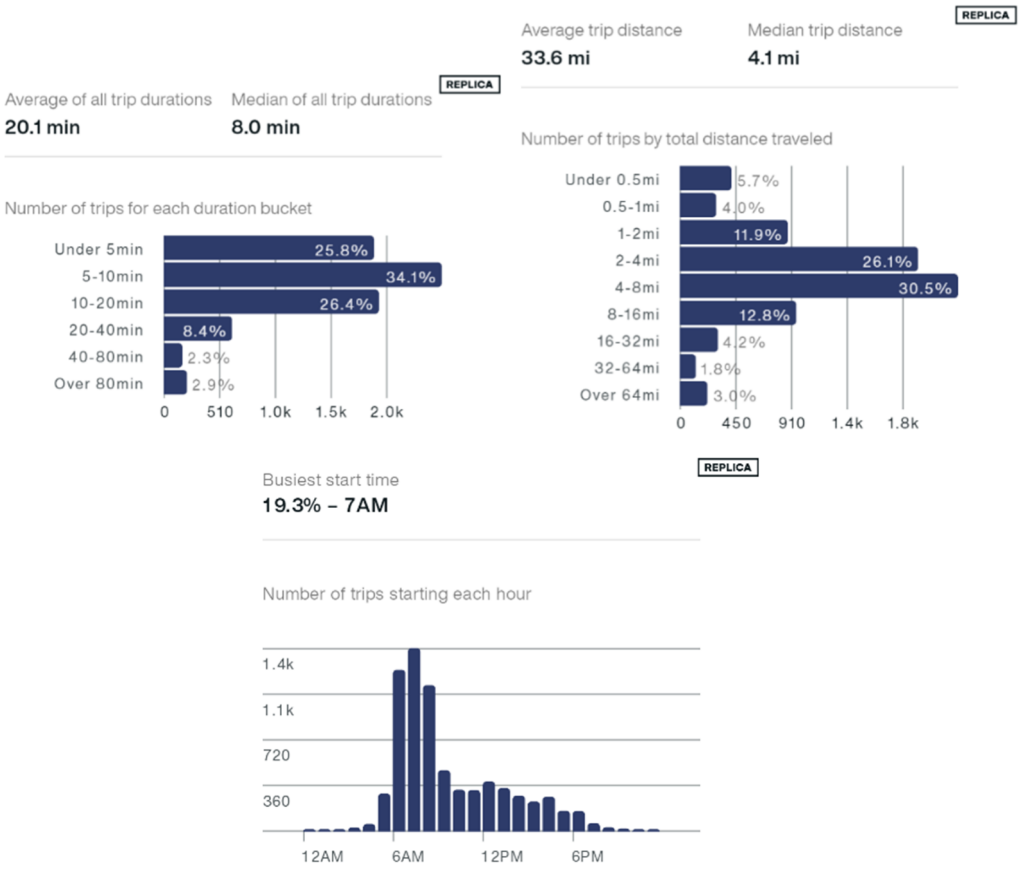


Table 11: Work Locations for Residents of Central Naples

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 18: 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.

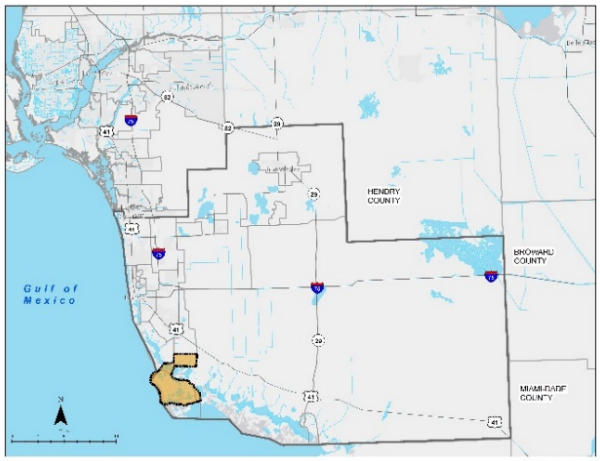


Table 12 identifies the trip origins and destinations for the top 20 subarea locations when at least one trip end takes place in this subarea. Trip origins listed have a destination in the City of Marco Island subarea and vice-versa for the destinations listed. The 43,800 trips originating in the City 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

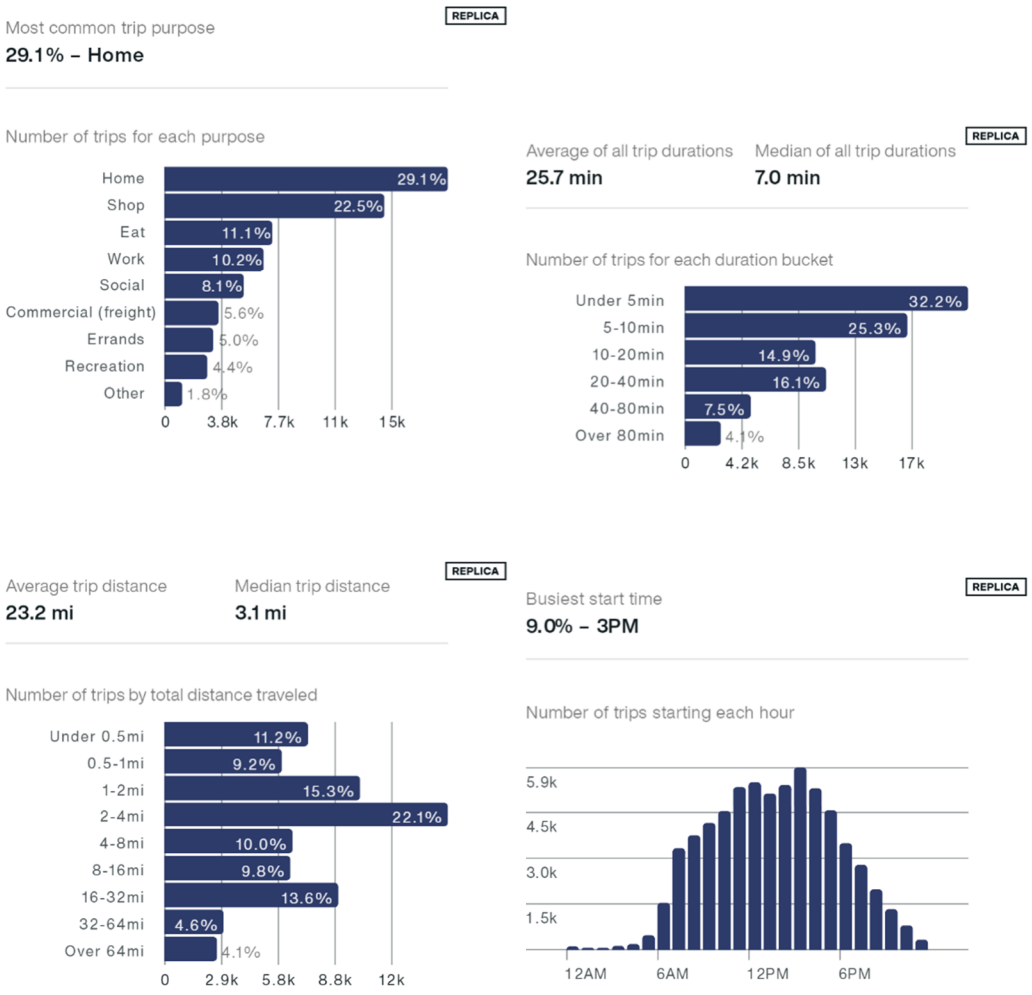
Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
City of Marco Island (internal)	43,800	43,800	Royal Fakapalm	419	401
South Naples	7,503	7,537	Miami-Dade County	393	376
City of Naples	1,560	1,566	Bonita Springs	305	363
Out of region	1,522	1,651	Fort Myers	234	334
East Naples	1,470	1,495	Estero	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 19 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 20 illustrates the geographic distribution of destinations for trips originating in the City of Marco Island subarea.

Figure 19: Selected Trip Characteristics for City of Marco Island Origins



3.4.2 Trips Ending in Subarea

Figure 21 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 22 graphically illustrates the geographic distribution of origins for trips ending in the City of Marco Island subarea.

Figure 20: Destinations for trips Originating in City of Marco Island Subarea

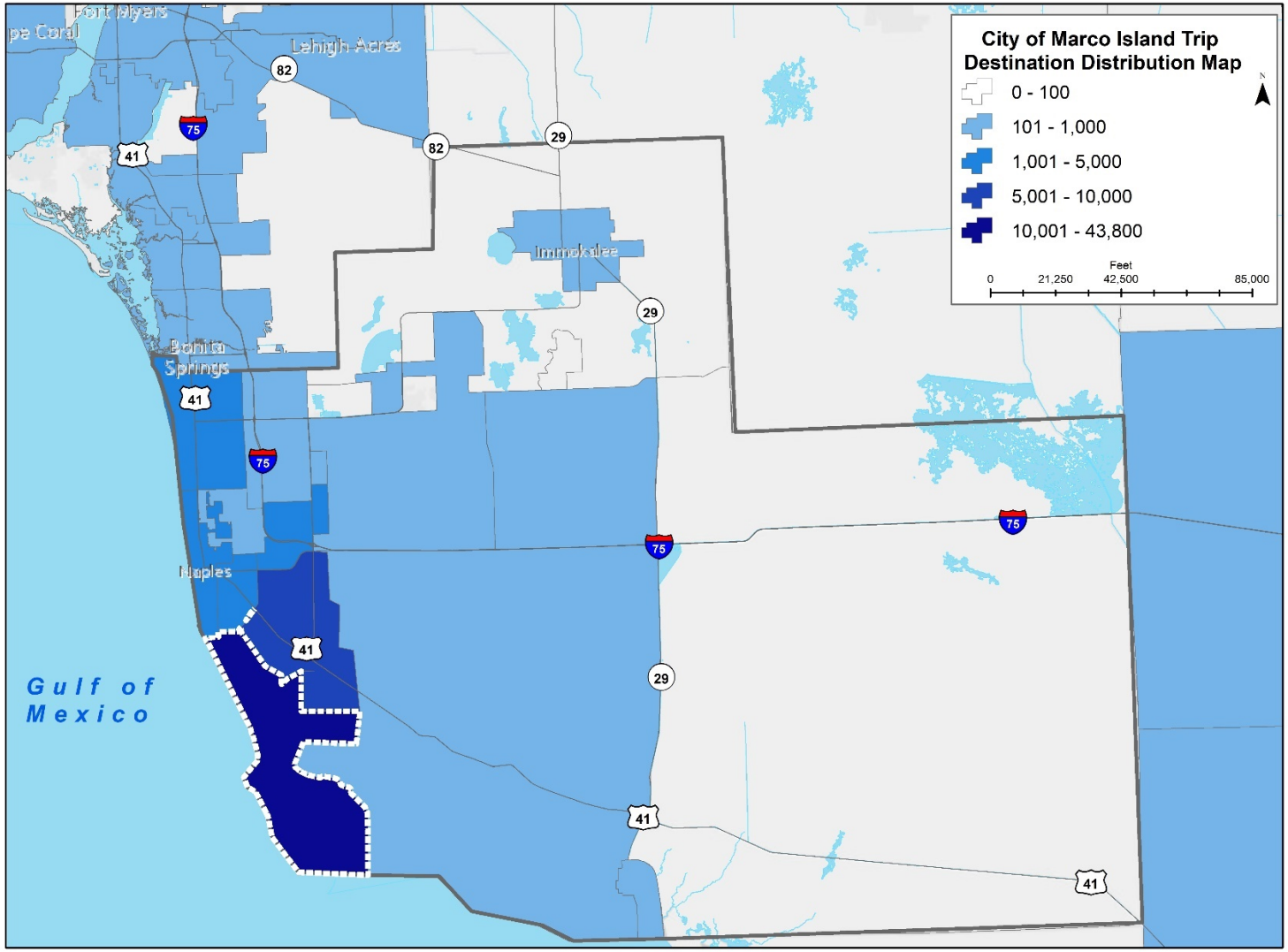
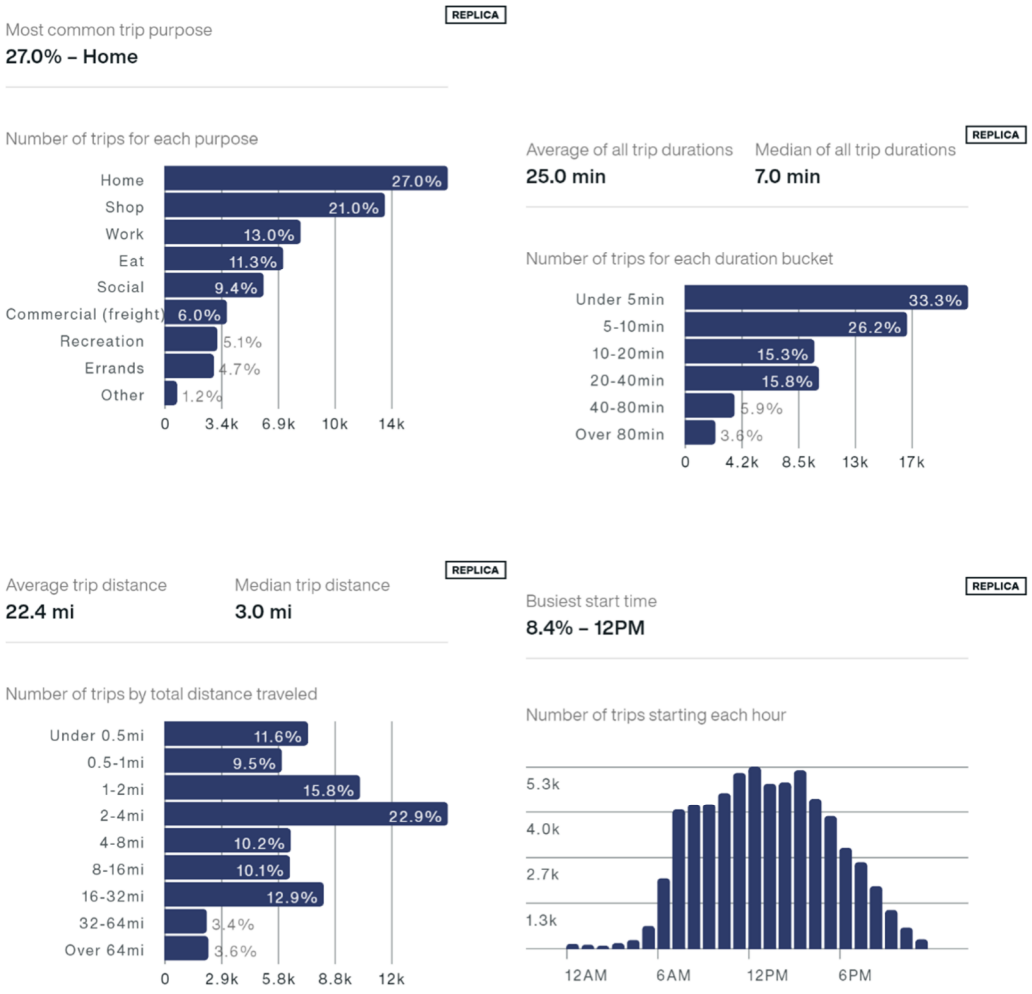


Figure 21: Selected Trip Characteristics for City of Marco Island Destinations



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 23 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 22: Origins for trips Ending in City of Marco Island Subarea

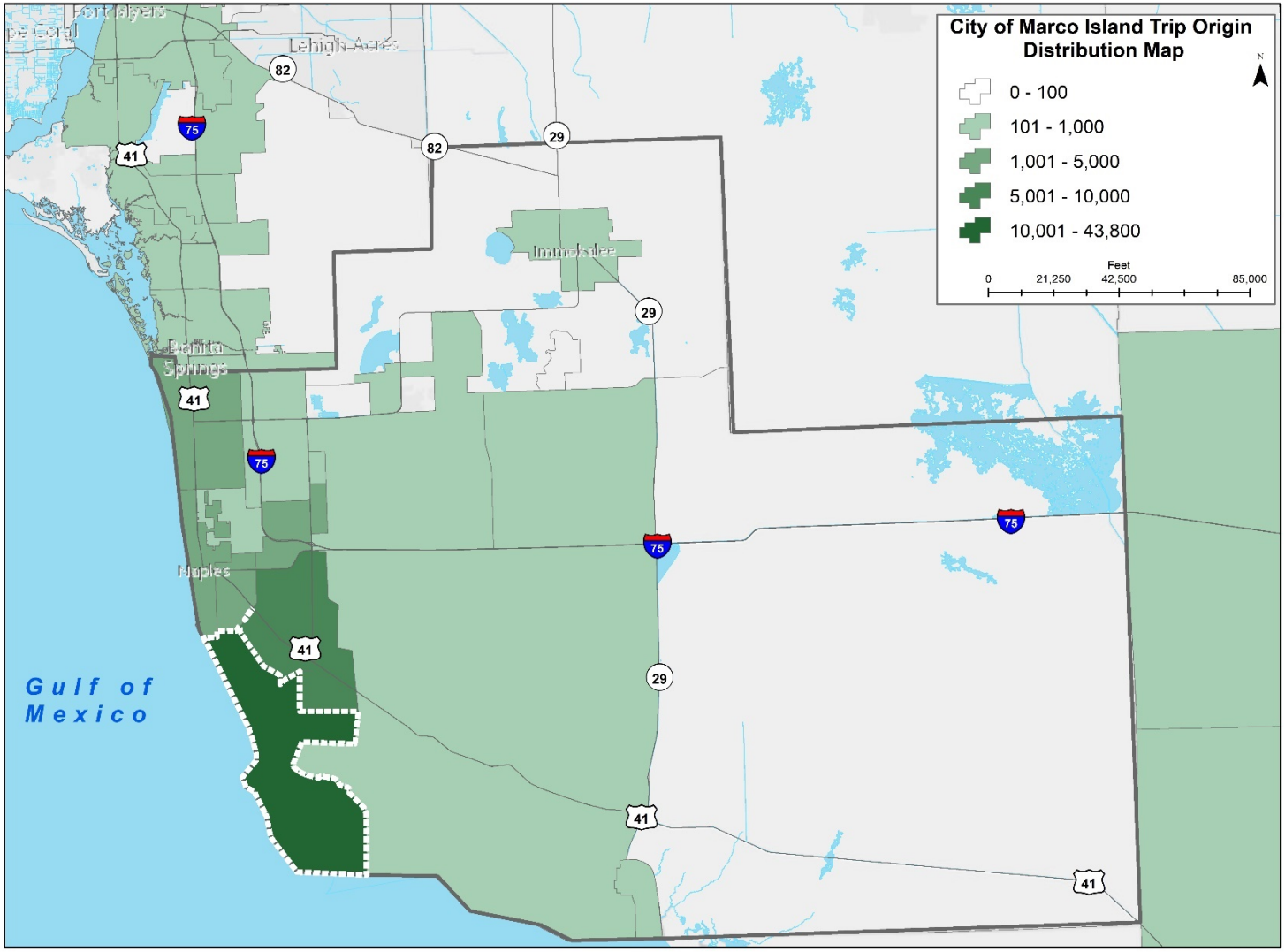
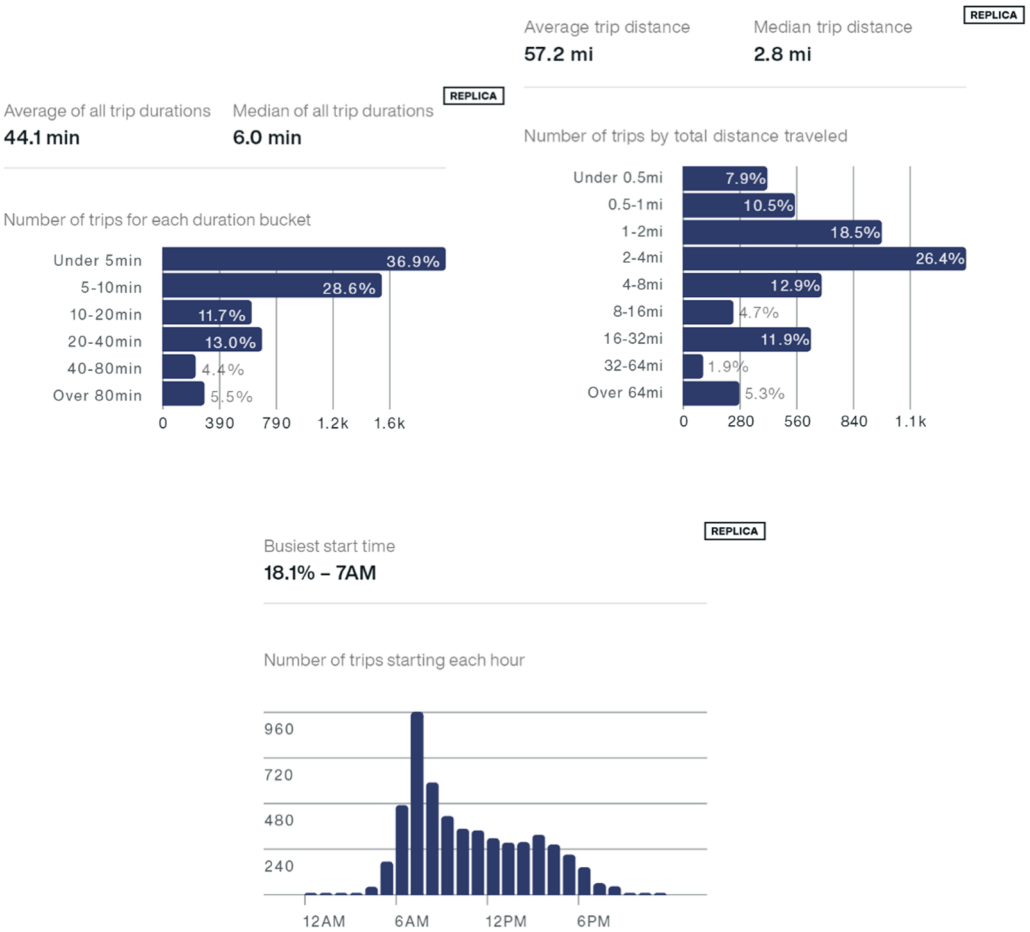


Table 13: Work Locations for Residents of City of Marco Island

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 23: City of Marco Island Home to Work Trip Characteristics



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.

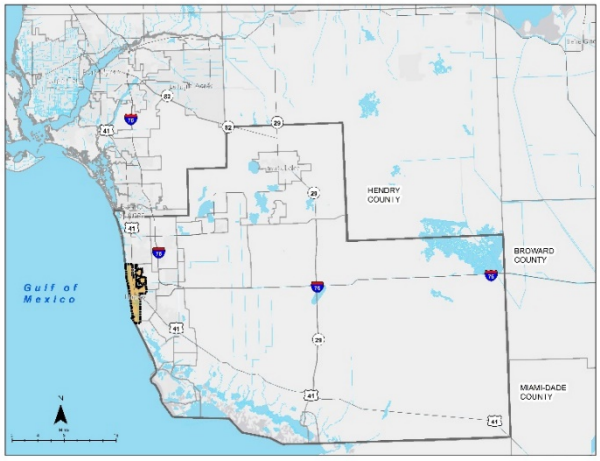


Table 14 identifies the trip origins and destinations for the top 20 subarea locations when at least one trip end takes place in the City of Naples subarea. Trip origins listed have a destination in the City of Naples subarea and vice-versa for the destinations listed. The 52,570 trips originating in 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.

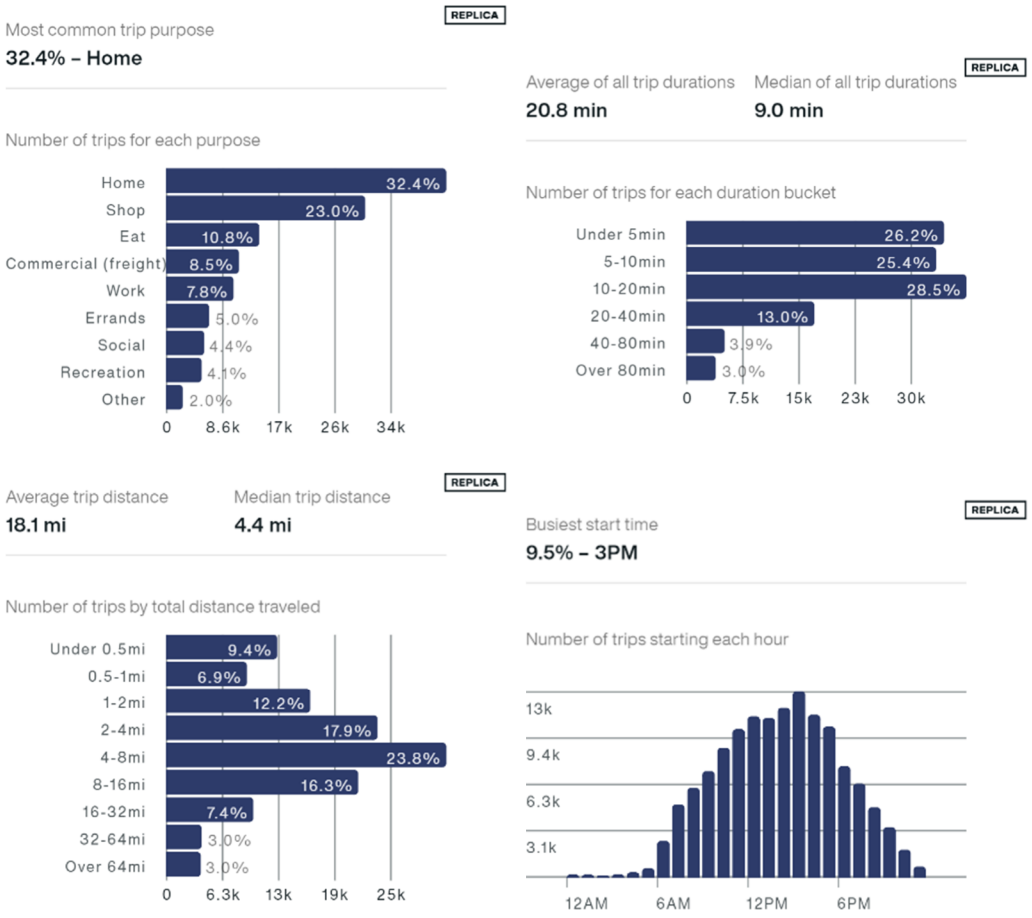
Table 14: City of Naples Trip Origins and Destinations

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 24 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 25 illustrates the geographic distribution of destinations for trips originating in the City of Naples subarea.

Figure 24: Selected Trip Characteristics for City of Naples Origins



3.5.2 Trips Ending in Subarea

Figure 26 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 27graphically illustrates the geographic distribution of origins for trips ending in the City of Naples subarea.

Figure 25: Destinations for trips Originating in City of Naples Subarea

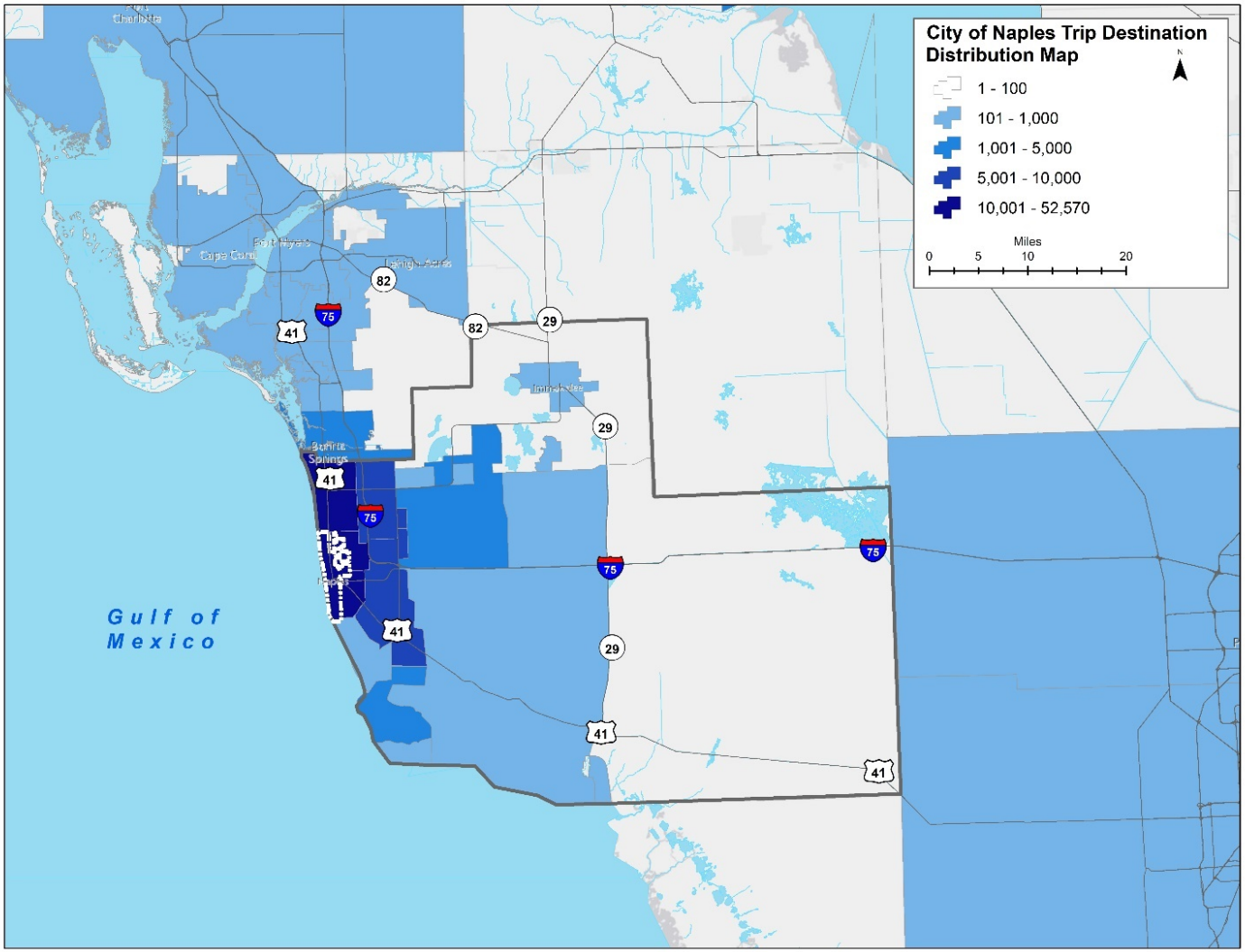
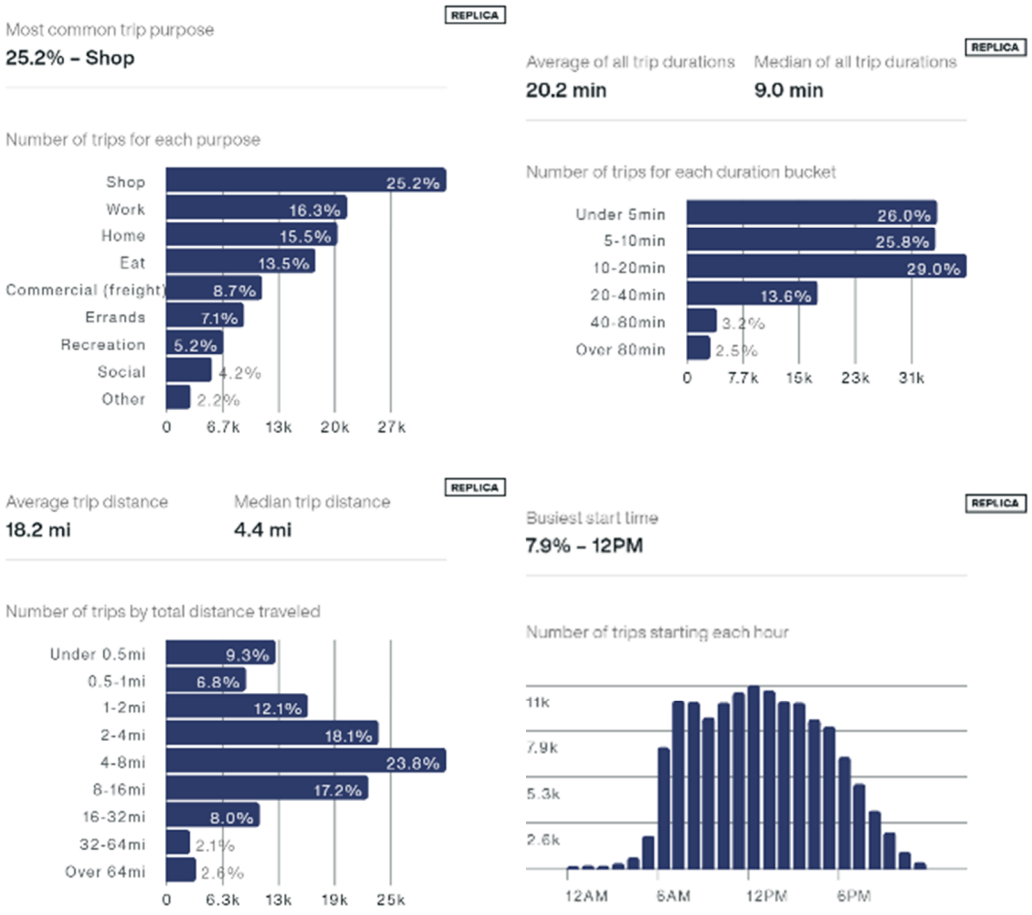


Figure 26: Selected Trip Characteristics for City of Naples Destinations



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 28 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 27: Origins for trips Ending in City of Naples Subarea

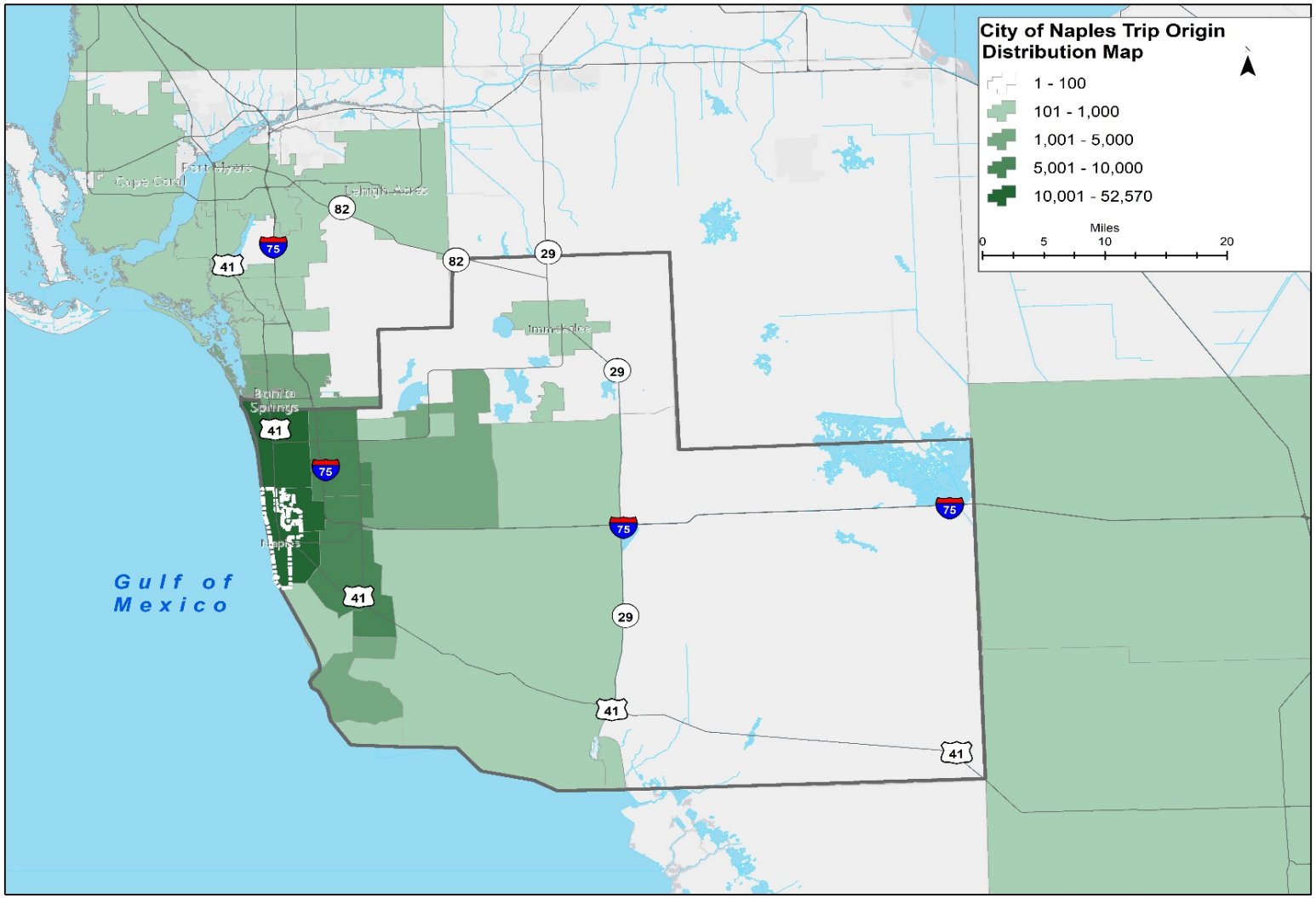
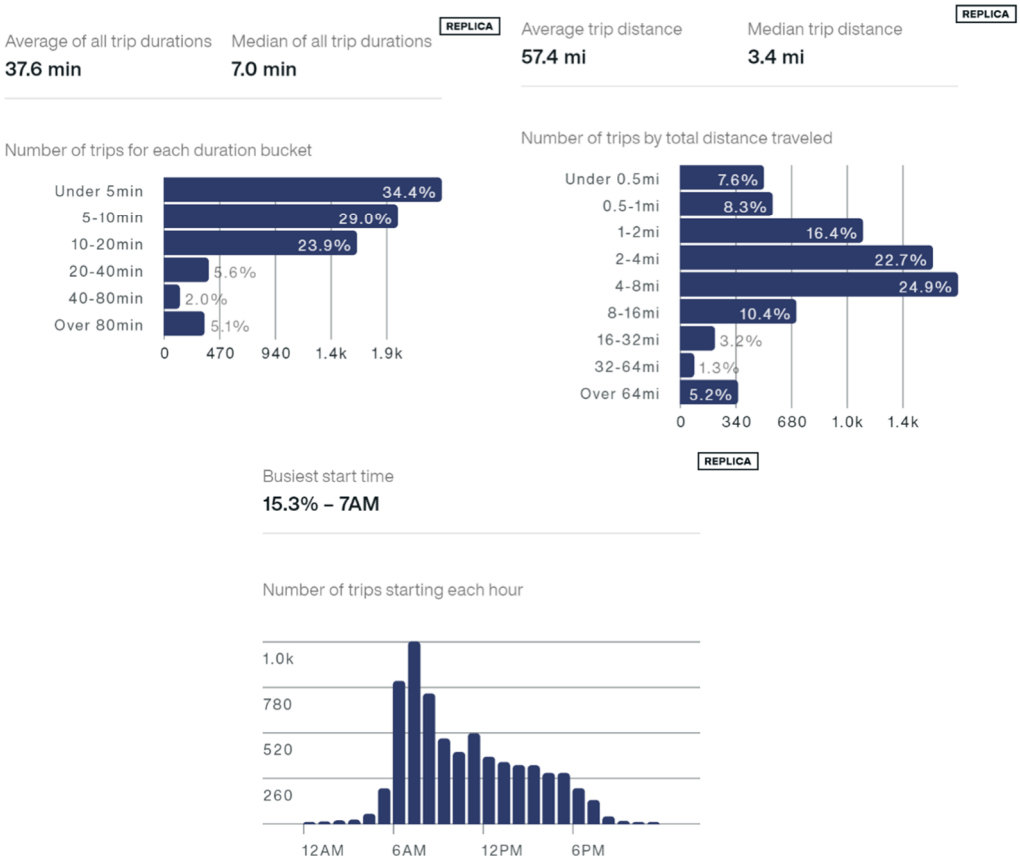


Table 15: Work Locations for Residents of City of Naples

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 28: 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.

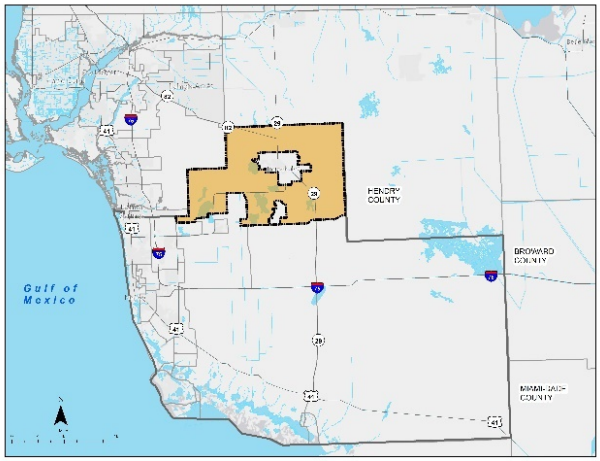


Table 16 identifies the trip origins and destinations for the top 20 subarea locations when at least one trip end takes place in the Corkscrew subarea. The trip origins listed have a destination in the Corkscrew subarea and vice-versa for the destinations listed. The 685 trips originating in the Corkscrew 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.

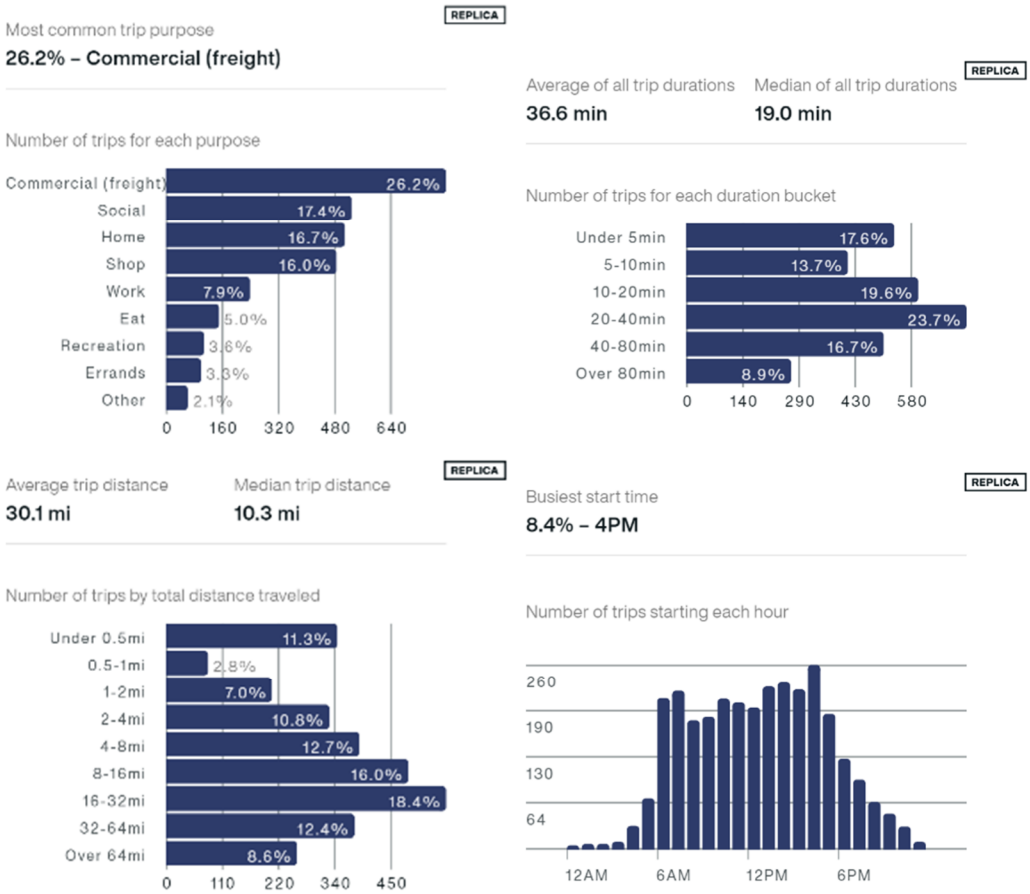
Table 16: Corkscrew Trip Origins and Destinations

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 29 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 30 illustrates the geographic distribution of destinations for trips originating in the Corkscrew subarea.

Figure 29: Selected Trip Characteristics for Corkscrew Origins



3.6.2 Trips Ending in Subarea

Figure 31 shows characteristics for trips ending in the Corkscrew subarea. Along with the map in Figure 32 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 30: Destinations for trips Originating in Corkscrew Subarea

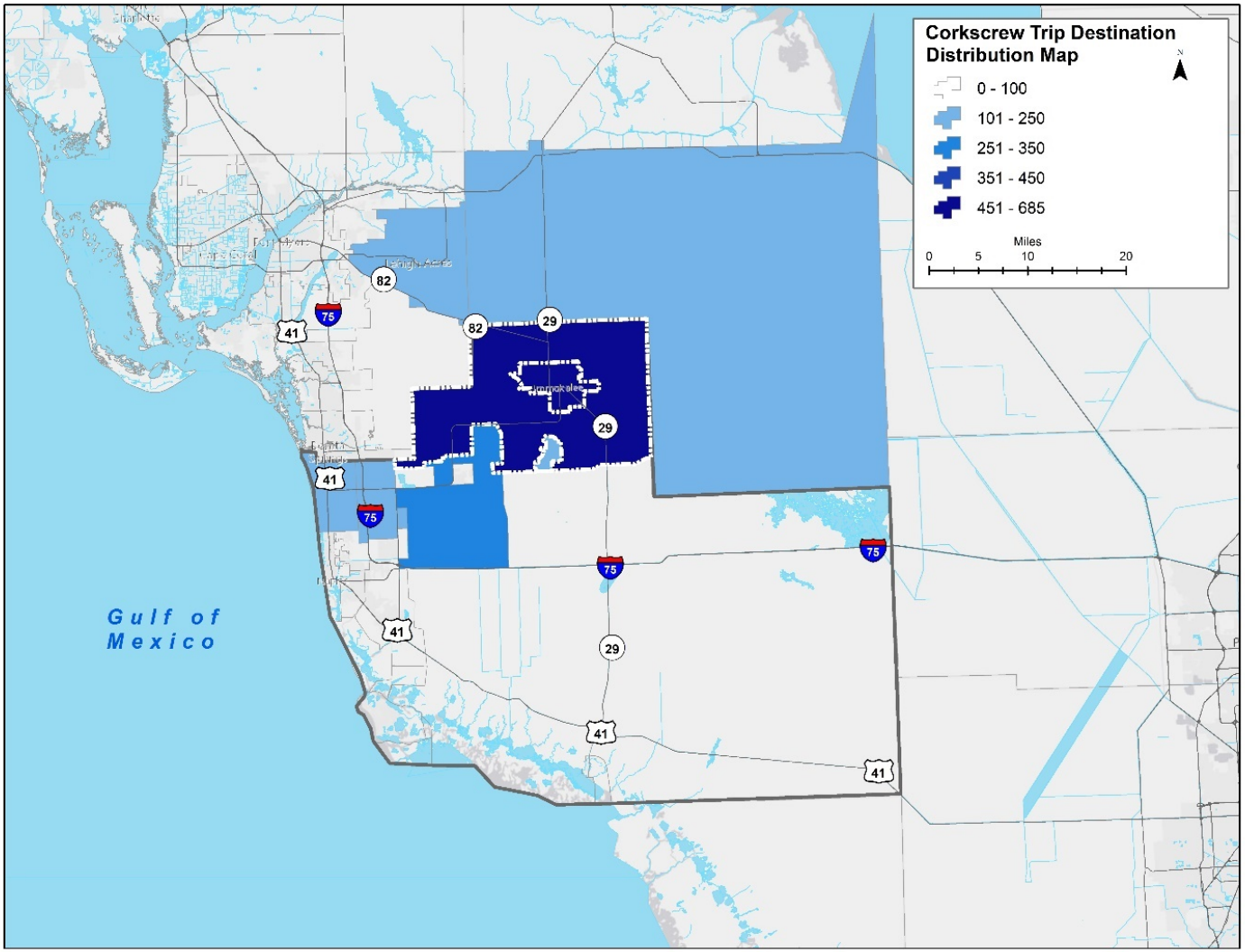
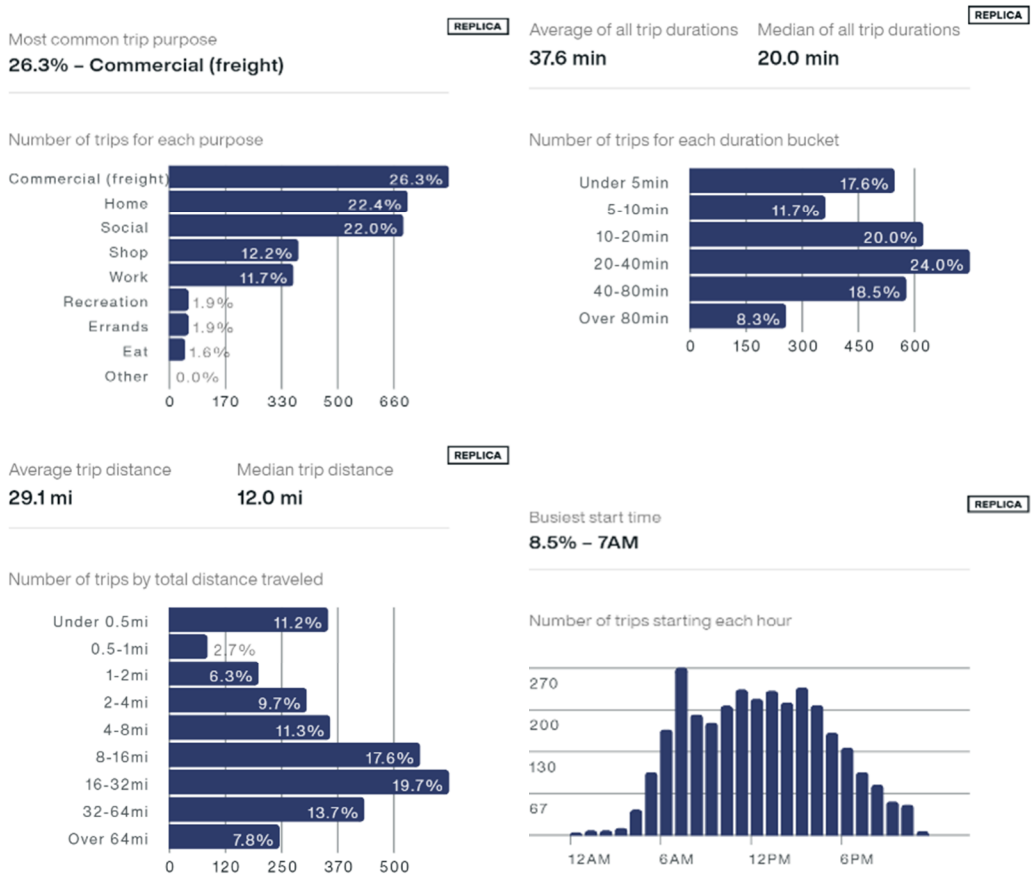


Figure 31: Selected Trip Characteristics for Corkscrew Destinations



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 33 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 32: Origins for trips Ending in Corkscrew Subarea

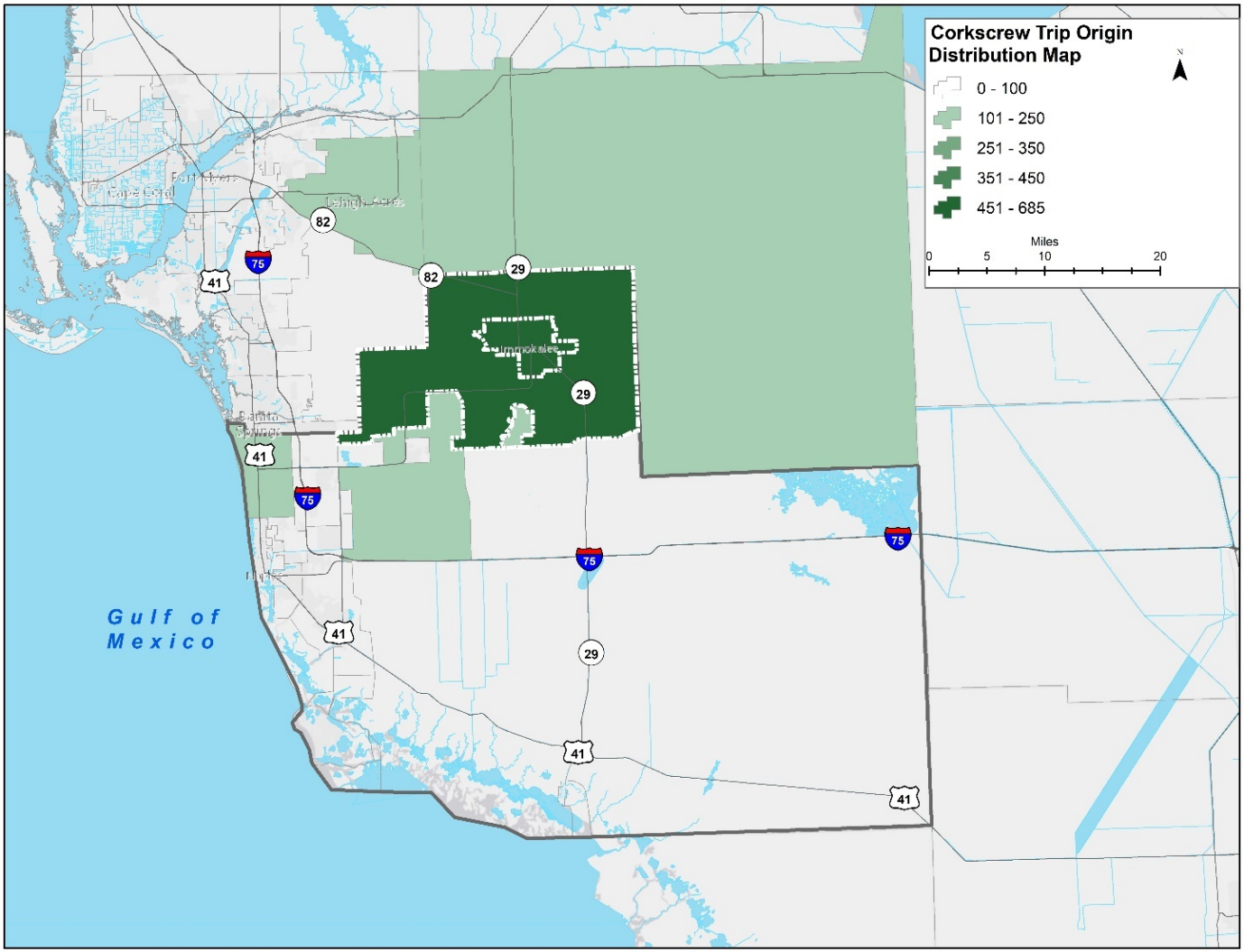
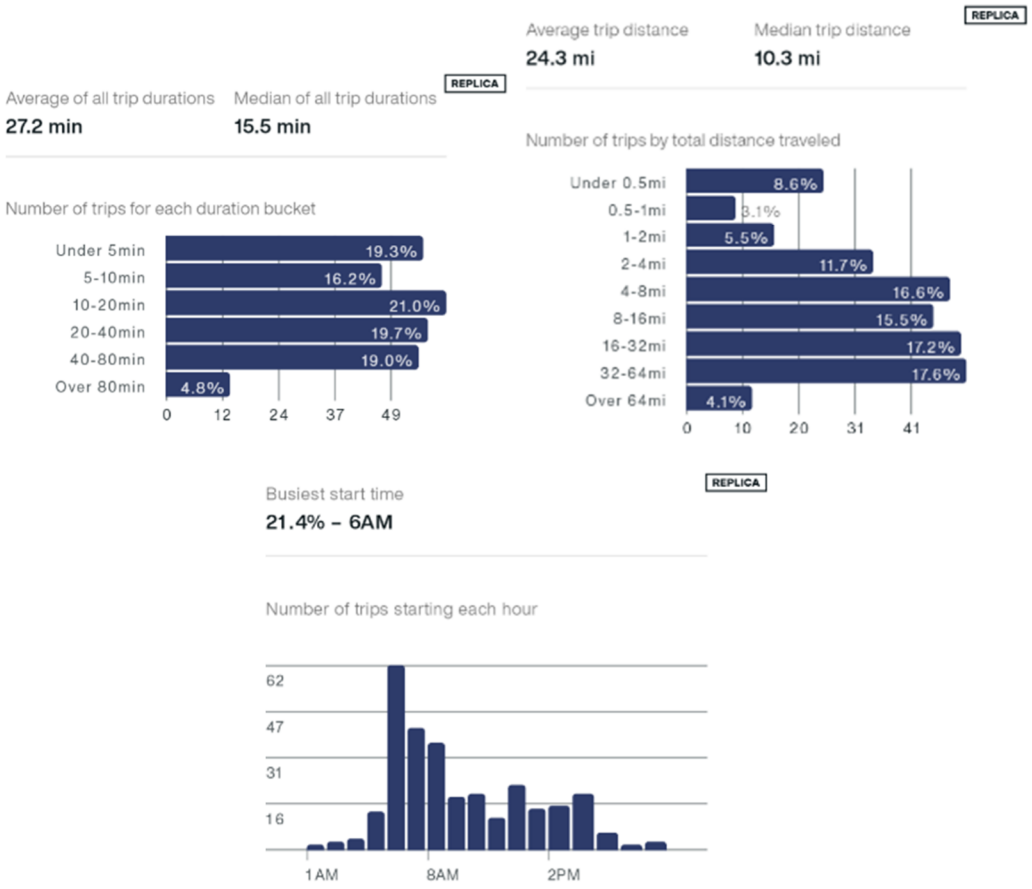


Table 17: Work Locations for Residents of Corkscrew

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 33: 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.

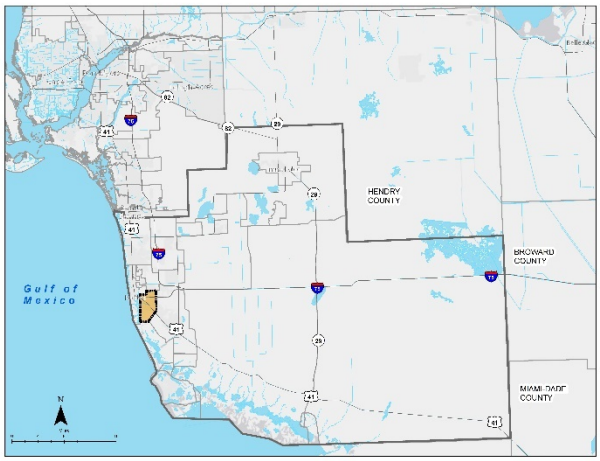


Table 18 identifies the trip origins and destinations for the top 20 subarea locations when at least one trip end takes place in the East Naples subarea. The trip origins listed have a destination in the East Naples subarea and vice-versa for the destinations listed. The 28,132 trips originating in the 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

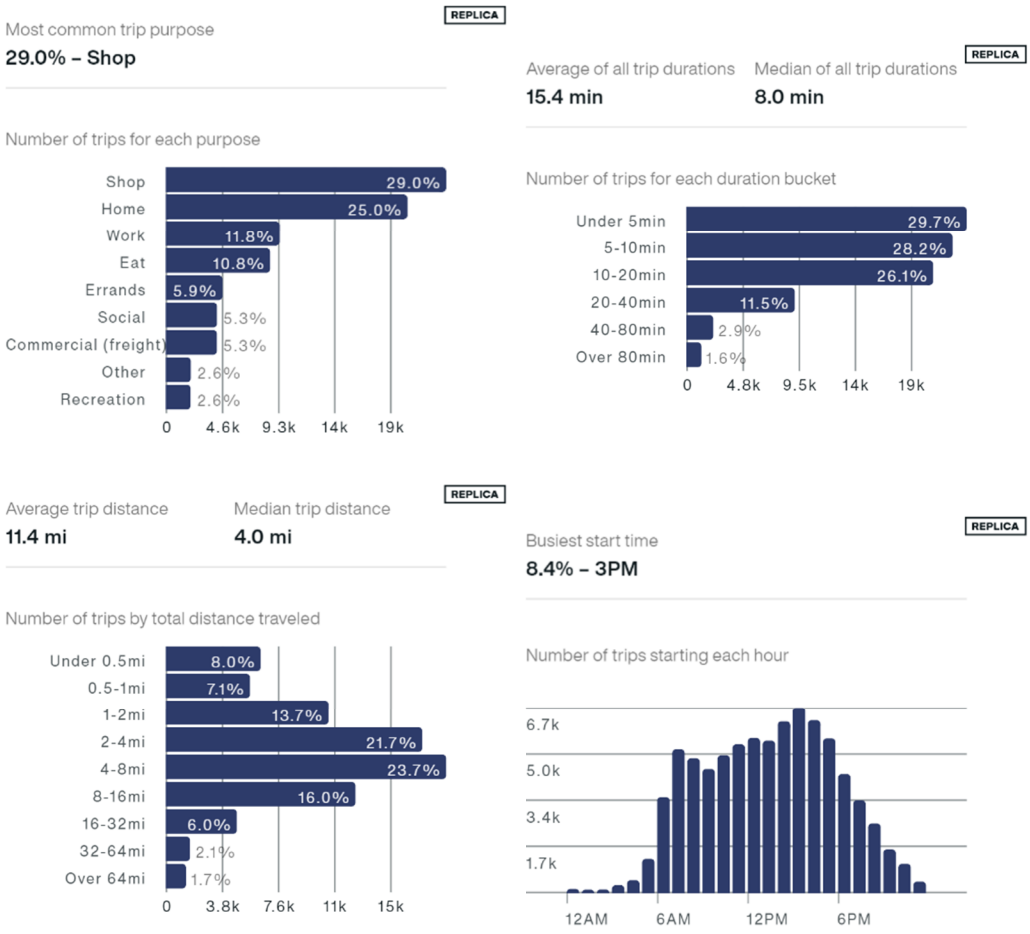
Table 18: East Naples Trip Origins and Destinations

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 34 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 35 illustrates the geographic distribution of destinations for trips originating in the East Naples subarea.

Figure 34: Selected Trip Characteristics for East Naples Origins



3.7.2 Trips Ending in Subarea

Figure 36 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 37 graphically illustrates the geographic distribution of origins for trips ending in the East Naples subarea.

Figure 35: Destinations for trips Originating in East Naples Subarea

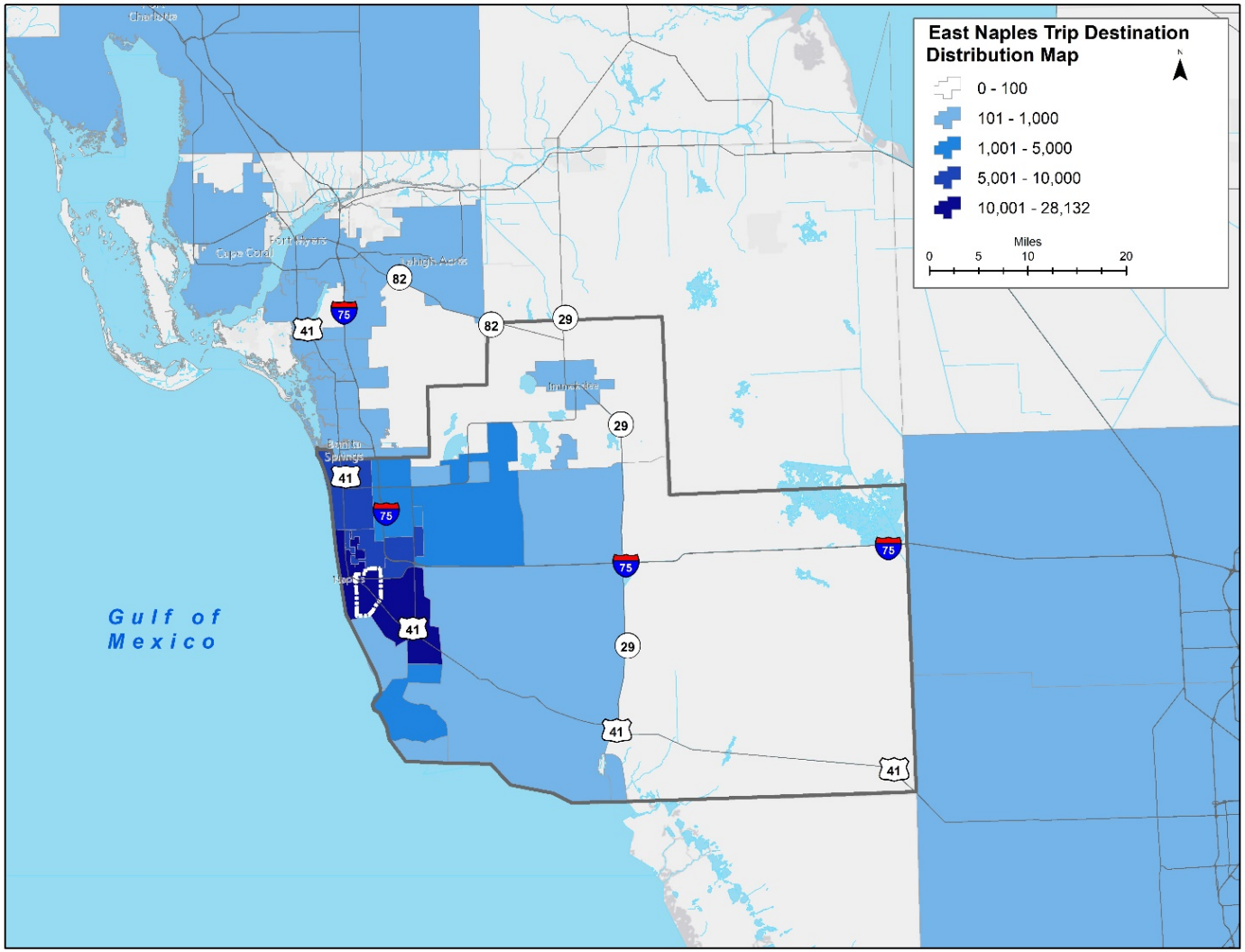
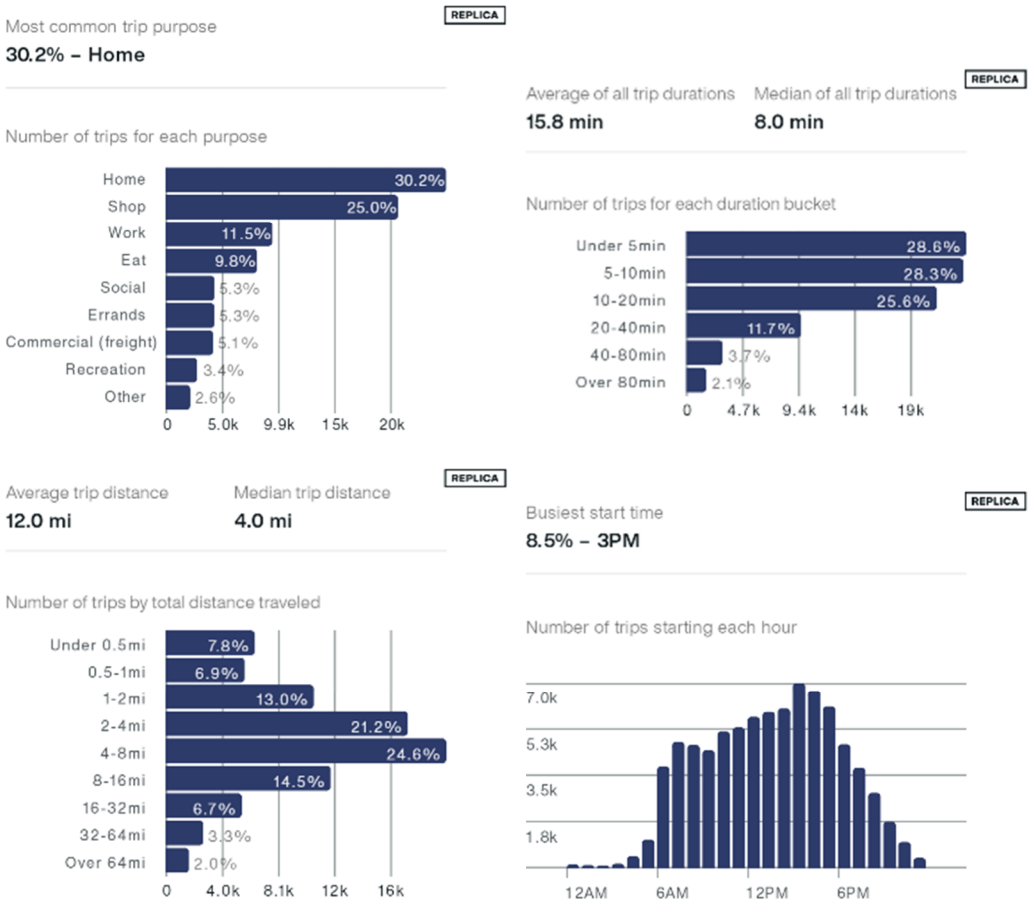


Figure 36: Selected Trip Characteristics for East Naples Destinations



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 38 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 37: Origins for trips Ending in East Naples Subarea

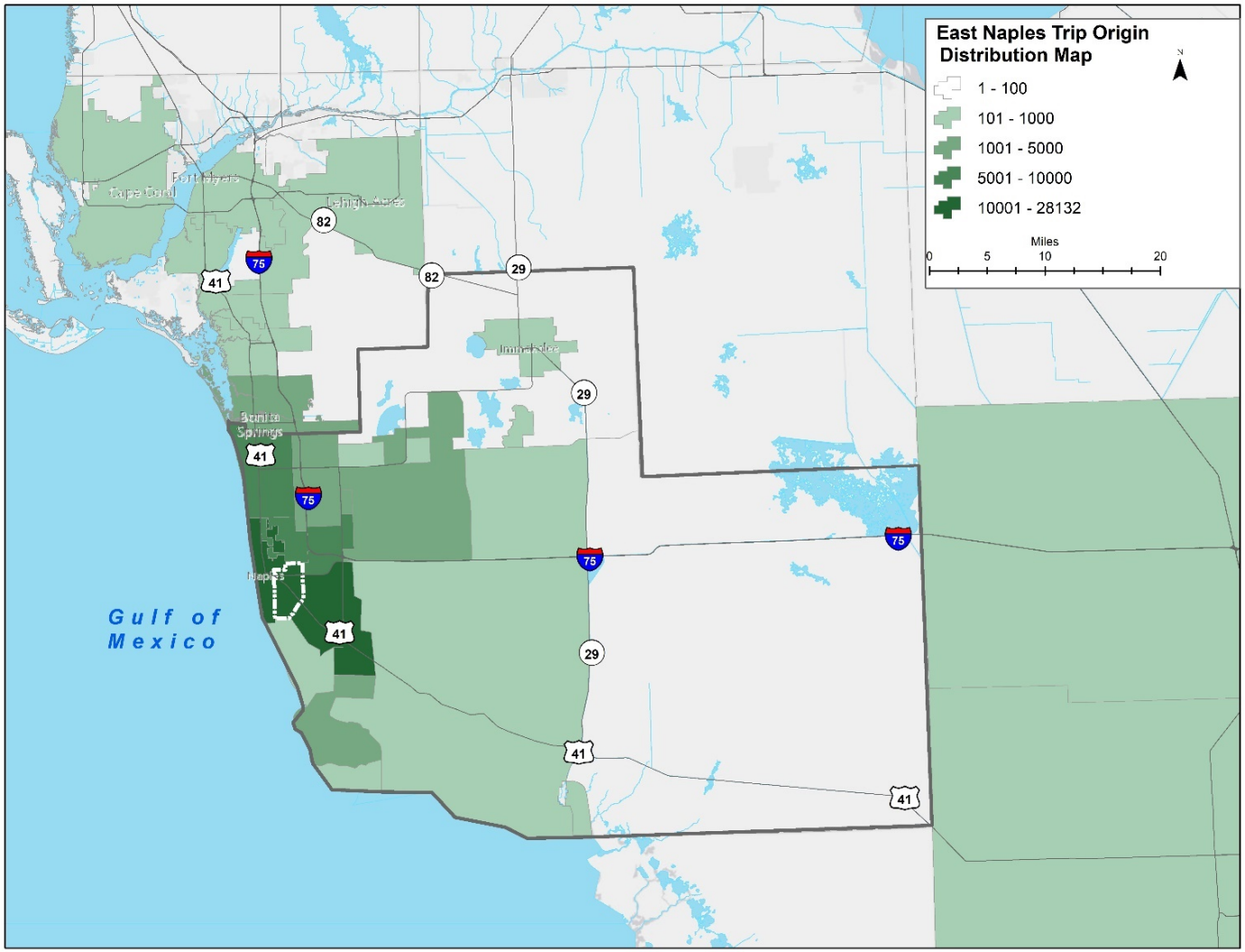
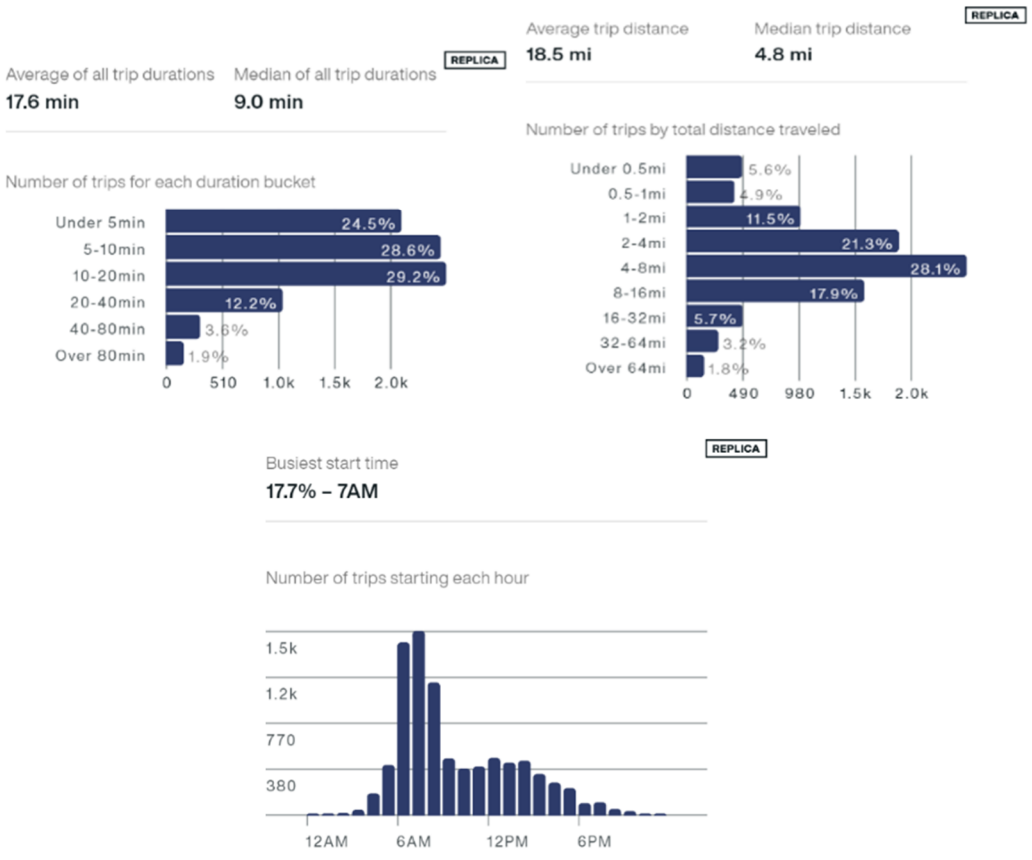


Table 19: Work Locations for Residents of East Naples

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 38: 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.

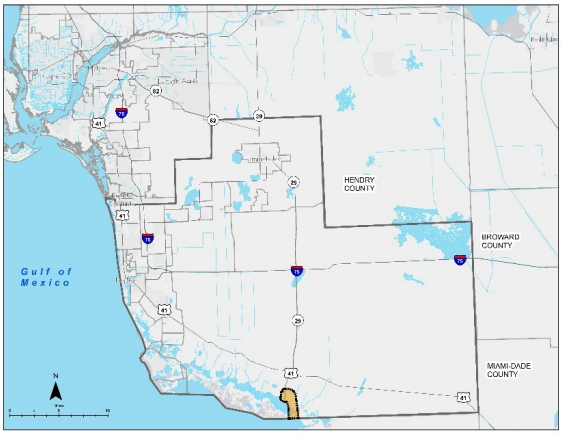


Table 20 identifies the trip origins and destinations for the top 20 subarea locations when at least one trip end takes place in the Everglades City subarea. The trip origins listed have a destination in the Everglades City subarea and vice-versa for the destinations listed. The 1,668 trips originating 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.

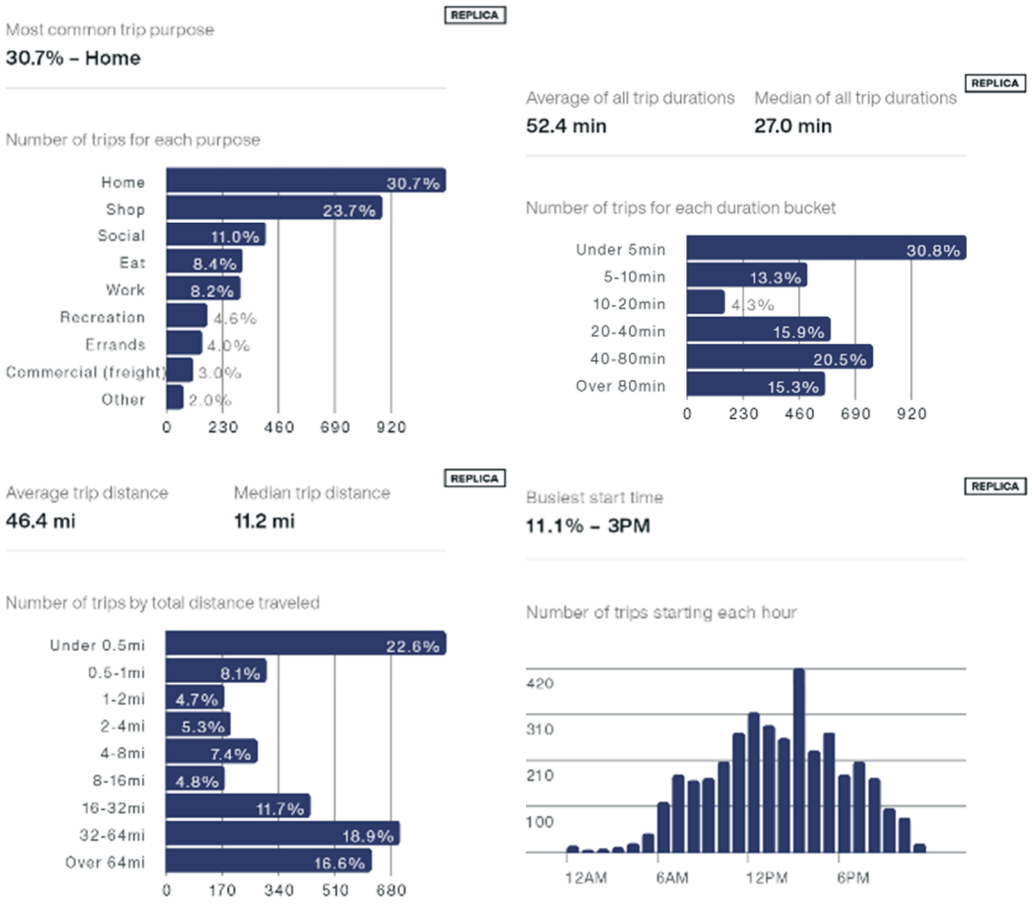
Table 20: Everglades City Trip Origins and Destinations

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 Fakapalm	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 39 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 40 illustrates the geographic distribution of destinations for trips originating in the Everglades City subarea.

Figure 39: Selected Trip Characteristics for Everglades City Origins



3.8.2 Trips Ending in Subarea

Figure 41 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 42 graphically illustrates the geographic distribution of origins for trips ending in the Everglades City subarea.

Figure 40: Destinations for trips Originating in Everglades City Subarea

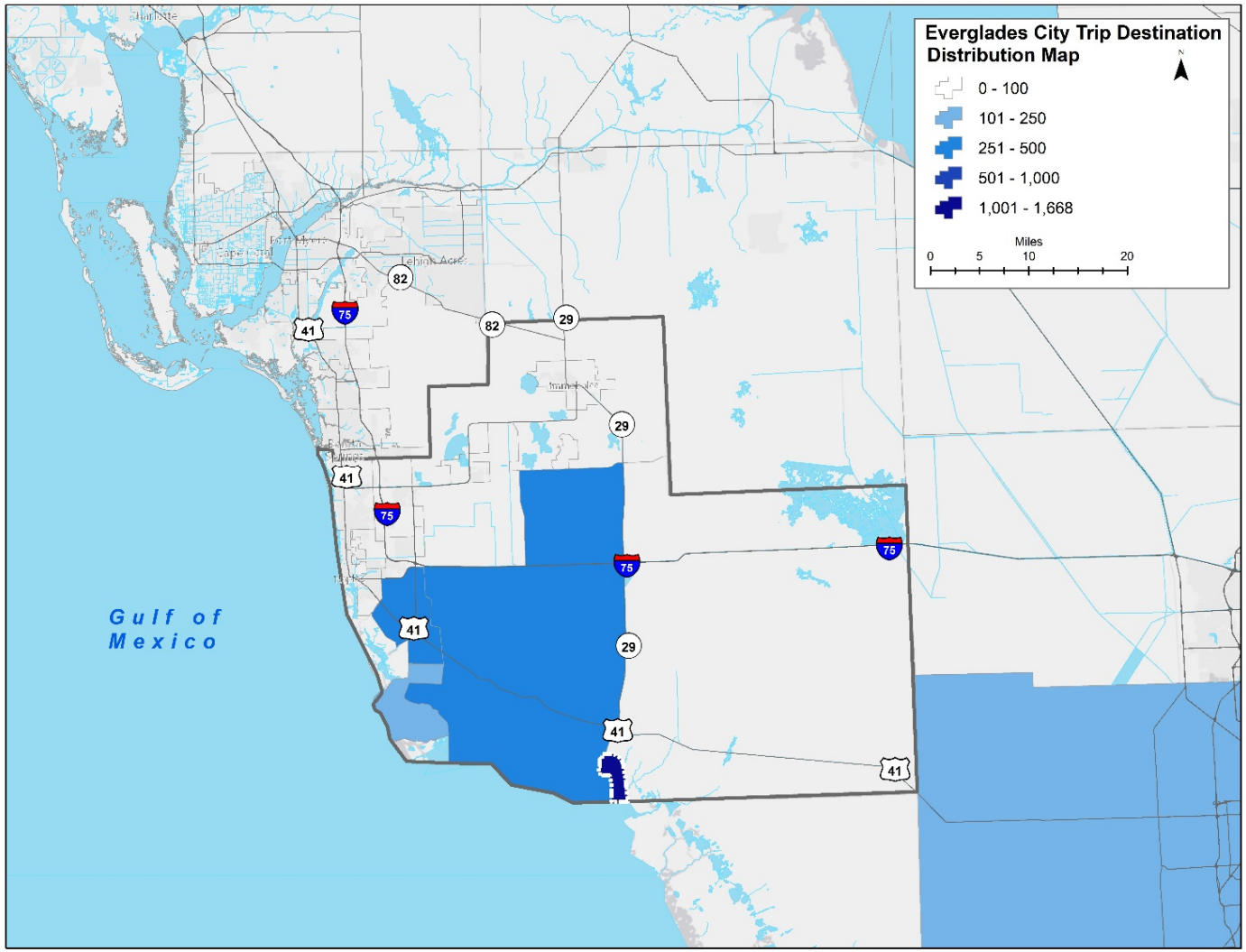
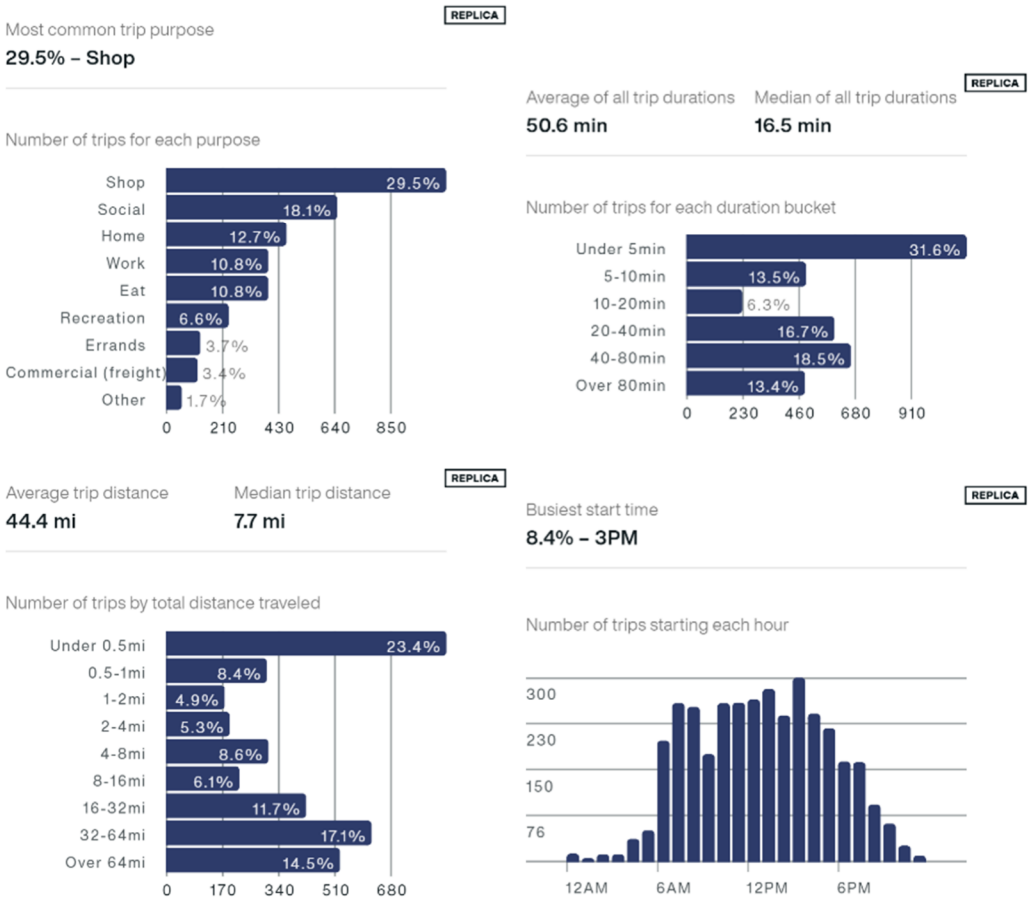


Figure 41: Selected Trip Characteristics for Everglades City Destinations



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 43 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 42: Origins for trips Ending in Everglades City Subarea

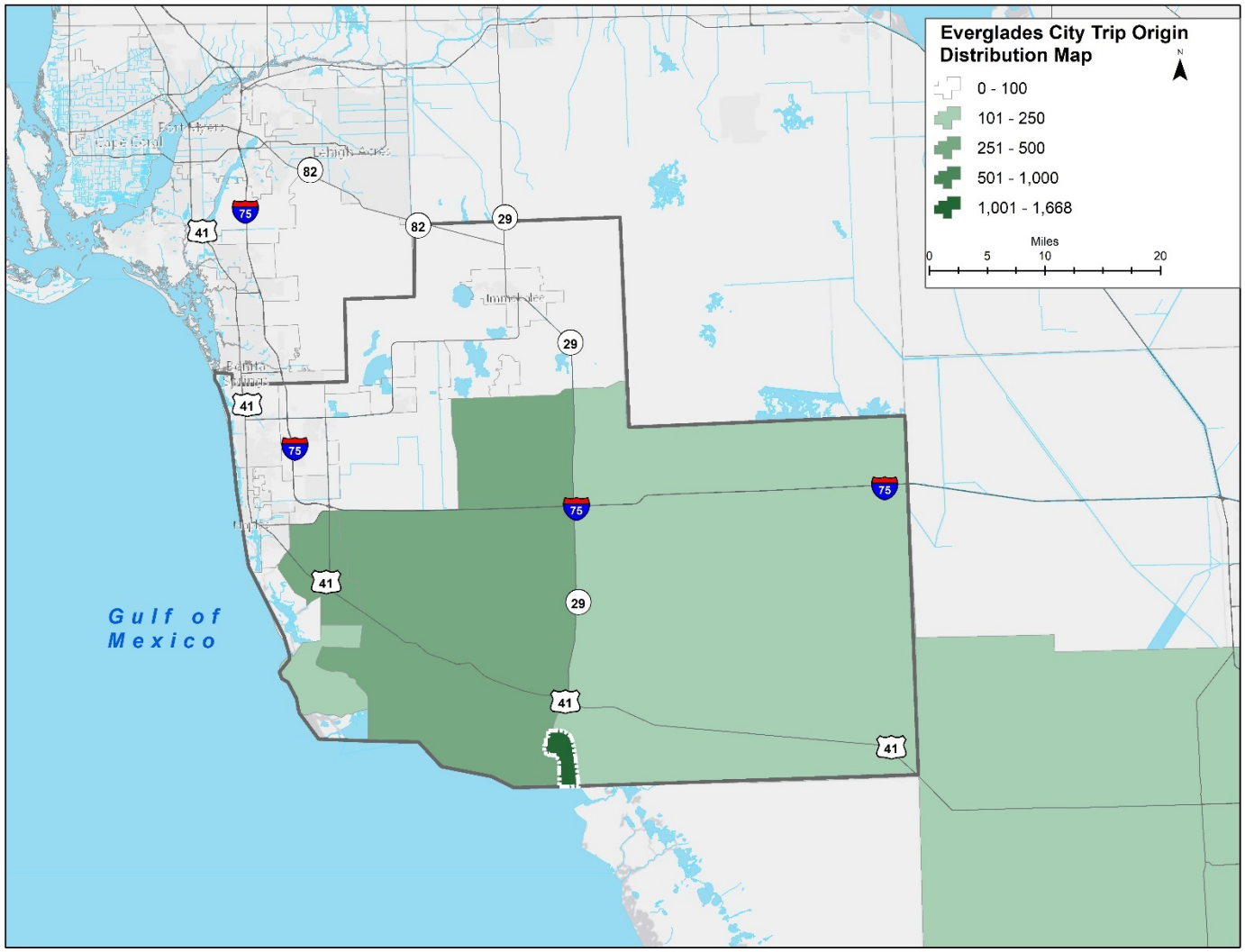
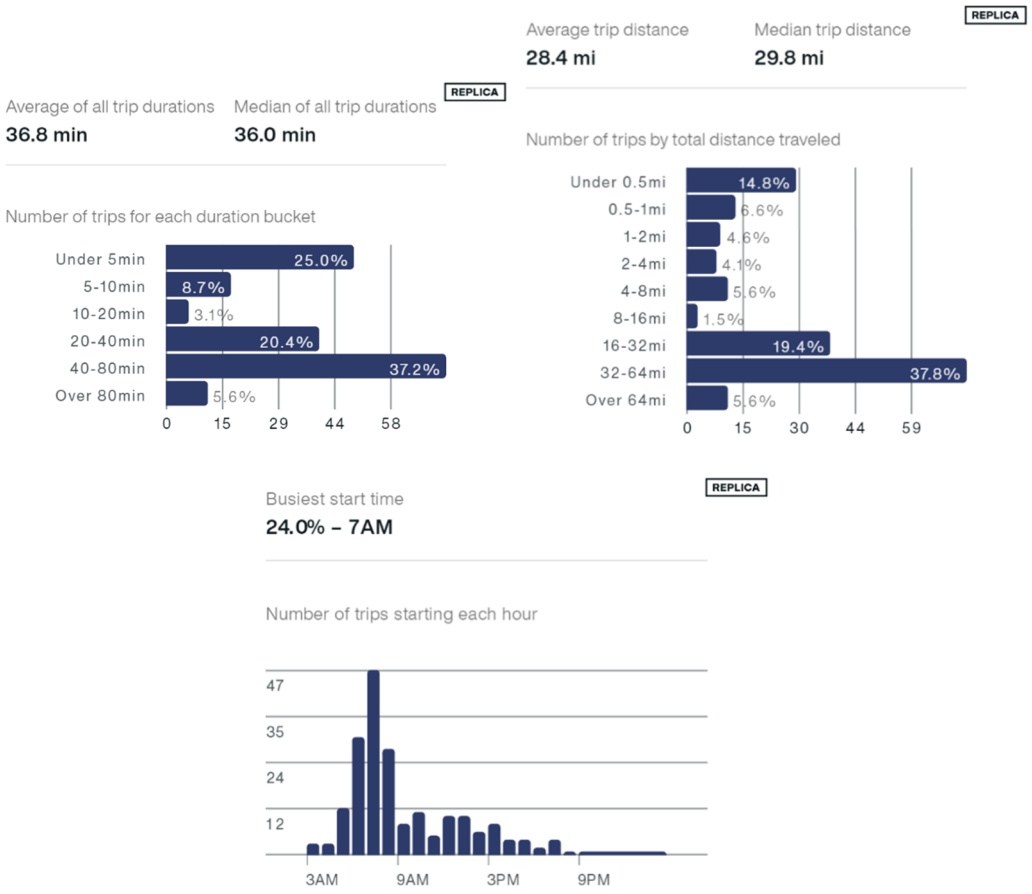


Table 21: Work Locations for Residents of Everglades City

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 43: 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.

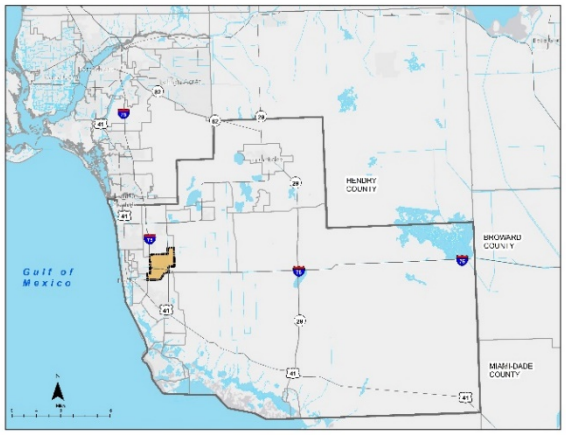


Table 22 identifies the trip origins and destinations for the top 20 subarea locations when at least one trip end occurs in the Golden Gate subarea. The trip origins listed have a destination in the Golden Gate subarea and vice-versa for the destinations listed. The 45,537 trips originating daily within 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

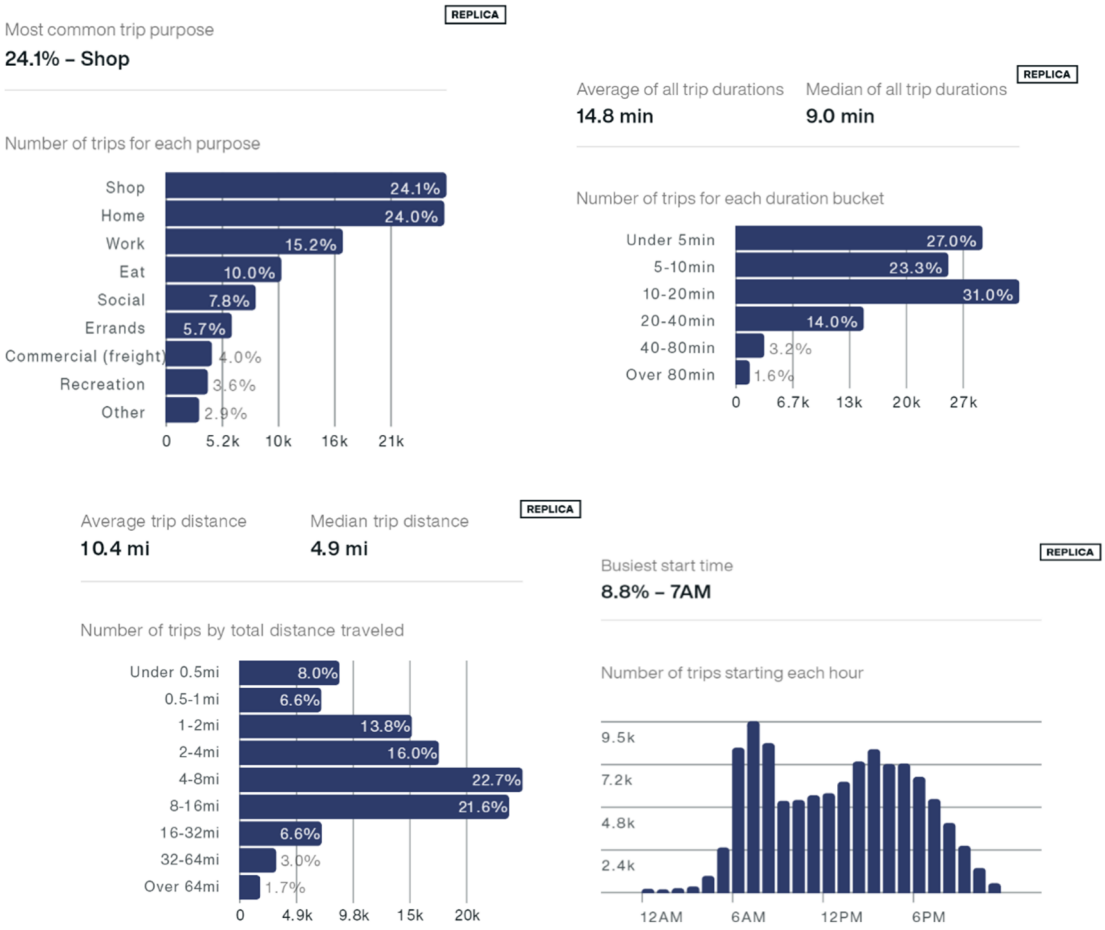
Subarea	Trips From	Trips To	Subarea	Trips From	Trip To
Golden Gate (internal)	45,537	45,537	San Carlos	773	907
North Naples	8,427	8,639	Out of Region	732	836
Urban Estates	8,311	8,291	Fort Myers	341	687
South Naples	8,381	7,881	Estero	673	622
City of Naples	7,159	7,360	South Fort Myers	263	565
Central 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 44. 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 44 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 45 illustrates the geographic distribution of destinations for trips originating in the Golden Gate subarea.

Figure 44: 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 46 provides summary statistics regarding travel distance and travel times for these trips. Figure 47 illustrates the geographic distribution of origins for trips ending in the Golden Gate subarea.

Figure 45: Destinations for trips Originating in Golden Gate Subarea

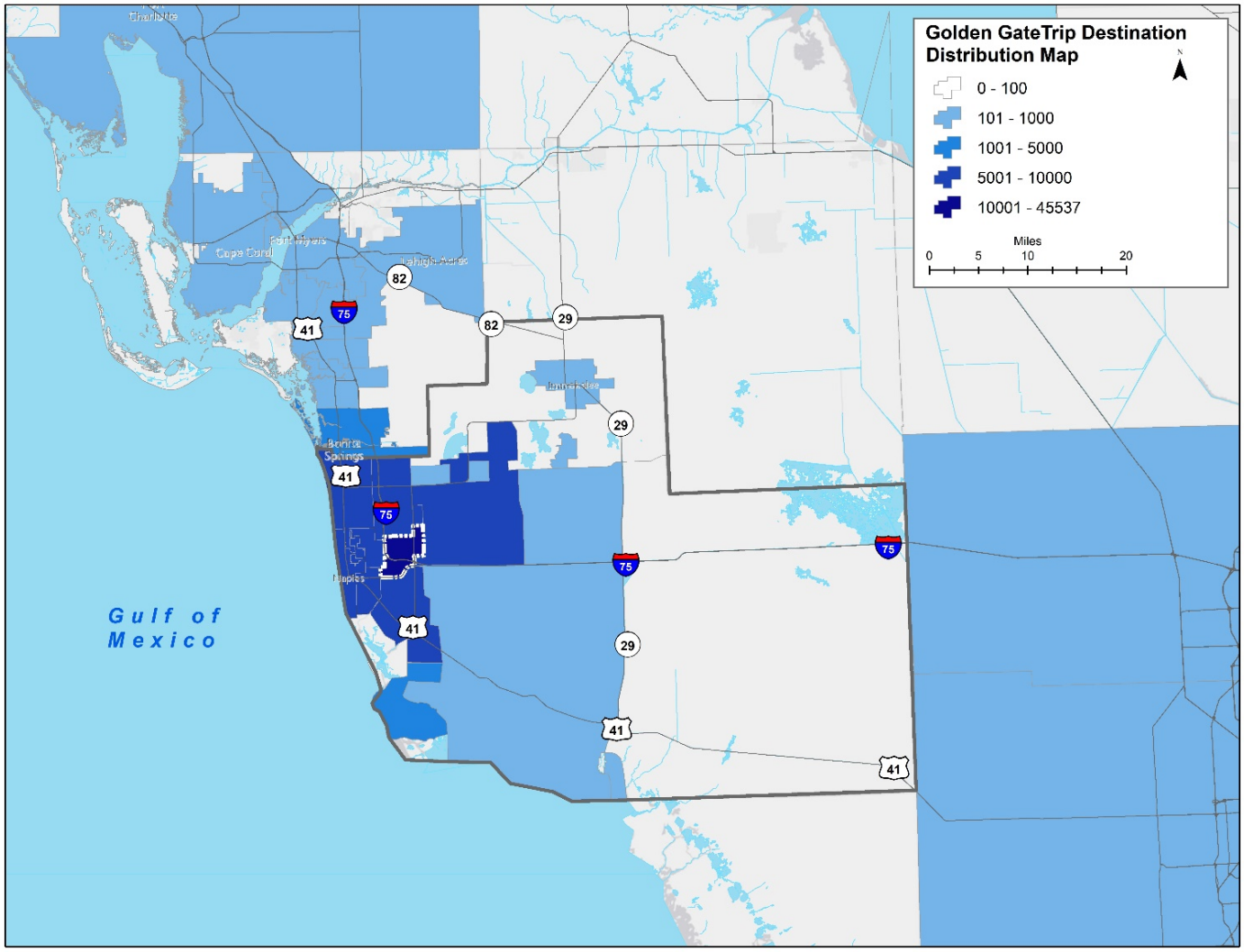
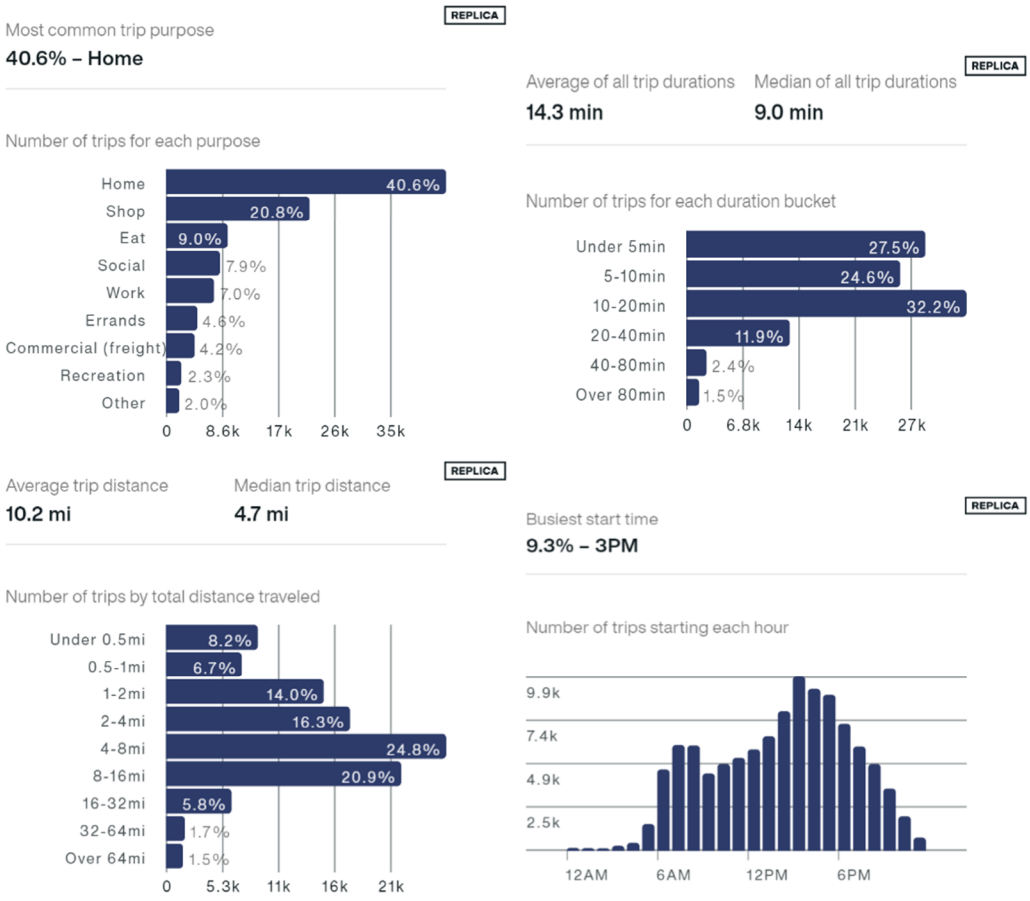


Figure 46: Selected Trip Characteristics for Golden Gate Destinations



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 48 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 47: Origins for trips Ending in Golden Gate Subarea

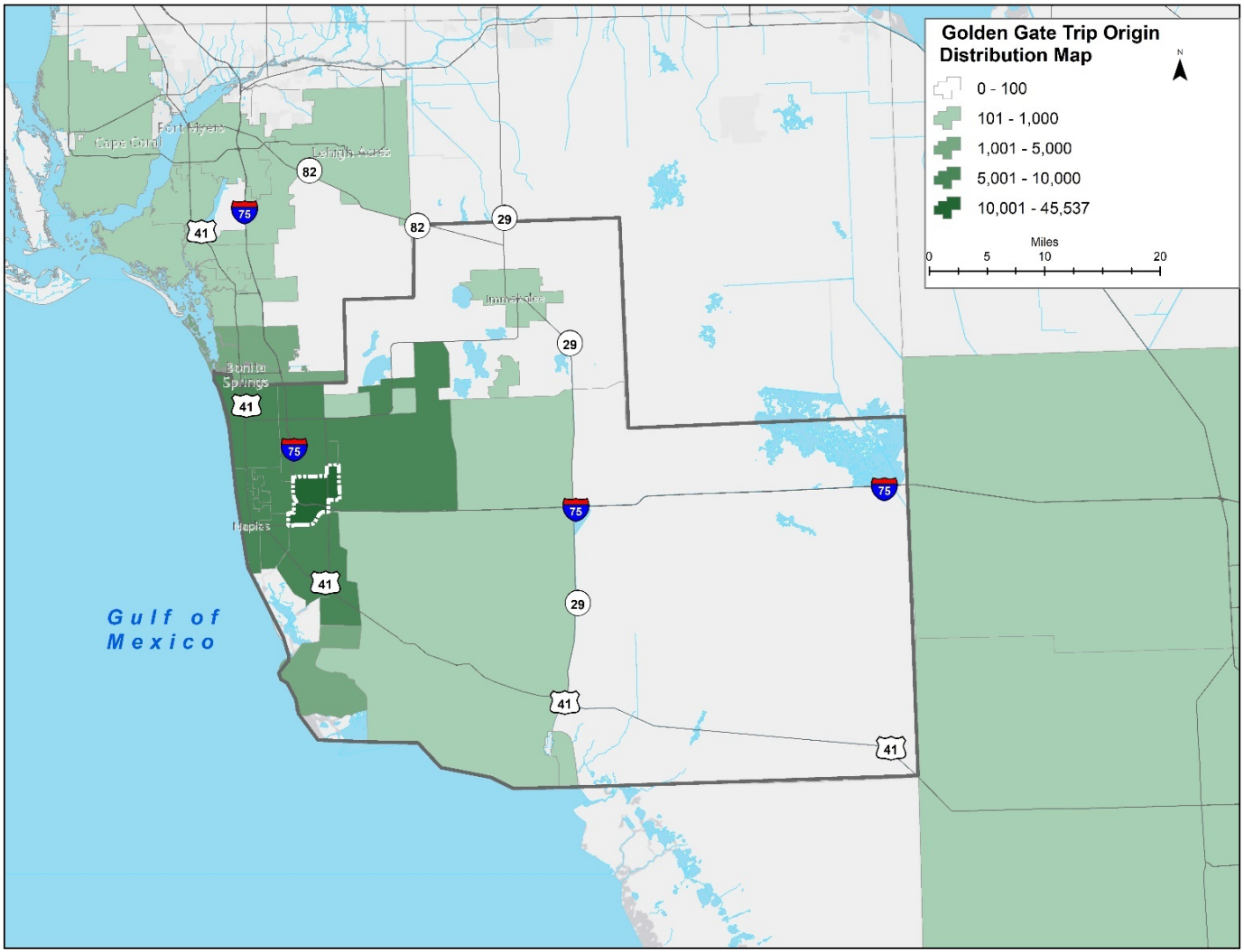
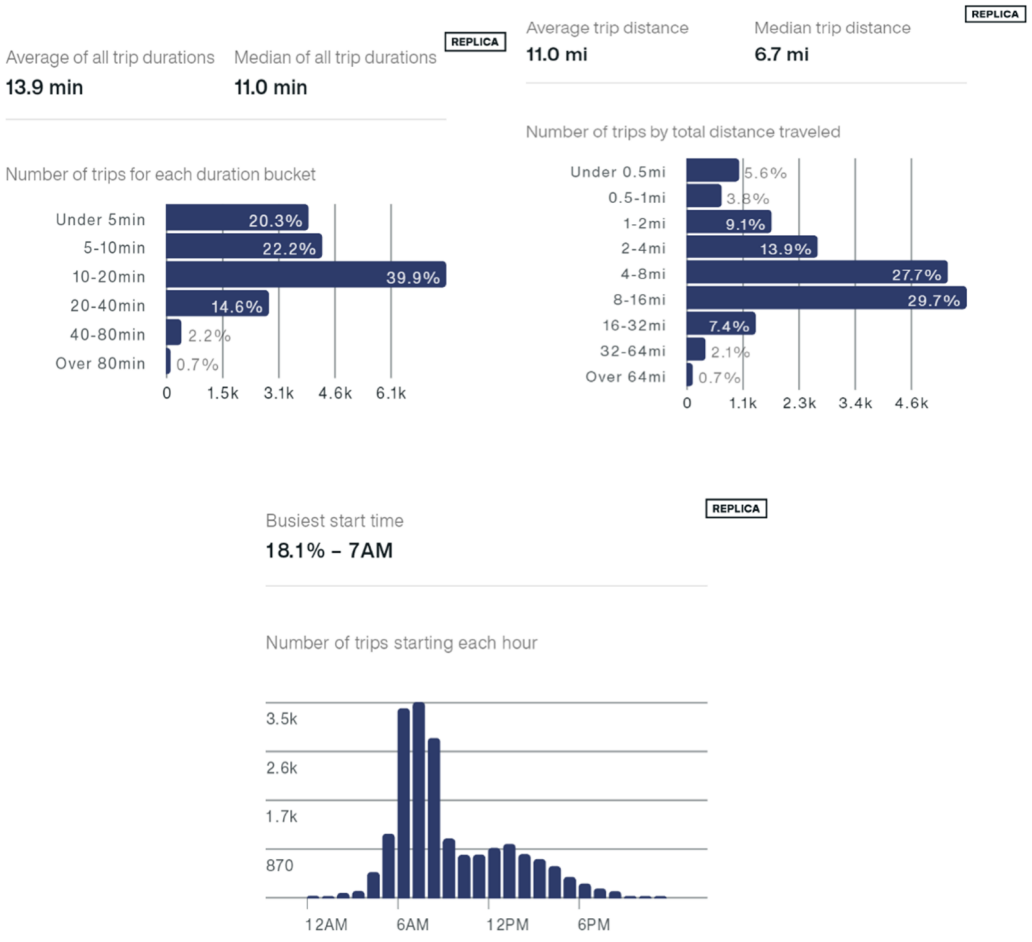


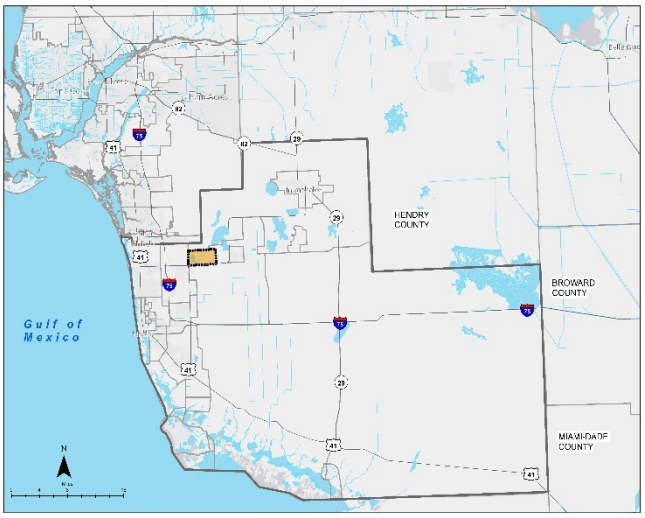
Table 23: Work Locations for Residents of Golden Gate

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 48: 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

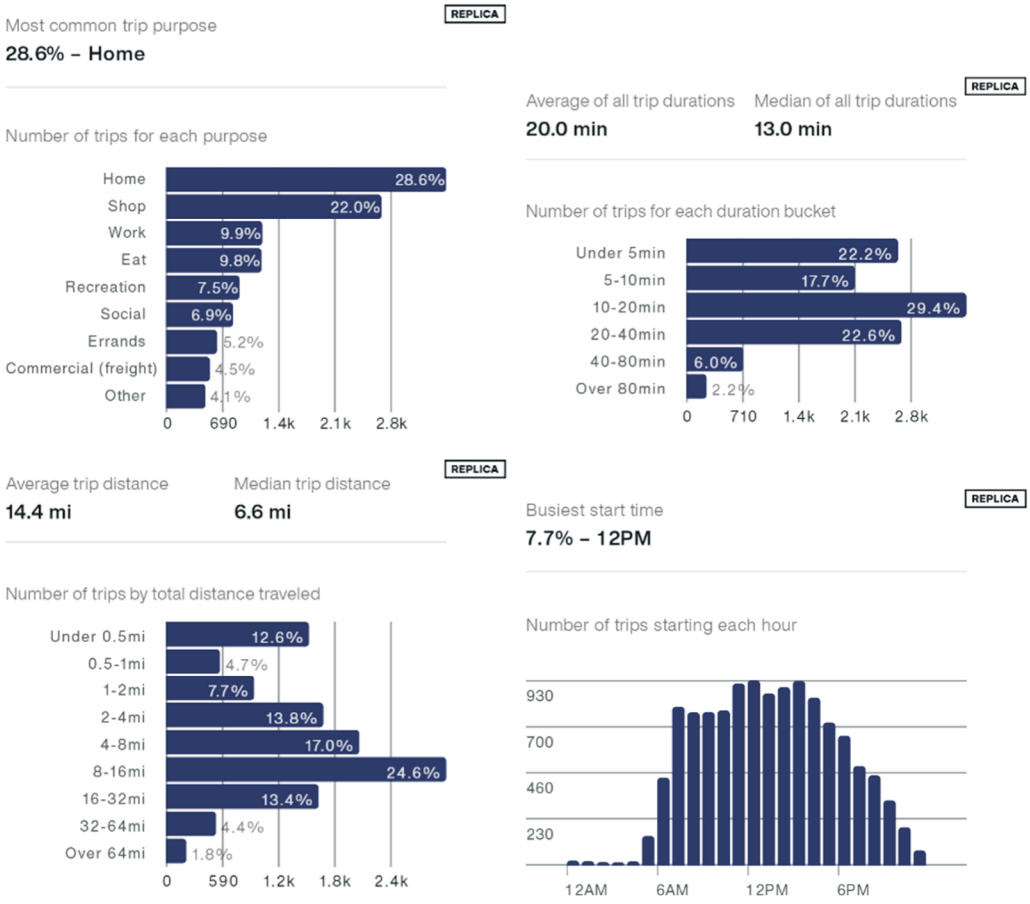
Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
Heritage Bay (internal)	2,949	2,949	East Naples	197	182
Urban Estates	2,584	2,511	South Naples	210	156
Rural Estates	1,817	1,695	Out of region	111	127
North Naples	1,239	1,185	Ave Maria	120	124
Bonita Springs	519	446	Fort Myers	64	106
Orange Tree	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 49 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 50 illustrates the geographic distribution of destinations for trips originating in the Heritage Bay subarea.

Figure 49: Selected Trip Characteristics for Heritage Bay Origins



3.10.2 Trips Ending in Subarea

Figure 51 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 52 graphically illustrates the geographic distribution of origins for trips ending in the Heritage Bay subarea.

Figure 50: Destinations for trips Originating in Heritage Bay Subarea

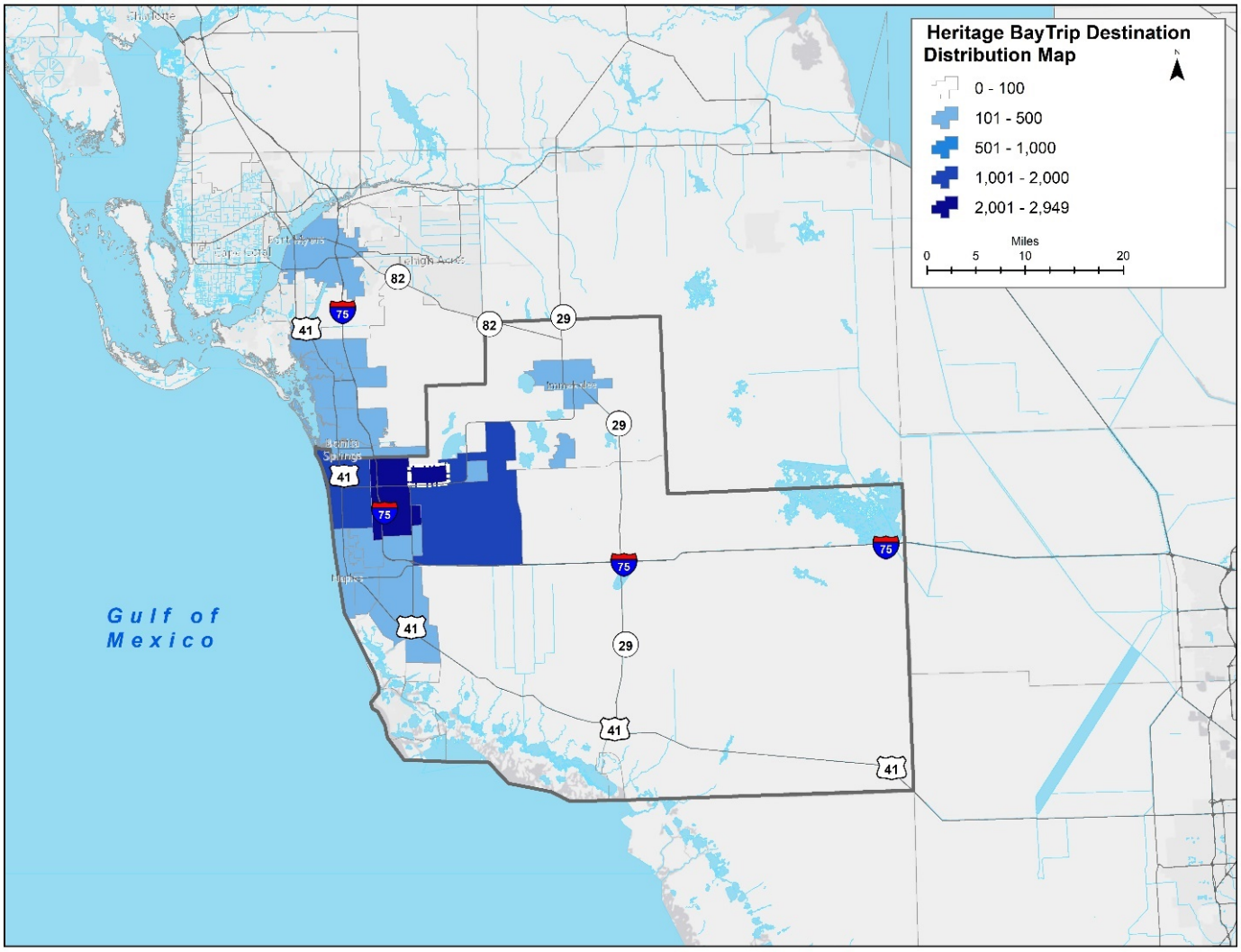
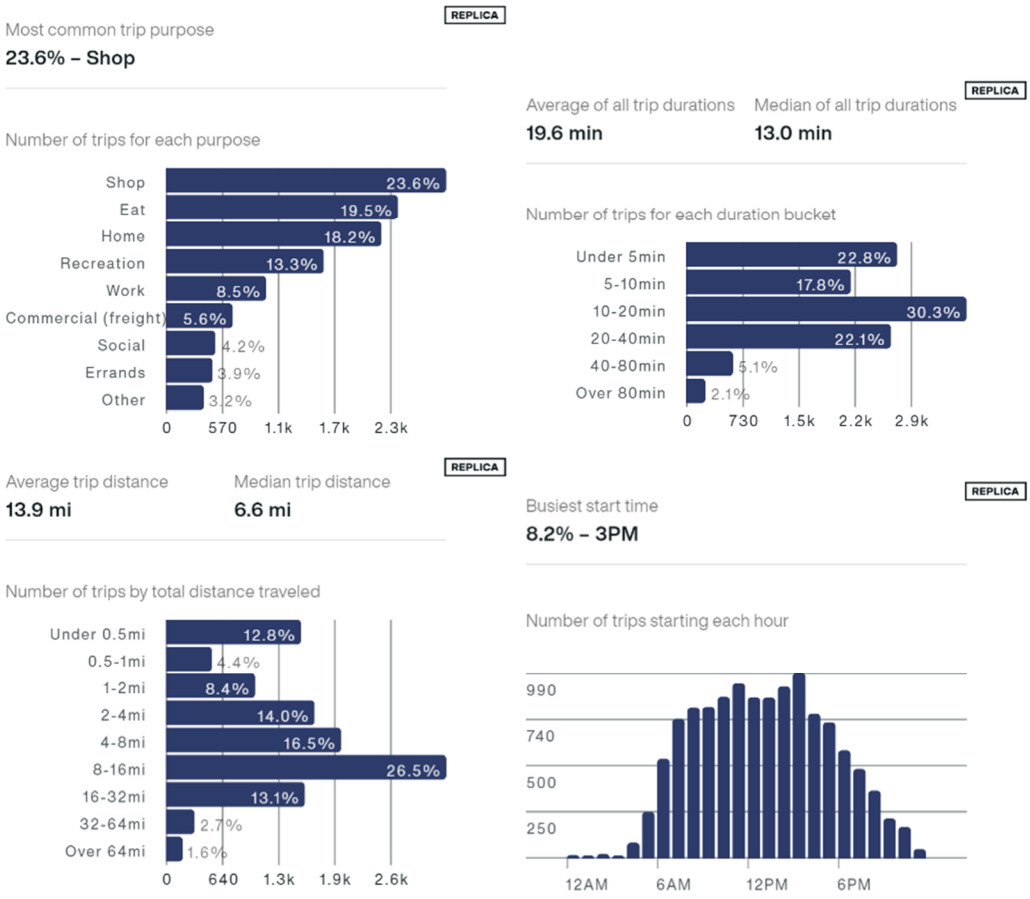


Figure 51: Selected Trip Characteristics for Heritage Bay Destinations



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 53 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 52: Origins for trips Ending in Heritage Bay Subarea

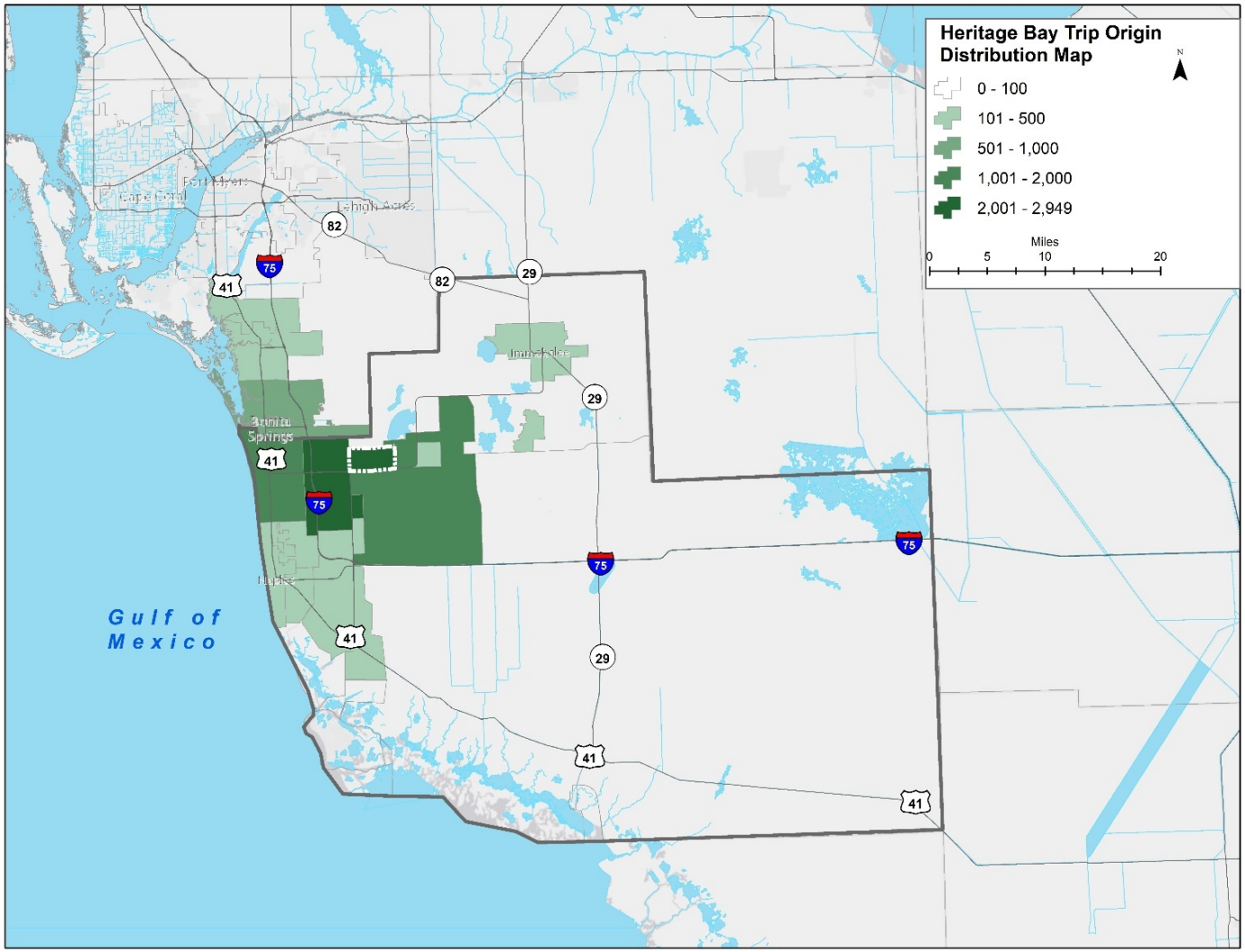
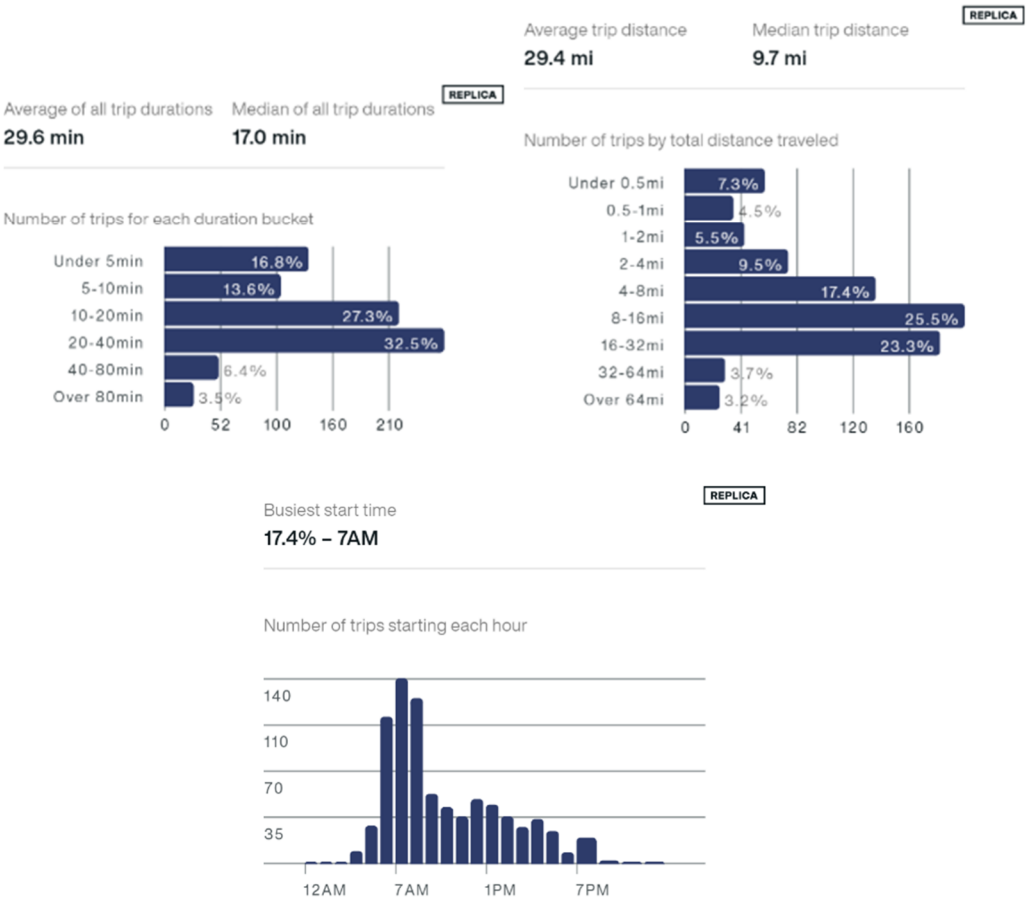


Table 25: Work Locations for Residents of Heritage Bay

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 53: Heritage Bay Home to Work Trip Characteristics



3.11 Immokalee

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

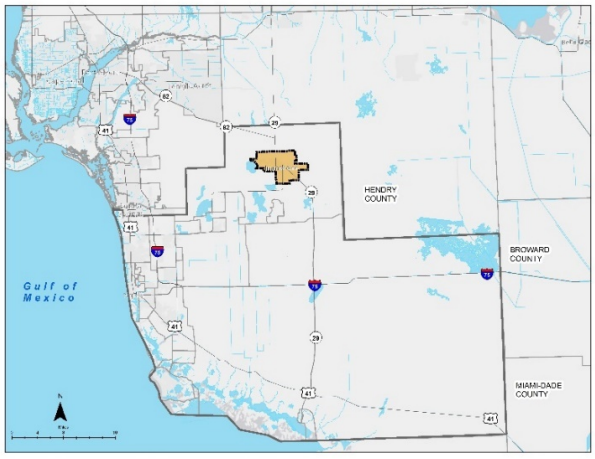


Table 26 identifies the trip origins and destinations for the top 20 subarea locations when at least one trip end takes place in the Immokalee subarea. Trip origins listed have a destination in the Immokalee subarea and vice-versa for the destinations listed. 72% of the 60,000 daily trips originating 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.

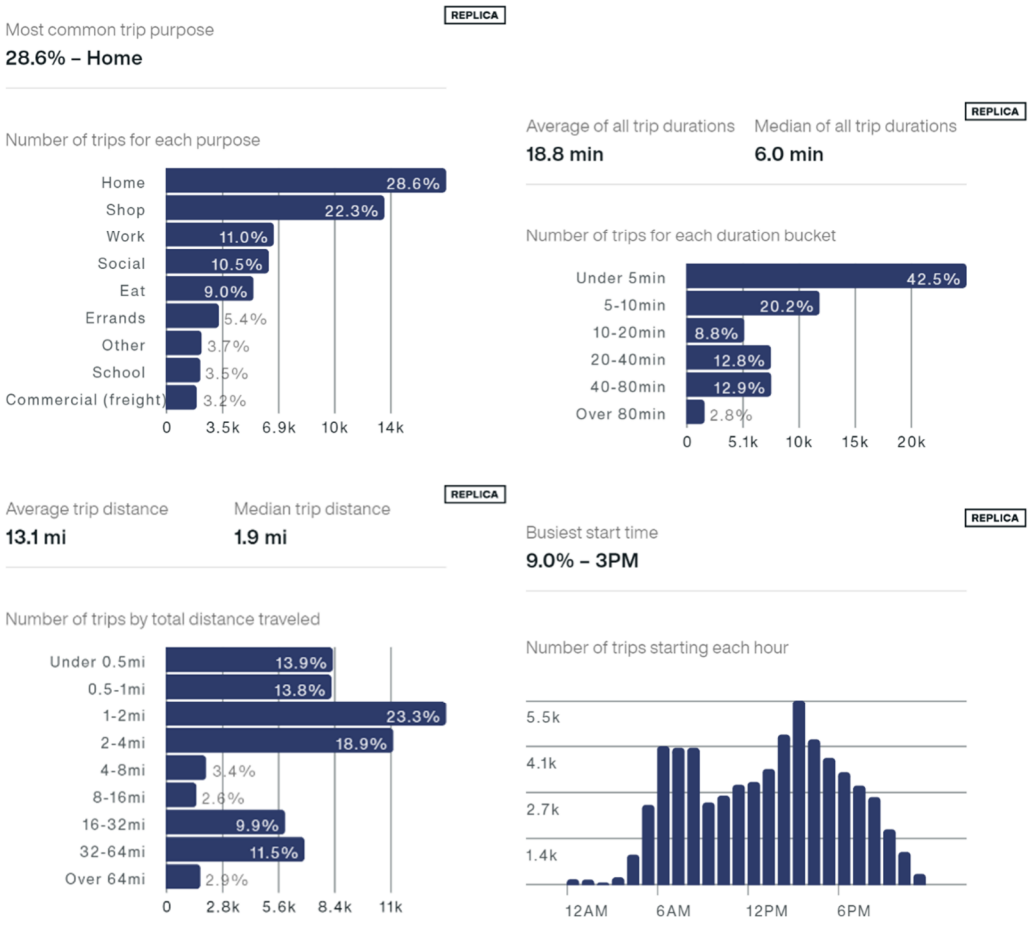
Table 26: Immokalee Trip Origins and Destinations

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 54 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 Collie County, they are closer in location than the developed areas of Collier County. Figure 55 illustrates the geographic distribution of destinations for trips originating in the Immokalee subarea.

Figure 54: Selected Trip Characteristics for Immokalee Origins



3.11.2 Trips Ending in Subarea

Figure 56 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 57 graphically illustrates the geographic distribution of origins for trips ending in the Immokalee subarea.

Figure 55: Destinations for trips Originating in Immokalee Subarea

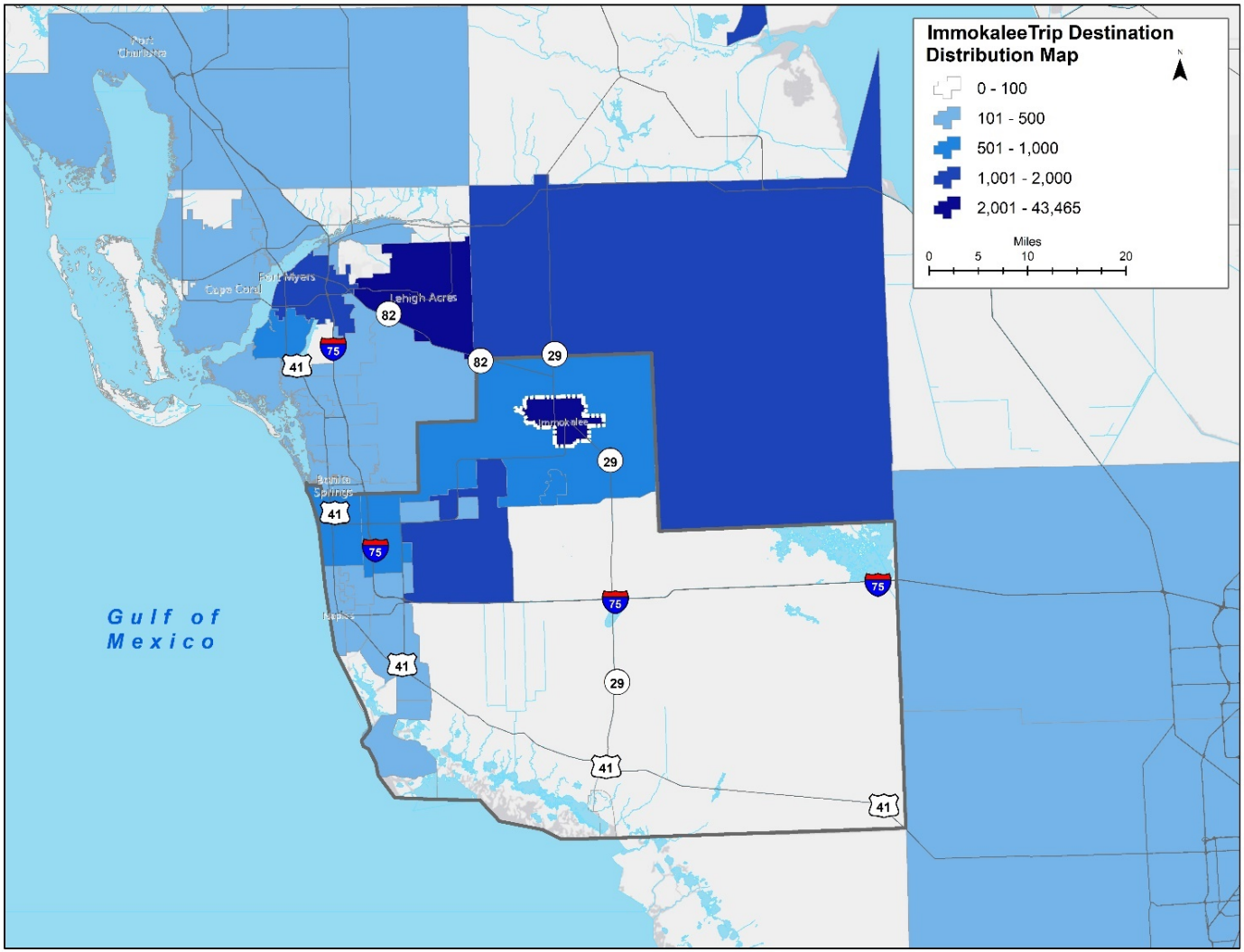
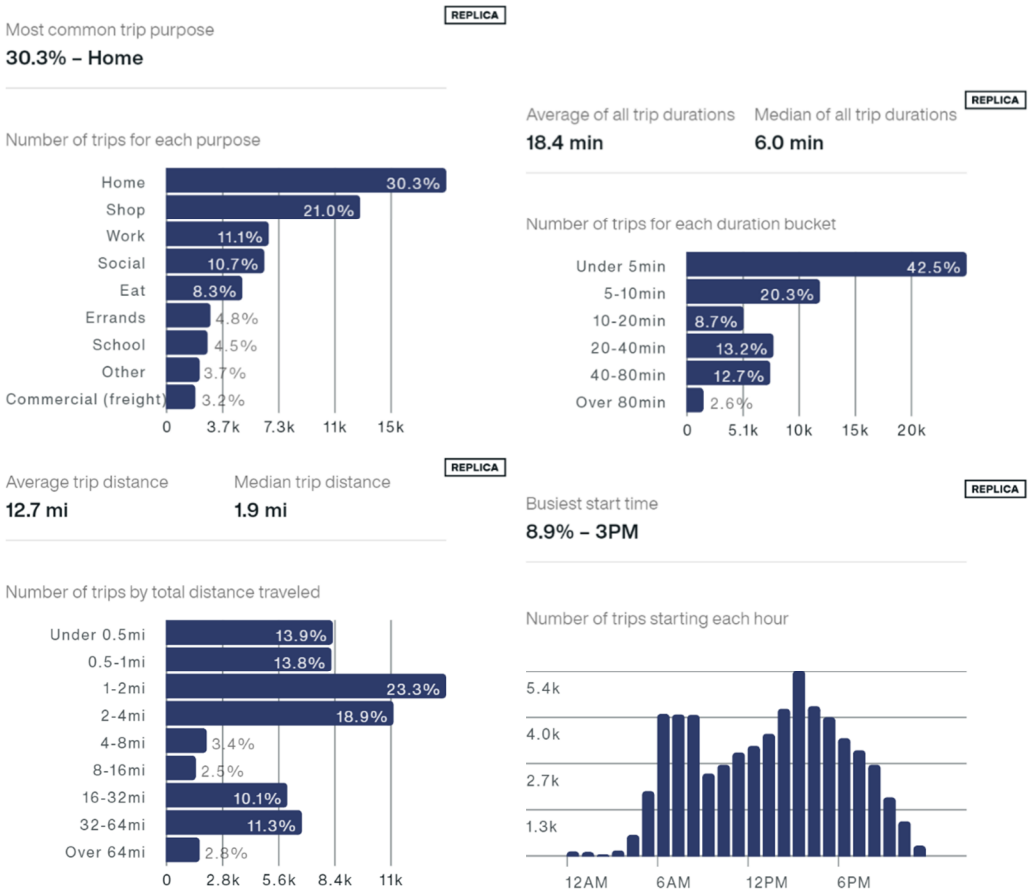


Figure 56: Selected Trip Characteristics for Immokalee Destinations



3.11.3 Work Location

Table 27 lists the top work locations for11,500 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 58. 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 57: Origins for trips Ending in Immokalee Subarea

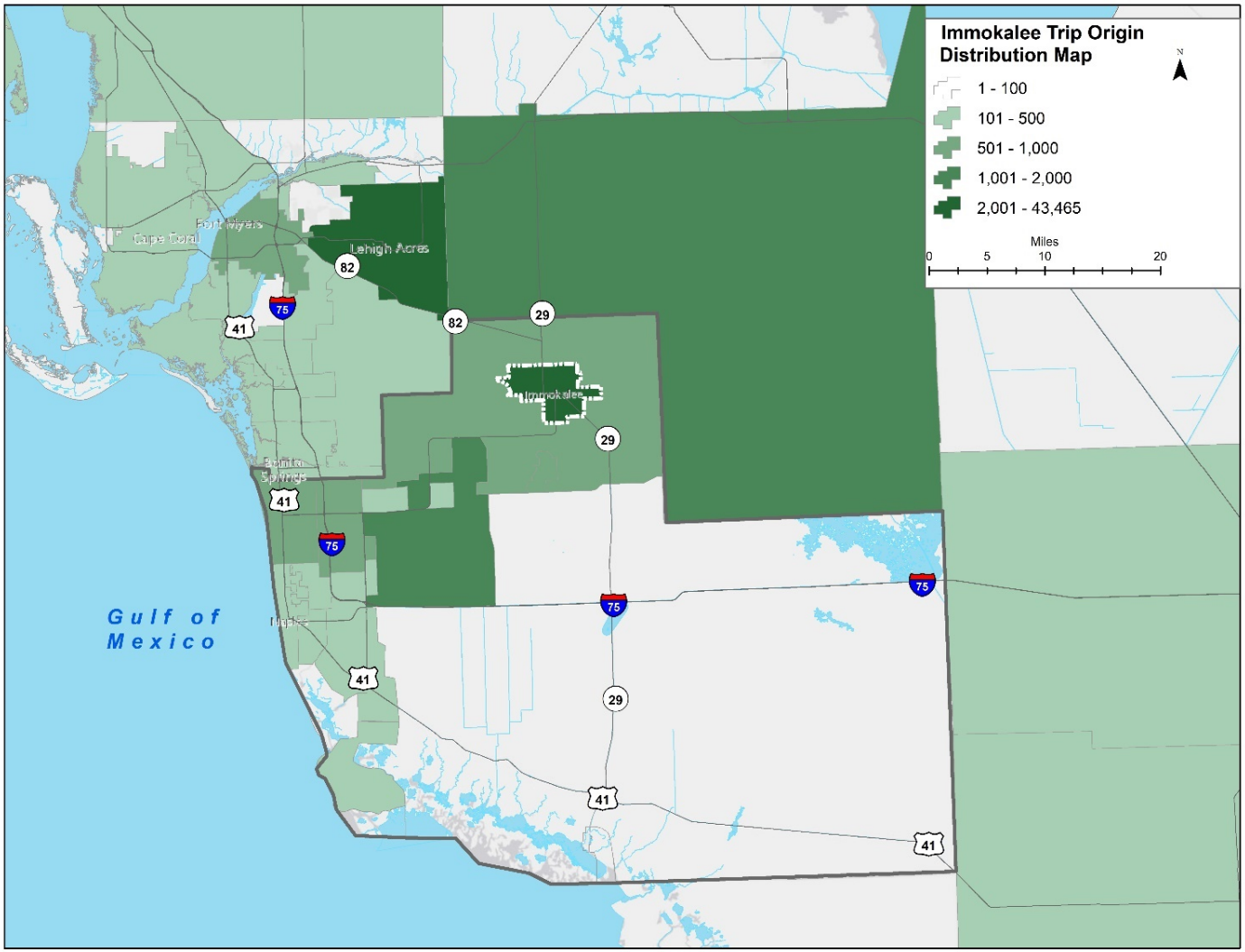
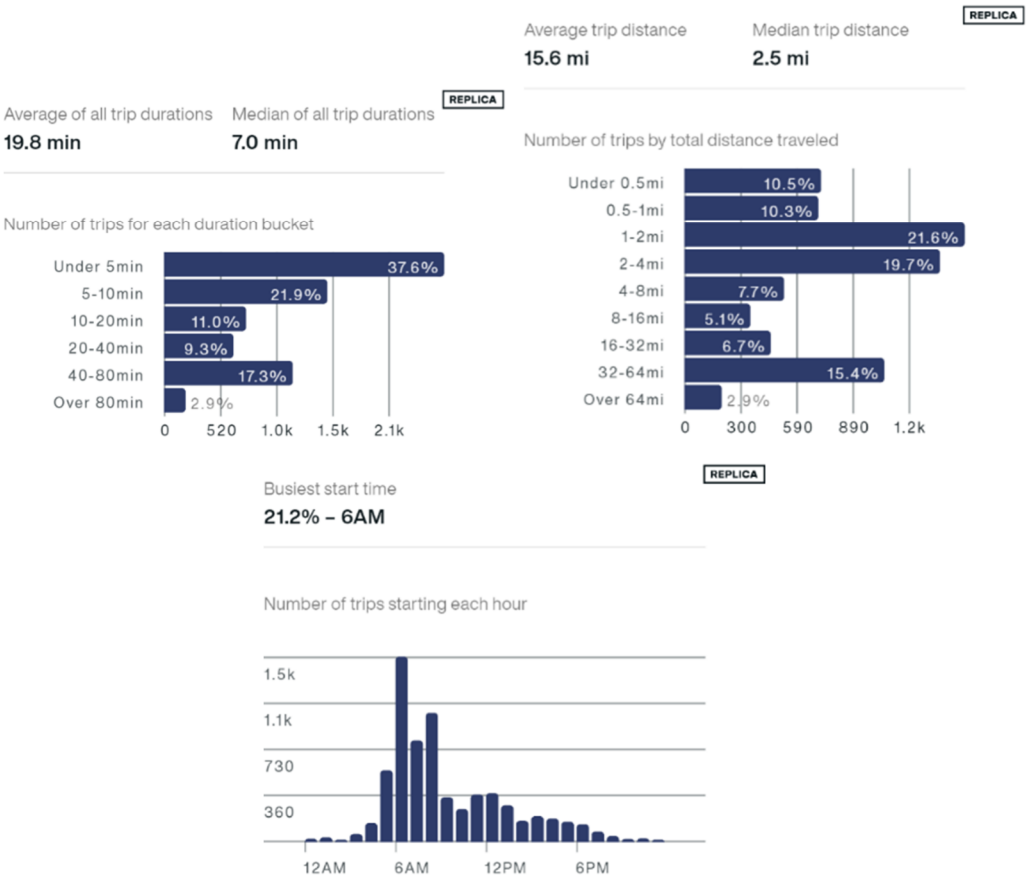


Table 27: Work Locations for Residents of Immokalee

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 58: 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.

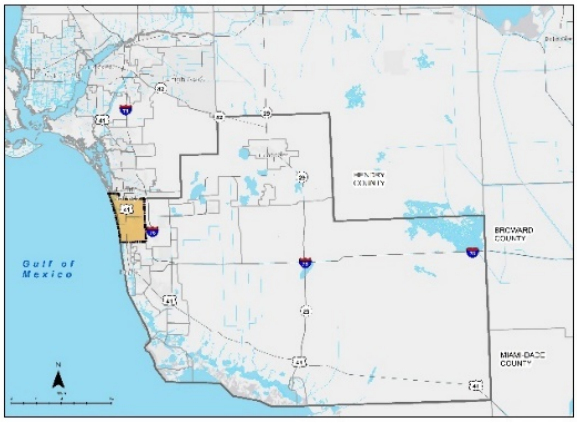


Table 28 identifies the number of trip origin and destination for the top 20 subarea locations when at least one trip end takes place in the North Naples subarea. Trip origins listed have a destination in the North Naples subarea and vice-versa for the destinations listed. The 111,944 trips originating 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.

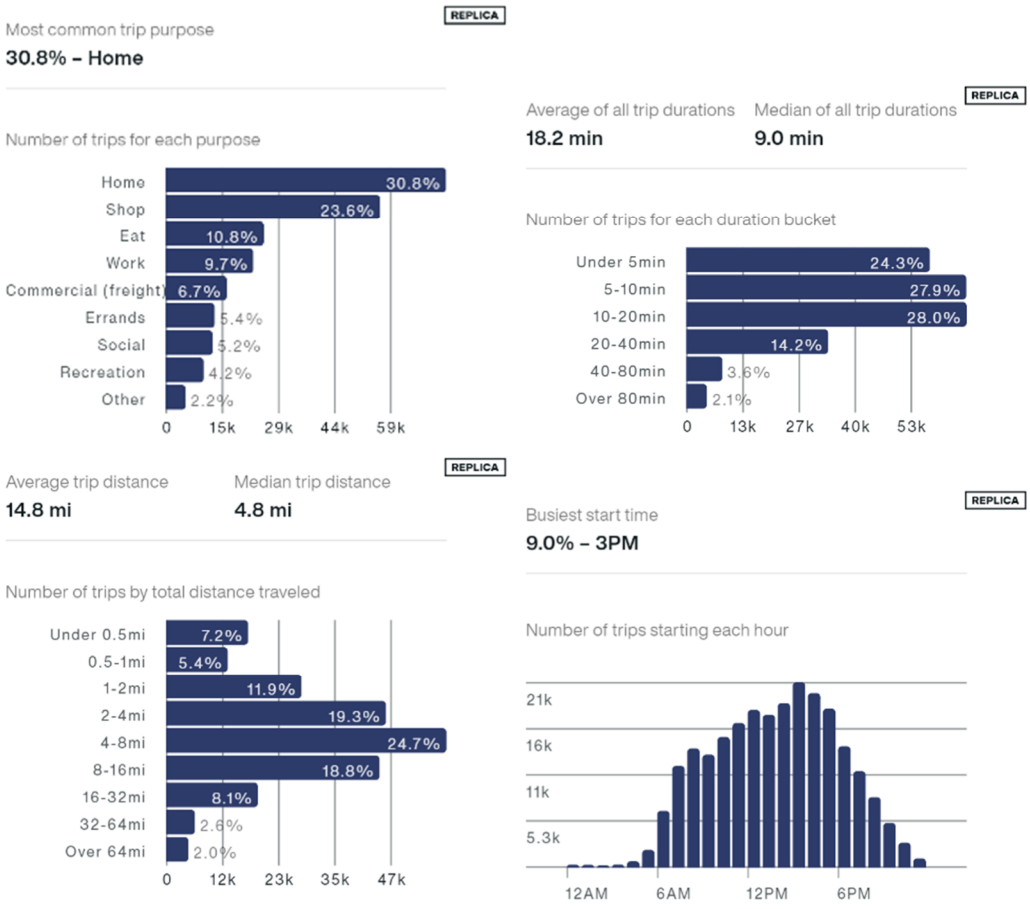
Table 28: North Naples Trip Origins and Destinations

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 59 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 60 illustrates the geographic distribution of destinations for trips originating in the North Naples subarea.

Figure 59: Selected Trip Characteristics for North Naples Origins



3.12.2 Trips Ending in Subarea

Figure 61 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 62 illustrates the geographic distribution of origins for trips ending in the North Naples subarea.

Figure 60: Destinations for trips Originating in North Naples Subarea

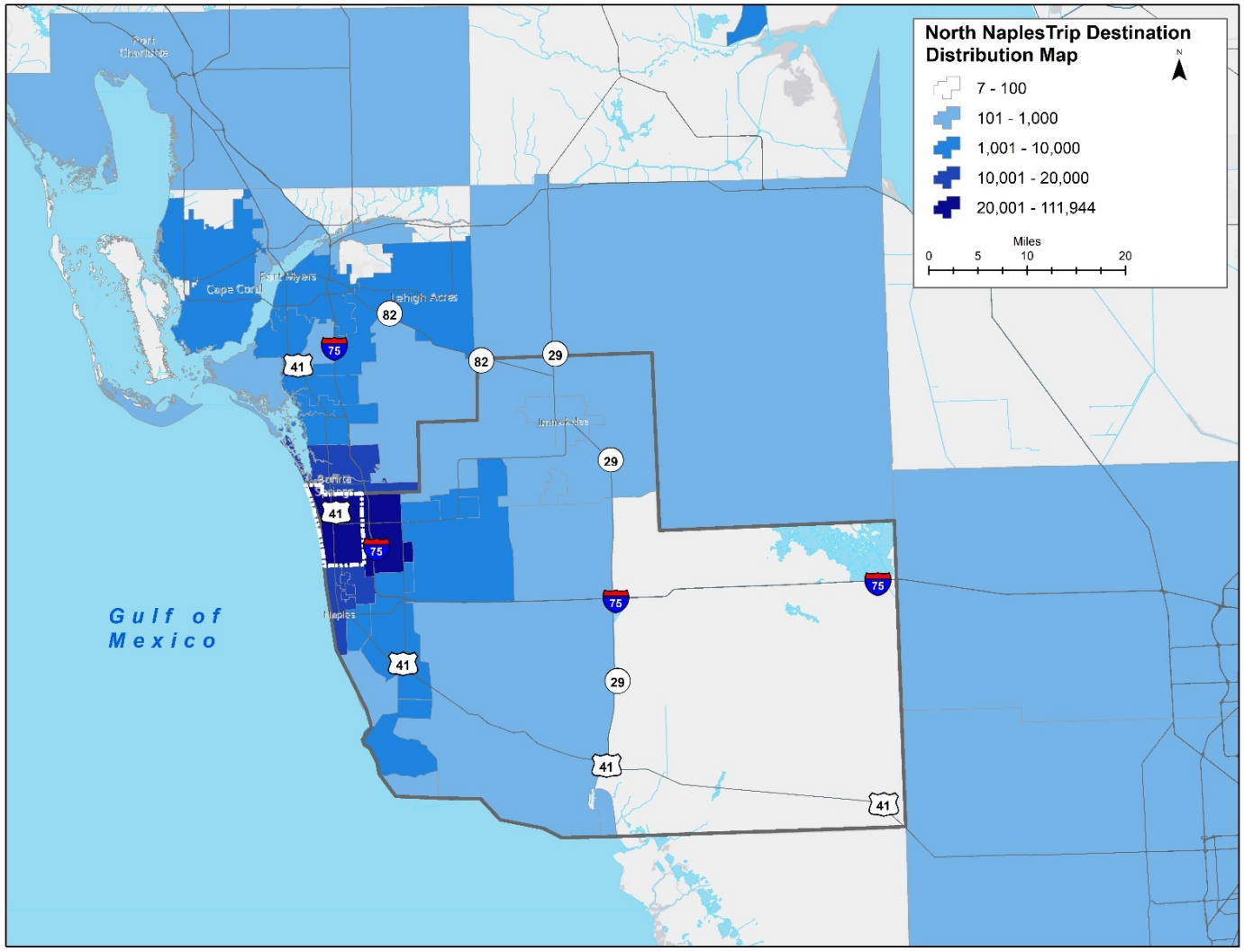
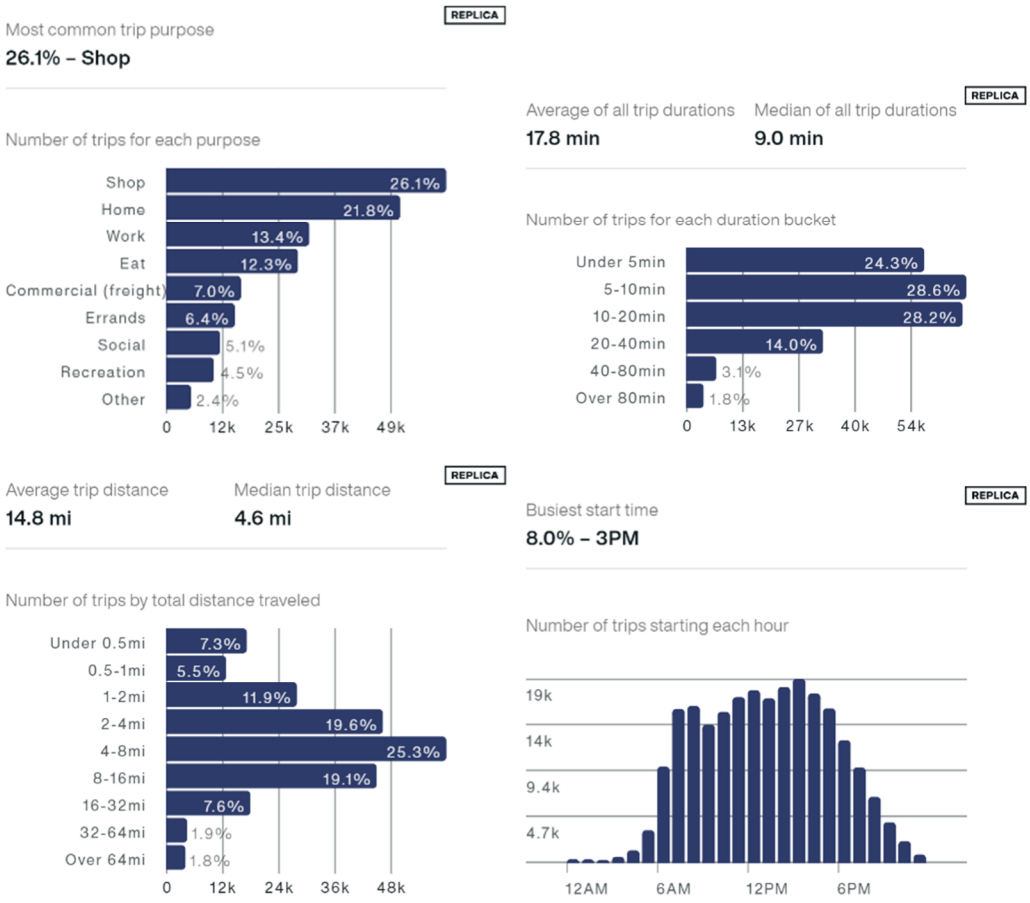


Figure 61: Selected Trip Characteristics for North Naples Destinations



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 63 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 62: Origins for trips Ending in North Naples Subarea

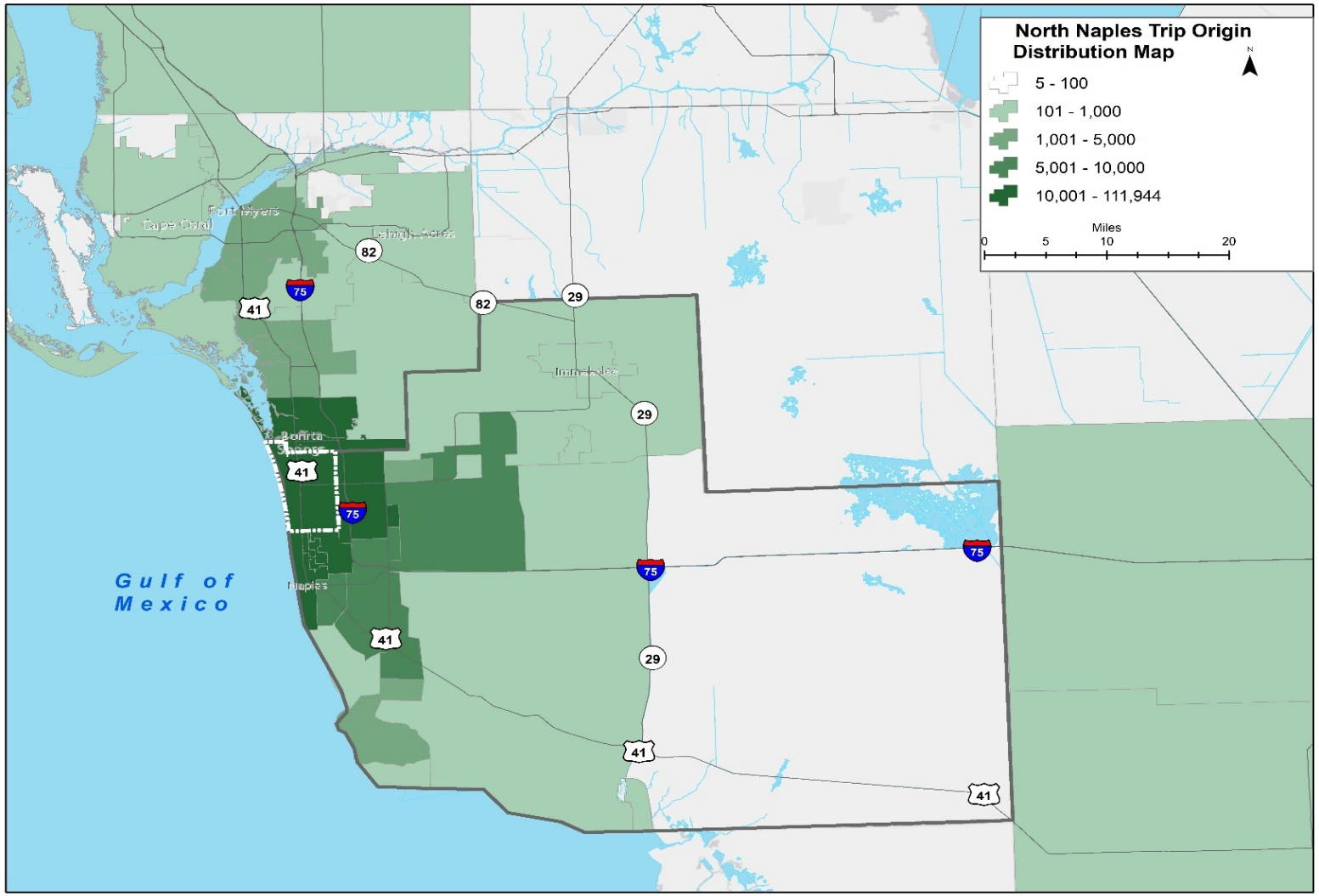
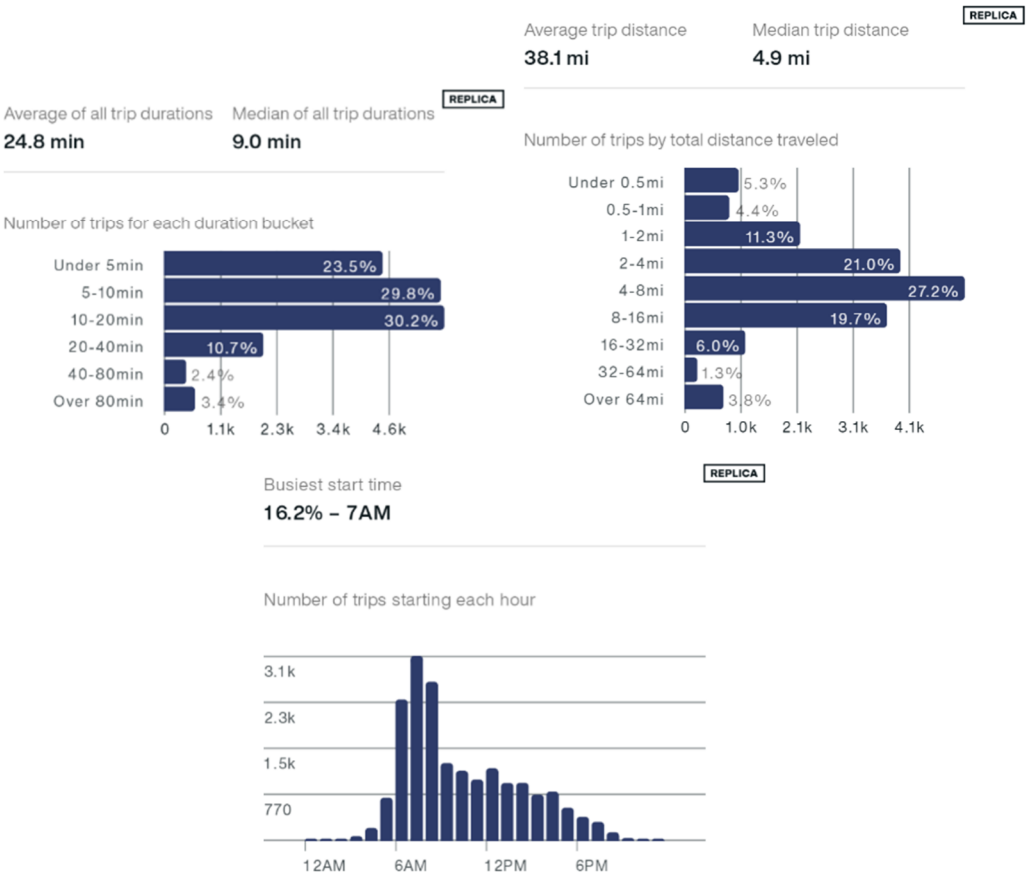


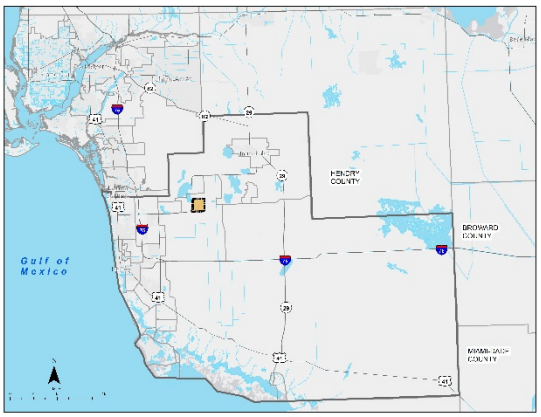
Table 29: Work Locations for Residents of North Naples

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 63: 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.

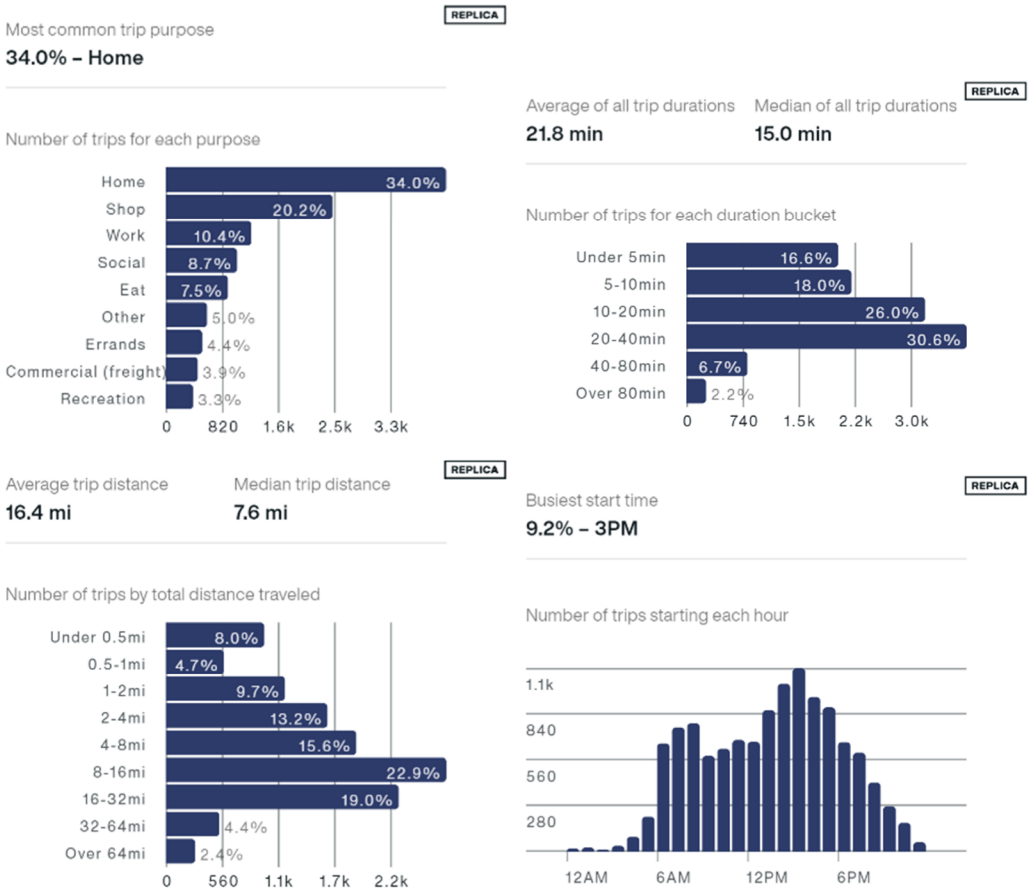
Table 30: Orange Tree Trip Origins and Destinations

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 64 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 65 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 64: Selected Trip Characteristics for Orange Tree Origins



3.13.2 Trips Ending in Subarea

Figure 66 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 67, 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 65: Destinations for trips Originating in Orange Tree Subarea

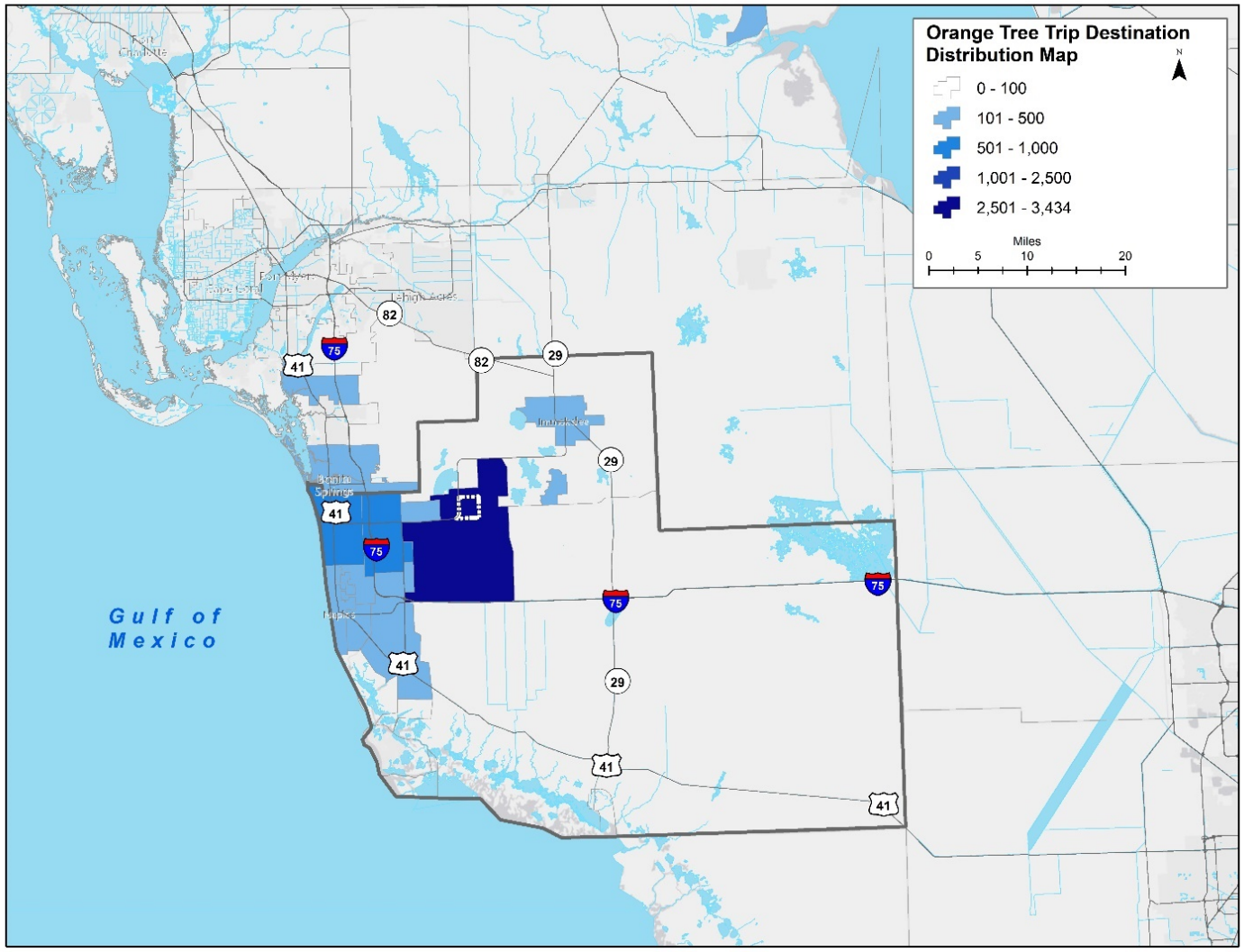
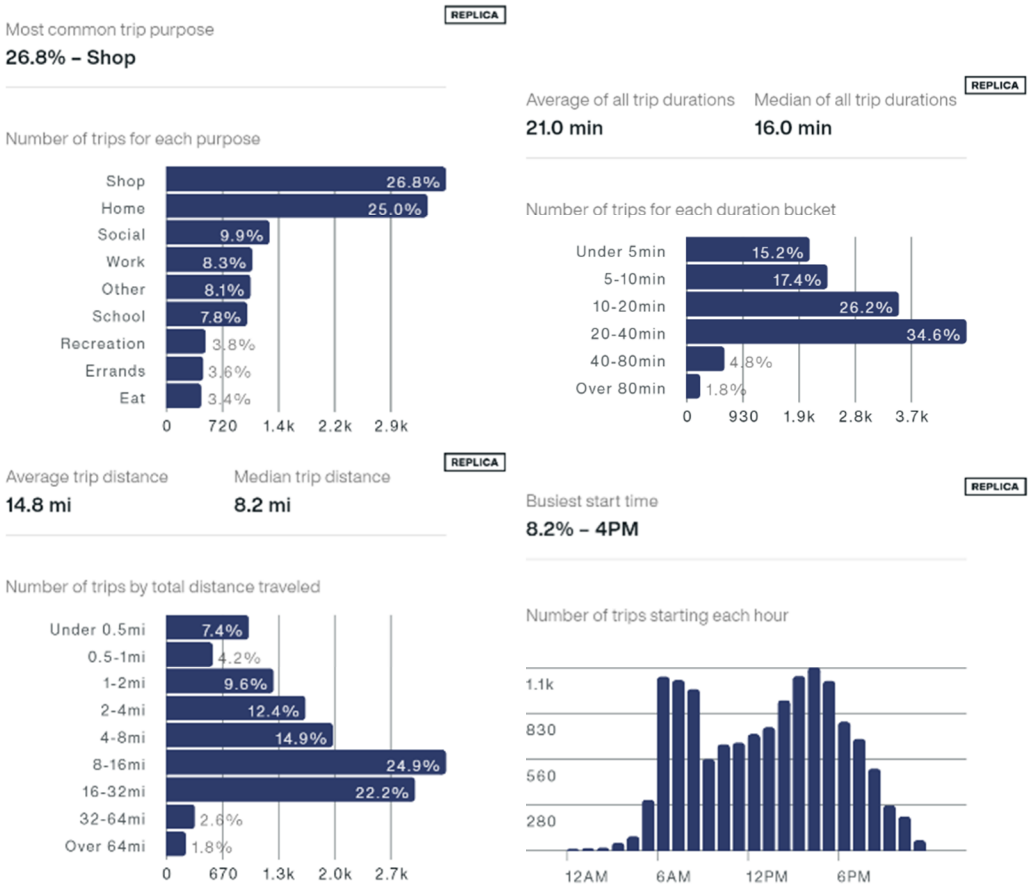


Figure 66: Selected Trip Characteristics for Orange Tree Destinations



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 68 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 67: Origins for trips Ending in Orange Tree Subarea

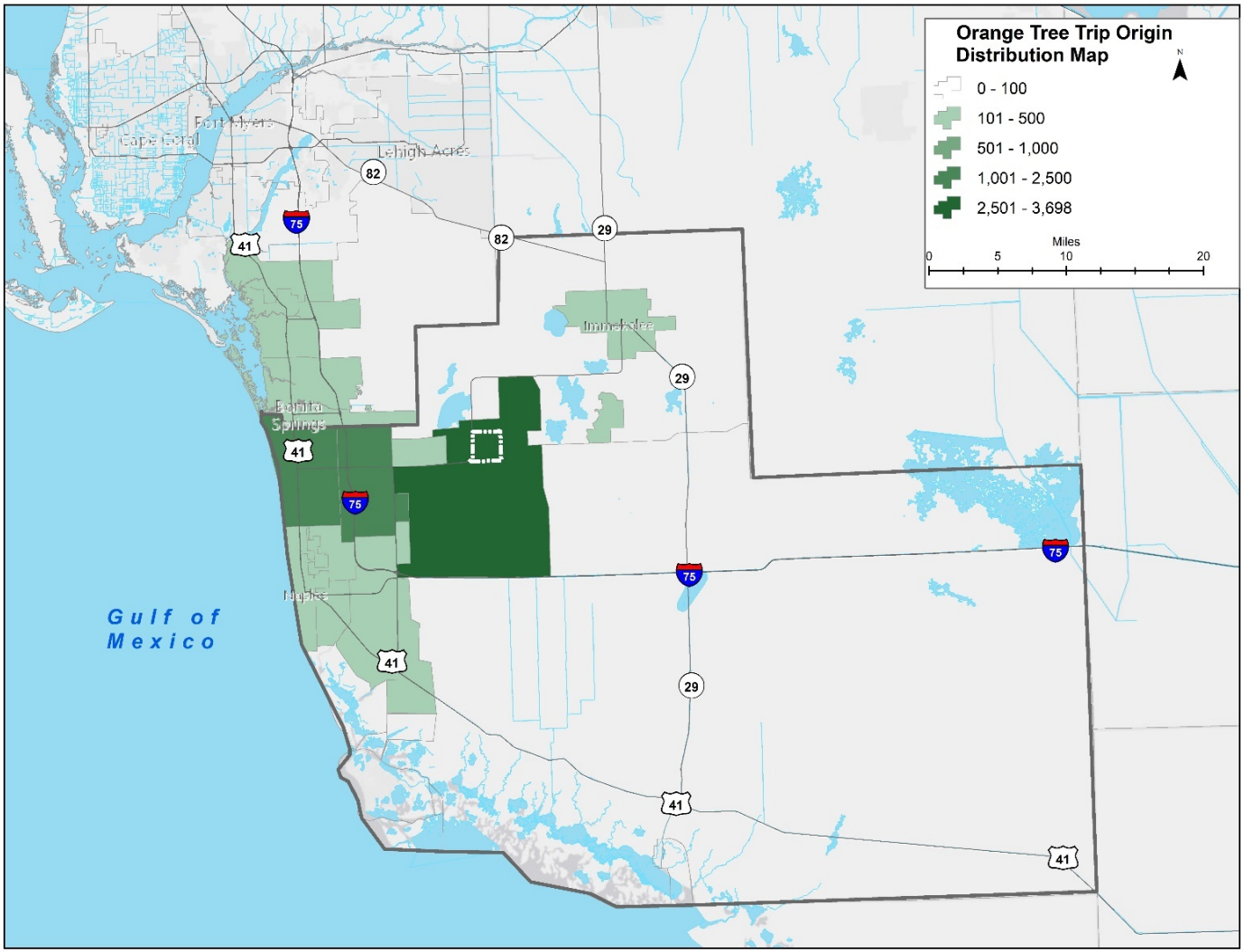
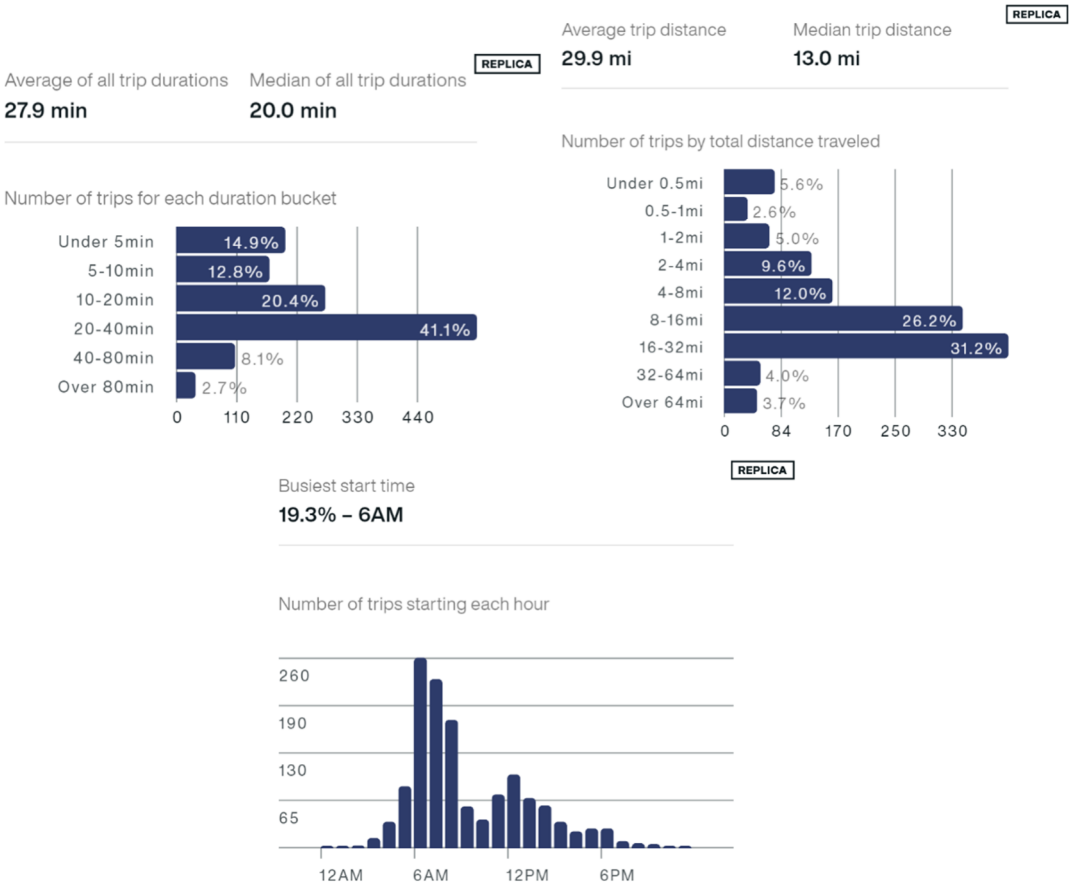


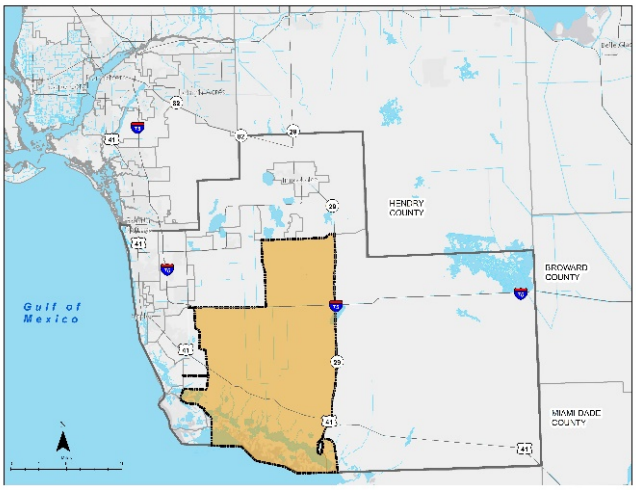
Table 31: Work Locations for Residents of Orange Tree

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 68: 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

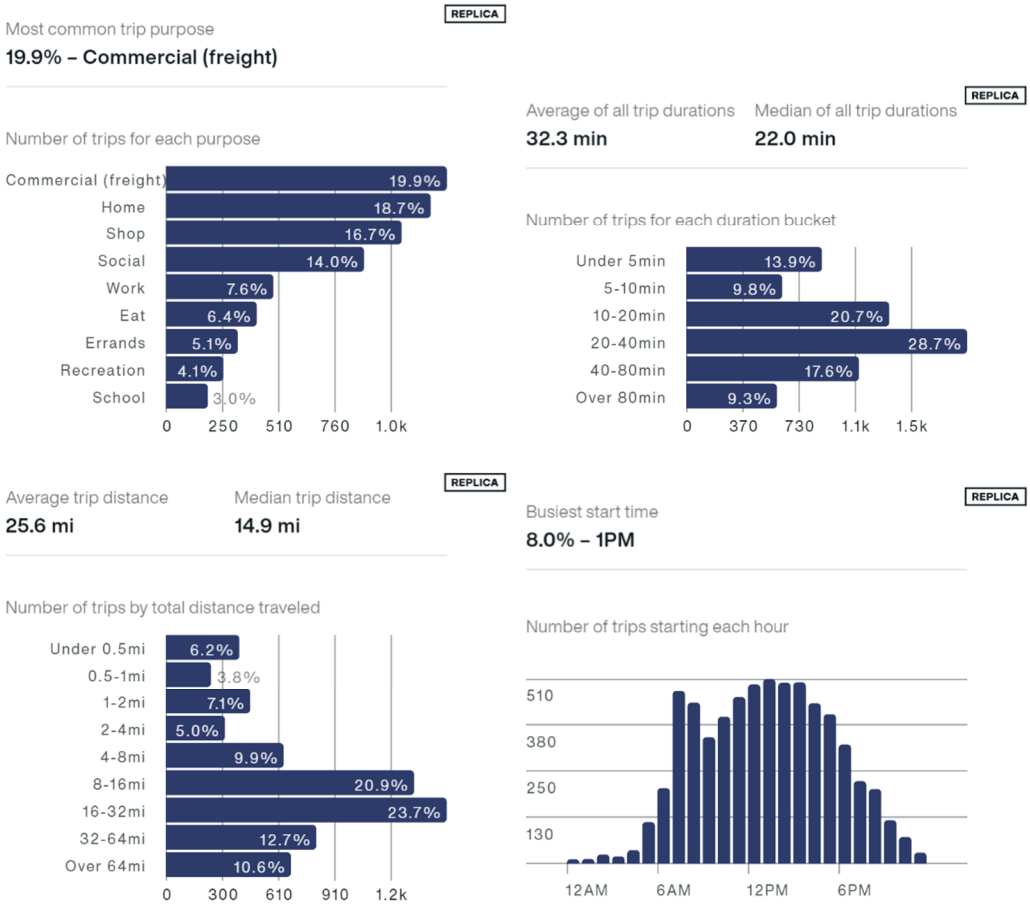
Subarea	Trips From	Trips To	Subarea	Trips From	Trips To
Royal Fakapalm (internal)	1,500	1,500	Out of region	163	162
South Naples	1,223	1,174	Broward County	144	120
City of Marco	457	433	Urban Estates	137	132
Rural Estates	313	331	Central Naples	136	134
Everglades City	273	301	Bonita Springs	109	104
East 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 69 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 69: Selected Trip Characteristics for Royal Fakapalm Origins



3.14.2 Trips Ending in Subarea

Like trips starting in the subarea, Figure 71 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 72 graphically illustrates the geographic distribution of origins for trips ending in the Royal Fakapalm subarea.

Figure 70: Destinations for trips Originating in Royal Fakapalm Subarea

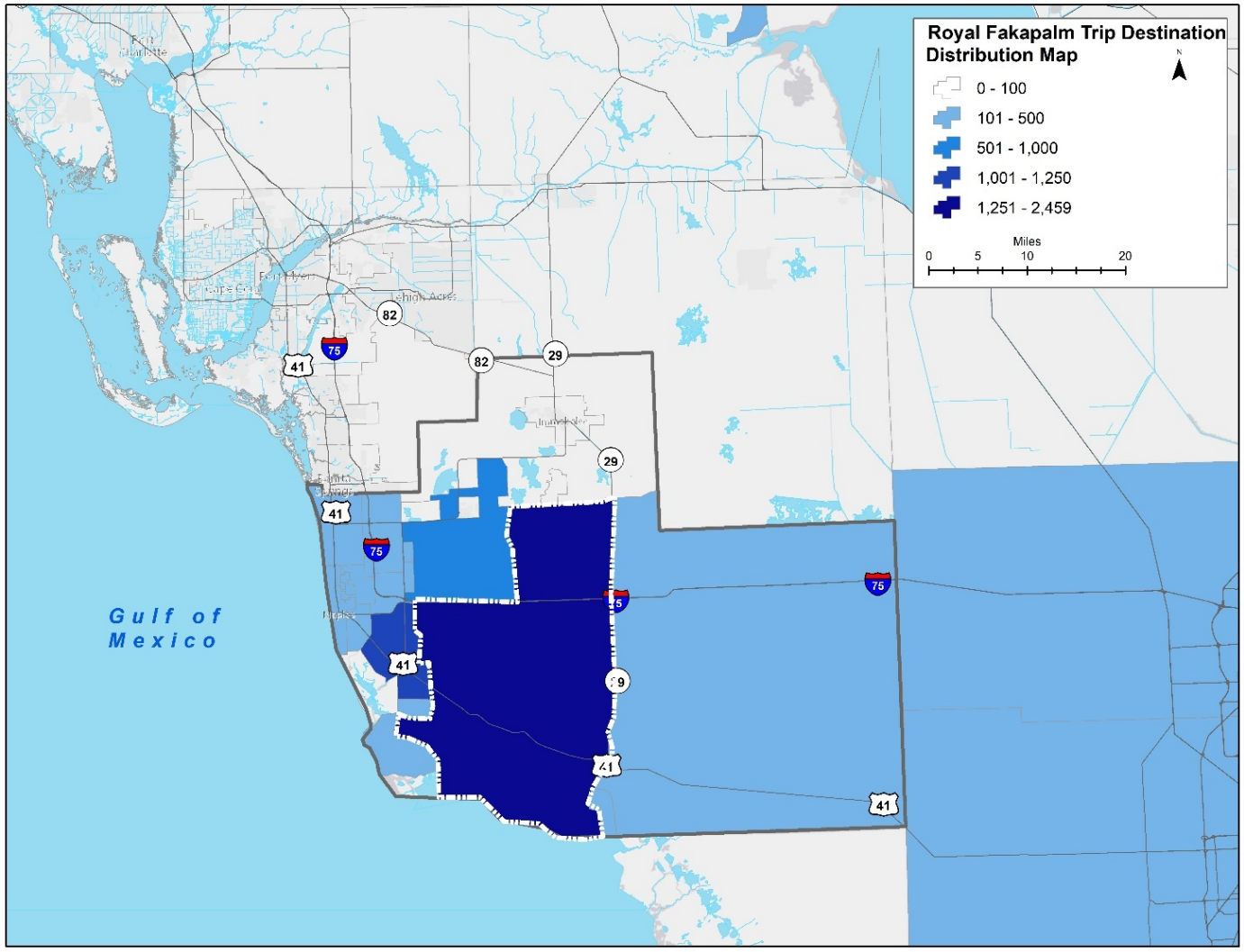
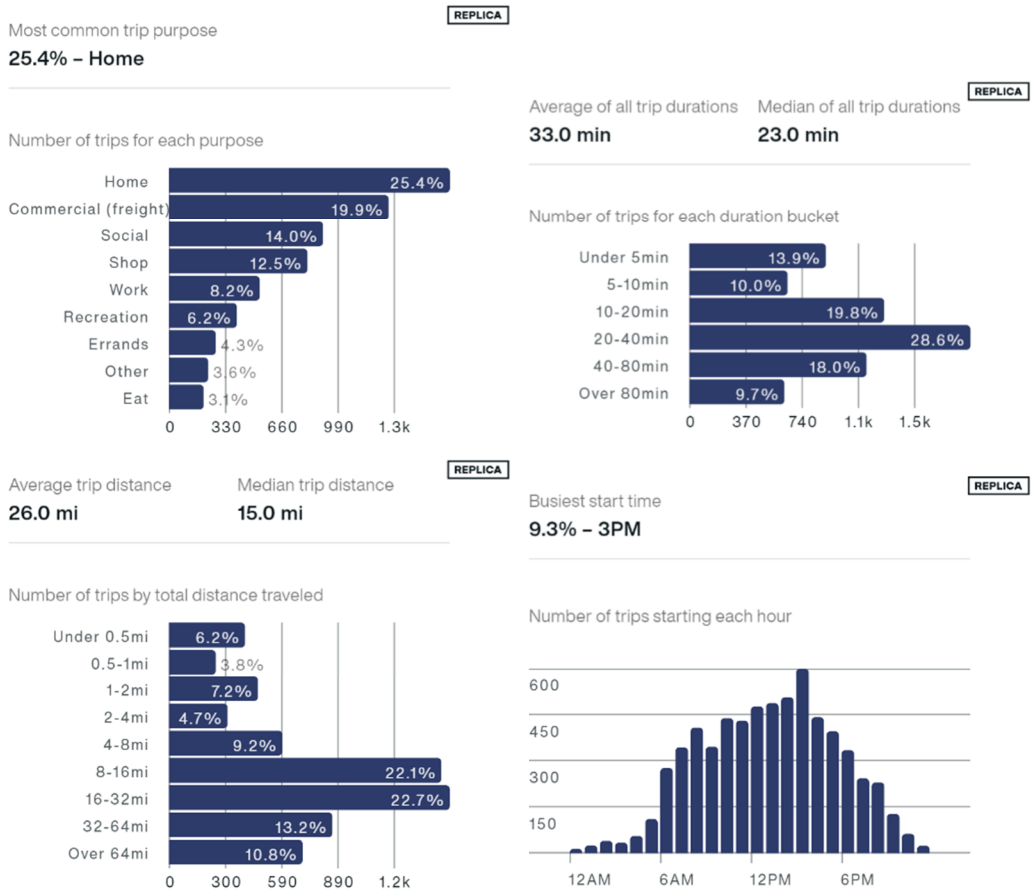


Figure 71: Selected Trip Characteristics for Royal Fakapalm Destinations



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 73 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 72: Origins for trips Ending in Royal Fakapalm Subarea

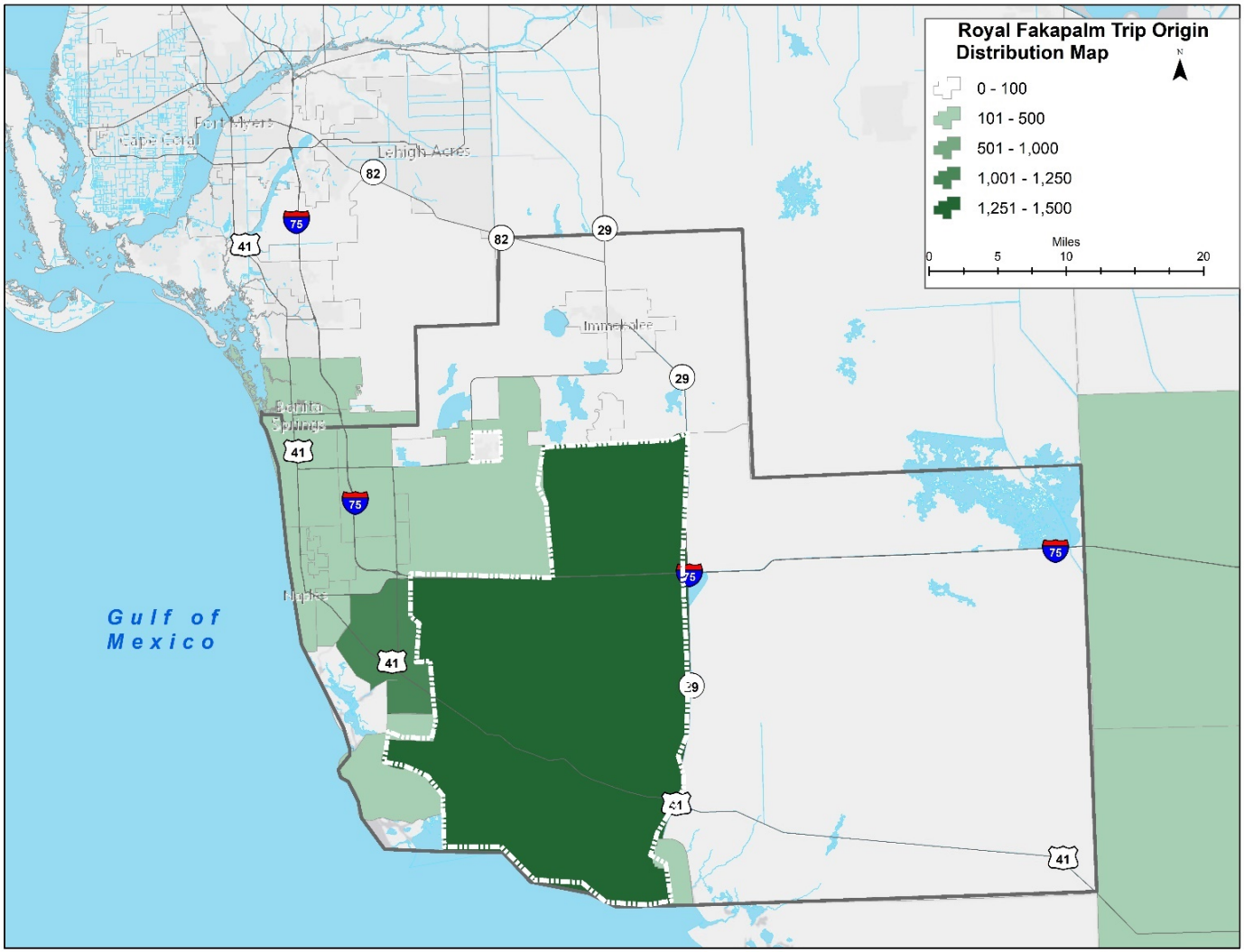
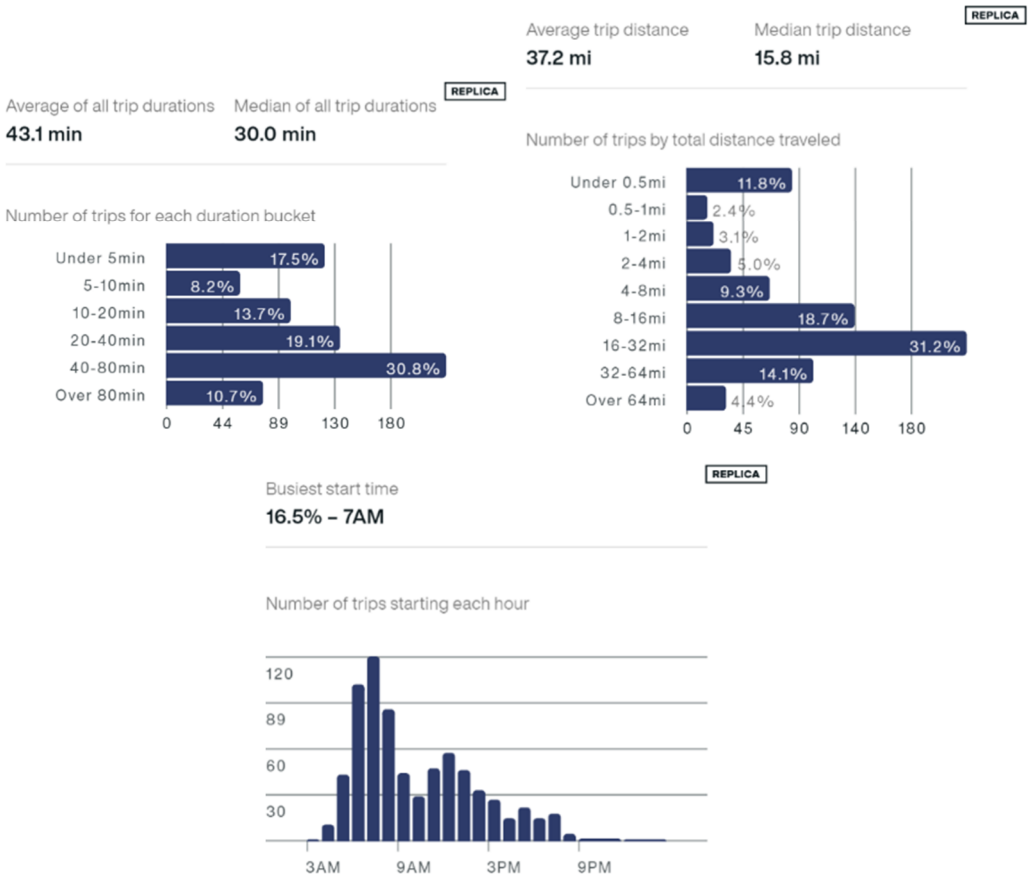


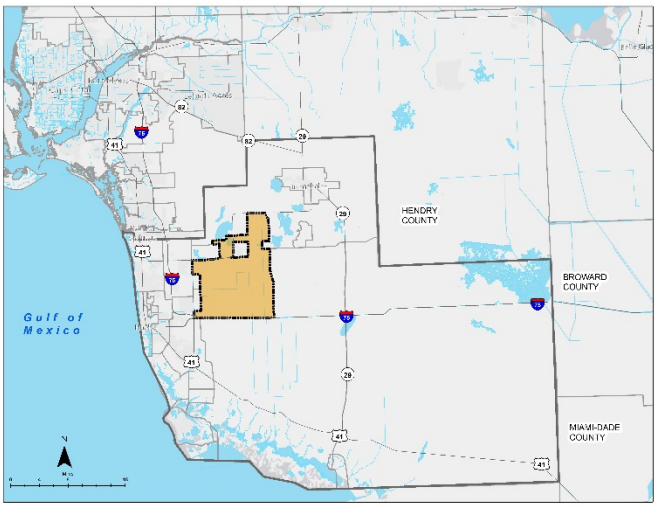
Table 33: Work Locations for Residents of Royal Fakapalm

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 73: 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.

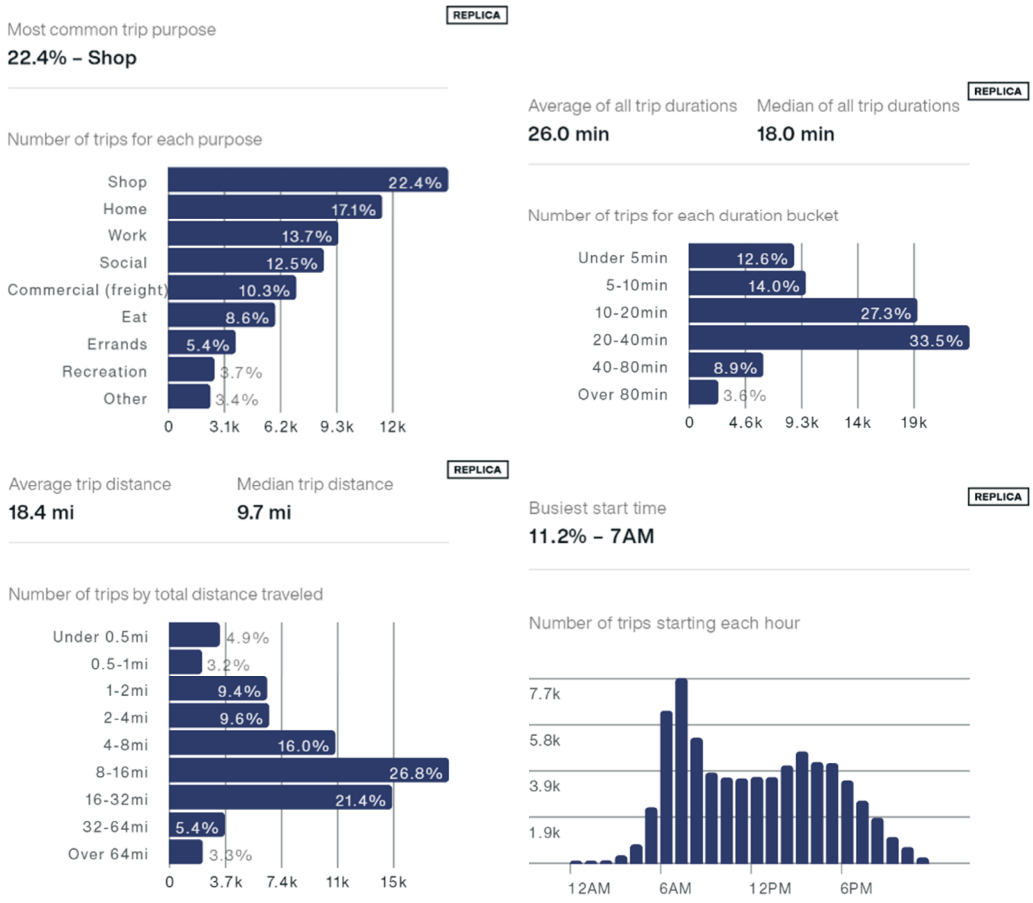
Table 34: Rural Estates Trip Origins and Destinations

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 74 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 75 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 74: Selected Trip Characteristics for Rural Estates Origins



3.15.2 Trips Ending in Subarea

Figure 76 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 77 graphically illustrates the geographic distribution of origins for trips ending in the Rural Estates subarea.

Figure 75: Destinations for trips Originating in Rural Estates Subarea

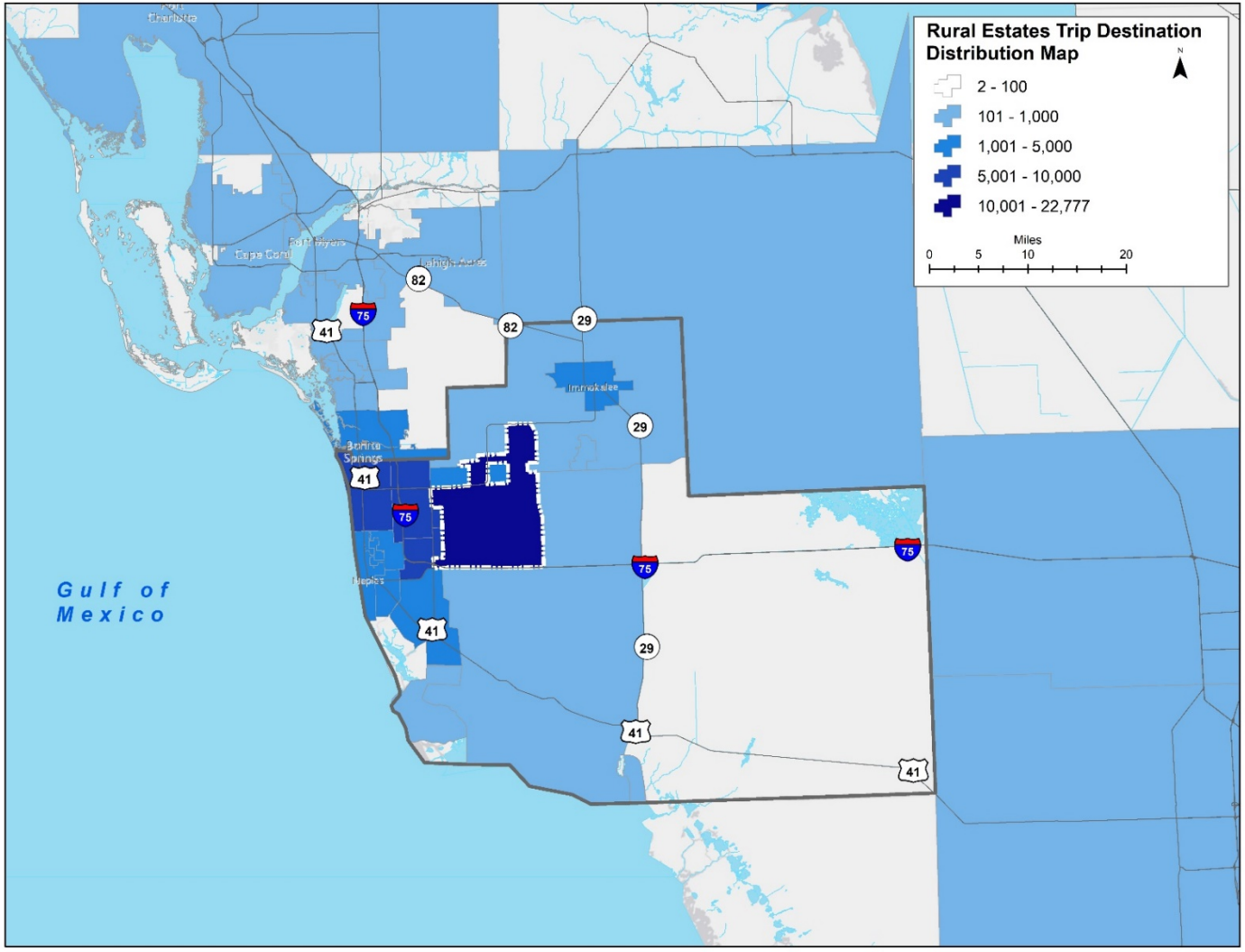
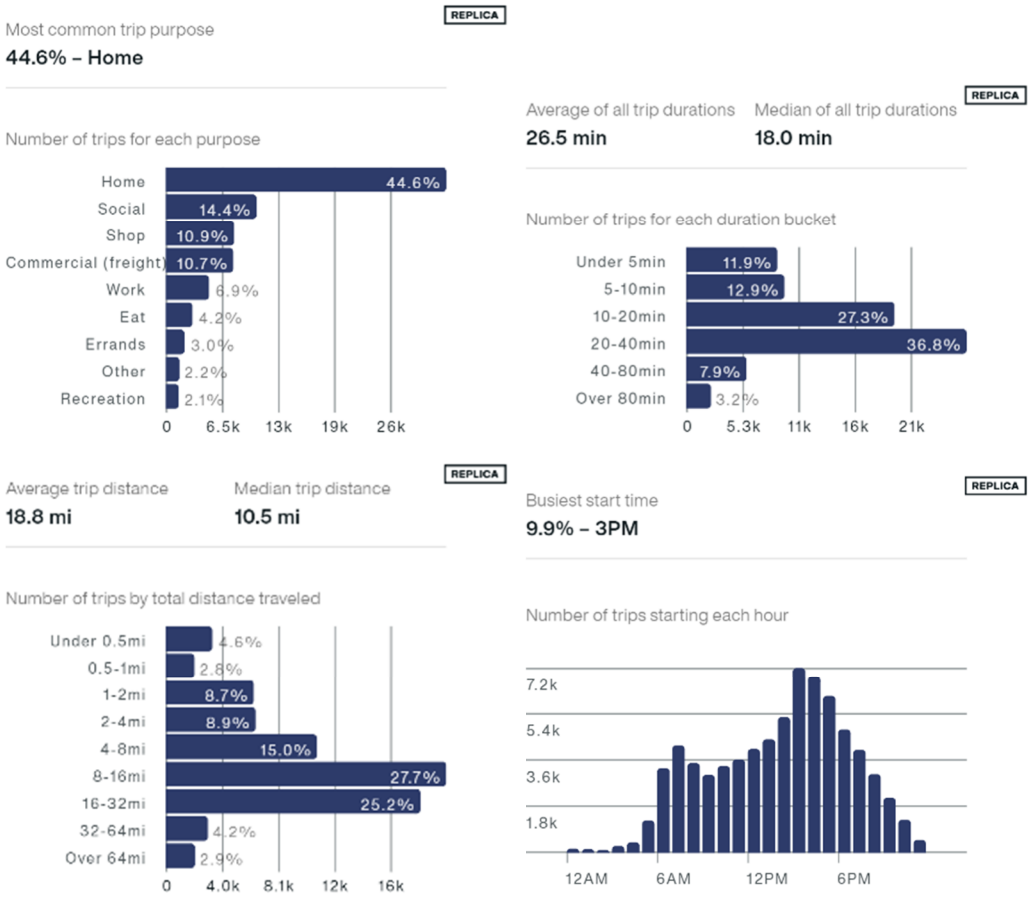


Figure 76: Selected Trip Characteristics for Rural Estates Destinations



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 78 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 41,0000 people residing in the Golden Gate subarea worked from home during the Spring 2021 quarter.

Figure 77: Origins for trips Ending in Rural Estates Subarea

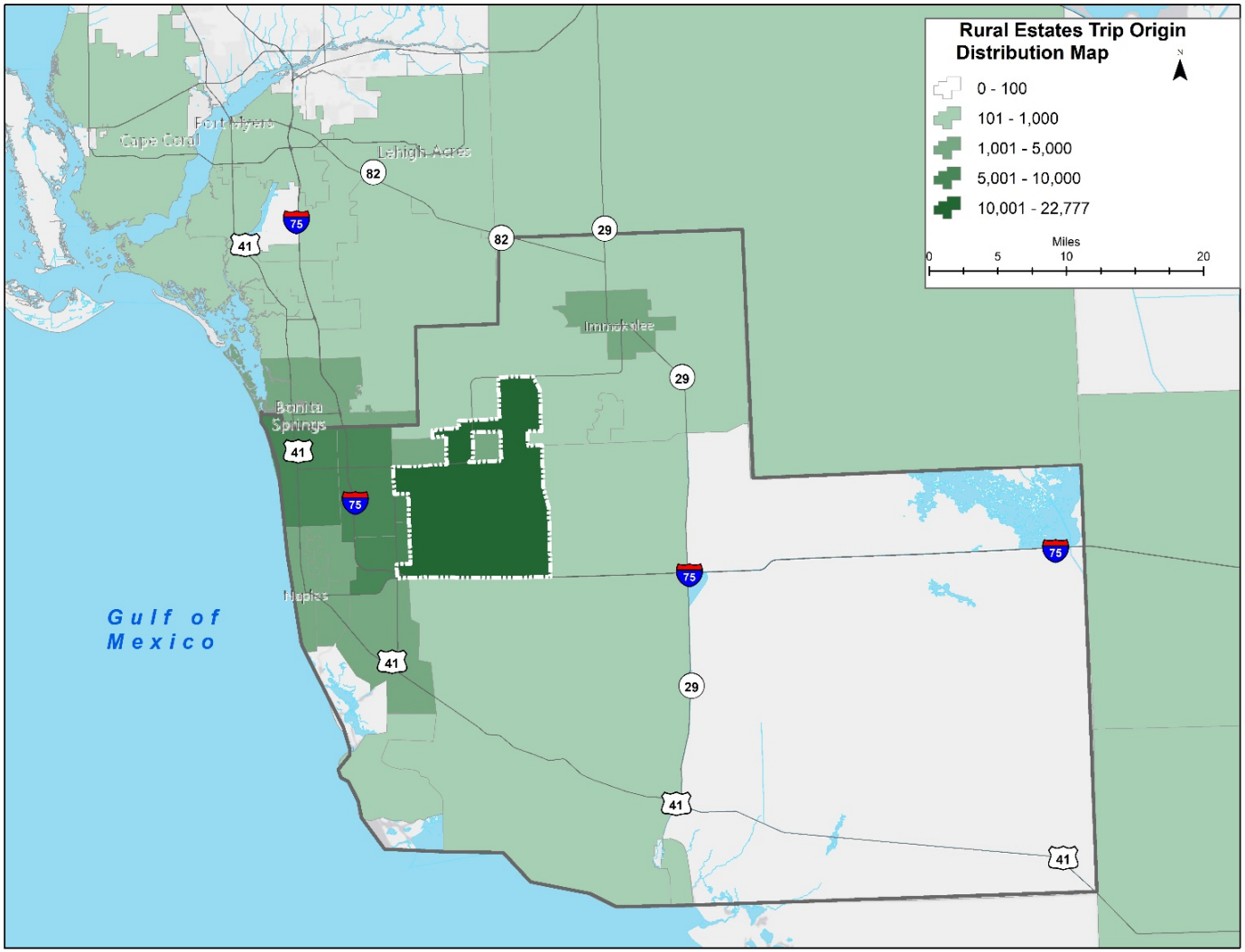
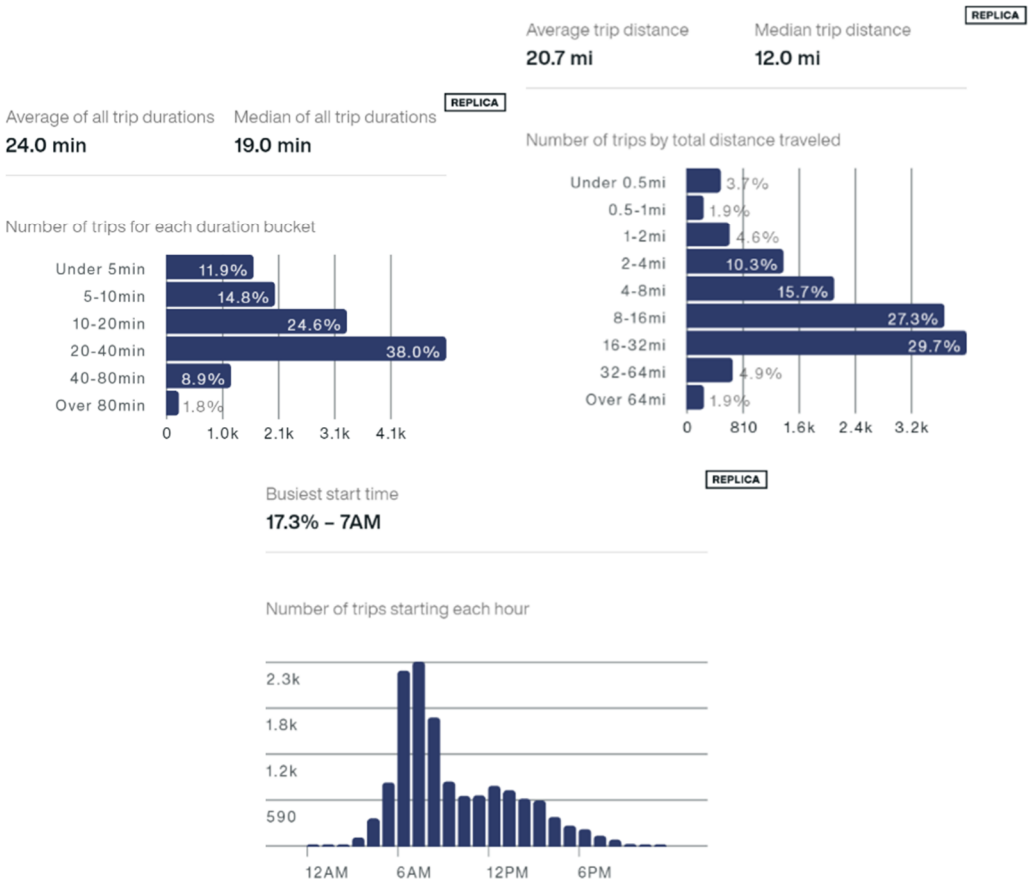


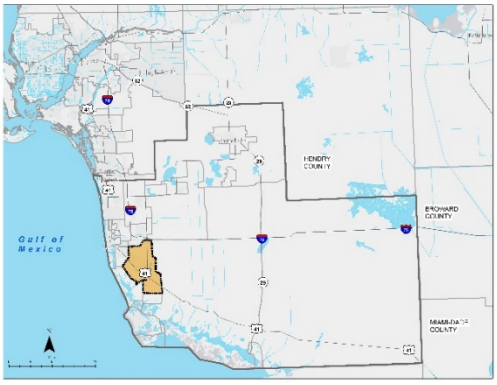
Table 35: Work Locations for Residents of Rural Estates

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 78: 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

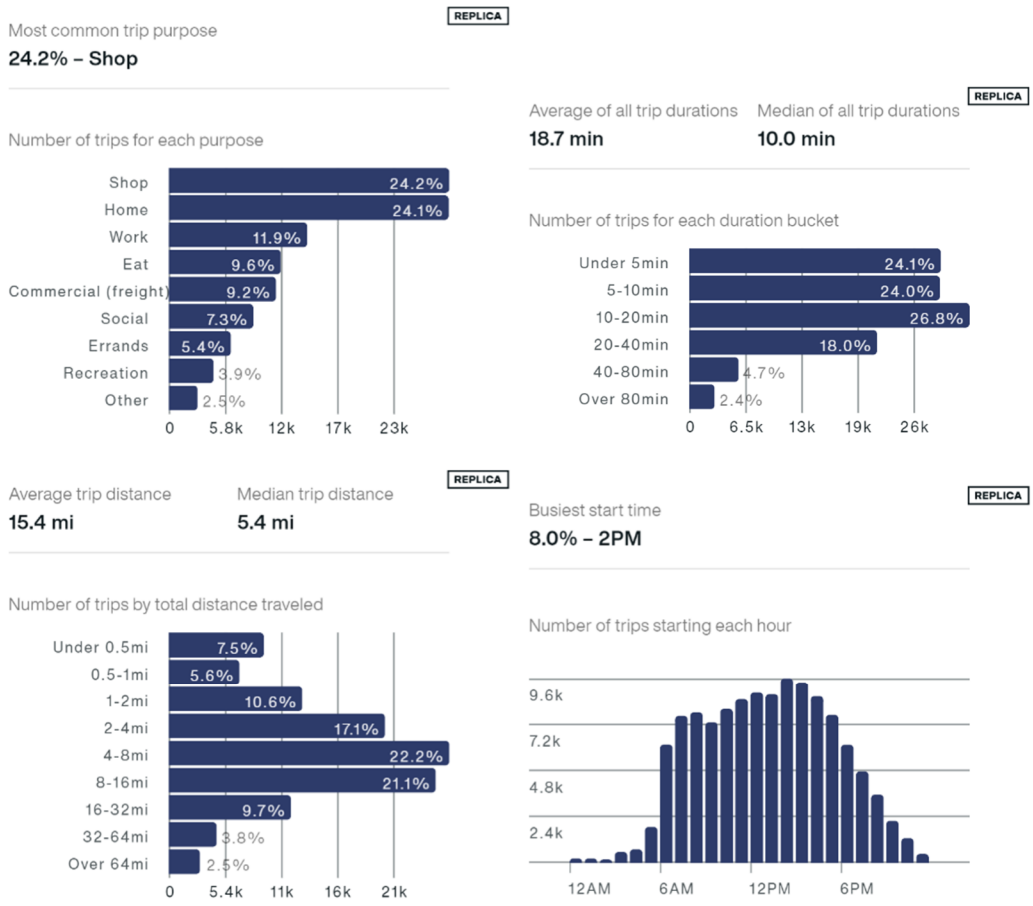
Subareas	Trips From	Trips To	Subarea	Trips From	Trips To
South Naples (internal)	57,338	57,338	Royal Fakapalm	1,147	1,163
East Naples	12,263	12,327	Bonita Springs	1,149	1,091
Golden Gate	7,881	8,381	Fort Myers	572	873
City of Naples	6,818	7,812	San Carlos	590	777
City of Marco Island	7,537	7503	South 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 79 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 80 illustrates the geographic distribution of destinations for trips originating in the South Naples subarea.

Figure 79: Selected Trip Characteristics for South Naples Origins



3.16.2 Trips Ending in Subarea

Figure 81 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 82 shows the geographic distribution of trips ending in the South Naples subarea.

Figure 80: Destinations for trips Originating in South Naples Subarea

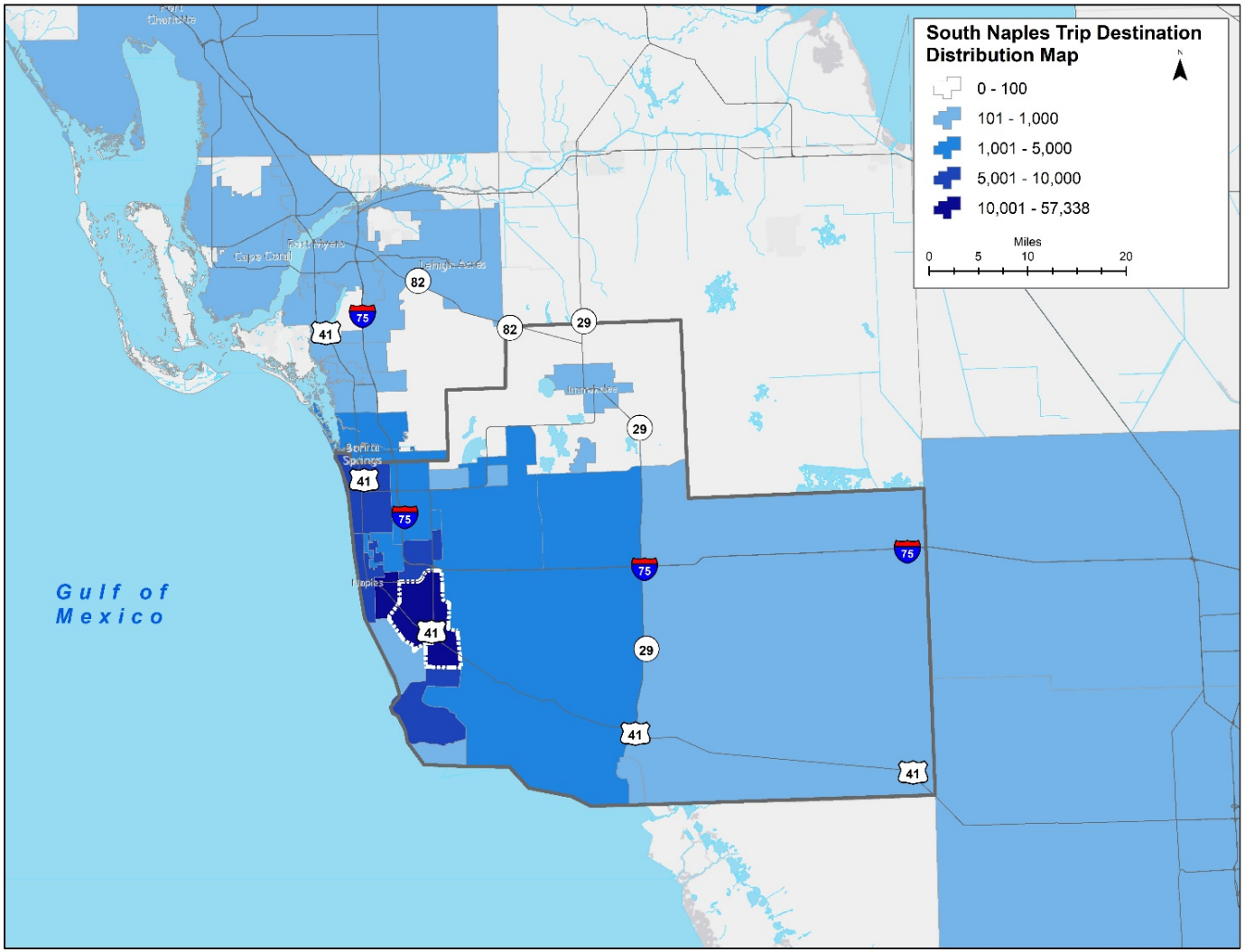
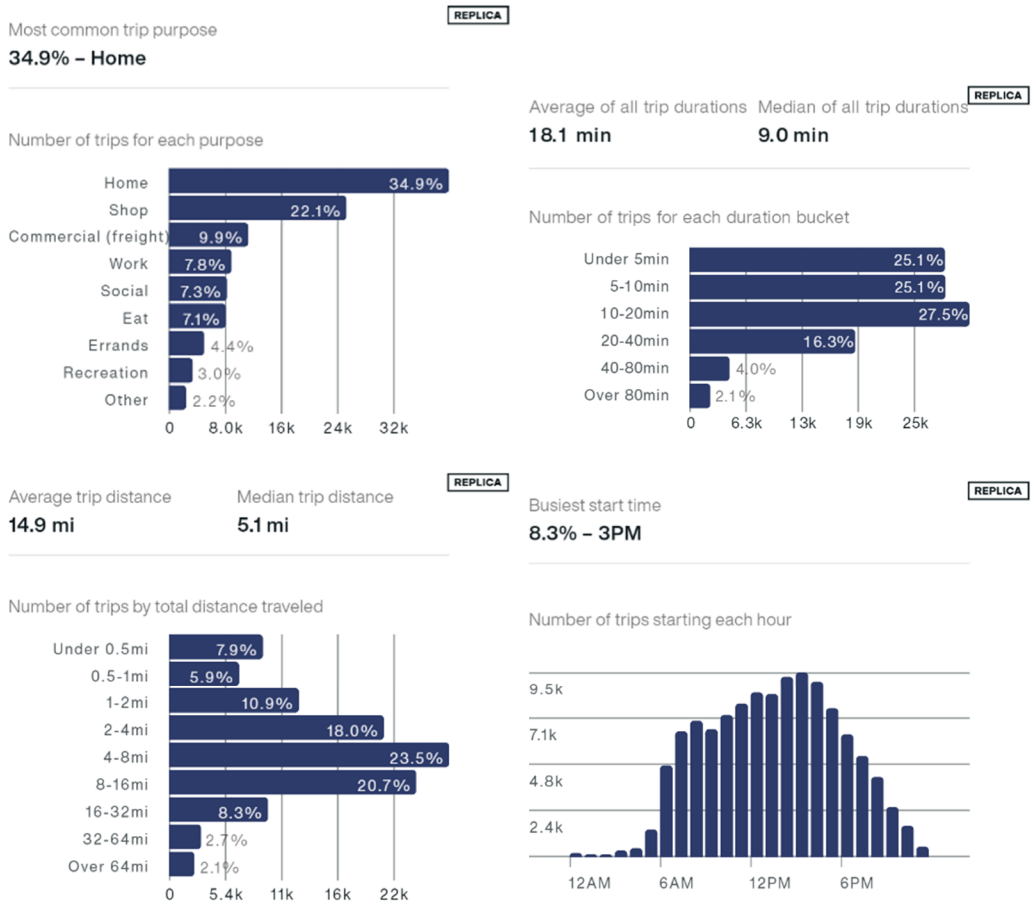


Figure 81: Selected Trip Characteristics for South Naples Destinations



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 83 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 82: Origins for trips Ending in South Naples Subarea

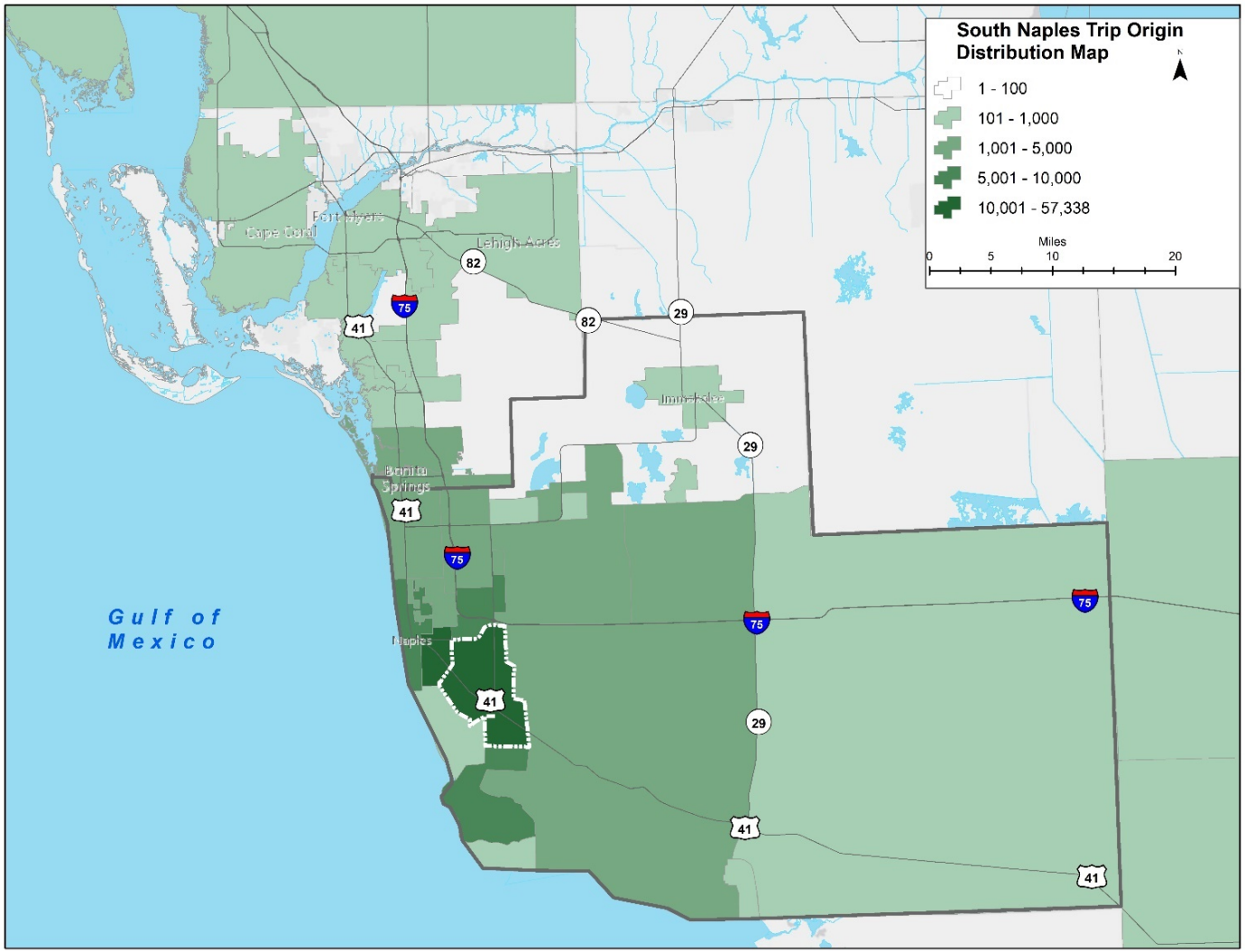
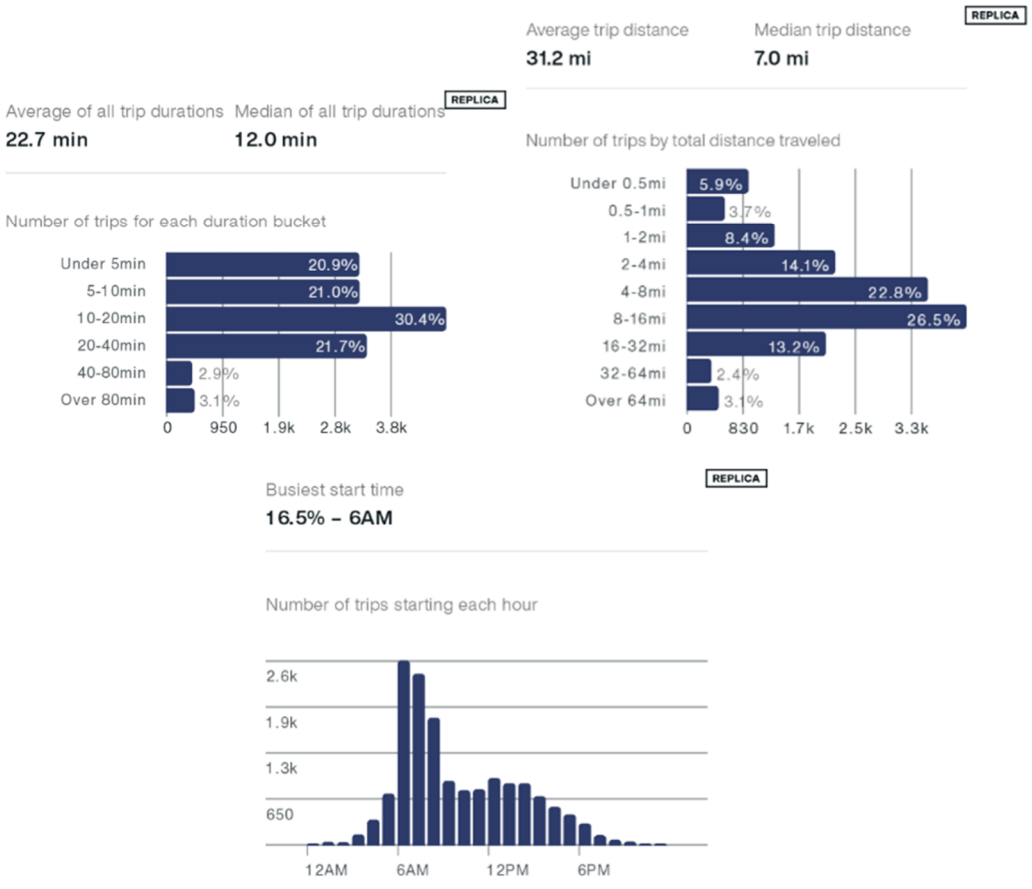


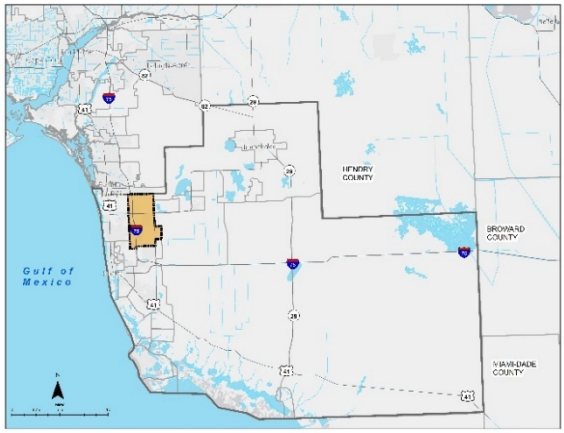
Table 37: Work Locations for Residents of South Naples

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 83: 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.

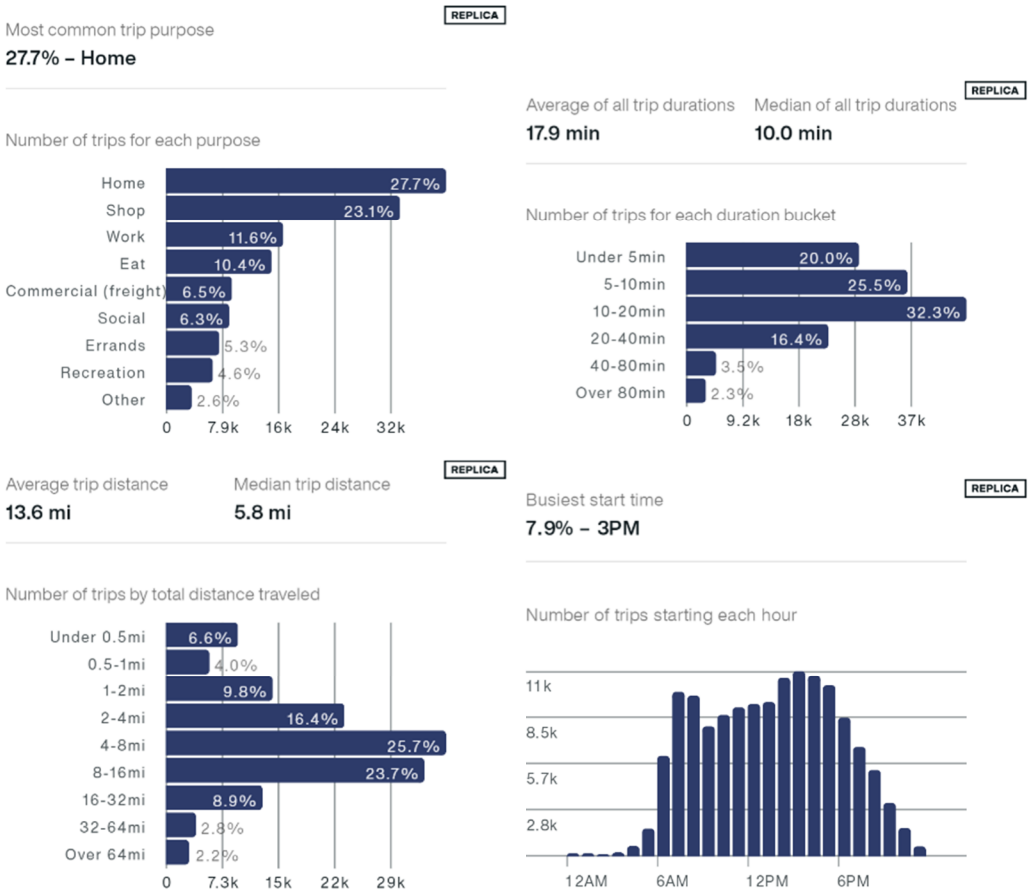
Table 38: Urban Estates Trip Origins and Destinations

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 84 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 85 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 is southern Lee County.

Figure 84: Selected Trip Characteristics for Urban Estates Origins



3.17.2 Trips Ending in Subarea

Figure 86 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 87 graphically illustrates the geographic distribution of origins for trips ending in the Urban Estates subarea.

Figure 85: Destinations for trips Originating in Urban Estates Subarea

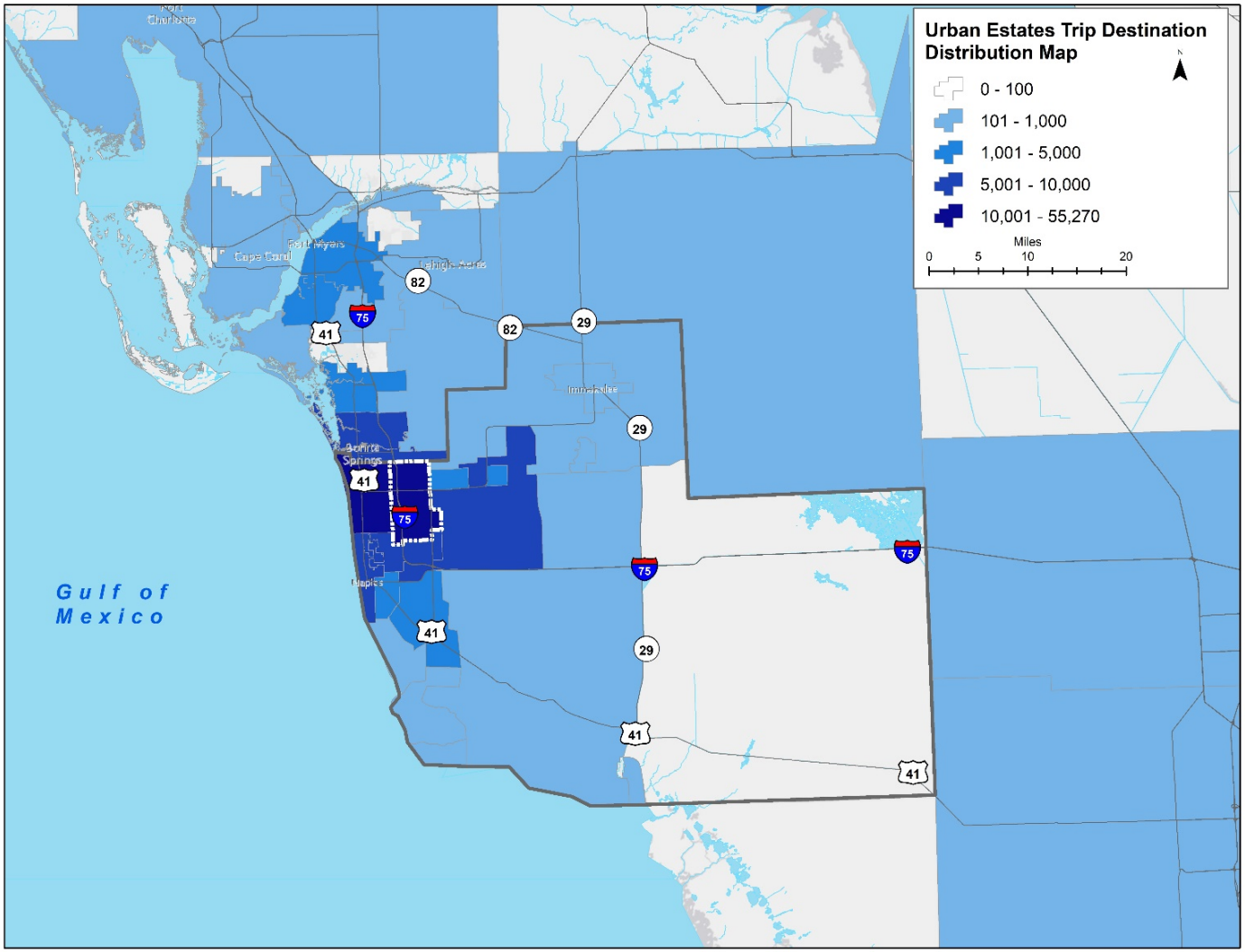
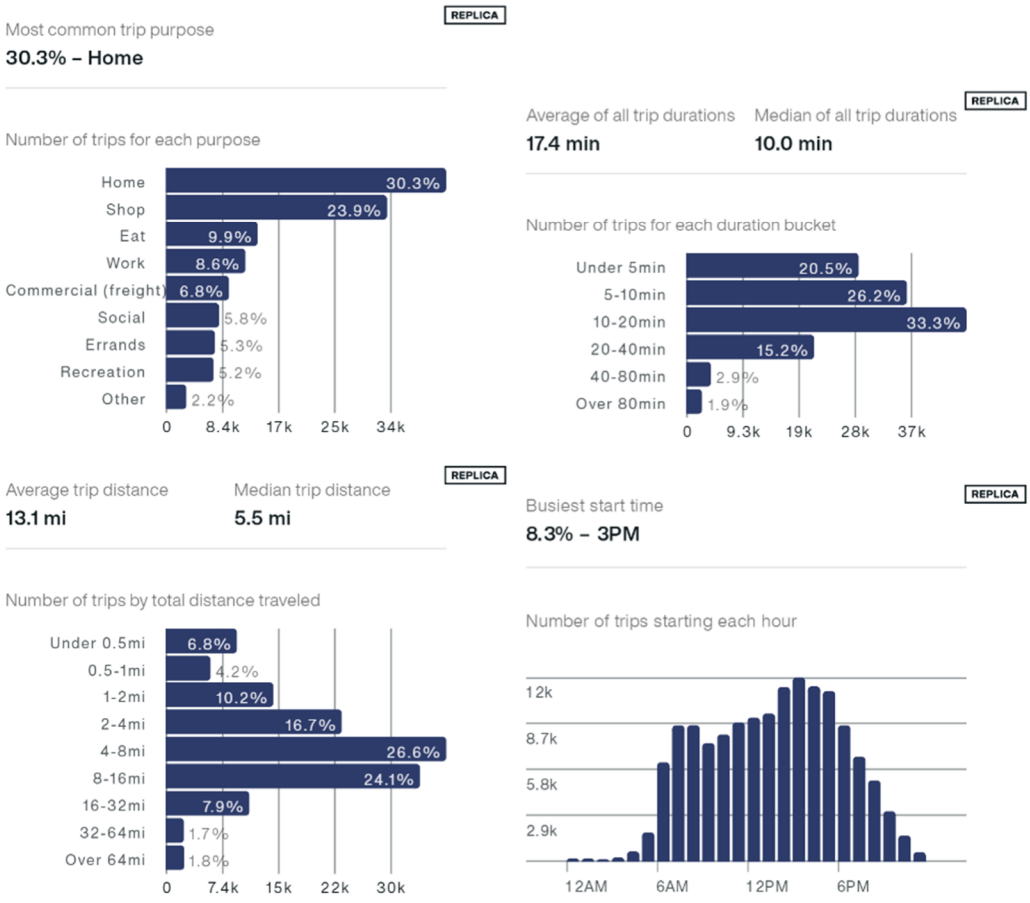


Figure 86: Selected Trip Characteristics for Urban Estates Destinations



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 88 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 87: Origins for trips Ending in Urban Estates Subarea

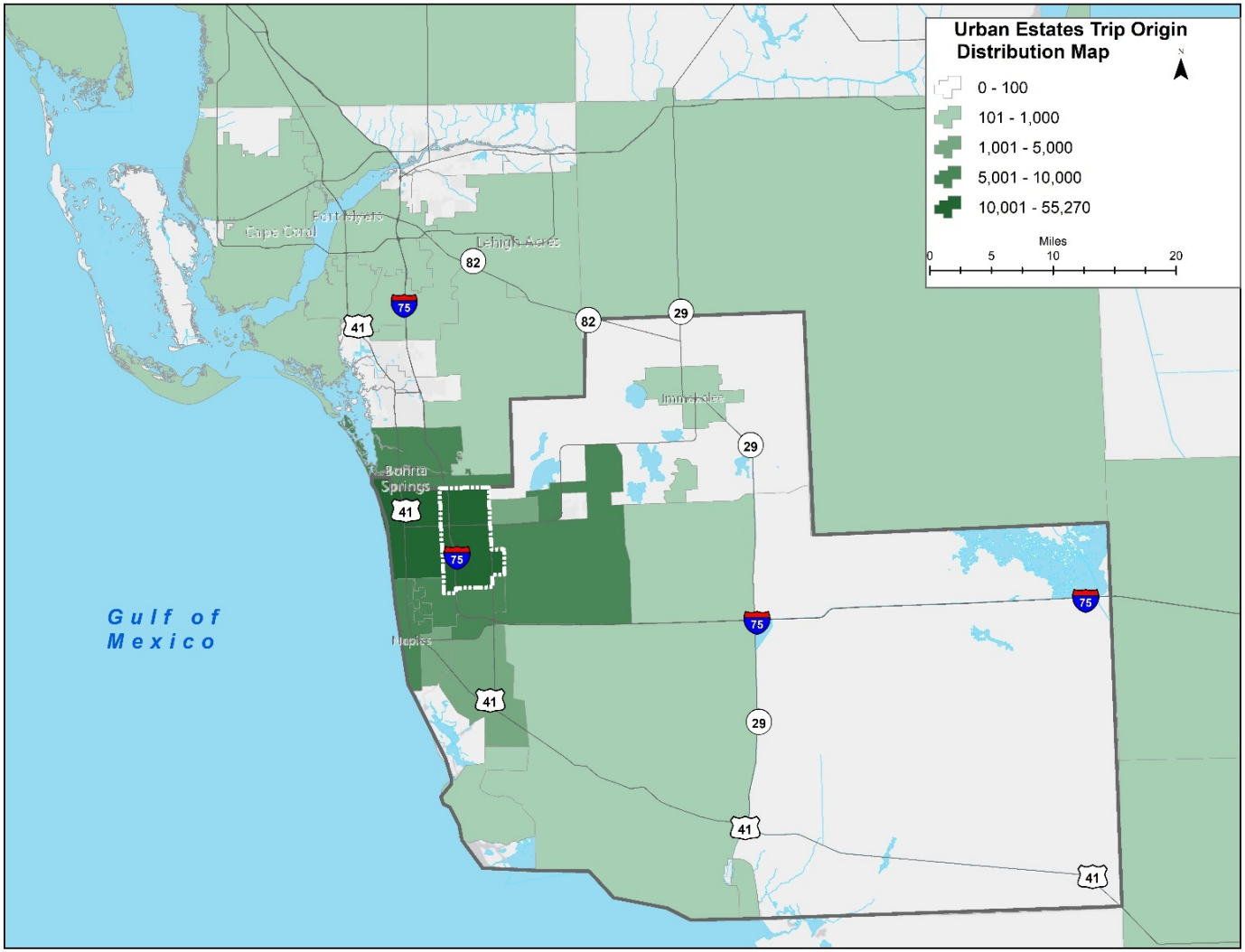
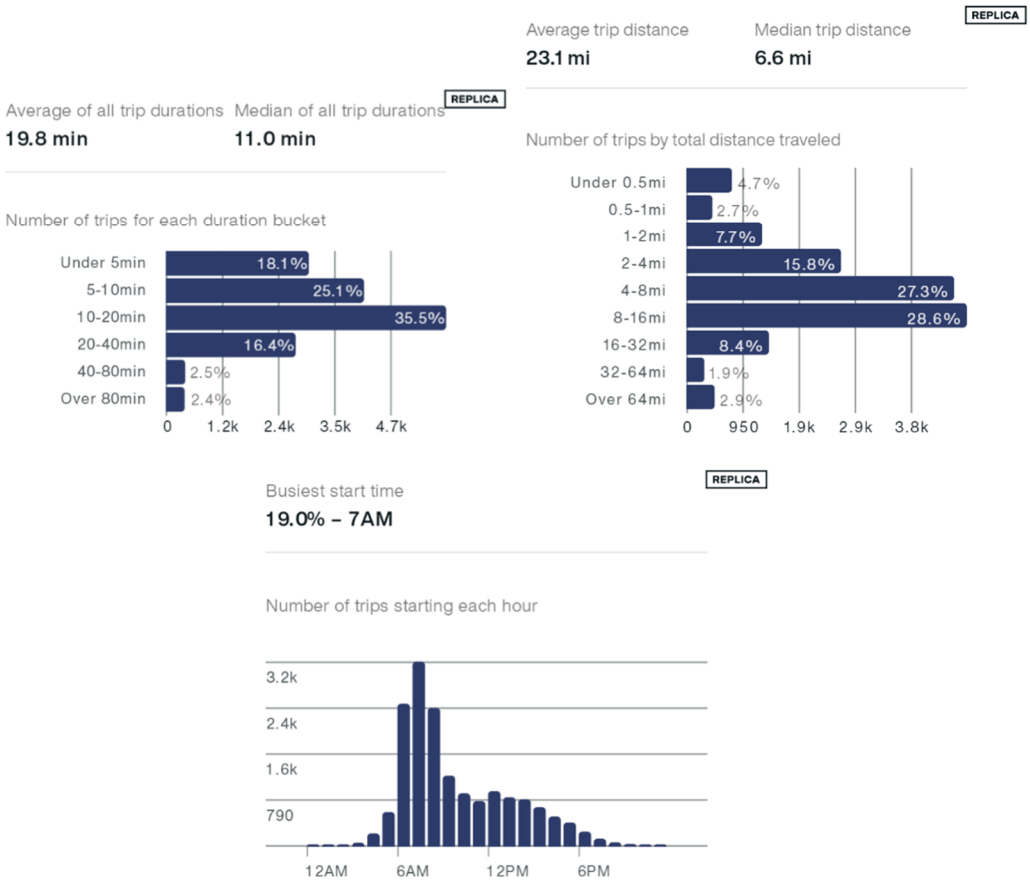


Table 39: Work Locations for Residents of Urban Estates

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 88: 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 patters 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

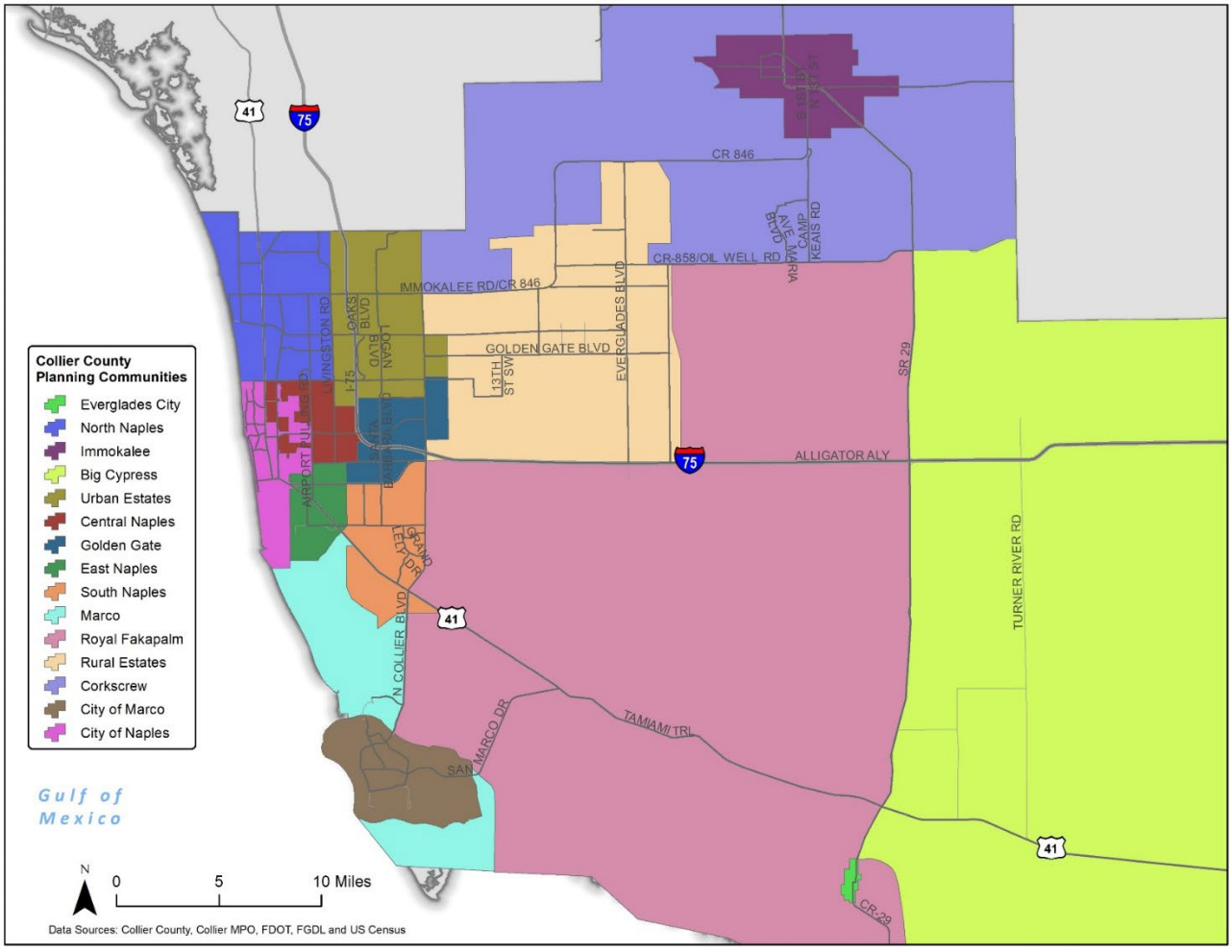
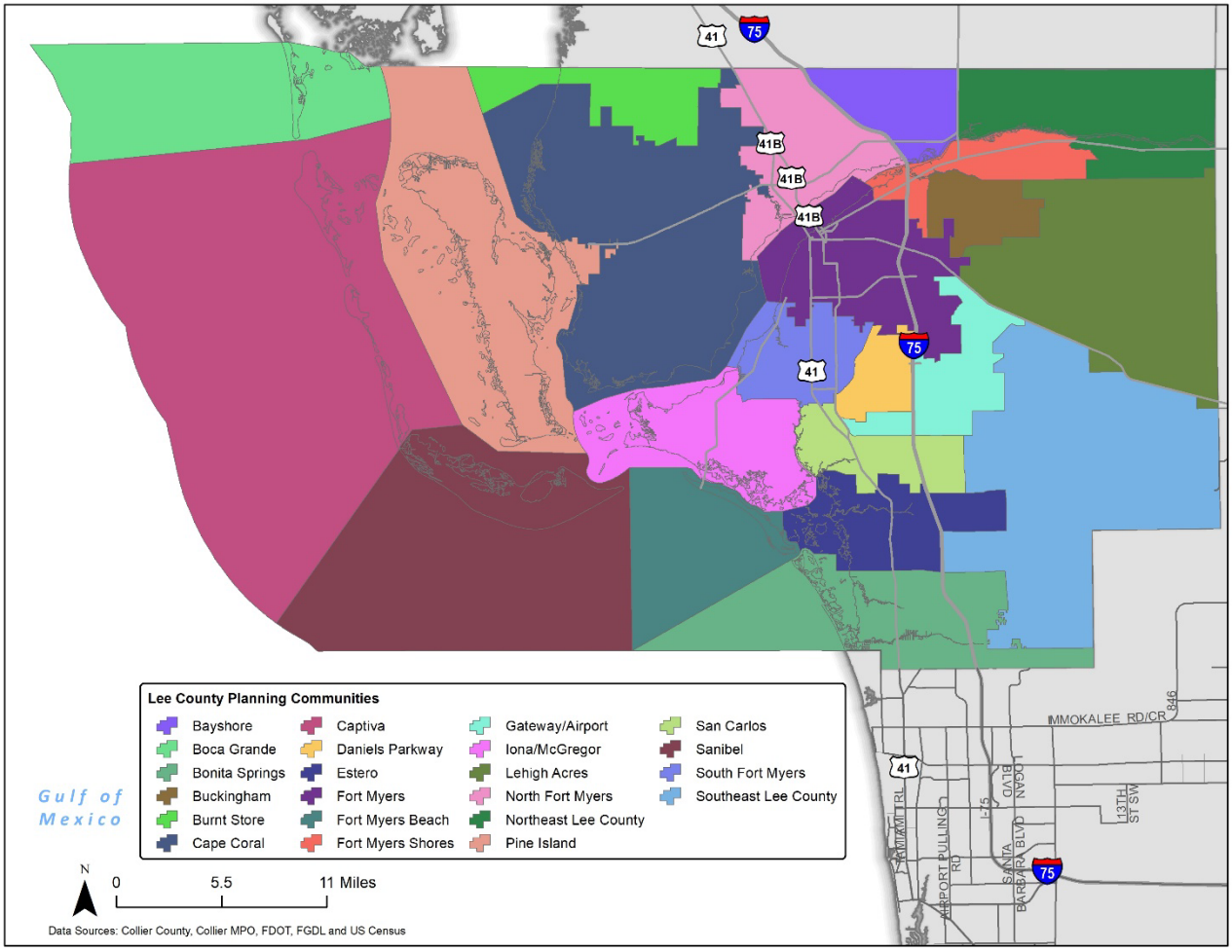


Figure 2: Lee County Planning Communities



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

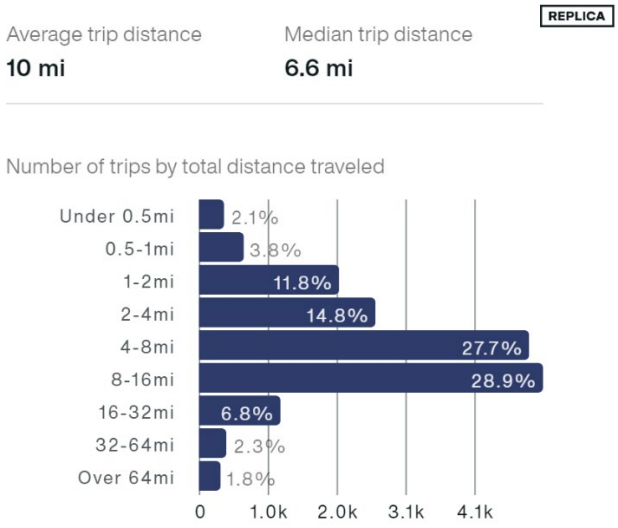
3.0 Analysis and Results

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**

EXECUTIVE SUMMARY
COMMITTEE ACTION
ITEM 7C

Potential Agenda Topics for Joint meeting with Lee County MPO

OBJECTIVE: For the committee to discuss potential agenda topics for the upcoming joint meeting with Lee County MPO advisory committee.

CONSIDERATIONS: The Collier MPO and Lee County MPO Citizens and Technical Advisory Committees are scheduled to meet jointly on October 24, 2022 at FDOT's Southwest Area Office (SWAO); 10041 Daniels Pkwy, Ft. Myers FL. (see link to google map pictured below.)

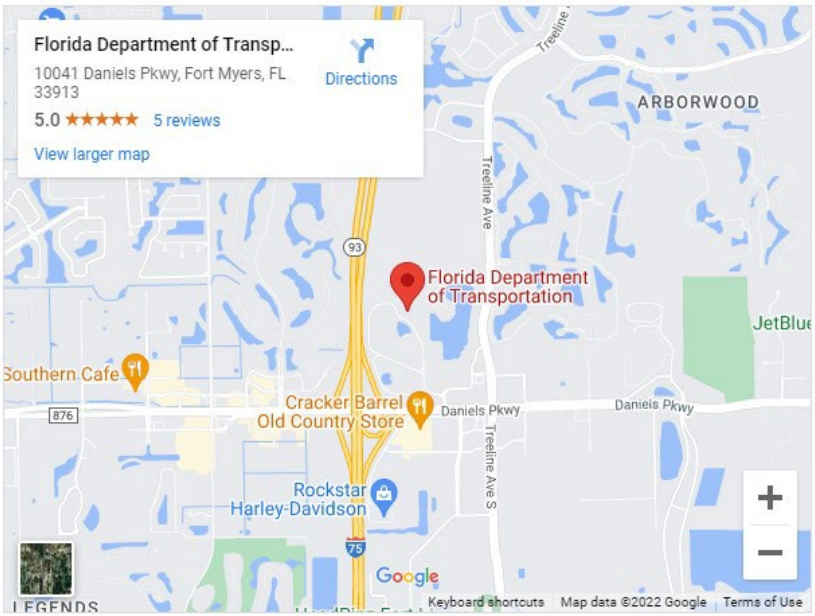
Potential topics for the joint meeting include:

- Regional Roads Project Status – Old US 41; US 41/Bonita Beach Rd, SR 82, I-75 Master Plan
- Regional Transit Update
- FDOT Commute with Enterprise Update
- Regional Bikeway Updates – Estero Bonita Rails to Trails Feasibility Study; Paradise Coast Trail Feasibility Study; USBR 15; SUN Trail
- Bipartisan Infrastructure Law – Update on Discretionary Grant Application Deadlines and Formula Fund Availability

STAFF RECOMMENDATION: Staff would like to receive additional suggestions from committee members.

Prepared By: Anne McLaughlin, MPO Director

https://goo.gl/maps/tCUF7HjxfE4ANg619



EXECUTIVE SUMMARY
COMMITTEE ACTION
ITEM 7D

Endorse Florida Department of Transportation (FDOT) Vision Zero Safety Performance Targets for Calendar Year 2023

OBJECTIVE: For the committee to endorse the FDOT Safety Performance Targets for calendar year (CY) 2023.

CONSIDERATIONS: Safety Targets are the only federal Transportation Performance Measures (TPM) that must be adopted annually. FDOT establishes the state's safety targets in the Highway Safety Improvement Plan. FDOT has notified the MPOs that it will maintain the Department's Vision Zero safety performance target for Calendar Year (CY) 2023. MPOs have the option to either adopt the Statewide safety targets or establish their own quantifiable safety targets.

The Collier MPO has consistently elected to adopt the FDOT statewide targets. Performance metrics for the years 2012-2019 and the FDOT CY 2023 Vision Zero targets are shown in the following table. (FDOT has not yet provided more current information.)

Highway Safety (PM1) Conditions and Performance

Performance Measures	Florida Statewide Baseline Performance (Five-Year Rolling Average)				Calendar Year 2023 Florida Performance Targets
	2012-16	2013-17	2014-18	2015-19	
Number of Fatalities	2,683.60	2,825.00	2,971.60	3,109.20	0
Rate of Fatalities per 100 Million VMT	1.33	1.36	1.39	1.42	0
Number of Serious Injuries	20,844.20	20,929.20	20,738.40	20,169.60	0
Rate of Serious Injuries per 100 Million VMT	10.36	10.13	9.77	9.22	0
Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries	3,294.40	3,304.20	3,339.60	3,287.40	0

STAFF RECOMMENDATION: That the committee endorse the FDOT Vision Zero Safety Performance Targets for calendar year 2023.

Prepared By: Anne McLaughlin, MPO Director

Attachments:
None.

EXECUTIVE SUMMARY
COMMITTEE ACTION
ITEM 7E

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

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

_____
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**
A. Personnel Services						
MPO staff salaries, fringe benefits, and other deductions		$225,000	$0	$0	$0	$225,000
Subtotal:		**$225,000**	**$0**	**$0**	**$0**	**$225,000**
B. Consultant Services						
Website maintenance, hosting fees, etc.		$5,000	$0	$0	$0	$5,000
General Support		$75,000	$0	$0	$0	$75,000
Subtotal:		**$80,000**	**$0**	**$0**	**$0**	**$80,000**
C. Travel						
Travel and Professional Development		$5,000	$0	$0	$0	$5,000
Subtotal:		**$5,000**	**$0**	**$0**	**$0**	**$5,000**
D. Other Direct Expenses						
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
Subtotal:		**$53,800**	**$0**	**$0**	**$0**	**$53,800**
Total:		**$363,800**	**$0**	**$0**	**$0**	**$363,800**

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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**
A. Personnel Services						
MPO staff salaries, fringe benefits, and other deductions		$305,000	$0	$0	$0	$305,000
	Subtotal:	**$305,000**	**$0**	**$0**	**$0**	**$305,000**
B. Consultant Services						
Website maintenance, hosting fees, etc.		**$5,000**	$0	$0	$0	**$5,000**
	Subtotal:	**$5,000**	**$0**	**$0**	**$0**	**$5,000**
C. Travel						
Travel and Professional Development		$5,000	$0	$0	$0	$5,000
	Subtotal:	**$5,000**	**$0**	**$0**	**$0**	**$5,000**
D. Other Direct Expenses						
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
	Subtotal:	**$53,800**	**$0**	**$0**	**$0**	**$53,800**
	Total:	**$368,800**	**$0**	**$0**	**$0**	**$368,800**

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 rations 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**
A. Personnel Services						
MPO staff salaries, fringe benefits, and other deductions		$30,000	$0	$0	$0	$30,000
	Subtotal:	**$30,000**	**$0**	**$0**	**$0**	**$30,000**
B. Consultant Services						
Contract/Consultant Services/ General Support		$45,000	$0	$0	$0	$45,000
	Subtotal	**$15,000**	**$0**	**$0**	**$0**	**$15,000**
	Total:	**$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**
A. Personnel Services						
MPO staff salaries, fringe benefits, and other deductions		$25,000	$0	$0	$0	$25,000
	Subtotal:	**$25,000**	**$0**	**$0**	**$0**	**$25,000**
B. Consultant Services						
Contract/Consultant Services		$15,000	$0	$0	$0	$15,000
	Subtotal	**$15,000**	**$0**	**$0**	**$0**	**$15,000**
	Total:	**$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 FY 24/25-28/29 TIP	June - 2023 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**
A. Personnel Services						
MPO staff salaries, fringe benefits, and other deductions		$10,000	$0	$0	$0	$10,000
Subtotal:		$10,000	$0	$0	$0	$10,000
B. Consultant Services						
General Support/ Automated TIP		$20,000	**$0**	**$0**	**$0**	**$20,000**
Subtotal:		**$20,000**	**$0**	**$0**	**$0**	**$20,000**
Total:		**$30,000**	**$0**	**$0**	**$0**	**$30,000**

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

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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.

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**
A. Personnel Services					
MPO staff salaries, fringe benefits, and other deductions	$31,000	$0	$0	$0	$31,000
Subtotal:	**$31,000**	**$0**	**$0**	**$0**	**$31,000**
B. Consultant Services					
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
Subtotal:	**$107,133**	**$100,000**	**$0**	**$0**	**$207,133**
Total:	**$138,133**	**$100,000**	**$0**	**$0**	**$238,133**

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**
A. Personnel Services					
MPO staff salaries, fringe benefits, and other deductions	$80,000	$0	$0	$0	$80,000
Subtotal:	**$80,000**	**$0**	**$0**	**$0**	**$80,000**
B. Consultant Services					
Transportation System Performance Report	$0	$50,000	$0	$0	$50,000
Bike/Ped Master Plan	$54,925	$0	$0	$0	$54,925
Subtotal:	**$54,925**	**$50,000**	**$0**	**$0**	**$104,925**
Total:	**$134,925**	**$50,000**	**$0**	**$0**	**$184,925**

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SUMMARY TABLES

TABLE 3 – FY 2022/23 AGENCY PARTICIPATION

Task #	Task Description	FHWA	FHWA	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
		CPG	CPG	G1V40	G2594						
		PL	SU	Soft Match	Soft Match						
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 PL	FHWA SU	FTA 5307	FDOT	TD Trust	Collier Co.	Naples	Everglades	Marco Is.	Total
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	$ -		$ -	$ -		$ 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**

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

	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	**$ 808,974**	**$ 350,000**	**$ 178,422**	**$ 27,954**	**$ 5,000**	**$ 2,000**	**$ -**	**$ 1,000**	**$ 1,373,350**

(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**
	Total fiscal year 2021/22 funds for all tasks	**$ 1,583,033**	$ 609,608	$ (145,000)	$ 870,995	$ 145,000	$ 102,430	**$ 1,583,033**

EXECUTIVE SUMMARY
DISTRIBUTION
ITEM 10A

2022 Congestion Management Process (CMP) Corridor Fact Sheets

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OBJECTIVE: For the committee to receive a copy of the CMP corridor fact sheets.

CONSIDERATIONS: The Congestion Management Committee (CMC) is expected to approve the CMP corridor fact sheets at their September 21 meeting. The fact sheets (**Attachment 1)** include all ten corridors previously selected during completion of the Transportation System Performance Report. MPO staff will provide the approved version of the fact sheets if any revisions were made by the CMC.

STAFF RECOMMENDATION: N/A informational item for distribution.

Prepared By: Brandy Otero, Collier MPO Principal Planner

ATTACHMENT(S):

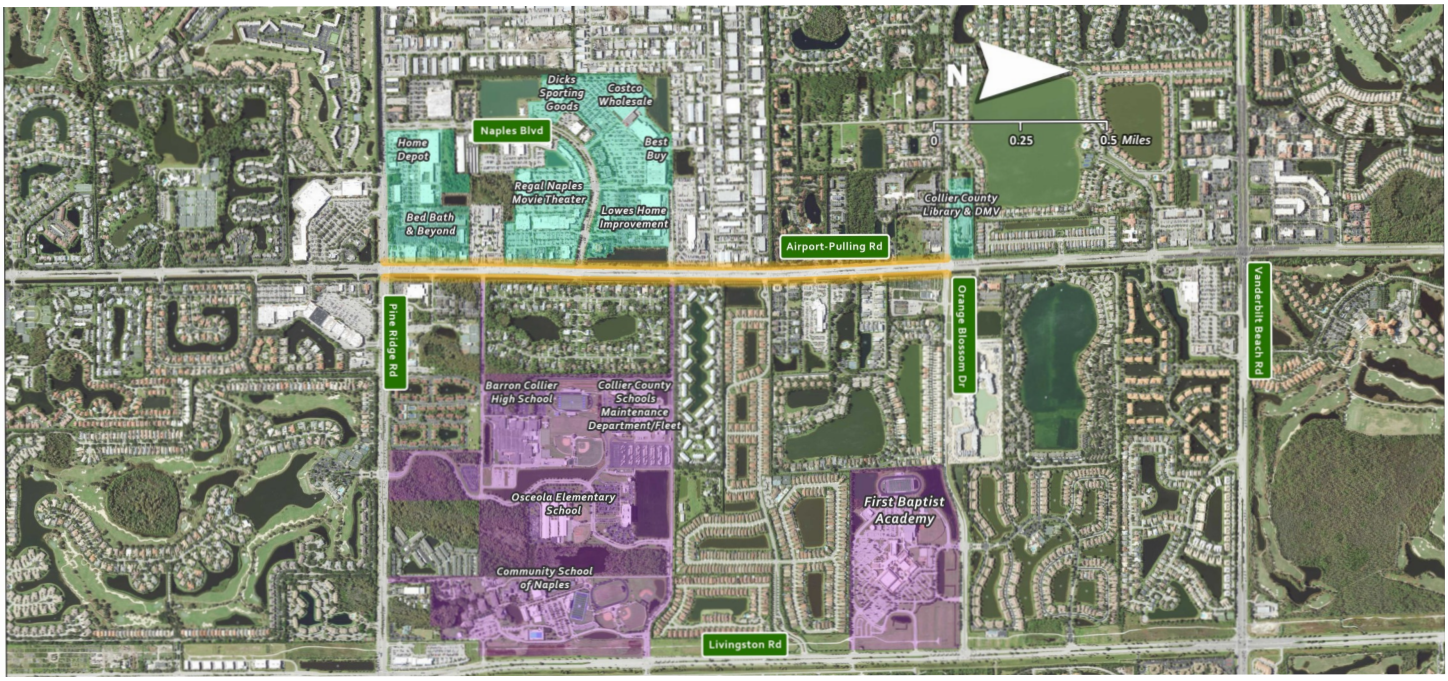
1. Corridor Fact Sheets

COLLIER METROPOLITAN PLANNING ORGANIZATION

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.

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

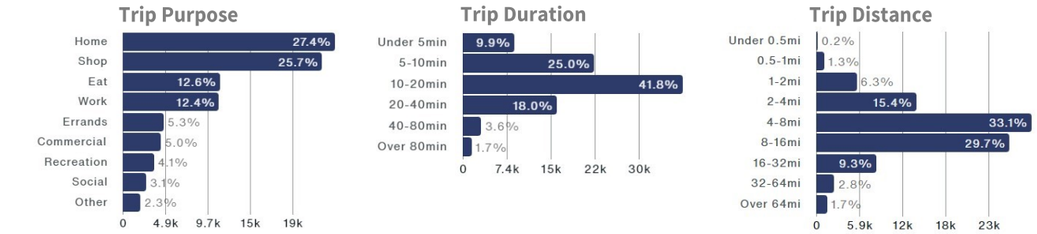
CR 31 / Airport-Pulling Rd (From CR 896 / Pine Ridge Rd to Orange Blossom Dr)

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?

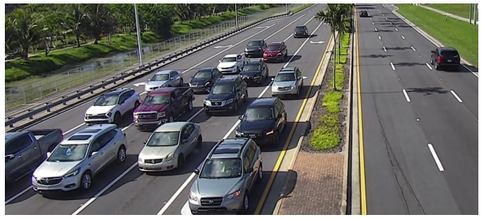
Direction
Southbound

Location
Approaching Pine Ridge Rd

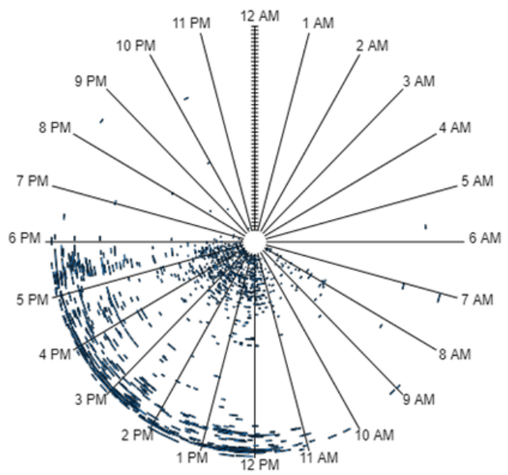
Time
12-6 PM

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.



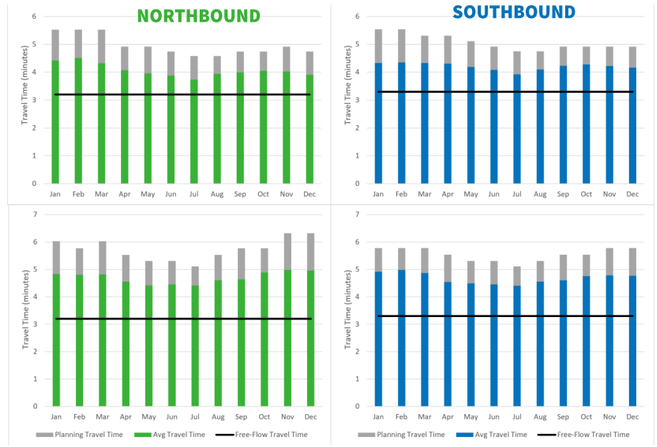
Airport-Pulling Rd at Orange Blossom Dr – Facing South



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.

Average Weekday Travel Times & Reliability



Estimated Traffic Delay Costs

Lowest cost — Highest cost; Data Unavailable

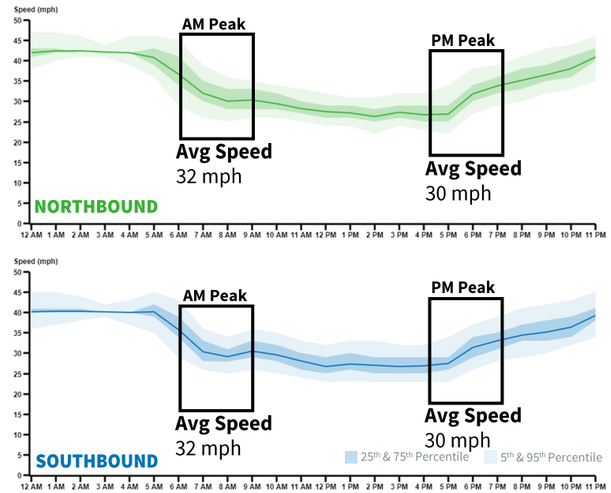
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	$$$	$$$$	$$$	$$$								
2021	$$$	$$$	$$$	$$	$$	$$	$$	$$	$$	$$	$$$	$$$
2020	$$$$	$$$$	$$$	$	$$	$$	$$	$$	$$	$$	$$	$$$
2019	$$$	$$$	$$	$$	$$	$	$$	$$$	$$$	$$$$	$$$$	$$$$

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.*

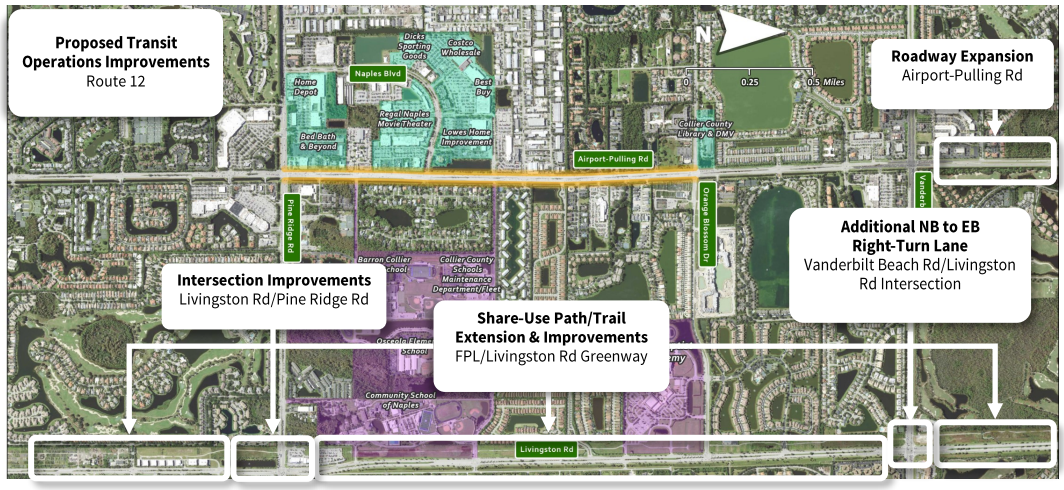
Congestion Throughout the Day...

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 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:

- *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*
- *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*
- *Consider expanding traffic signal capabilities through technology and communications improvements*
- *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 constructing a second left-turn lane at J and C Blvd to accommodate truck traffic*
- *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 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*
- *Conduct a study to evaluate possible intersection improvements at Pine Ridge Rd and Airport-Pulling Rd*

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:

R12 Airport Rd to Creekside Commerce Park

R20 Pine Ridge Road

R26 Pine Ridge Road/ Naples Blvd/ Clam Pass

RideCAT.com

How Do I Get Involved?

If you want to learn more about the Collier MPO's efforts to improve our transportation system, please visit our website: *www.colliermpo.org*

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

Collier County's Congestion Hotspots

CR 951 / Collier Blvd

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

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Why is the MPO Evaluating Hotspot Corridors?

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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
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

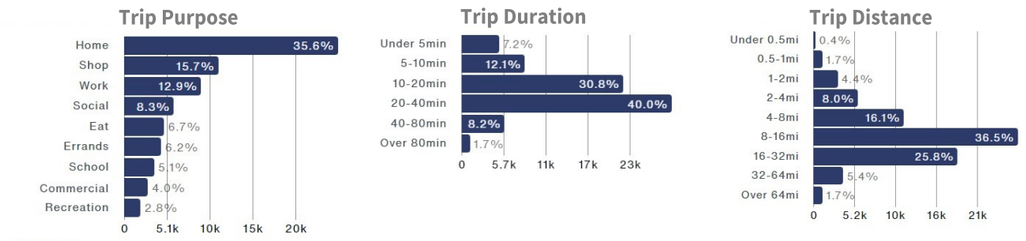
CR 951 / Collier Blvd (From CR 862 / Vanderbilt Beach Rd to CR 846 / Immokalee Rd)

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

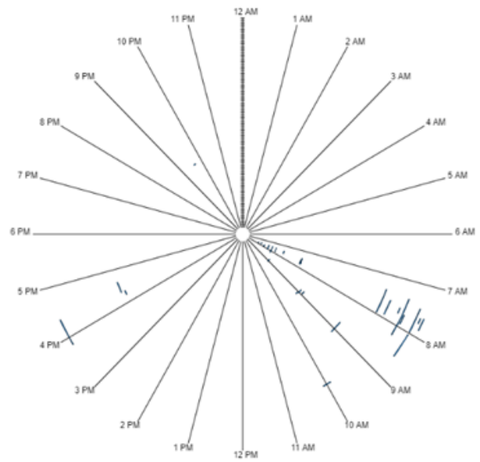
Location
Approaching Vanderbilt Beach Rd

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.

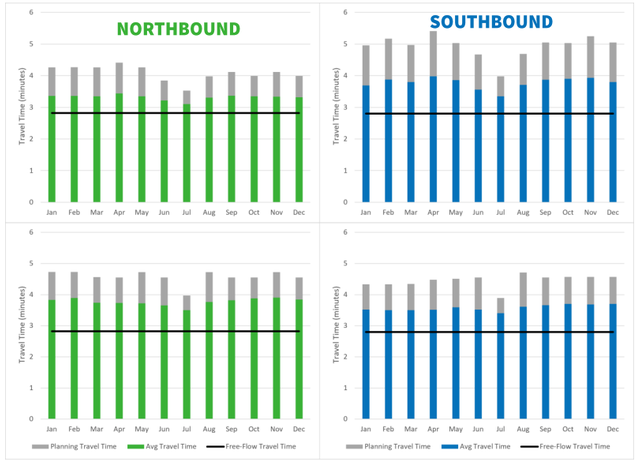
Collier Blvd at Immokalee Rd – Facing South



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.

Average Weekday Travel Times & Reliability



AM Peak 6-9 AM

PM Peak 4-7 PM

Estimated Traffic Delay Costs

Lowest cost — Highest cost — Data Unavailable

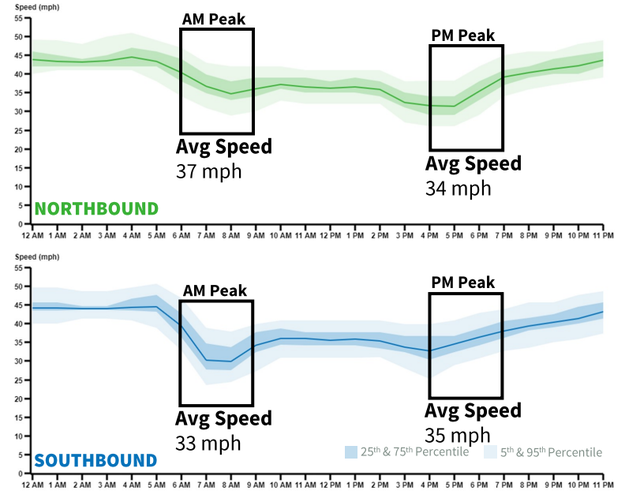
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	$$$$	$$$$	$$$$	$$$$								
2021	$$	$$	$$$	$$$	$$$	$$	$	$$	$$$	$$$	$$$	$$$
2020	$$	$$	$	$	$	$	$	$$	$$	$$	$$	$$
2019	$	$	$	$	$	$	$	$$	$$	$$$	$$$	$$

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 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 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:

- *Identify opportunities for making new bicycle and pedestrian connections on the west side of the corridor so that Oakridge Middle School can be accessed by the surrounding neighborhoods without using Immokalee Rd and/or Collier Blvd*
- *Provide funding assistance for promoting existing car/vanpool awareness and app availability*
- *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*
- *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*

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:

R27 Immokalee Road

RideCAT.com

rideCAT COLLIER AREA TRANSIT

How Do I Get Involved?

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We want to hear your feedback!

mpo COLLIER Metropolitan Planning Organization

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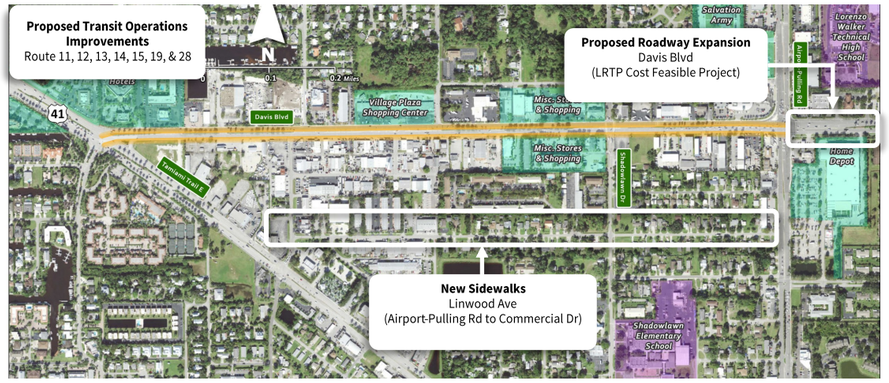
What Improvements Are Planned for This Corridor?



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- *Conduct an access management study to identify opportunities for consolidating the numerous driveways and implementing other solutions for reducing conflicts associated with vehicles entering/exiting the roadway*
- *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:

- *Changing your trips to less busy time periods when possible*
- *Checking for alternate routes based on traffic conditions*
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- *Taking advantage of flex schedule or telecommuting opportunities if offered by your employer*
- *Practicing safe driving techniques to avoid crash incidents*

Transit Routes Available:

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

RideCAT.com

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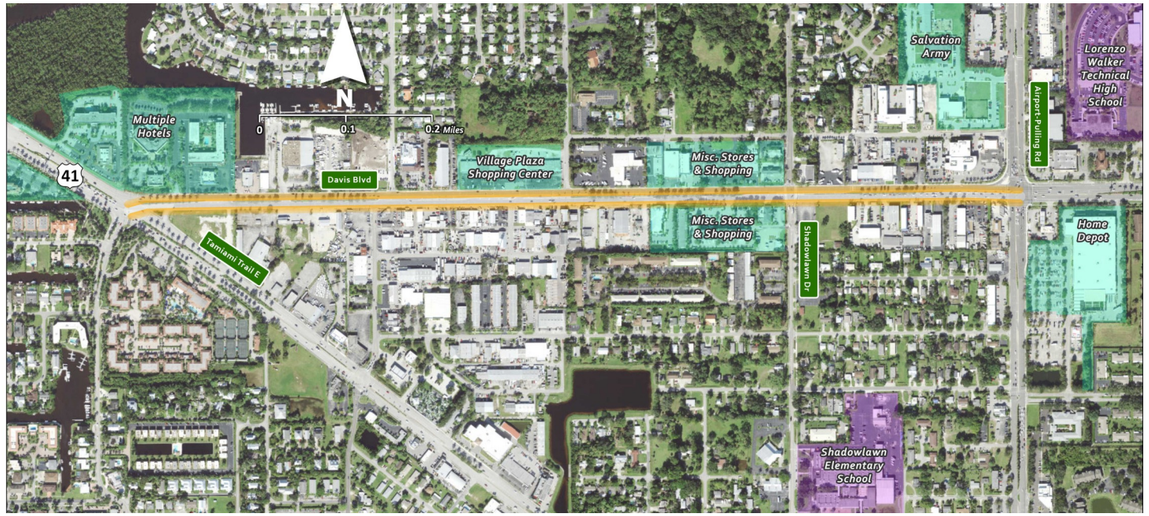
COLLIER METROPOLITAN PLANNING ORGANIZATION

Collier County's Congestion Hotspots

SR 84 / Davis Blvd

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



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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).

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

Collier County's Congestion Hotspots

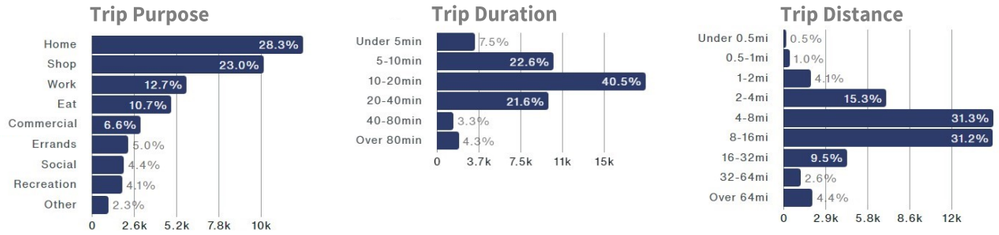
SR 84 / Davis Blvd (From US 41 / Tamiami Trail to CR 31 / Airport-Pulling Rd)

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?

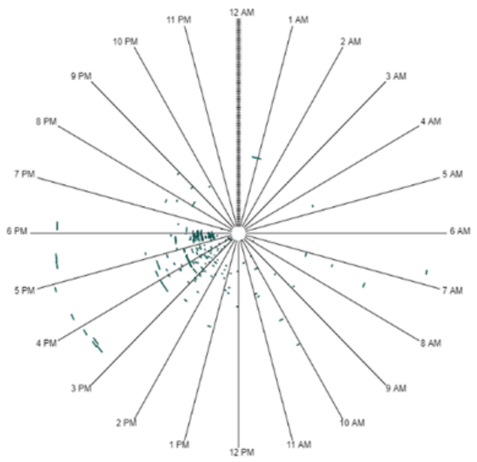
Direction
Eastbound

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.

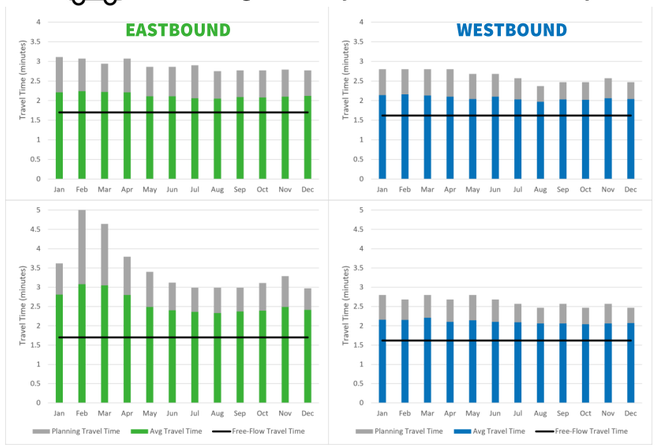


Davis Blvd at Airport-Pulling Rd – Facing West

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.

Average Weekday Travel Times & Reliability



Estimated Traffic Delay Costs

Lowest cost — Highest cost; Data Unavailable

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

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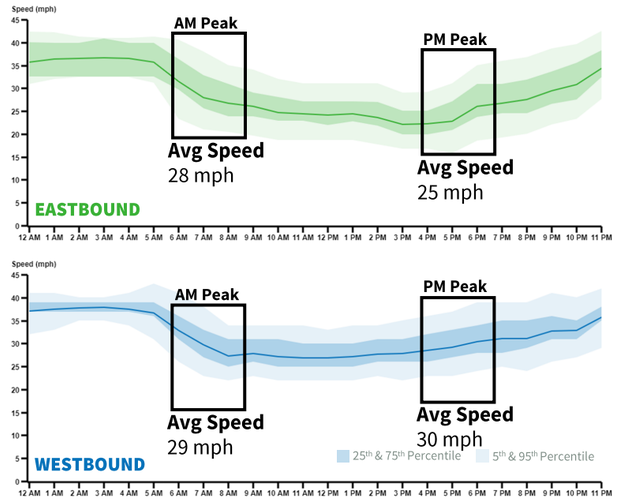
Congestion Throughout the Day...

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. Although speeds drop to the lowest in the eastbound direction during the PM peak at roughly 22 MPH, they remaining consistently low in both directions throughout the middle of the day as well. As shown in the circular graph to the left, most bottlenecks occur during the first part of year between 3 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 trip purpose throughout the day, accounting for 13% of all trips during the AM peak period and 24% during the PM peak period.

Average Weekday Travel Speeds

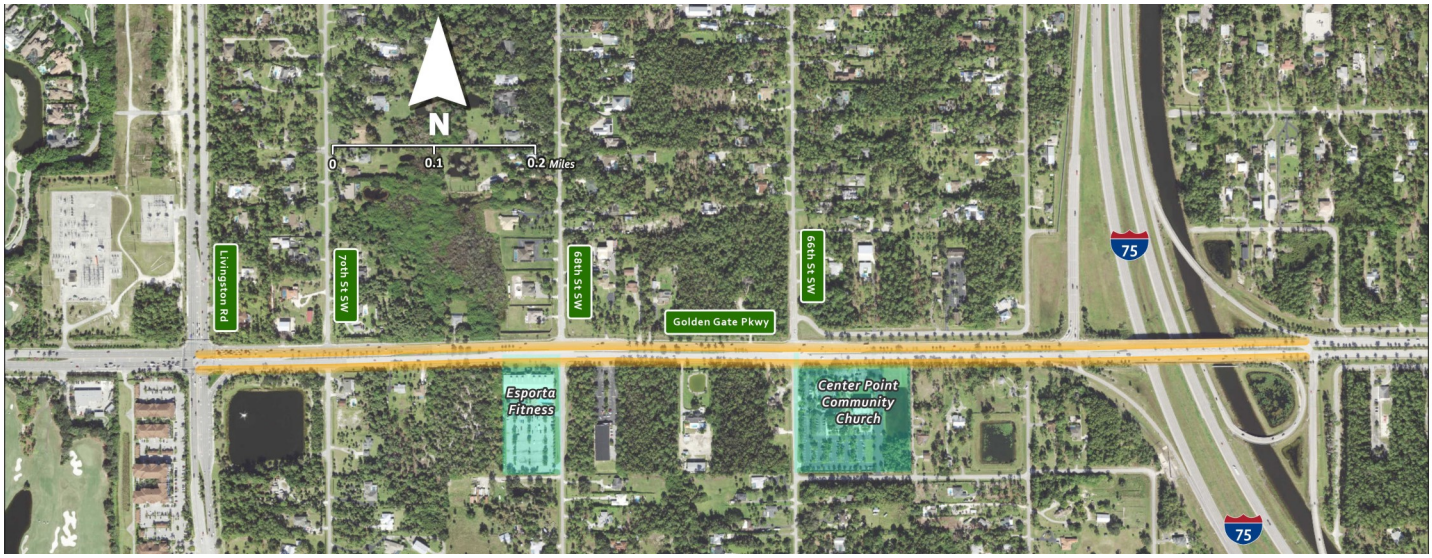


COLLIER METROPOLITAN
PLANNING ORGANIZATION

Collier County's Congestion Hotspots

CR 886 / Golden Gate Pkwy

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



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

Collier County's Congestion Hotspots

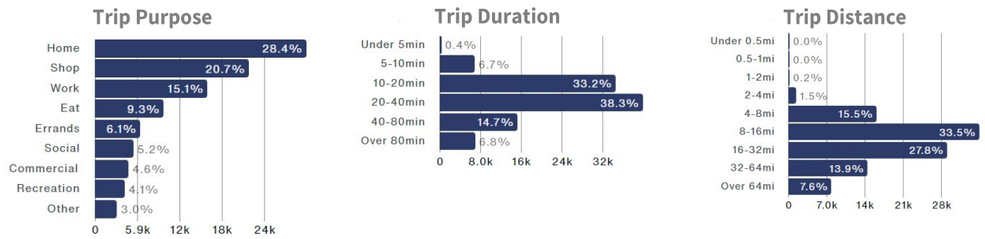
CR 886 / Golden Gate Pkwy (From CR 881 /Livingston Rd to I-75)

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?

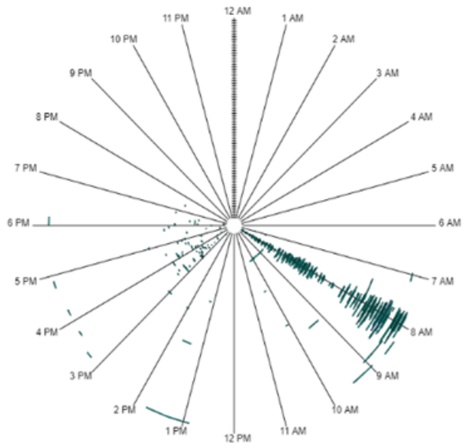
Direction
Westbound

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.

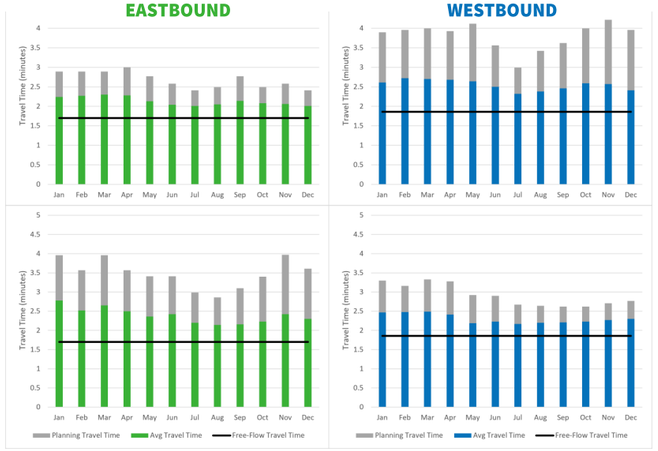


Golden Gate Pkwy at I-75 – Facing West

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 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.

Average Weekday Travel Times & Reliability



Estimated Traffic Delay Costs

Lowest cost — Highest cost; Data Unavailable

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

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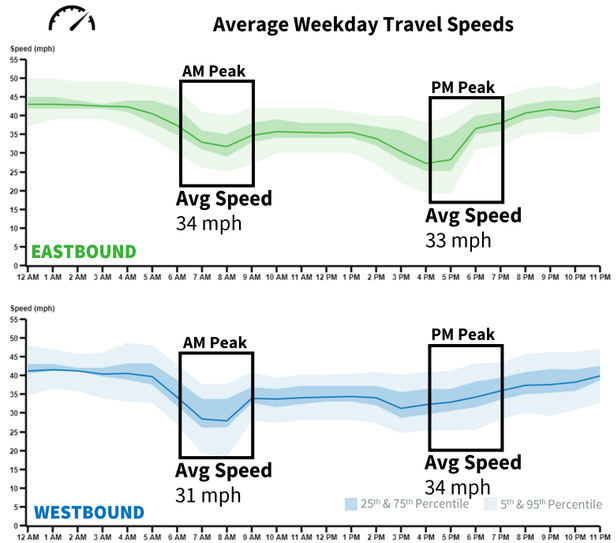
Average Weekday Travel Speeds



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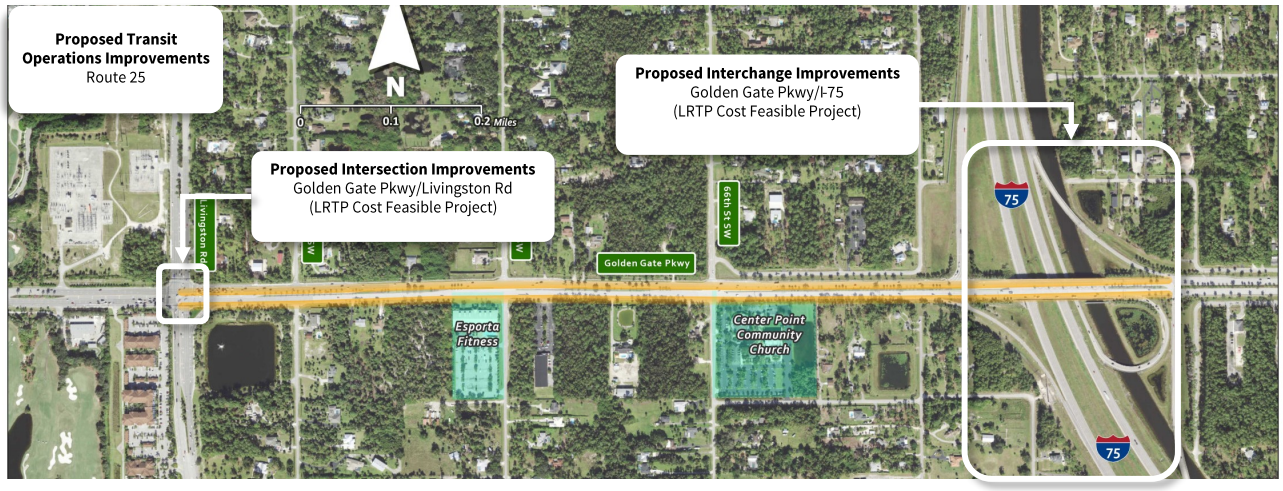

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Although CMP strategies are focused on reducing traffic congestion, they are more than just roadway improvements and adding new lanes. In fact, well-planned CMP strategies can include multiple modes of transportation and often produce low-cost projects 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:

- *Provide funding assistance for promoting existing car/vanpool awareness and app availability*
- *Consider expanding traffic signal capabilities through technology and communications improvements*
- *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*
- *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*
- *Evaluate the feasibility of increasing capacity of westbound left-turn lanes at Livingston Rd by lengthening the existing inside lane and/or adding a third turn lane*

What Can I Do to Help Reduce Congestion?

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

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Transit Routes Available:

R25 Golden Gate Parkway & Goodlette – Frank

RideCAT.com

rideCAT COLLIER AREA TRANSIT

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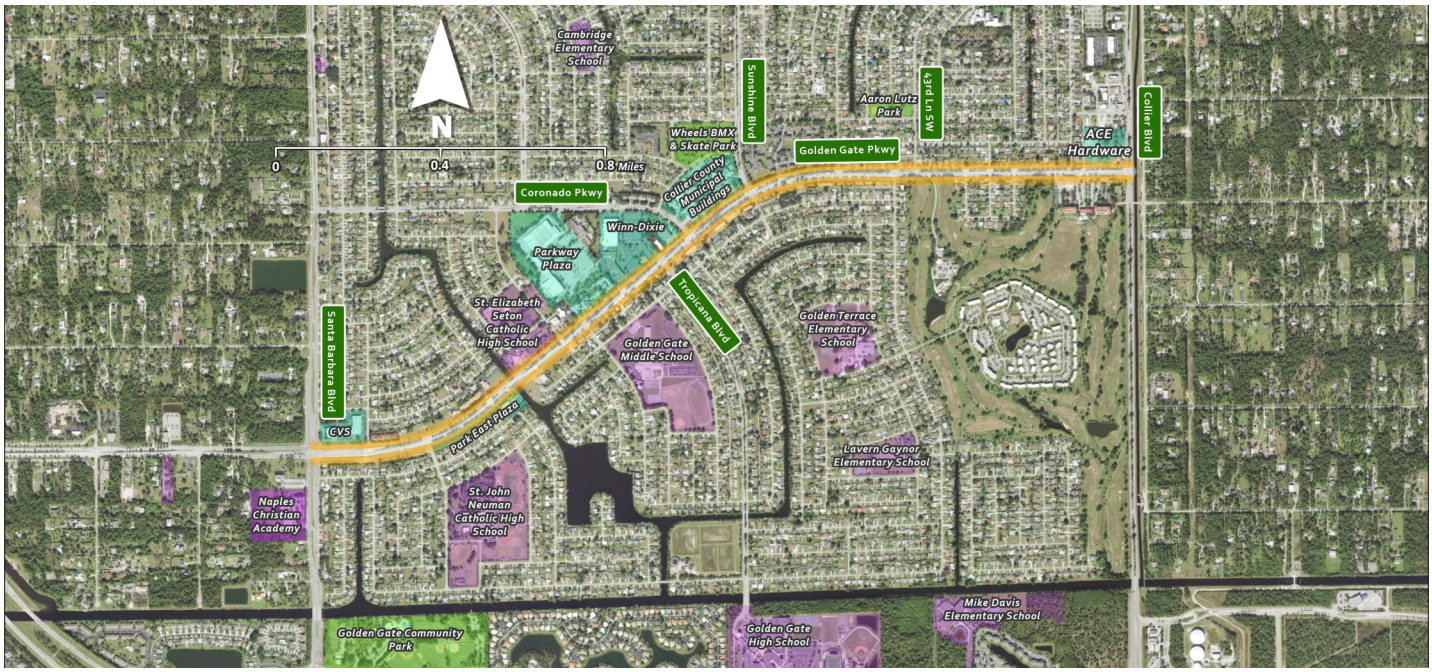
COLLIER METROPOLITAN
PLANNING ORGANIZATION

Collier County's Congestion Hotspots

CR 886 / Golden Gate Pkwy

(From Santa Barbara Blvd to CR 951 / Collier Blvd)



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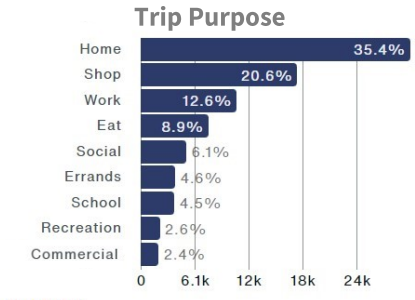
CR 886 / Golden Gate Pkwy (From Santa Barbara Blvd to CR 951 / Collier Blvd)

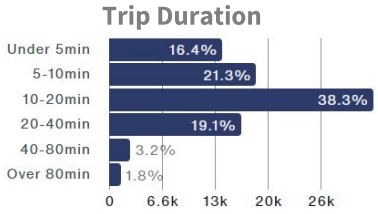
Quick Facts

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?

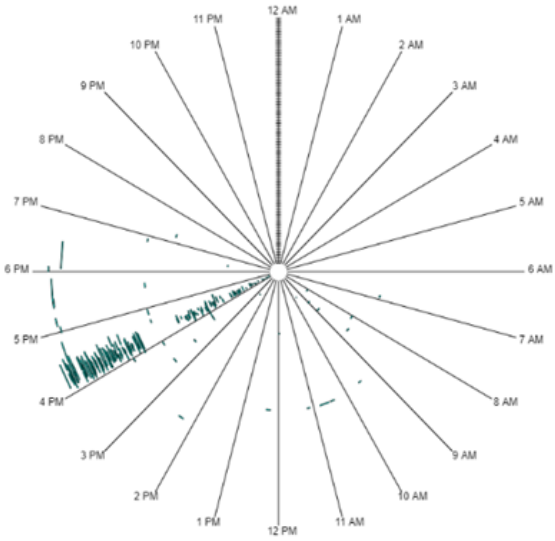
Direction
Eastbound

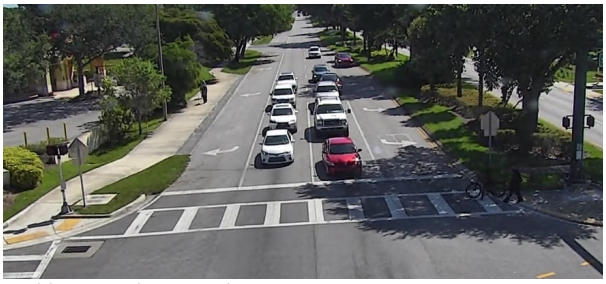
Location
Approaching Sunshine Blvd

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.



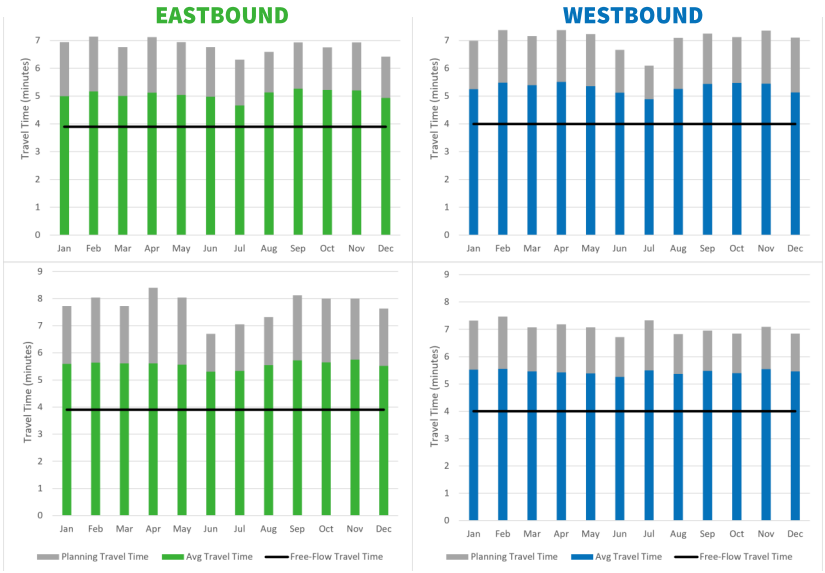


Golden Gate Pkwy at 50th St – Facing East

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.

Average Weekday Travel Times & Reliability



Estimated Traffic Delay Costs

Lowest cost — Highest cost; Data Unavailable

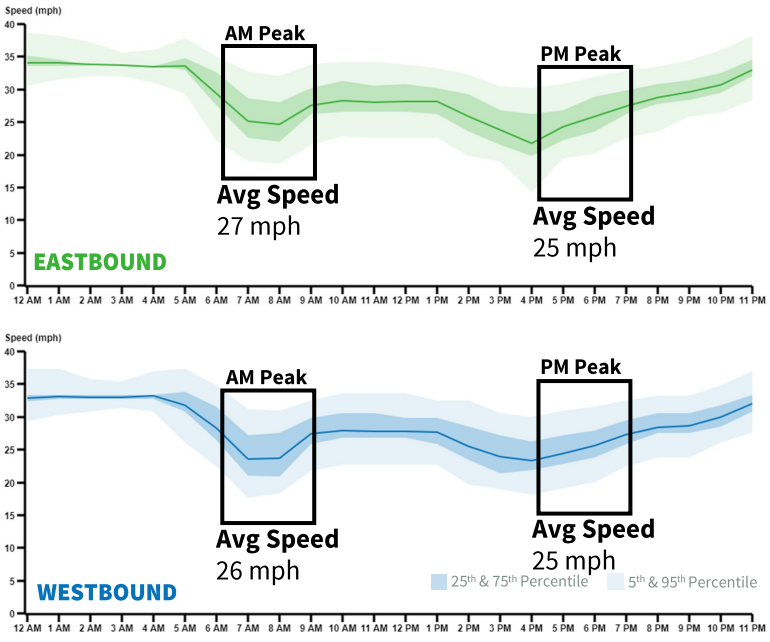
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	$$	$$	$$	$$								
2021	$$	$$	$$	$$	$$	$	$$	$$	$$	$$	$$	$$
2020	$$$$	$$$$	$$$	$	$$	$	$	$	$$	$$	$$	$$
2019	$$$	$$$	$$$	$$$	$$$	$$	$$	$$$$	$$$$	$$$$	$$$$	$$$$

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.*

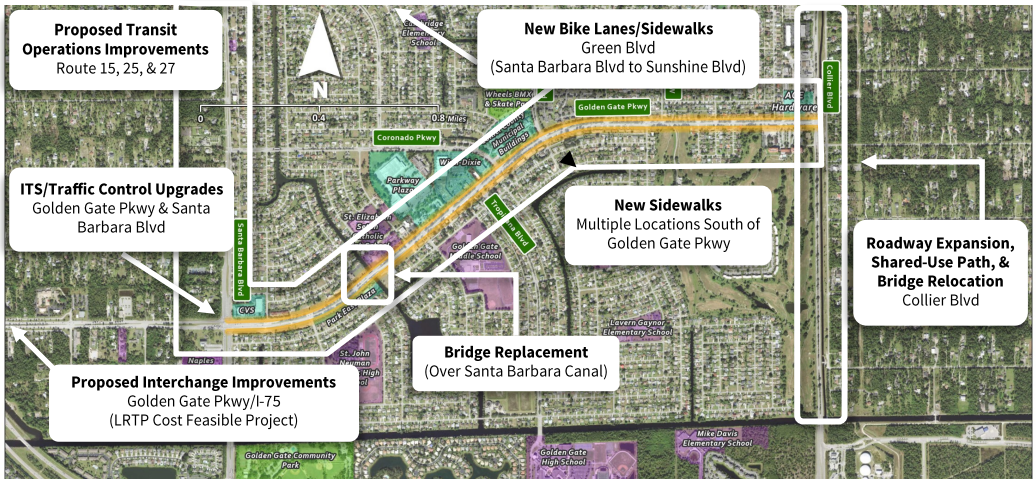
Congestion Throughout the Day...

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. 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 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*

Transit Routes Available:

R15	Golden Gate City (Santa Barbara)	R25	Golden Gate Parkway & Goodlette – Frank
R16	Golden Gate City (Santa Barbara)	R27	Immokalee Road
R19	Golden Gate Estates & Immokalee	R28	Golden Gate Estates Everglades Blvd, Ave Maria
R20	Pine Ridge Road		

RideCAT.com

How Do I Get Involved?

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We want to hear your feedback!

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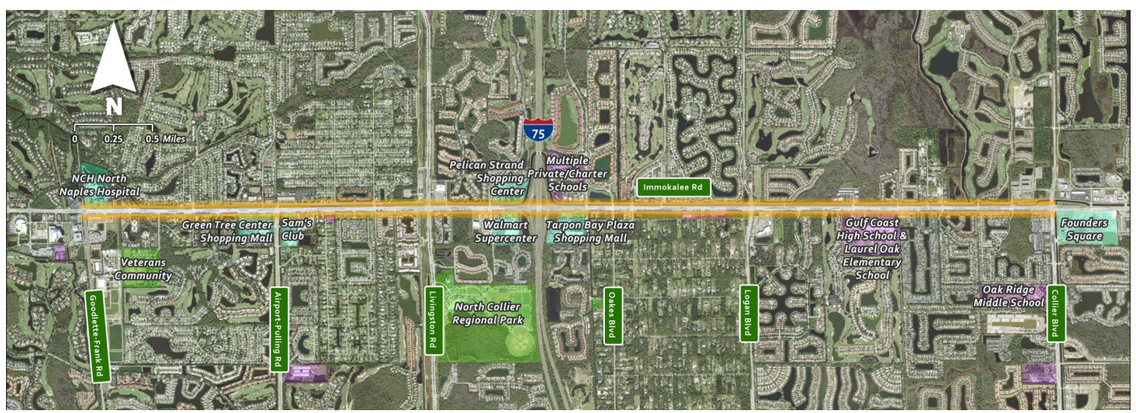
COLLIER METROPOLITAN
PLANNING ORGANIZATION

Collier County's Congestion Hotspots

CR 846 / Immokalee Road

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



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.

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

Collier County's Congestion Hotspots

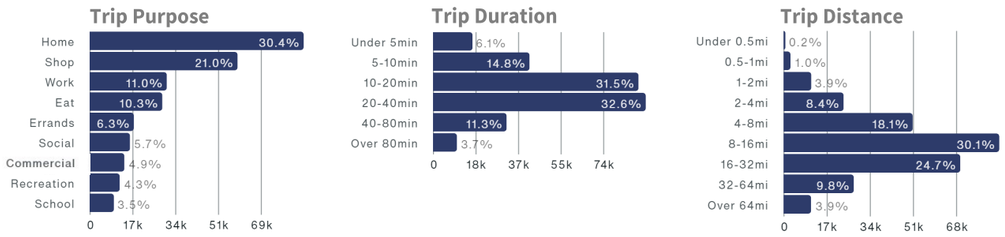
CR 846 / Immokalee Road (From CR 851 / Goodlette-Frank Road to CR 951 / Collier Blvd)

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?

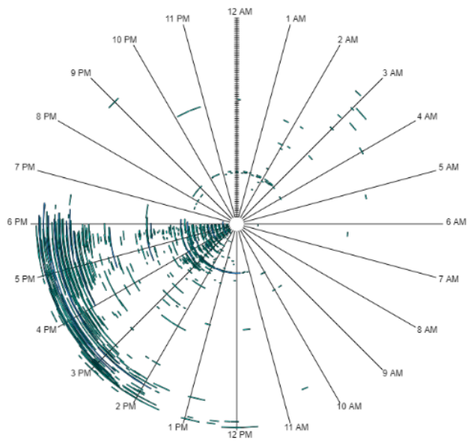
Direction
Eastbound

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.

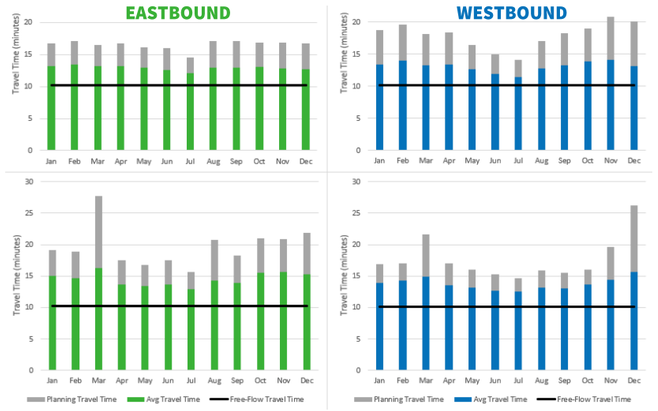


Immokalee Rd at Strand Blvd – Facing West

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.

Average Weekday Travel Times & Reliability



Estimated Traffic Delay Costs

Lowest cost — Highest cost; Data Unavailable

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

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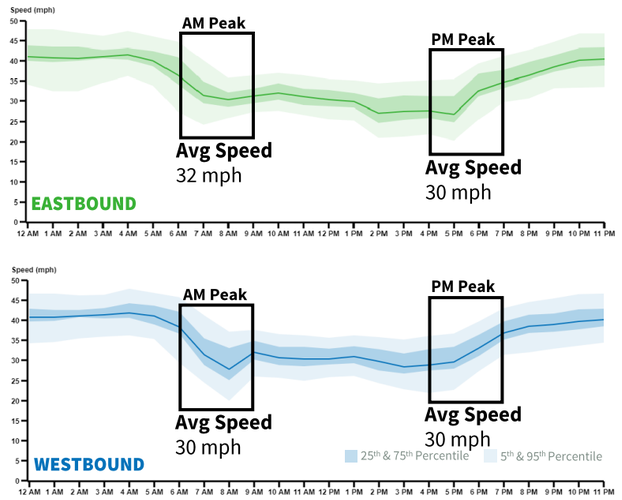
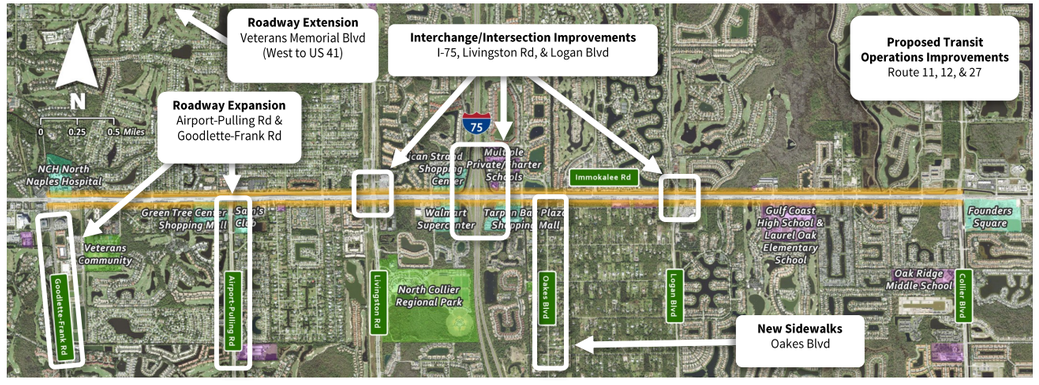
Congestion Throughout the Day...

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. Although speeds are lowest during the AM and PM peak periods at roughly 30 MPH, there is also a noticeable drop in travel speeds in between those times. As shown in the circular graph to the left, most bottlenecks occur roughly between 2 and 6 PM. Trip purposes also change throughout the day along this corridor, with work being the most common purpose during the AM peak and home being the common purpose during the PM peak.

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*
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- *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:

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

RideCAT.com

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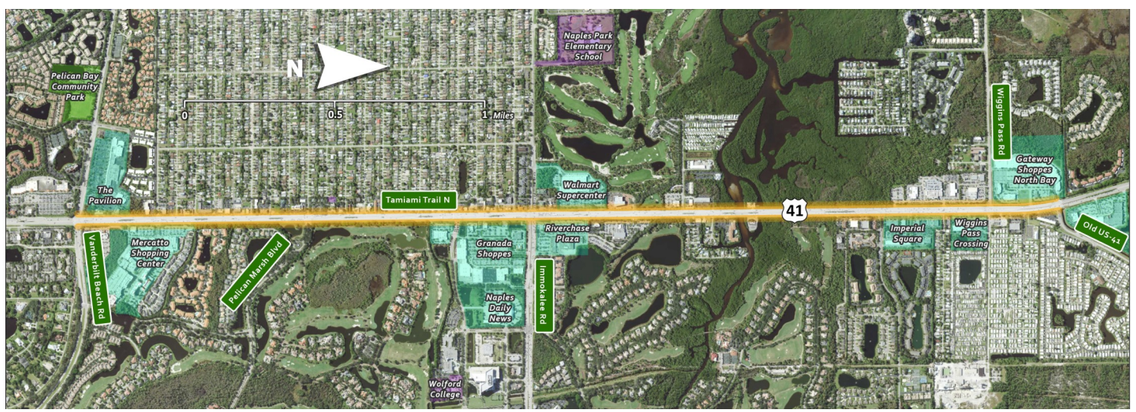
COLLIER METROPOLITAN
PLANNING ORGANIZATION

Collier County's Congestion Hotspots

US 41 / Tamiami Trail

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



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Collier County's Congestion Hotspots

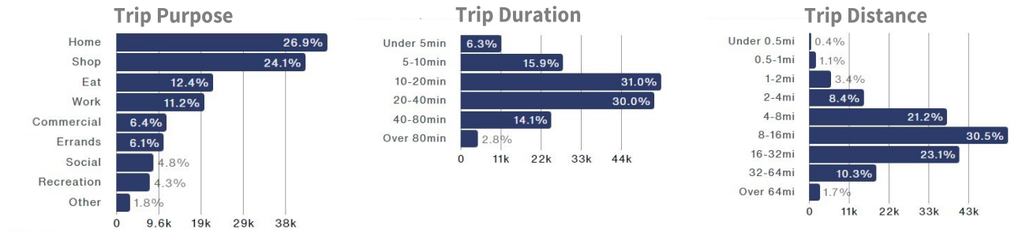
US 41 / Tamiami Trail (From CR 862 / Vanderbilt Beach Rd to CR 887 / Old US 41)

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?

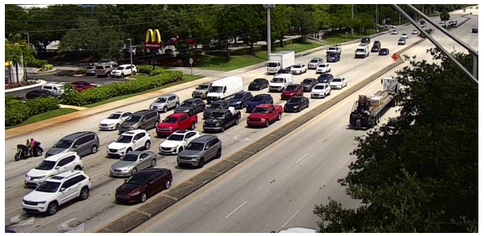
Direction
Northbound

Location
Approaching Immokalee Rd

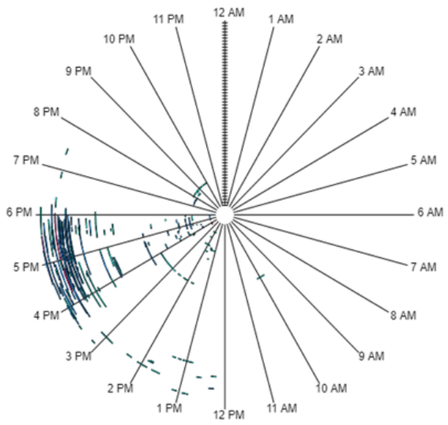
Time
4-6 PM

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.



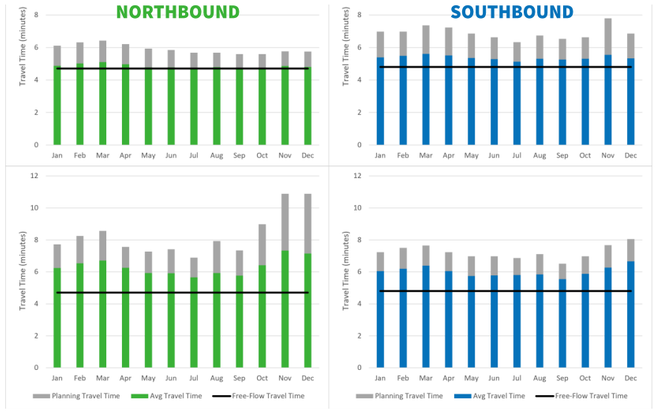
US 41 at Immokalee Rd – Facing North



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.

Average Weekday Travel Times & Reliability



Estimated Traffic Delay Costs

Lowest cost — Highest cost; Data Unavailable

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

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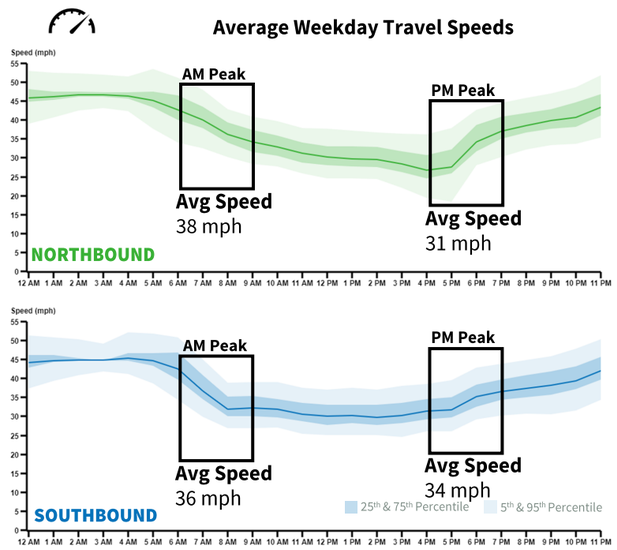
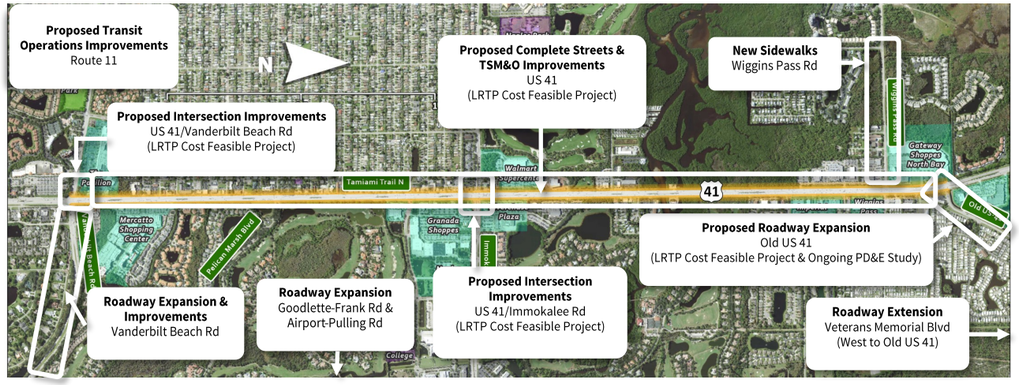
Congestion Throughout the Day...

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 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 that trips home during the PM peak period.

Average Weekday Travel Speeds



What Improvements Are Planned for This Corridor?



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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 establishing a new regional Bus Rapid Transit (BRT) or Express Bus service along US 41, along with 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*

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:

LINC — LinC Lee-Collier
R11 — US 41 to Creekside Commerce Park
R12 — Airport Rd to Creekside Commerce Park
R27 — Immokalee Road

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PLANNING ORGANIZATION

Collier County's Congestion Hotspots

CR 896 / Pine Ridge Rd

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

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Collier MPO
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(239) 252-5814

Collier County's Congestion Hotspots

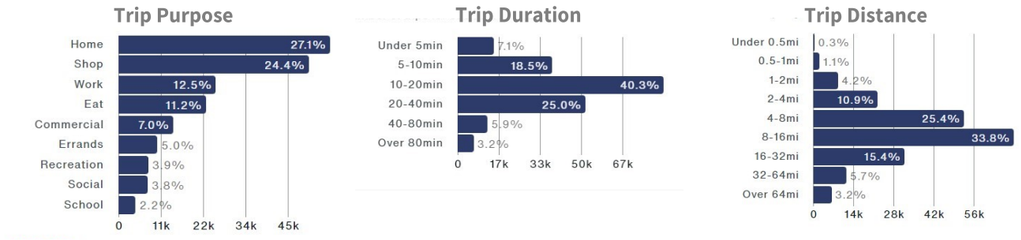
CR 896 / Pine Ridge Rd (From CR 851 / Goodlette-Frank Rd to I-75)

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

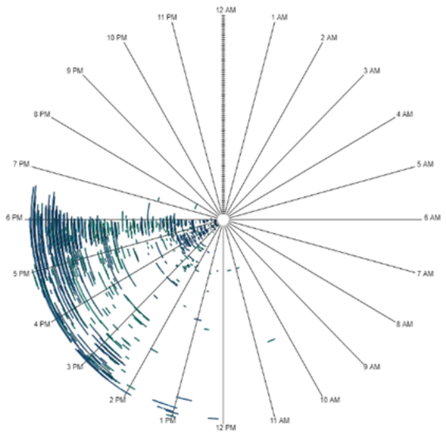
Location
Approaching Livingston Rd

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.

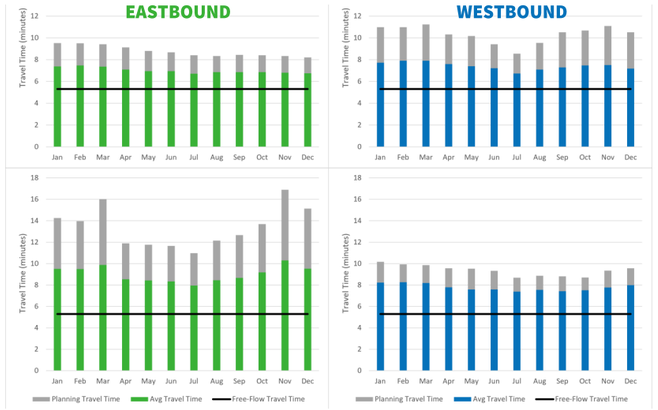
Pine Ridge Rd at Livingston Rd – Facing West



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 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.

Average Weekday Travel Times & Reliability



Estimated Traffic Delay Costs

Lowest cost — Highest cost; Data Unavailable

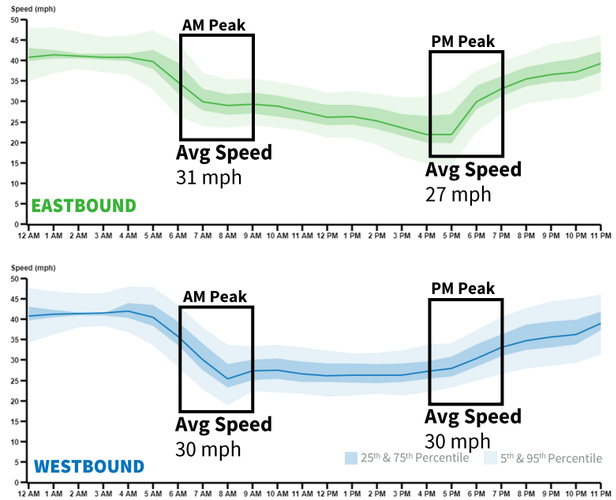
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	$$$	$$$	$$$	$$$								
2021	$$$	$$$	$$$	$$	$$	$$	$	$	$$	$$	$$$	$$$
2020	$$$$	$$$$	$$$	$	$$	$$	$$	$$	$$	$$	$$	$$$
2019	$$$	$$	$$	$$	$$	$	$$	$$$	$$	$$$	$$$$	$$$$

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.*

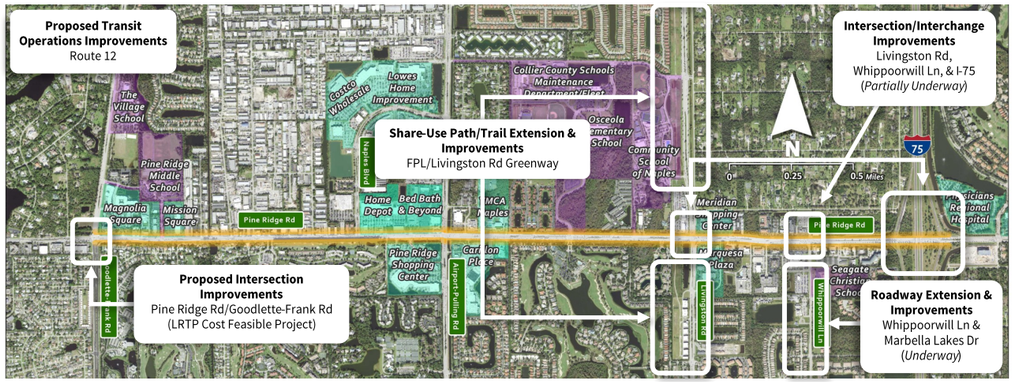
Congestion Throughout the Day...

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 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 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 feasibility of constructing additional turn lanes or extending existing storage capacity for accessing Osceola Trail from both directions to accommodate spikes in school traffic*
- *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:

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

RideCAT.com

How Do I Get Involved?

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COLLIER METROPOLITAN
PLANNING ORGANIZATION

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?

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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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Collier County's Congestion Hotspots

CR 862 / Vanderbilt Beach Rd (From CR 31 / Airport-Pulling Rd to CR 881 / Livingston Rd)

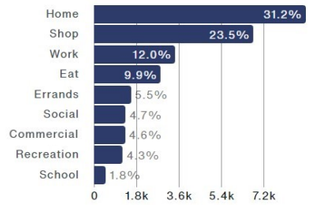
Quick Facts

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

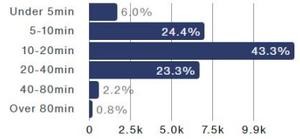
~3 min
Avg. Daily Duration of Bottleneck Conditions

~2k
Annual Vehicle Hours of Delay

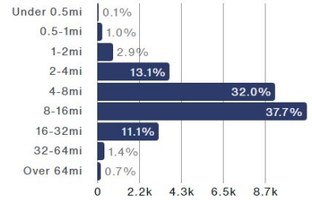
Trip Purpose



Trip Duration



Trip Distance



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?

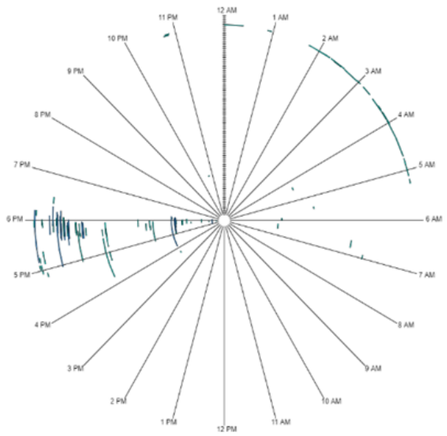
Direction
Eastbound

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.

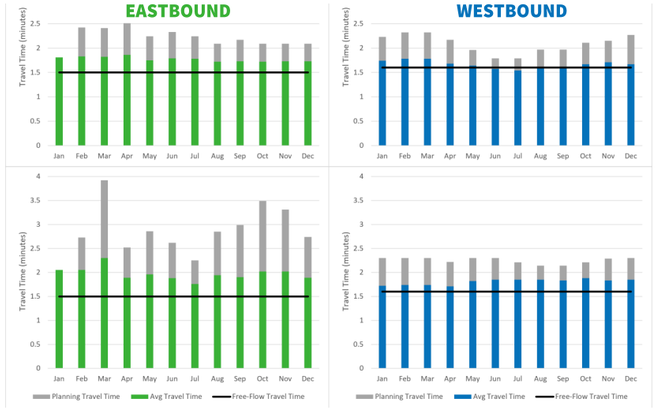


Vanderbilt Beach Rd at Livingston Rd – Facing West

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.

Average Weekday Travel Times & Reliability



Estimated Traffic Delay Costs

Lowest cost — Highest cost; Data Unavailable

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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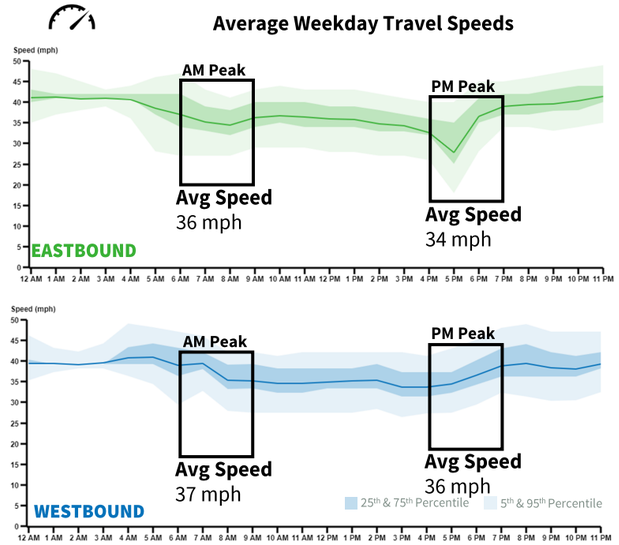

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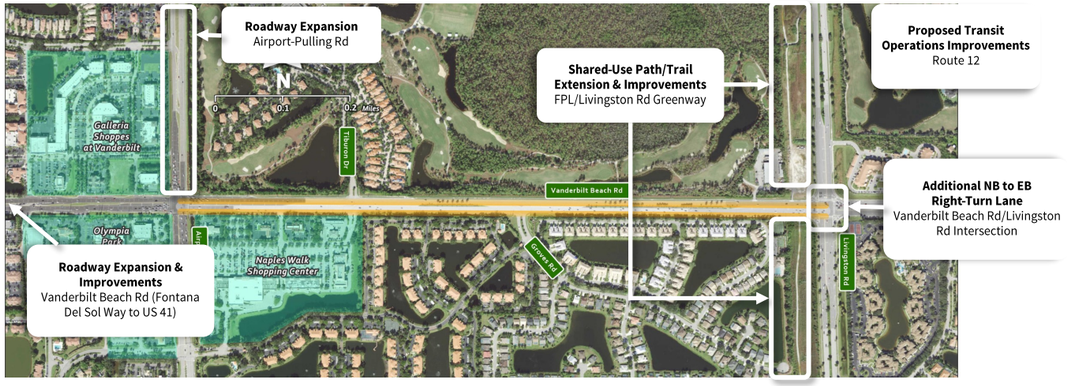

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- *Evaluate the feasibility of a new interchange at Vanderbilt Beach Rd and I-75*
- *Consider upgrading non-motorized crossing facilities on the west side of the Livingston Rd intersection to improve safety conditions and accommodate additional greenway 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*
- *Provide funding assistance for promoting existing car/vanpool awareness and app availability*
- *Evaluate the feasibility of adding capacity to Orange Blossom Dr to serve as an alternative route for accessing Livingston Rd*
- *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 similar to the analysis conducted during the Pine Ridge Road Congestion Study*

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COLLIER METROPOLITAN
PLANNING ORGANIZATION

Collier County's Congestion Hotspots

CR 862 / Vanderbilt Beach Rd

(From CR 901 / Vanderbilt Dr to US 41 / Tamiami Trail)

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Collier County's Congestion Hotspots

CR 862 Vanderbilt Beach Rd (From CR 901 / Vanderbilt Dr to US 41 / Tamiami Trail)

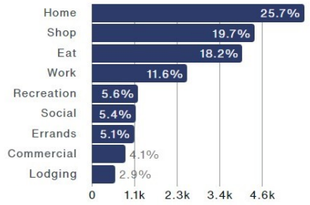
Quick Facts

Corridor Length: 1 Mile
Number of Major Intersections: 4
Number of Daily Trips (Avg. Weekday): ~22k

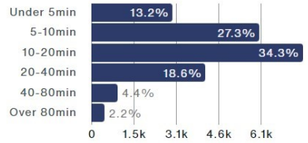
~2 min
Avg. Daily Duration of Bottleneck Conditions

~1k
Annual Vehicle Hours of Delay

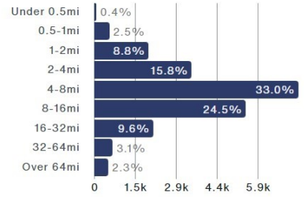
Trip Purpose



Trip Duration



Trip Distance



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.

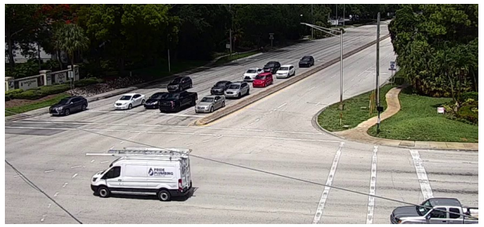
When is Congestion Usually the Worst?

Direction
Eastbound

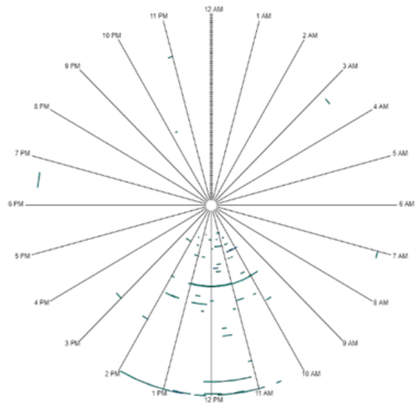
Time
11AM- 4PM

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.



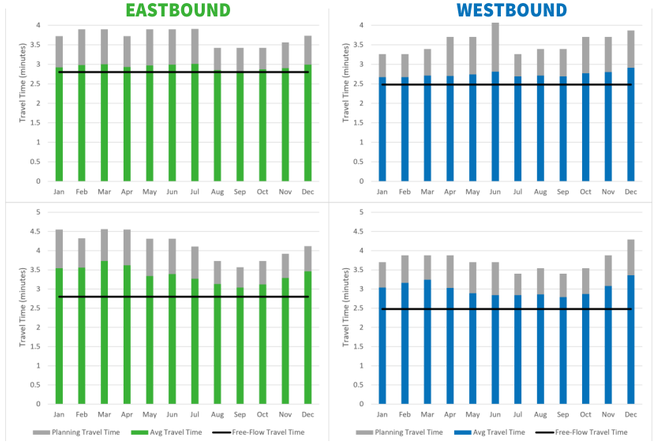
Vanderbilt Beach Rd at US 41 – Facing West



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.

Average Weekday Travel Times & Reliability



Estimated Traffic Delay Costs

Lowest cost — Highest cost; Data Unavailable

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

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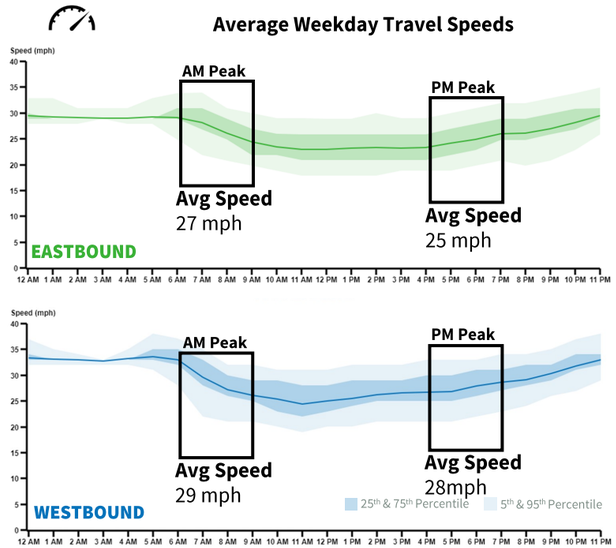
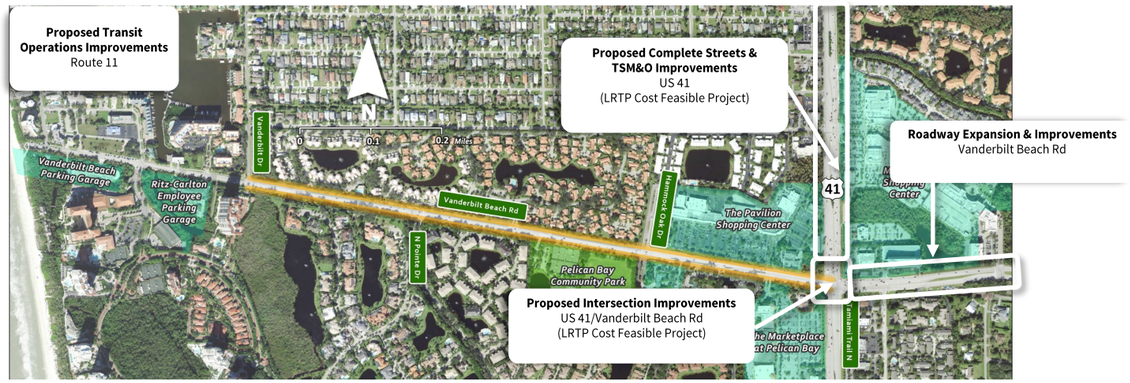
Congestion Throughout the Day...

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. 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 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 Parking Garage and/or the Ritz-Carlton Employee Garage*

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:

R11 — US 41 to Creekside Commerce Park

RideCAT.com

How Do I Get Involved?

If you want to learn more about the Collier MPO's efforts to improve our transportation system, please visit our website: *www.colliermpo.org*

We want to hear your feedback!

COLLIER Metropolitan Planning Organization

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