#### **Transportation Supporting Data**

The purpose of the Transportation Element is to plan for future motorized and non-motorized traffic circulation systems that ensure provision of adequate transit, circulation, and parking facilities to meet future University needs. Additionally, this element is to ensure the provision of adequate pedestrian and non-vehicular circulation facilities to meet the future needs of the University; and to coordinate the location of these facilities planned in the host community in the context area. For purposes of the Campus Master Plan, non-vehicular is meant to be foot powered transportation, mainly bicycles.

#### TRANSIT, CIRCULATION, AND PARKING SUB-ELEMENT

#### Introduction

To analyze the transportation element of the Florida State University Master Planning effort, the Florida Board of Governors in Guidelines for the Comprehensive Campus Master Plan System<sup>1</sup> outlines the effort to consist of the three primary parts: parking, transit, and circulation. This analysis follows the Guideline for both the Tallahassee and the Panama City Campuses.

#### **1.** Data Requirements

#### **1.a.1** Inventory of Existing Campus Parking Facilities

Florida State University provides (in the year 2020) over sixteen thousand parking spaces for students, faculty, staff, visitors, and commercial vehicles within the core campus. The Tallahassee Campus Southwest provided approximately two thousand more parking spaces. Parking within the University is divided into areas designated by certain permit categories.

Areas designated "R" or "Red" for faculty or staff parking with White ("W") parking designated for student parking. Other categories of parking include motorcycle, handicap, state reserved, loading zone, service, and pay (visitor/metered).

The current location and quantity of parking by permit category and University quadrant is presented respectively, in **Table 11.1** and **Figure 11.1** (Existing parking at FSU facilities at the Tallahassee Campus Southwest are shown on **Figure 11.2**.).

<sup>&</sup>lt;sup>1</sup> Florida Board of Regents. Guideline for the comprehensive Campus Master Plan System. Unpublished, 1993.

 i invaluable i arming opaces of	renne category (restaary 2020)		
Permit Type	Tallah. Campus (Main)	Tallahassee Campus SW	
Faculty/Staff	3,661	0	
Student	8,050	0	
Shared Parking	2,826	744	
Disabled	461	27	
Other (Service, Disabled, Etc.)	1,034	1,168	
Total	16,032	1,939	

Table 11 1 - Available Pau	rking Snaces hy Permit	Category (February 2020)
Table 11.1 - Available I al	I KINg Spaces by I clinit	Category (represented to $2020$ )

Source: Office of Parking & Transportation Services, 2020

In 2010, there were 15,469 spaces on campus, and this figure has increased to 17,971 spaces in the 2019-20 academic year, in part due to the completion of a new parking garage in the southwest quadrant of the Tallahassee Campus.

#### 1.a.2 Special Events Parking

The university handles special event parking on campus, for non-athletic events. For a fee, visitors may purchase a one-day university parking pass to attend special events. The Seminole Boosters, Incorporated coordinates parking for sporting and other alumni events. Events that draw unusually large crowds use the Tucker Center parking lot.

Ancillary parking is also available by private landowners on vacant lots surrounding the university ranging in price from approximately five to twenty dollars per event. Price varies based upon location and total demand for parking.

#### 1.a.3 Inventory of Surface and Multi-Level Parking (Context Parking)

Context parking contributes a significant amount of additional parking within the university campus area. Parking in each quadrant is either on street metered, on street unmetered, pay lots not maintained by the city or reserved for select fraternities/sororities.

Recent field inspections indicate context parking adds another 5% above available university parking inventory on the core Tallahassee Campus. As land available for parking within the University is consumed, parking facilities provided by the surrounding community will likely increase on a "for profit basis."

A significant amount of non-campus parking is found in the southeastern quadrant, but context parking availability has declined somewhat from previous master plan updates

in the area north of Tennessee Street. This is due to removal of some on-street parking and conversion of vacant lots once used as makeshift parking to other development or to enforce unauthorized parking. The 732 parking spaces at the Tucker Center, however, are no longer included in context area count, as they are counted as part of the Tallahassee Campus proper. Faculty, staff and students with valid permits may use the spaces during weekdays. There is not overnight and weekend parking at the Tucker Center Parking lot and spaces may not be available during special events.

Please note **Table 11.2** details the amount of context parking within each quadrant of the University. **Figure 11.3** depicts the location of context parking within each quadrant.

18 spaces
215 spaces
0 spaces
577 spaces
810 spaces

 Table 11.2 - Context Parking (spaces)

Source: FSU Staff 2020 field inspections

It should be noted that in recent years, on-street metered parking has been removed from Jefferson Street (Copeland-Woodward), College Avenue (Copeland-Macomb), and Learning Way.

#### 1.b Inventory of Off-Campus Parking

Currently, Florida State University does not have or use any off-campus lots for remote parking, except for lots owned by Seminole Boosters, Inc. or other University affiliated organizations. Properties that have been added to the University from the State of Florida over the past two decades (see **Figure 4.9**) contain parking that will serve those individual properties. In some cases, these may not have been added to the context parking nor the existing parking for the core Tallahassee Campus.

#### 1.c Inventory of Accident Location

**Table 11.3A** and **Table 11.3B** detail a comparison of automobile accident data for the context area and campus locations for the periods: (a) 2002 and 2019 and (b) 2014 and 2019, respectively. As noted, some locations have experienced an increase in accidents,

while others have seen a decrease in accidents. Crime statistics for incidents occurring on the Florida State campuses is maintained by the Florida State University Police Department. Information relating to these statistics can be found on the FSU Police Department webpage at the following address: <u>http://www.police.fsu.edu/</u>.

Street	Segment	Mid-Block		Intersection		Unidentified	
		2002	2019	2002	2019	2002	2019
Brevard Street	Tennessee to	6		13			
	Woodward						
Stadium Drive	Tennessee to Call	1		0			15
Call Street	Stadium (formerly Bryan) to Macomb	5		10			
College Avenue	Copeland to Macomb	7		9	1		
Copeland Avenue	Tennessee to Gaines	2	7	53	7		
Gaines Street	Stadium to Macomb	9	1	20	1		
Heritage Grove Cir.			3				
Jefferson Street	Pensacola to Macomb	9	3	20	11		
Lake Bradford Rd.			1				
Levy Avenue			2				
Lorene Street					1		
Macomb Street	Tennessee to Gaines	7	9	75			
Madison Street	Woodward to Macomb	4	3	3	3		
Paul Dirac			3		1		
Park Avenue	Copeland to Macomb	4		6			
Pensacola Street	Hayden to Macomb	38	10	57	9		
Pottsdamer			2				
St. Augustine Street	Stadium to Railroad	5		39			11
Tennessee Street	Stadium (formerly	81		141			11
	Bryan) to Macomb						
Woodward Avenue	Brevard to Gaines	11		63	1		
Totals		203	44	537	30		22

#### **2020 UPDATE**

#### **SUPPORTING DATA 11** Transportation

Street	Segment	Mid-Block		Intersection		Other or Unidentified	
		2014	2019	2014	2019	2014	2019
Call Street	Stadium to Macomb		13		8		
Champions Way			17				
Chieftan Way	Pensacola to Academic	10	13	10	2		
Collegiate Loop	Collegiate Loop to Collegiate Loop	2		0	1		
College Avenue	Learning Way to Macomb	1		1	1		
Dewey Street	Tennessee to Call	1	1				
Honors Way	University to Macomb	0	1	2	1		
University Way	Collegiate Way (formerly Jefferson) to Dead End	2		3			9
Hull Drive	Academic to Dead End	0	2	0			
Convocation Way	Call to University	1		3	1		
Collegiate Loop	University to Collegiate	0	4	0	1		
Academic Way	Hull to Dewey	6	10	9			
Traditions Way (formerly Park Avenue)	Woodward to Wildwood (Learning Way)	0		0			17
University Way	Loop	2		3			
Varsity Drive	Wildwood to Dead End	0		6			3
Learning Way	Jefferson to Woodward	0	2	1		1	
Spirit Way			9				
Walker Dr.							9
Woodward Ave.	Tennessee to Pensacola	19		12			
Woodward North	Tennessee to dead end						28
Woodward South	Traditions to Pensacola						6
Totals		44	72	50	15	1	72

#### Table 11.3b - FSU Main Campus Accident Data Comparison (2014 vs. 2019)

Of note are the increases in accidents over the study period along Champions Way, Traditions Way, Woodward North, and Call Street.

#### SUPPORTING DATA

#### **11** Transportation

#### 1.d Existing Campus Roadway Classification

The existing campus roadway classifications as identified in the Tallahassee-Leon County 2020 Comprehensive Plan are shown in **Figure 11.4**.

#### 1.e Existing Context Roadway Classification

The existing context roadway classifications as identified in the Tallahassee-Leon County 2020 Comprehensive Plan are shown in **Figure 11.5**. (The roadways at the Tallahassee Campus Southwest are depicted in **Figure 11.6**.)

#### 1.f Level of Service

There are several roadways on the campus that exclusively serve university generated trips. Roadways in this category include Chieftan Way, Learning Way, Academic Way, Collegiate Loop, Honors Way, Convocation Way, University Way, Traditions Way, and sections of Park Avenue, Call Street and College Avenue.

Chieftan Way is the primary north/south route devoted to the University. It provides connections between the sports complexes of the University and Moore University Center. Parking for the Leach Center, the Stone Education Building and the Natural Science buildings are accessed from Chieftan Way.

Learning Way forms a C-shape partial loop, connecting Jefferson Street with Woodward Avenue. Learning Way serves as the access road for the Coburn Wellness Center, the Askew Student Life Building, parking lots, and the Mendenhall Maintenance Building. The intersection of Learning Way with Woodward Avenue has been closed to vehicular traffic, except for service deliveries to the Central Utility Plant.

Collegiate Loop provides access to the Strozier Library, Landis Green, Thagard Building and Montgomery Hall. A two-way road at its southern end, Collegiate Loop becomes part of a one-way circle with Collegiate Loop to the west. Street parking as well as parking lots can be accessed via Collegiate Loop. Academic Way parallels Tennessee Street from Murphree Street to Dewey Street. Notable features of Academic Way include on-street parking, transit stop, a pedestrian access tunnel under Tennessee Street, and an underpass at Woodward Avenue. A recently lowered roadbed at Woodward Avenue overpass provides greater vertical clearance to allow larger service truck access.

On the east side of Woodward Avenue, Traditions Way provides access to Traditions Way Garage (Garage No. 2).

Honors and Convocation Ways are north/south routes connecting University Way with Call Street. Both roads travel through the oldest part of the campus with limited on-street parking. These roads provide the access for the center of the campus for service and deliveries as well. Vehicular traffic on Honors Way is restricted to service vehicles.

Florida State University is bordered to the north by Tennessee Street, a six-lane divided State/Federal principal arterial. The City of Tallahassee Comprehensive Plan establishes the level of service for Tennessee Street in the vicinity of the campus as LOS "E." The capacity of this roadway varies between 2,000-2,800 vehicles per hour per direction.

Macomb Street borders the Tallahassee Campus to the east. Macomb has been widened to four lanes and connects to Old Bainbridge Road north of Brevard and to Railroad Avenue south of Pensacola Street. Current (December 2018) PM peak hour peak direction traffic volume is just under 900 vehicles per hour per peak direction. The road is projected to carry higher traffic volumes in the future.

Six roads serve the Tallahassee Campus to the south; Jefferson Street, Pensacola Street, Saint Augustine Street, Gaines Street, Lafayette Street, and Madison Street. Jefferson Street, the historical southern boundary of the campus, is a two-lane Minor Collector with an adopted level of service "E." Pensacola Street and Saint Augustine Street is a pair of one-way roads from Stadium Drive to Monroe Street in downtown Tallahassee and are classified as Minor Arterials (this included Madison Street east of Macomb Street.) Providing 2-3 through lanes each, both roads have an adopted level of service "E. Madison Street in the vicinity of the University is a two lane Minor Collector. Pensacola St. and Saint Augustine St. have incorporated protected bike lanes within the right lanes. Protected bike lanes provide more space and physical separation between the bike lane and vehicle lane compared with standard striped bike lanes.

The southernmost road to border the Tallahassee Campus is Gaines Street. A minor arterial, Gaines Street is the subject of a recently completed City of Tallahassee reconstruction. The reallocation of roadway space on Gaines Street from four lanes to two lanes, now includes bike facilities, wide sidewalks, and extensive landscaping to serve as a border between Florida State University and Florida A&M University, and to serve the university community commercial needs.

Bisecting the east campus from the west campus, Woodward Avenue is closed to through

traffic from Call Street to Traditions Way. Woodward currently serves as a means of access to Woodward Garage (Garage No. 1) located near Tennessee Street (for motorists on north Tallahassee Campus) and Traditions Way (Garage No. 2) located on Traditions Way (for motorists on south Tallahassee Campus).

Stadium Drive begins at the Jefferson Street/Pensacola Street intersection, traversing the southern end of the Stadium and terminating at Call Street (Stadium Drive). This roadway was improved and widened as part of the Pensacola Street bridge closure. Stadium maintains six-lanes from Lake Bradford Road to Pensacola Street, and four-lanes from Pensacola Street to Tennessee Street, where it is called Stadium Drive north of Call Street. The adopted level of service for Stadium Drive is "E."

#### 1.g Traffic Counts

The City of Tallahassee, Leon County, and Florida Department of Transportation provide annual traffic counts on many roadways near campus and are presented in **Table 11.4.** There are two different years because they do not capture every intersection at one time. The 2015 and 2018 data from the City of Tallahassee Traffic Engineering Department was used to document turning movement counts (TMCs). The TMC's are shown in **Figures 11.7 - 11.10.** 

Roadway	Section	2016 Daily Volume	2018 Daily Volume
Tennessee Street	Woodward to Call	41,000	41,500
	Woodward to Copeland	38,500	40,500
Call Street	West of Convocation Way	N/A	N/A
College Avenue	East of Copeland	N/A	N/A
Copeland Street	St. Augustine to Brevard	7,300	8,600
Gaines Street	Woodward to Railroad	21,500	21,400
	Macomb to MLK	21,800	19,700
Jefferson Street	West of Gray	N/A	N/A
Macomb Street	Brevard to Pensacola	17,600	18,700
Madison Street	West of Gay	N/A	N/A

#### Table 11.4 - Existing Traffic Volume Count Summary

### SUPPORTING DATA

**11** Transportation

Roadway	Section	2016 Daily Volume	2018 Daily Volume
Pensacola Street	Stadium to Ocala	31,500	34,000
	Macomb to Lorene	6,900	8,100
	Macomb to Duval	4,900	5,000
St Augustine St.	Varsity to Woodward	9,800	9,900
	Woodward to Adams	8,000	8,600
Stadium Drive	Tennessee to Lake Bradford	19,400	19,500
Woodward Avenue	Learning to Gaines	16,200	15,500

2016 and 2018 COT and FDOT Traffic Counts

https://www.arcgis.com/home/webmap/viewer.html?layers=562a5696d62f4496a303380ae2f82e62

As detailed in Table 11.4, traffic volumes on some roadway segments have remained relatively stable, while some have increased. Stadium has remained stable while Gaines and southern portion of Woodward has even trended slightly downward. Tennessee, Copeland, Macomb, Pensacola and St. Augustine exhibit some uptick in traffic volume. Pensacola and St. Augustine increased traffic is likely due to increased development of private student residences, associated services, and entertainment facilities.

#### 1.h Existing University Trip Generation

It should be noted that the Tallahassee-Leon County Planning Department, in part, bases trip counts based on new construction square footage along with the associated building type. Nevertheless, calculations for trip rates based on the State University System Transportation Study (SUSTS) used in previous versions of the Master Plan is provided below for comparison purposes. Traditionally, it has been the basis for calculating traffic generation for university campuses statewide. This study documented the trip generation and travel characteristics at 14 university campuses, including FSU. The study calls for trip generation for the University and is based on enrollment, employment, visitor, and service traffic calculations.

The primary results or products of the study were estimated auto trip rates (external), auto occupancies, and average trip lengths (external) for both students and employees (faculty/staff). At FSU, these characteristics are presented in **Table 11.5**.

Population	Auto Trip Rate <sup>1</sup>	Auto Occupancy <sup>2</sup>	Average Trip Length <sup>3</sup>
Students (Headcount)	1.52	1.27	2.96
Faculty/Staff	3.21	1.24	4.99
Dormitories	2.40	1.27	2.96

1 – Number of vehicle trip ends per day

2 - Persons per vehicle

3-Miles

The students and faculty/staff populations represent the independent variable regarding trip generation for the campus. Regarding on-campus housing or dormitories, the trip generation related to this land use is based on a Group Quarters land use from standard transportation models used throughout the state. A rate of 4.0 person trips/unit or bed is assumed, with a 60% person trips by auto usage rate. This yields the 2.40 auto trips/bed or 1.89-vehicle trips/bed after applying the auto occupancy rate of 1.27.

To determine the total auto trip generation associated with the campus populations, a direct application of these rates to *population totals* (headcounts) was prepared. **Table 11.6** presents the Fall 2019 external auto trip generation for the FSU Campus. It should be noted that the headcount shown may likely be higher than actual, due to some members of the population being counted multiple times i.e. a staff member may also be a part time student.

Population	Size	Auto Trip Rate (Trips/Day)	Auto Occupancy (persons/auto	Average Daily Trips
Students	42,876	1.52	1.27	51,316
Faculty/Staff*	15,096	3.21	1.24	39,079
Dormitories	6,707	2.40	1.27	12,675
Visitor/Service**				8,988
University Totals		112,058		

Table 11.6 - External Auto Trip Generation:By Population Totals (Fall 2019 Headcount Enrollment)

\*Faculty/Staff Size: from the 2019 FSU Fact Sheet/Fact book https://ir.fsu.edu/facts.aspx

#### SUPPORTING DATA

#### **11** Transportation

Includes Lab School, Branch Campuses and sites. Includes student assistants, grad assistants, work study and other student employees.

\*\*Visitor/Service trips are estimated at + 23% of Faculty/Staff trips.

#### 1.i **Existing TAZ Identification**

A map diagramming the existing Traffic Analysis Zones (TAZs) for the University is shown in Figure 11.11.

#### **Transit Route Identification** 1.j

The Seminole Express Bus service consists of several routes. Renegade, Garnet, Heritage, Tomahawk, Innovation, Gold and Osceola operate Monday-Friday 7am-8:00pm during the Fall and Spring Semesters. These routes circulate through the Tallahassee Campus as well as travel off campus to other student-oriented areas, particularly including Student Housing. The Nite Nole operates Tuesday - Saturday in the Fall and Spring semesters from 10:30pm - 3:00 am. Figure 11.12 depicts the Seminole Express Bus routes.

#### Ridership

Seminole Express and Off-campus FSUCard ridership data is maintained by FSU Parking & Transportation Services through data received by StarMetro. Annual ridership for the 2019 calendar year is presented in **Table 11.7**. Based on the figures presented, the impact of transit on internal campus automobile trip generation is quite substantial. All students, faculty and staff may ride any StarMetro bus throughout the City of Tallahassee for free by swiping a valid FSUCard.

#### Table 11.7 – StarMetro FSU Ridership

January 1, 2019 – December 31, 2019			
<b>Bus Service</b>	Total		
Off-Campus w/FSU Card	56,958		
Night Nole	19,645		
Seminole Express	737,546		
FSU Orientation	6,625		
TOTAL	820,774		

31 3010

Source: FSU Transportation and Parking Services and StarMetro 2020

StarMetro and University staff members evaluate the individual routes and total service regularly in order to maximize the ridership and increase satisfaction.

#### 2 Analysis Requirements

#### 2.a. Future Parking Needs Analysis

Future parking facilities were calculated based on the 2025 and 2030 *Final* master plan layout. **Table 11.8** presents a comparison of existing Tallahassee Campus parking, by quadrant as of periods 2019-20 (**Figure 11.1**), and future parking estimates for 2025 and 2030.

rubie 1110 - Fundhubbee Cumpub Existing und Future Furn							
	YR 2019-2020	YR 2025	YR 2030				
Northwest Quadrant	5,713	5,713	5,486				
Northeast Quadrant	3,093	3,093	3,093				
Southwest Quadrant	3,714	3,604	3,604				
Southeast Quadrant	3,512	3,447	3,345				
TOTAL	16,032	15,857	15,528				

 Table 11.8 – Tallahassee Campus Existing and Future Parking Inventory (spaces)

Source: Subconsultants Nelson\Nygard "Leading with Vision, Campus Master Plan" 2020 by Perkins and Will, reference email from Thomas Brown (Nelson\Nygard) to Laurie Thomas (FSU Facilities) on 27 May 2021. Email from Kevin Graham to Laurie Thomas on 25 January 2021.

#### 2.b Required Land Area Analysis

The Campus Master Plan for the core Tallahassee Campus seeks to maintain current campus parking inventory, providing replacement parking as parking lots are used for building sites. The Campus Master Plan projects a reduction of 175 parking spaces by 2025 and 504 spaces by 2030 due to new building construction on the core Tallahassee Campus. **Table 11.9** details the needed land (acres) requirements for future parking facilities, to address this parking shortfall and maintain current level of parking. Given the scarcity of land on the core Tallahassee Campus, the addition of new parking space inventory is primarily in the form of parking garages.

Facility Type	Mitigation of Parking Shortfall	Spaces Per Area of Coverage	Land Area Required
Parking Garages	175/504	600 sp/acre	0.29/0.84 acres
Surface Parking	175/504	125 sp/acre	1.4/4.0 acres

#### Table 11.9 – Tallahassee Campus Future Parking Acreage Req'd (2025/2030)

It should be noted that the above parking inventory is based on estimated and generalized parking facility layouts. An average of 350 sf/space (surface lots) was assumed, however, actual parking facility size will vary based on parcel configuration, landscaping and other factors. However, these future space counts serve as a sound representation of the planned levels of parking.

#### 2.c Assessment of Campus Capacity

FSU's Transportation and Parking Services (TAPS) in its Strategic Plan states that the University does not have a parking supply problem. New parking will be provided only to replace existing parking and no new parking is needed on the campus. It should be noted that **Table 11.8** reveals a 4% reduction in parking spaces during this ten-year planning period for core Tallahassee Campus. This is due to the construction of new hotel in the Arena District, the Football Operations Facility, and the Veterans Legacy Complex, residence halls in the northwest quadrant of the core campus, all built on existing parking lots. Due to the minimal absorption of existing parking for projected new facilities in this planning period, it is unlikely this loss will be mitigated. If the university does decide to replace this parking, it is unlikely that a garage will be built. Solutions such as installing surface parking or arranging agreements to park in existing downtown parking garages may be considered.

#### 2.d Parking Reduction Analysis

It should be noted that FSU historically and currently continues to provide one of the fewest number of parking spaces per student than other campuses in the State University

System. On the core campus, currently 59% of parking spaces are dedicated to student parking (assuming half of the shared spaces will be used by students). The ratio of students per student permitted parking space is approximately 4.5-to-one, or 0.22 spaces/student. With a projected nearly level growth of student population and temporary parking shortfall ratio could dip to 0.21 spaces/student in 2030.

In regards to practical methods to reduce the amount of University parking needed, several goals, objectives and policies have been included to guide this outcome. Parking is dynamic in that *factors* such as supply, cost, auto ownership, transit service, lot location and access all play roles in determining the *demand*.

Policies contained in the Master Plan regarding these *factors* set a framework for addressing future parking at the university. Balancing the supply of parking with enhancements to alternative modes of travel (transit, bike, walking) is considered a key objective in the Master Plan. Policies for limiting parking supply within the campus core illustrate an approach to the *supply* side of the parking equation.

Regarding the demand side, policies supporting alternative modes of travel (Objective 1A) and Transportation Demand Management (TDM) techniques (Objective 1B) are also proposed. These objectives and related policies, combined with developing sound funding mechanisms (Objective 1C) strengthen the actual implementation of these policies, support pedestrian and bicycle policies, and further the university's vision for a walking and green space-oriented campus.

#### 2.e Analysis of Context Parking

As shown in **Figure 11.2**, approximately 810 spaces are currently available in the context area. The utilization rate of these spaces by university students, faculty/staff and visitors or the increase or decrease in supply is not quantified for future years. However, additional non-university "for fee" parking lots have been developed over the years near the campus. These lots generally provide proximate parking to the campus and do not consume university lands. In the future, lands currently used for parking lots are likely to be converted to higher and better land uses.

#### 2.f Analysis of Off-Campus Parking to Context Area

As presented in the goals, objectives and policies, the university is not planning the addition of university parking outside of the campus limits.

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### SUPPORTING DATA

#### **11** Transportation

#### 2.g Future Traffic Volumes/Analysis

Future Traffic volumes, both university and non-university related were prepared for the 2029-2030 academic year. As presented in the existing conditions section of this element (Section 1.h), *Population-based* estimates were used in the calculations of university related trips. **Table 11.11** detail the *population-based* trip generation for the Year 2030.

**Table 11.11** details the external auto trip generation for university in the Year 2030 using best available population projection of 2024 from Table 2.6 of this document. It should be noted that the future year enrollment population projections are headcount projection rather than full-time equivalent (FTE) students. Faculty/staff totals represent a pro-rata ratio similar to existing student to faculty/staff ratios.

#### Table 11.11 - Future External Trip Generation:

By Population Totals (2024 population projection and 2030	0
dormitory construction)	

Population	Size	Auto Trip Rate (Trips/Day)	Auto Occupancy (persons/auto)	Average Daily Trips
Student	41,600	1.52	1.27	49,789
Faculty/Staff*	15,096	3.21	1.24	39,079
Dormitories**	7,761	2.40	1.27	14,666
Visitor/Service***		•		8,988
University Totals				112,522

\*Faculty/Staff Size: Due to flat enrollment, will use the same as indicated in Table 11.6 \*\*Dormitories Bed Count completed in the 2026-2030 time frame

\*\*\*Visitor/Service trips are estimated at  $\pm 23\%$  of Faculty/Staff trips

Numbers remain flat, when comparing the 2020 trip generation levels with 2030 projections due to the relatively flat enrollment growth projected for the future.

#### 2.h Future Roadway System

The two components of the proposed FSU Master Plan roadway network for the Tallahassee Campus (Main District) are the *internal roadway system and an external roadway system (perimeter loop)*. These components are depicted in **Figure 11.14** and described as follows:

Internal Roadway System External Roadway System (Perimeter Loop)

#### **Internal Roadway System**

The Internal Roadway system is a series of existing and improved roadways which provide vehicular circulation inside the perimeter loop. The function of this roadway system is to carry a low volume of traffic for university purposes exclusively. Internal roadways will be used primarily by autos, service and transit vehicles. A combination of low volume and low speed will make the internal roadway systems pedestrian "friendly".

#### External Roadway System (Perimeter Loop)

The External Roadway System (*Perimeter Loop*) is provided by a series of connected roadways serving as a general boundary for the FSU campus. These roads are designed to carry a high volume of traffic to and around the University. These roads share functions with the host community and the university. The primary function of the External Roadway System for the host community will be the efficient movement of traffic bypassing the university. These roads will serve FSU by providing a conduit from the host community related traffic.

Perimeter Loop roadways include the following segments: **Gaines Street** (Macomb Street-Pensacola Street); **Stadium Drive** (Pensacola Street-Tennessee Street); **Tennessee Street** (Stadium Drive-Macomb Street) and **Macomb Street** (Tennessee Street-Gaines Street). The External Roadway System is designed as multi-lane arterials carrying a moderate to high volume of traffic at moderate overall speeds with traffic signals at major intersections.

#### 2.i Analysis of Future Roadway System

The analysis for the future roadway system is being undertaken using the City of Tallahassee's QRS II traffic model set, which uses the location of the university's parking facilities as the primary means to determine traffic demands on area roadways. This traffic model is also used for transportation concurrency review of development projects in the city and will be used to determine traffic assignment for purposes of negotiating a Campus Development Agreement (CDA) for the Master Plan.

For the purposes of this master plan update, the increase in university traffic from this

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update has been determined and presented in **Section 2.g** for the projected levels of students, faculty/staff, on-campus housing, and visitor/service vehicles.

Improvements to roadways, intersections, transit service, and/or bicycle/pedestrian facilities will be examined during the Campus Development Agreement update as potential mitigation for the 2029-2030 traffic levels.

#### 2.j Future Transit Service

As presented in **Section 1.j**, both campus level and local service level transit service exist today. In fact, ridership levels have continued to grow over the past years for both of these services. The *Goals, Objectives* and *Policies* of the FSU Master Plan outline a continued commitment and future enhancement to the existing transit service. Future transit concepts proposed in the FSU Master Plan are presented below and in **Figure 11.15**. These concepts outline the intent and general service area for future transit systems and service.

Transit systems operating in the university environment are divided into four (4) levels of service. These systems are based on the following categories:

Campus Circulator – Level 1 Remote Operations – Level 2 StarMetro – Level 3 Core Services – Level 4

#### **Campus Circulator (Level 1)**

Circulatory transit is the primary level of transit operating within the boundaries of the University. Level 1 transit is devised to transport or circulate students, faculty, and staff to/from perimeter campus activities to other campus locations and interface with other levels of transit service.

#### **Remote Operations (Level 2)**

The second level of transit service is direct transit between off-campus facilities, select campus locations, and private student-oriented housing. This system is designed to operate with minimal headways to specific, high demand campus destinations. The Heritage Grove shuttle service is an example of this level of transit. Level 2 transit will also service FSU remote activities (e.g., College of Engineering and shuttle services to

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FAMU).

#### StarMetro (Level 3)

Unlike the on-campus transit levels that are university specific services, Level 3 is operated by StarMetro and is part of the transit system of the larger Tallahassee region. StarMetro should continue to operate "fare free" service to students, with an expansion to include faculty and staff and future area developments. Existing StarMetro stops will generally remain the same with penetration into the campus only to the inner roadway system. Level 3 service will continue as the main transit service from the host community to the campus.

#### Core Services (Level 4)

Level 4 Core Services incorporate small-scale transportation services or vehicles to enhance mobility for the disabled, improve local on-campus traffic related to special events, and provide for transportation on-campus for activities such as campus tours. Future transportation improvements can be planned for in the Master Plan through planning for expanded widths of existing paths to accommodate future transportation needs and looking for candidate pathways that could be added to the campus to accommodate vehicles such as electric golf cart type vehicles.

#### 2.k Alternative Transportation Techniques

The FSU Master Plan outlines the envisioned future roadway, transit and parking systems. Initiatives regarding TDM strategies and other non-auto related travel options are also included in the plan. Objectives and policies detailing the coordination and joint participation activities (Objective 1B) are combined with policies regarding information exchange on TDM opportunities for student, faculty and staff set a framework to developed new programs and enhance existing University and host community initiatives.

Enhancements to transit systems (Objective 1A), roadway systems (Objective 2A and Objective 2B), and pedestrian/non-vehicular systems (Goal 4) are envisioned in the Master Plan. The development of detailed data regarding future housing locations, academic scheduling options, and monitoring programs are also considered important elements in the continued evaluation of University related travel characteristics and their interaction with the host community. An enhanced intergovernmental coordination initiative which includes community goal setting, data/resource sharing and area wide visioning between the City of Tallahassee, Leon County, State of Florida and Florida

Project Number 210012800 24 September 2021

#### SUPPORTING DATA

#### **11** Transportation

State University is considered important for the successful growth and enhancement of the University.

#### 2.1 Permit Description

Parking within the university is divided into areas designated by certain decal categories. Areas designated "R" or "Red" are for faculty or staff parking. White ("W") parking designates student parking. Other categories of parking include, Handicap, State Reserved, Loading Zone, Service, and Visitor/Metered. Students, faculty and staff are permitted to park in their designated lots only. After 4:00 pm all lots are open to anyone with a valid parking decal.

#### 2.m Fee Description

A limited number of metered parking spaces are provided at the campus. Approximately 140 metered spaces are available on the core Tallahassee Campus for visitors or parking permit owners at a cost of fifty cents (\$0.50) per hour. In 2000, the University instituted a Student Activity Fee for Transportation on a per credit hour basis for all students.

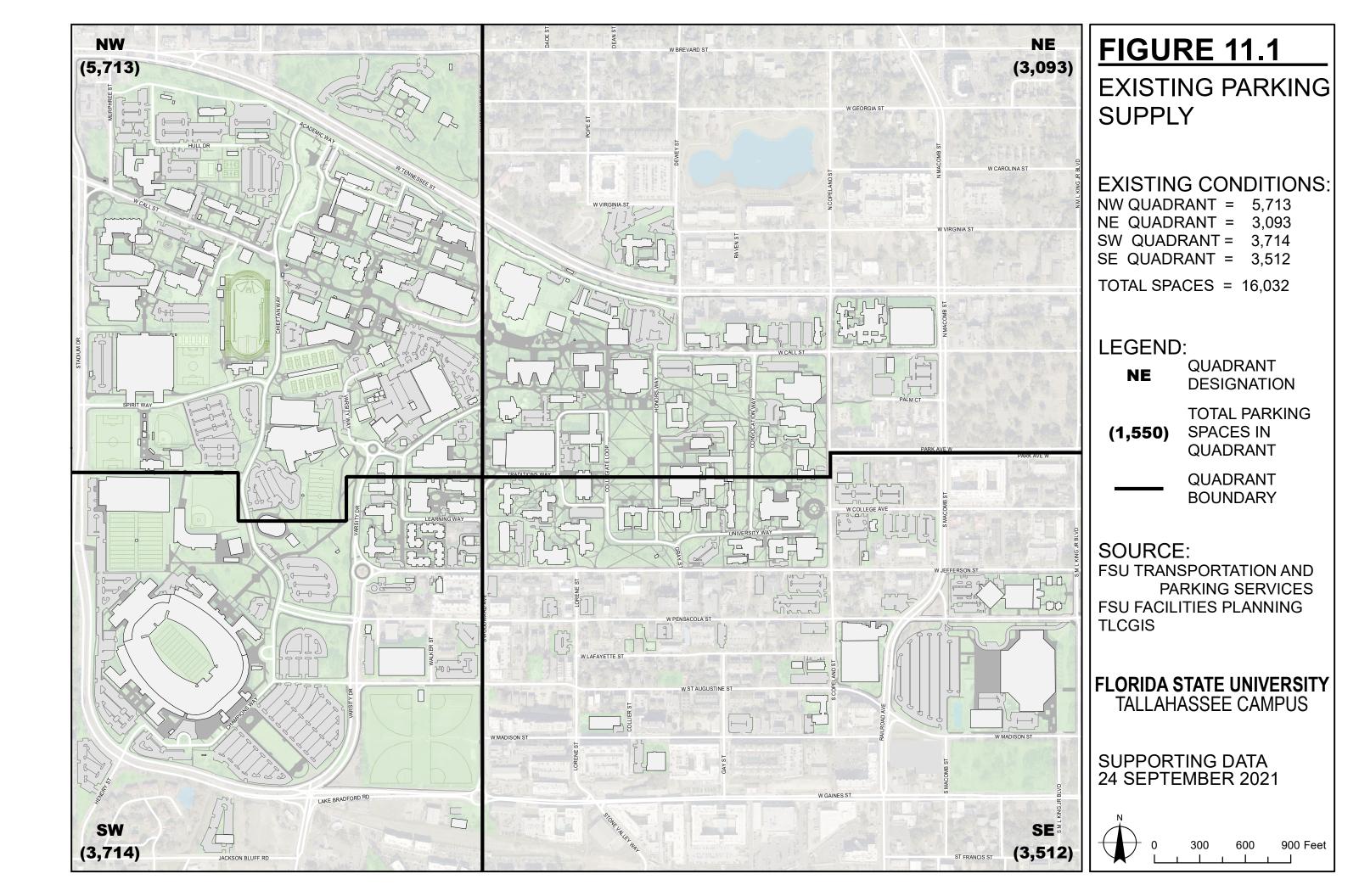
#### Conclusion

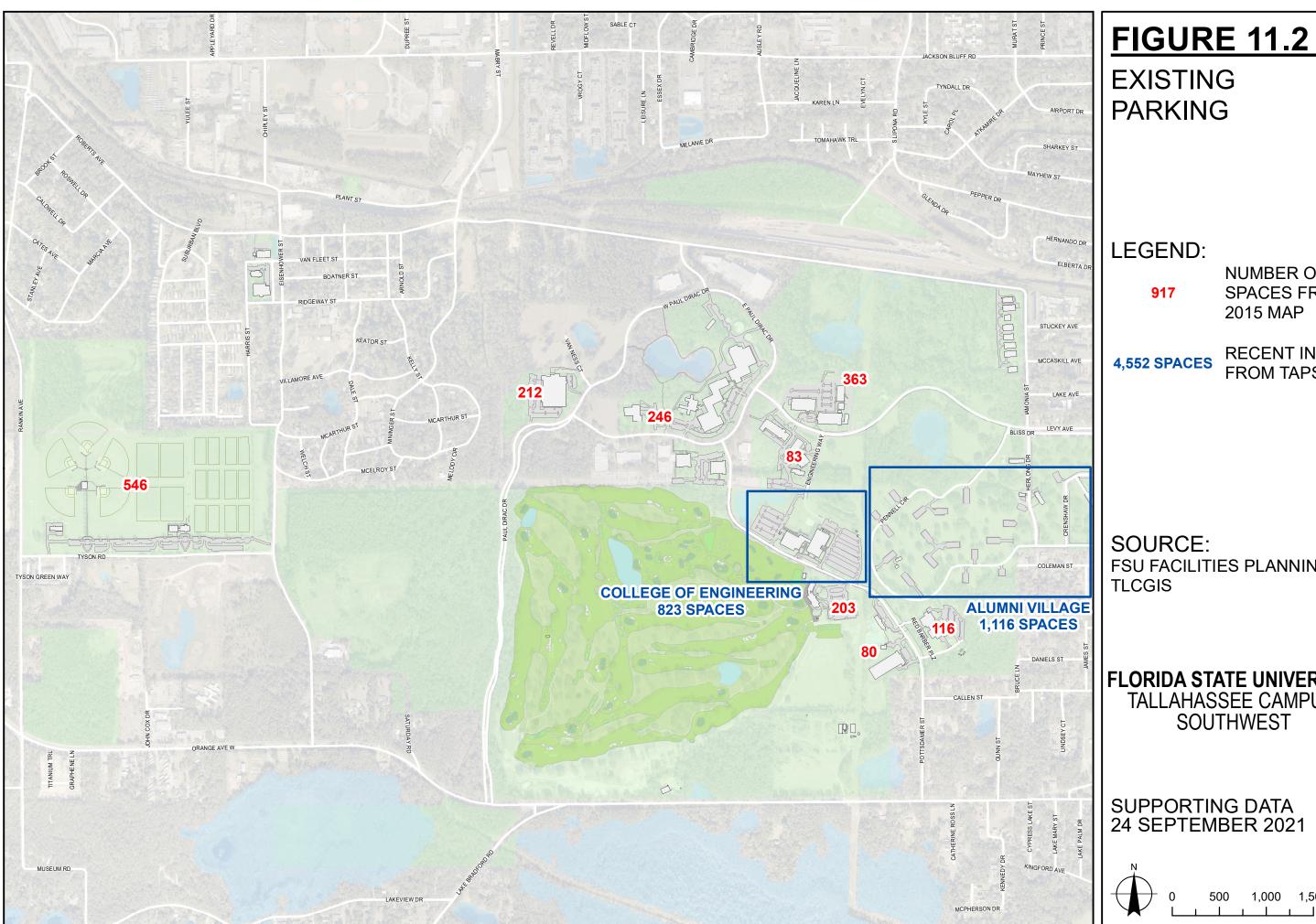
Originally developed in the age of horse and buggies, Florida State University's Tallahassee Campus provides unique opportunities and challenges for transportation planning. The campus of 1851, once isolated at the perimeter of the city, has grown into the fabric of Tallahassee. Campus parking, transit and circulation are complex issues intertwined with the development of Tallahassee. The Tallahassee Campus must find ways to ameliorate the impacts the campus and host community have on each other. This can be addressed by recognizing the following set of guidelines:

- Context parking satisfies a small portion of the total demand for parking. As the university grows and land becomes scarce, the context area may provide a larger proportion of the parking demand for the university. Parking policies should complement the development of a pedestrian and transit friendly campus.
- Transit provides a high level of mobility at Florida State University. It softens the impact of student, faculty and staff trips both within the campus and the host community. The University should promote policies to support increased use of transit services provided as well as policies that investigate transportation alternatives.

Roadways surrounding and traveling through the University are heavily traveled, including some that are currently or are projected to operate at or near locally established level of service standards. Circulation routes within and surrounding the university should be evaluated with safety, both vehicular and non-vehicular, as the first concern. The university must coordinate with local and state transportation decision makers to assure roadways in or near the university support safety, community, and aesthetic requirements.

Florida State University presents unique circumstances regarding transportation. It is an objective of the university to build upon its success in the transportation arena. The concepts and goals of the Florida State University Campus Master Plan enhance the commitment to achieving continued success.





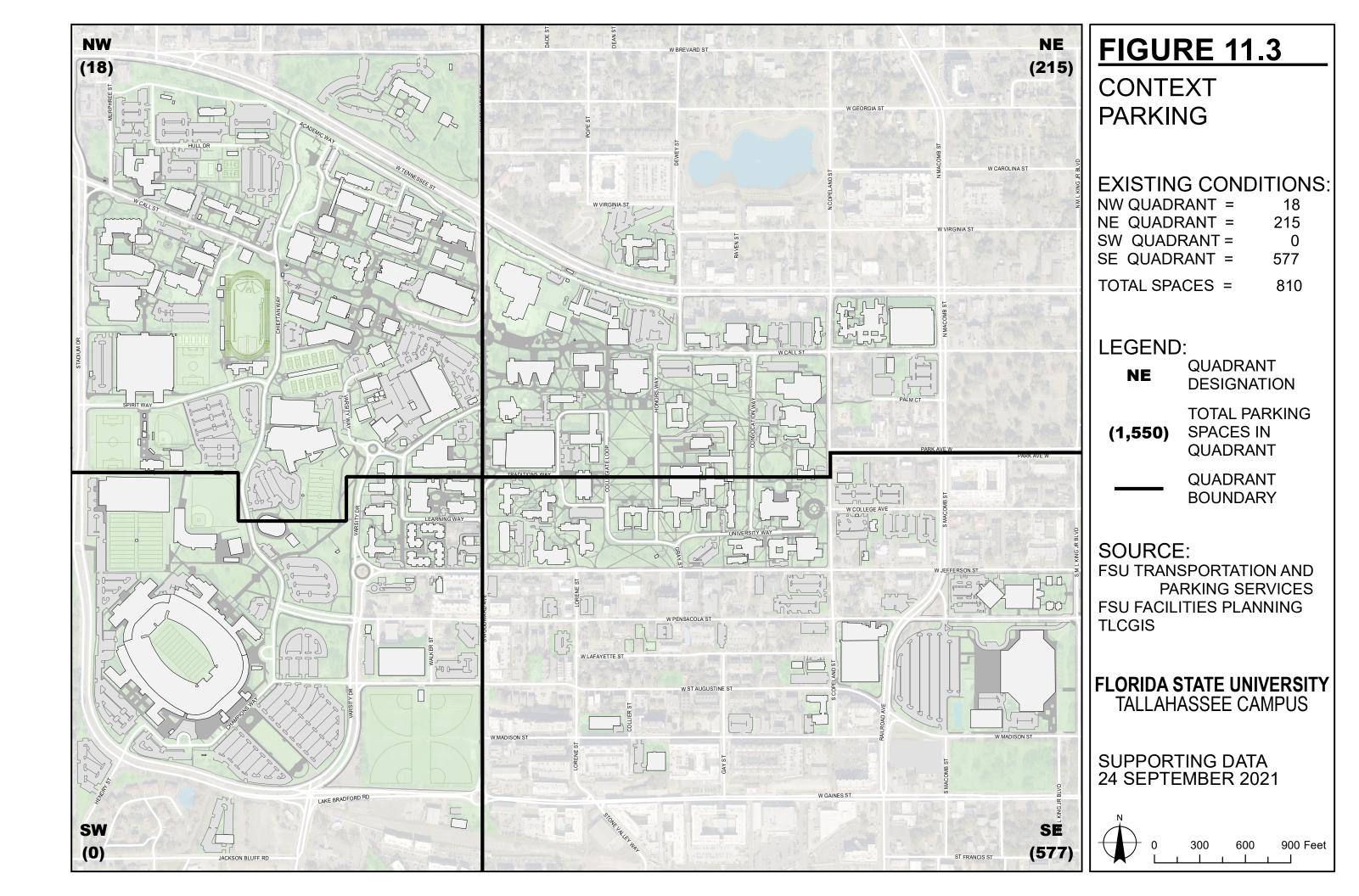
NUMBER OF SPACES FROM

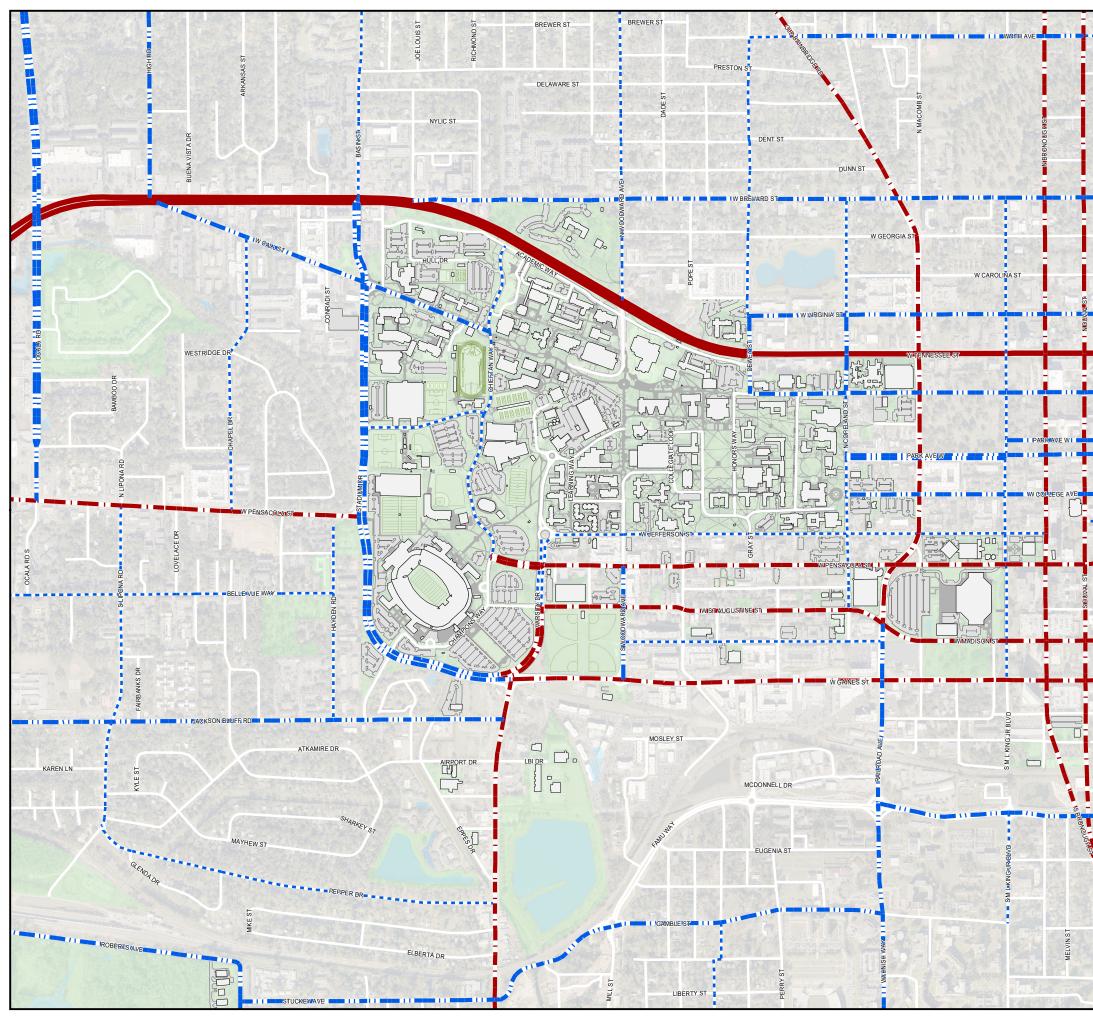
**RECENT INFO** FROM TAPS

FSU FACILITIES PLANNING

FLORIDA STATE UNIVERSITY TALLAHASSEE CAMPUS SOUTHWEST

1,000 1,500 Feet







# **FIGURE 11.4** CAMPUS ROADS FUNCTIONAL CLASSIFICATION

### LEGEND:

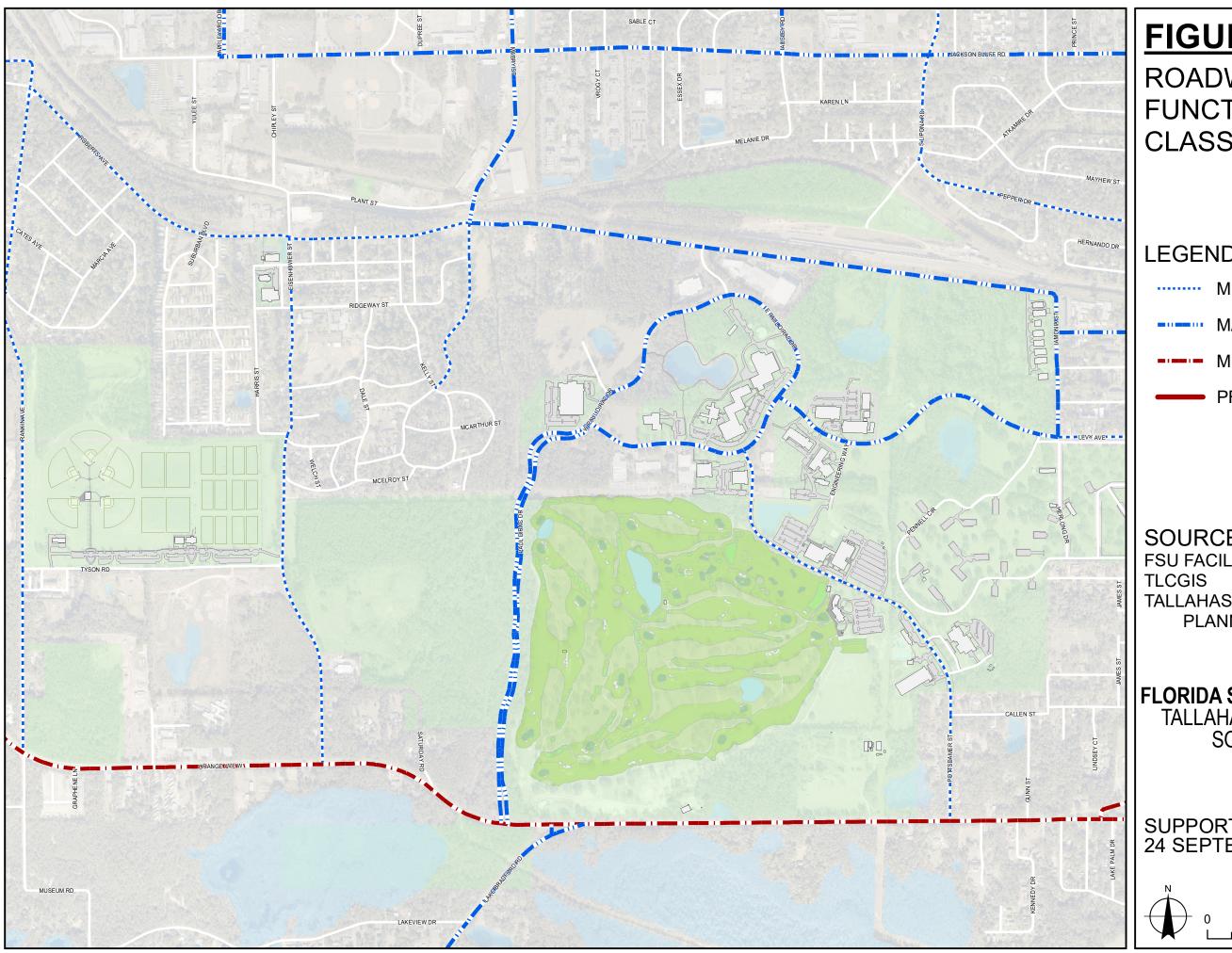
- MINOR COLLECTOR
- ----- MAJOR COLLECTOR
- ----- MINOR ARTERIAL
  - PRINCIPAL ARTERIAL

#### SOURCE: FSU FACILITIES PLANNING TLCGIS TALLAHASSEE-LEON COUNTY PLANNING DEPARTMENT

### FLORIDA STATE UNIVERSITY TALLAHASSEE CAMPUS

#### SUPPORTING DATA 24 SEPTEMBER 2021

0 400 800 1,200 1,600 Feet



### **FIGURE 11.6** ROADWAY **FUNCTIONAL** CLASSIFICATION

### LEGEND:

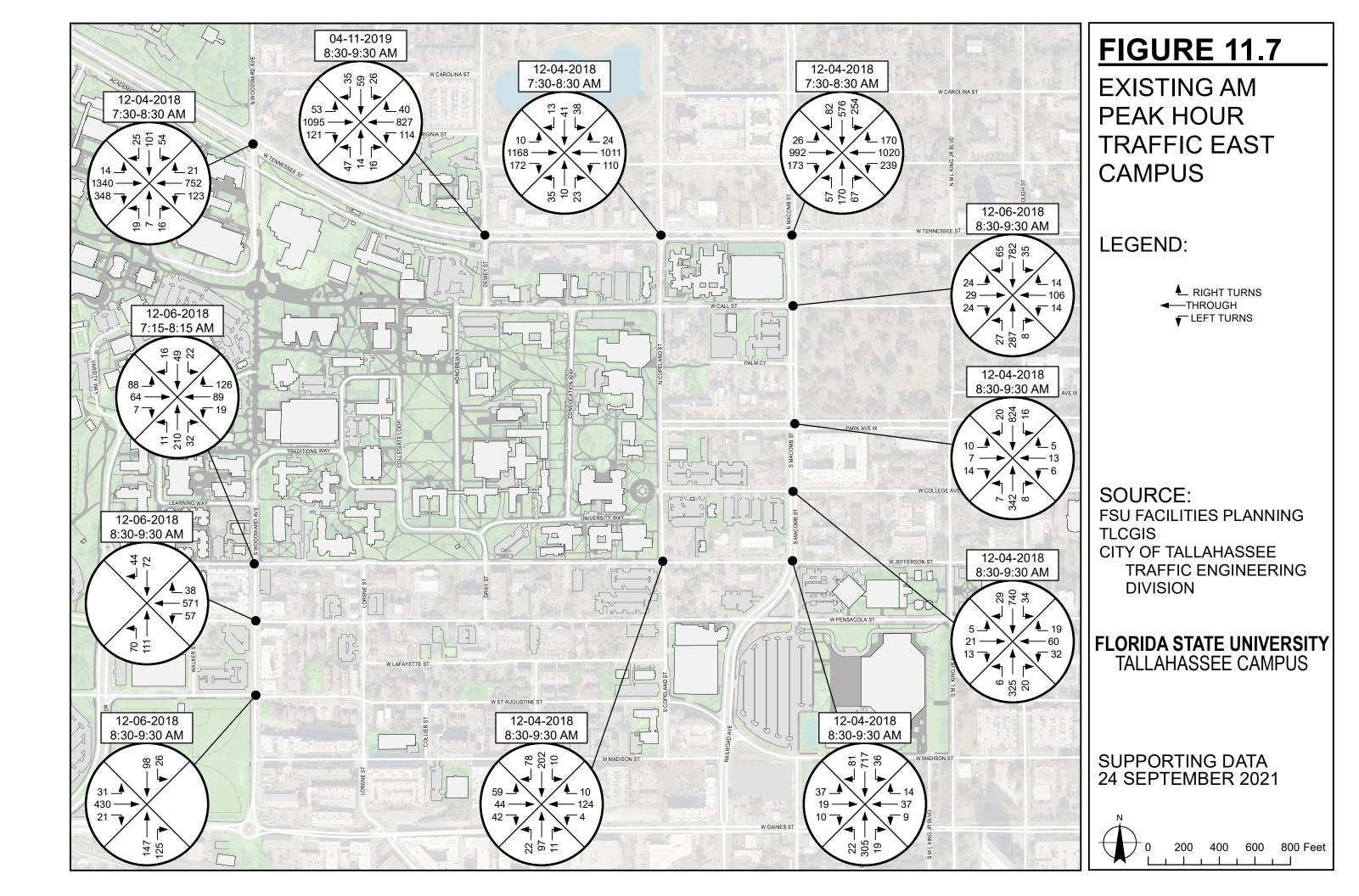
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- ----- MINOR ARTERIAL
  - PRINCIPAL ARTERIAL

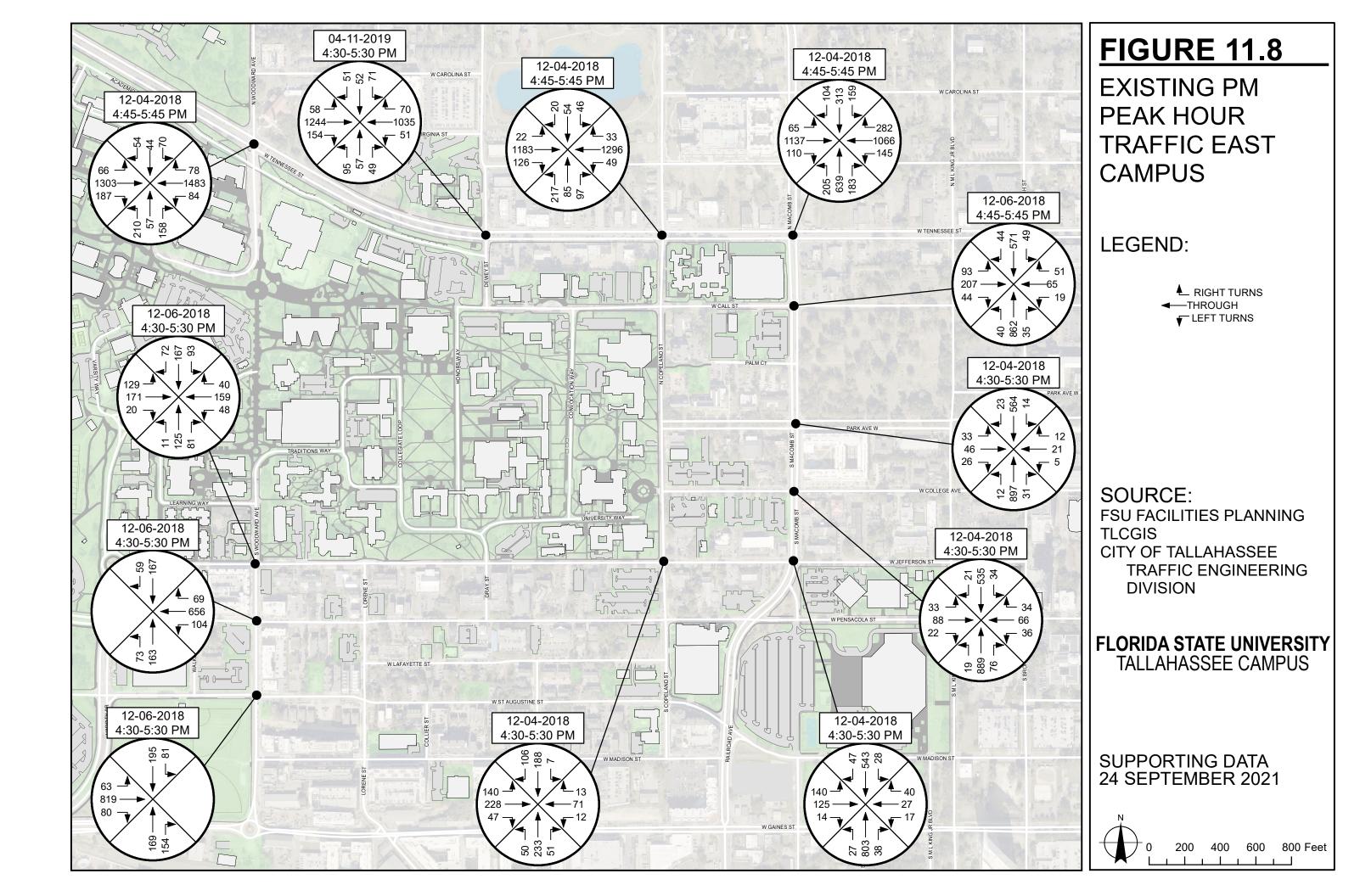
### SOURCE: FSU FACILITIES PLANNING TALLAHASSEE-LEON COUNTY PLANNING DEPARTMENT

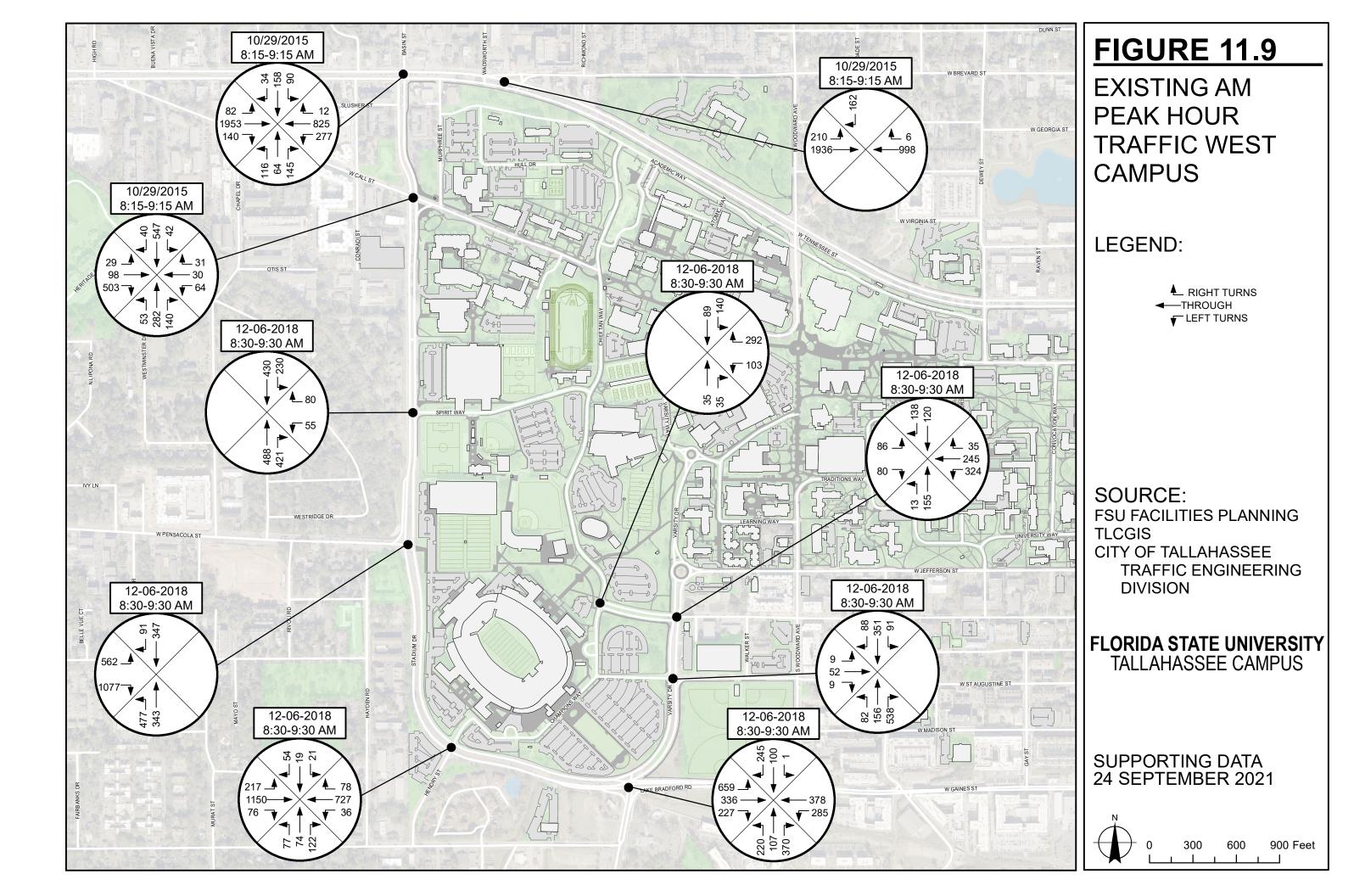
## FLORIDA STATE UNIVERSITY TALLAHASSEE CAMPUS SOUTHWEST

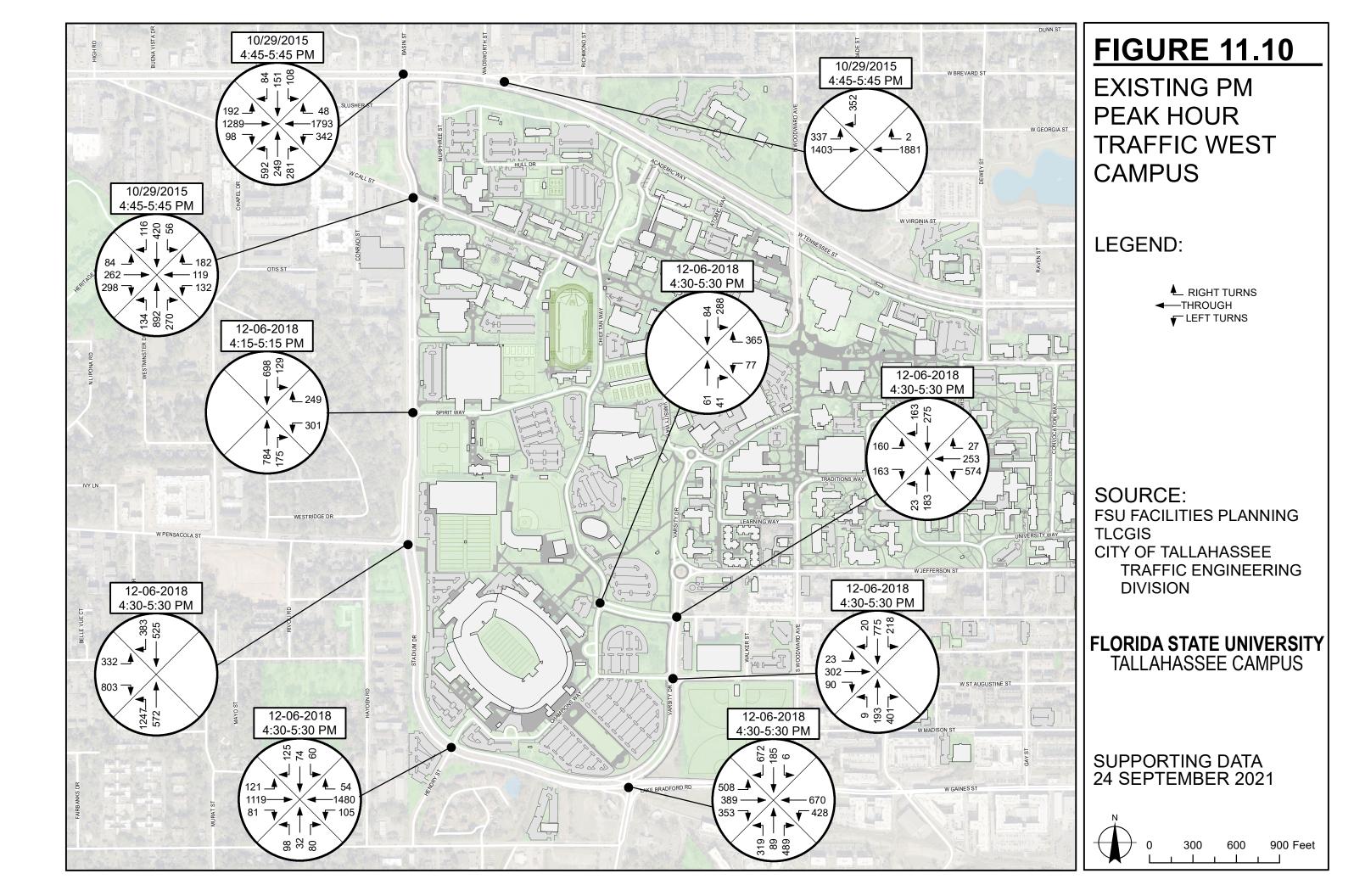
# SUPPORTING DATA 24 SEPTEMBER 2021

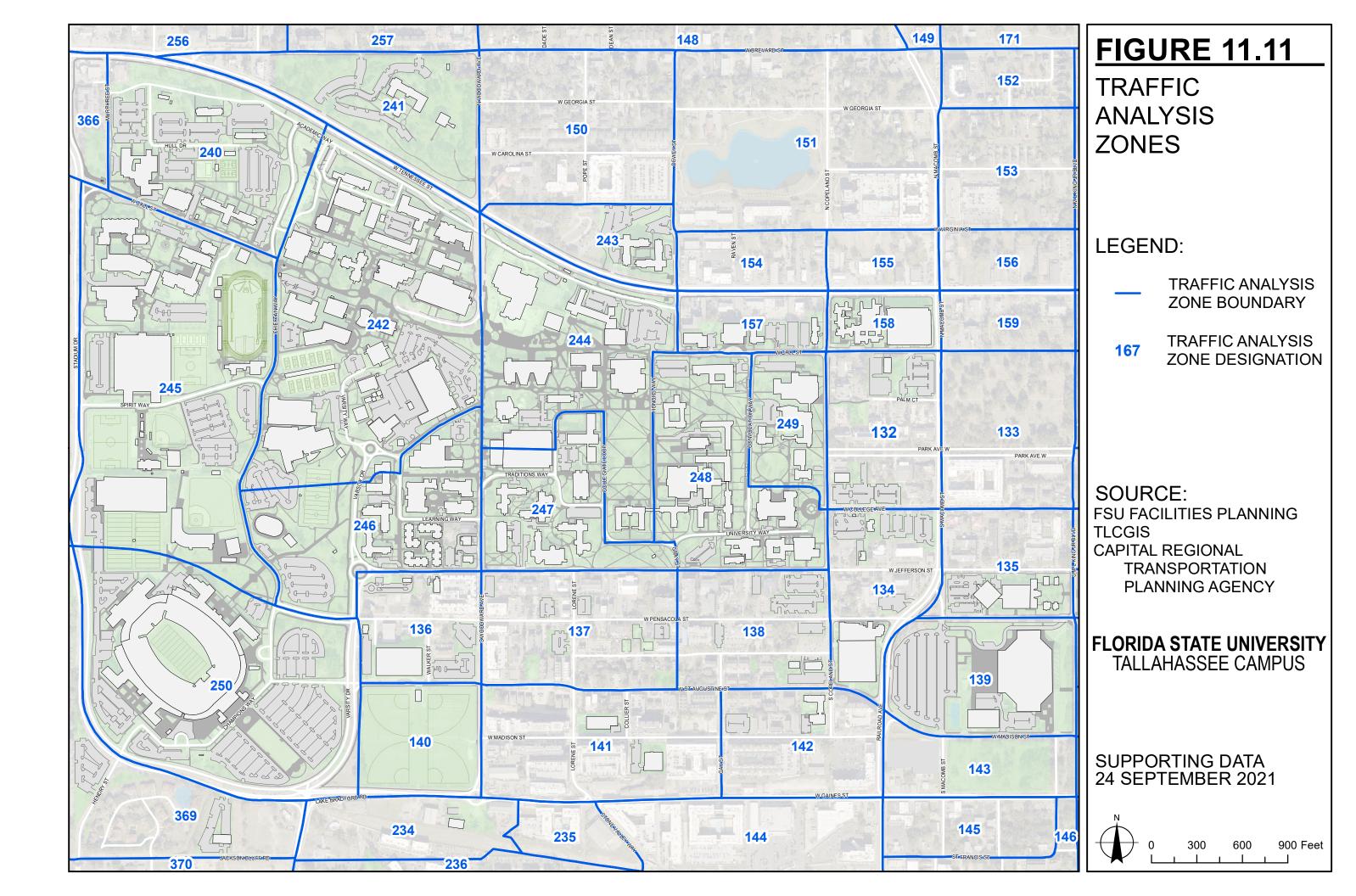
1,000 1,500 Feet 500

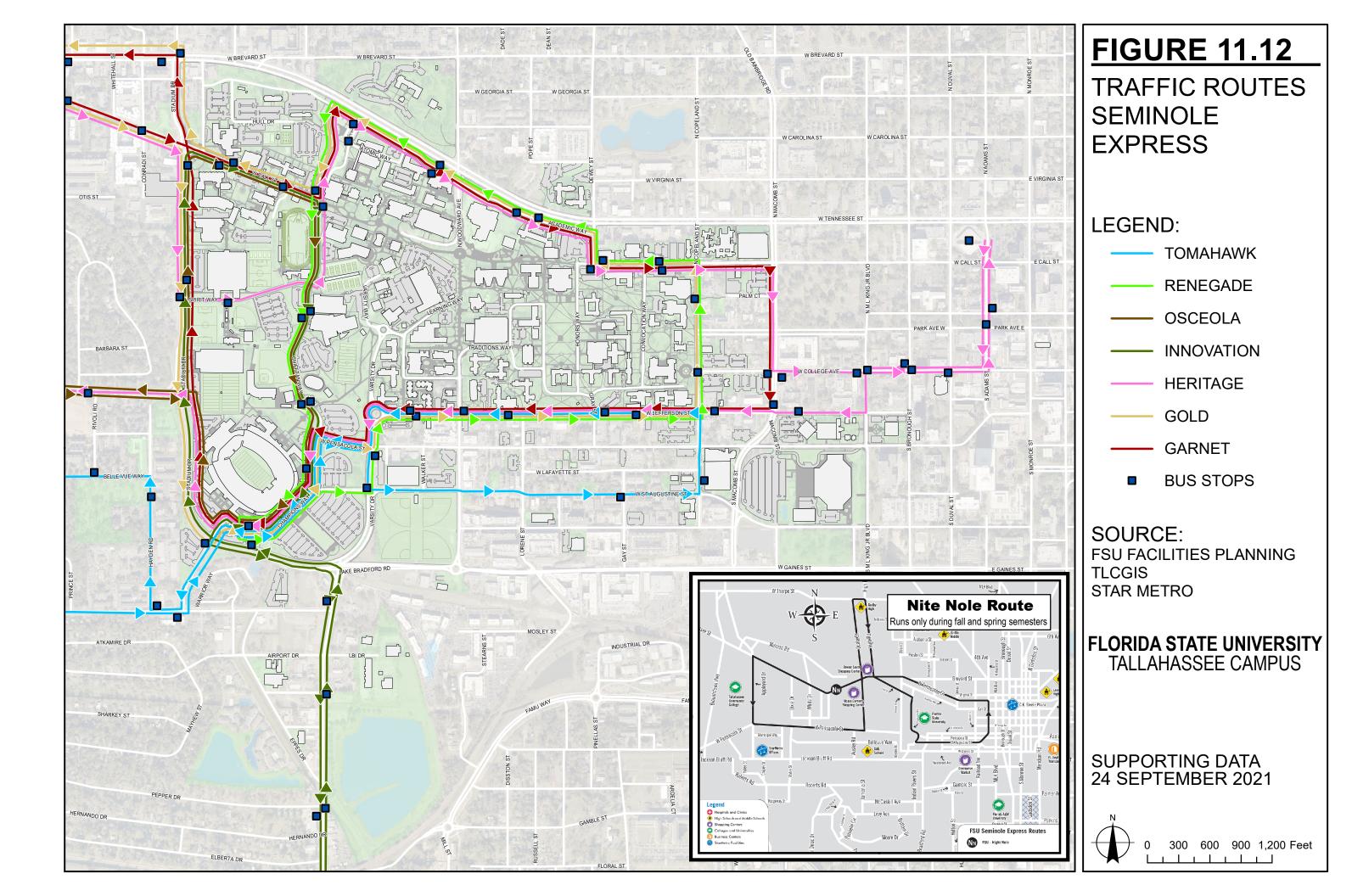


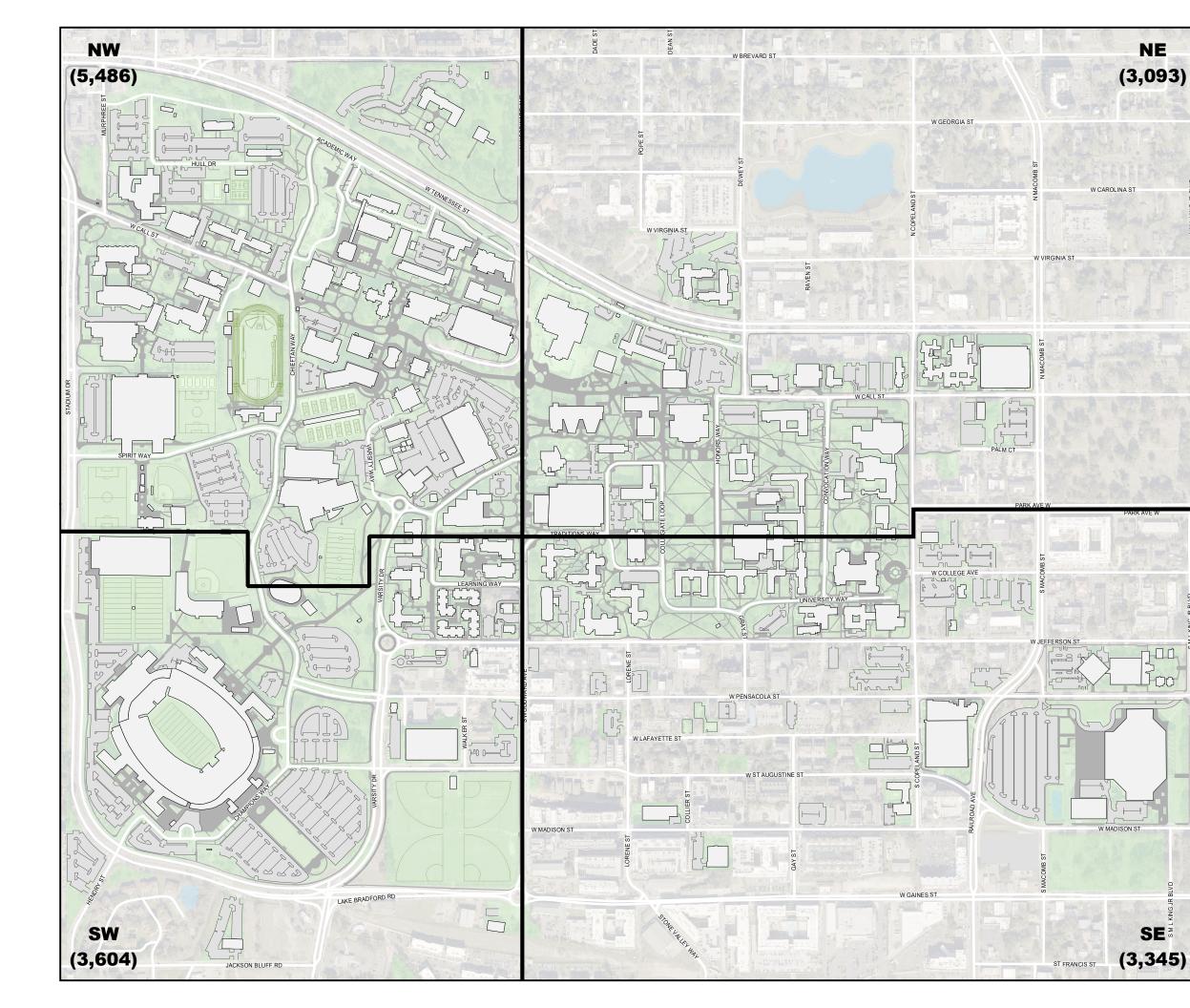












# FIGURE 11.13 FUTURE PARKING SUPPLY

#### EXISTING CONDITIONS: NW QUADRANT = 5,486 NE QUADRANT = 3,093 SW QUADRANT = 3,604 SE QUADRANT = 3,345

TOTAL SPACES = 15,528

#### LEGEND:

NE

- QUADRANT DESIGNATION
- (1,550) TOTAL PARKING SPACES IN QUADRANT

QUADRANT BOUNDARY

### SOURCE:

FSU FACILITIES PLANNING TLCGIS

"LEADING WITH VISION, CAMPUS MASTER PLAN 2020, APPENDIX" BY PERKINS AND WILL, PAGE A-12. SE QUADRANT 2030 NET SUPPLY CHANGE NUMBER REVISED BY E-MAIL FROM THOMAS BROWN (NELSON\NYGARD) TO LAURIE THOMAS (FSU FACILITIES) ON 2 FEBRUARY 2021.

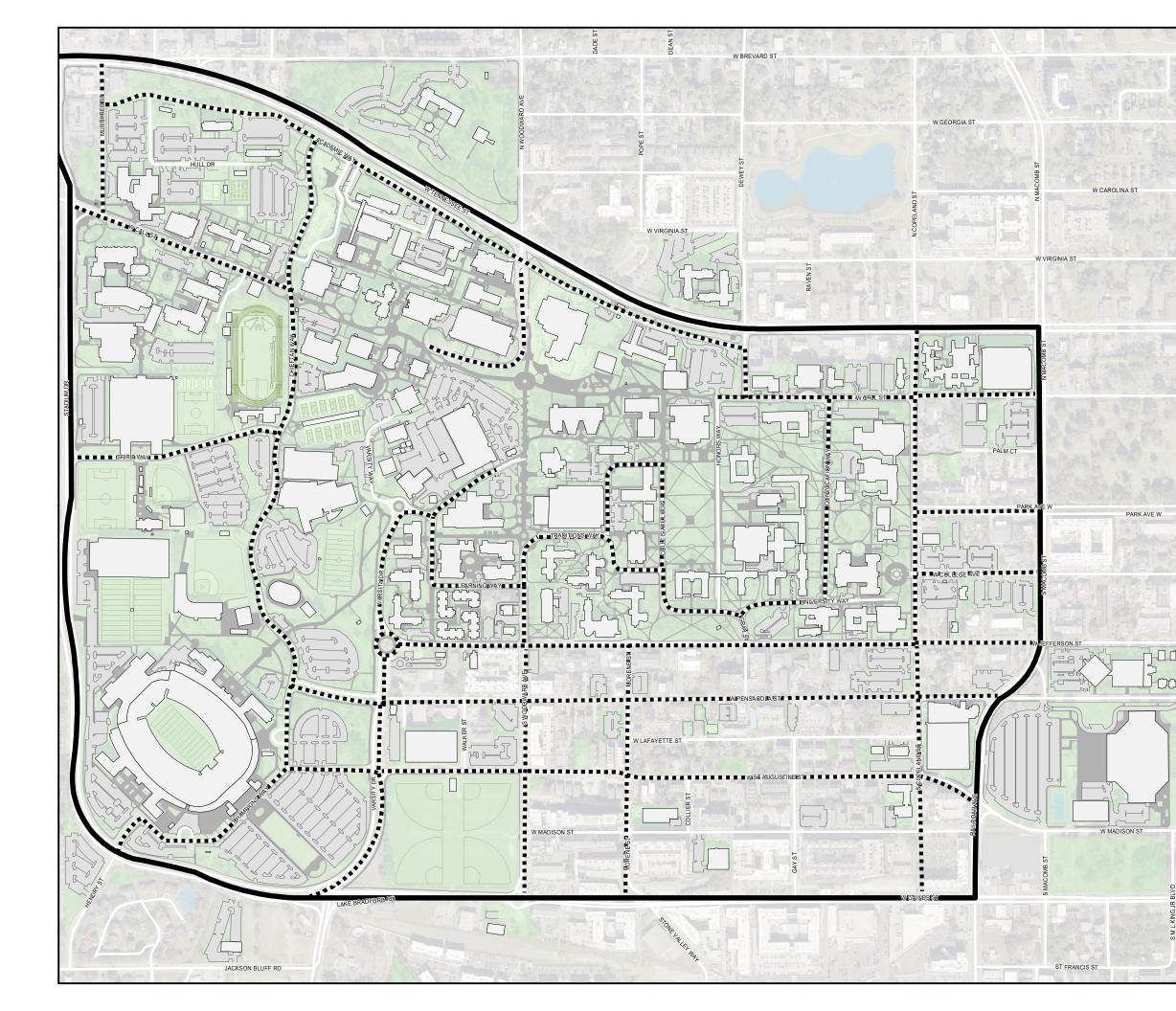
FLORIDA STATE UNIVERSITY TALLAHASSEE CAMPUS

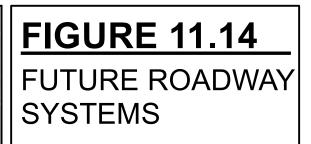


300

600

900 Feet





LEGEND:

EXTERNAL ROADWAY SYSTEM (PERIMETER LOOP)

INTERNAL ROADWAY SYSTEM

SOURCE: FSU FACILITIES PLANNING TLCGIS

FLORIDA STATE UNIVERSITY TALLAHASSEE CAMPUS

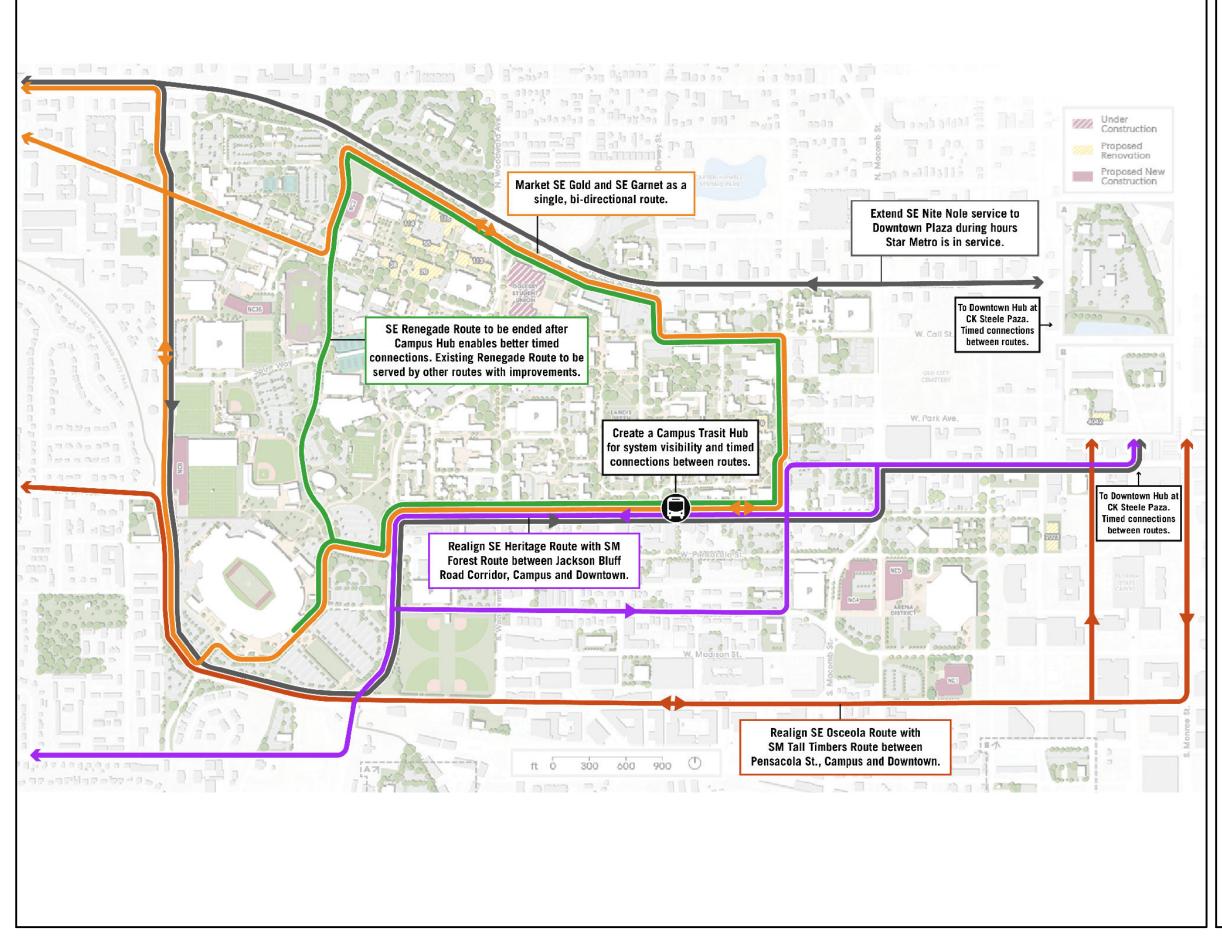
#### SUPPORTING DATA 24 SEPTEMBER 2021

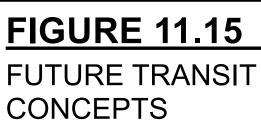
300

0

600

900 Feet



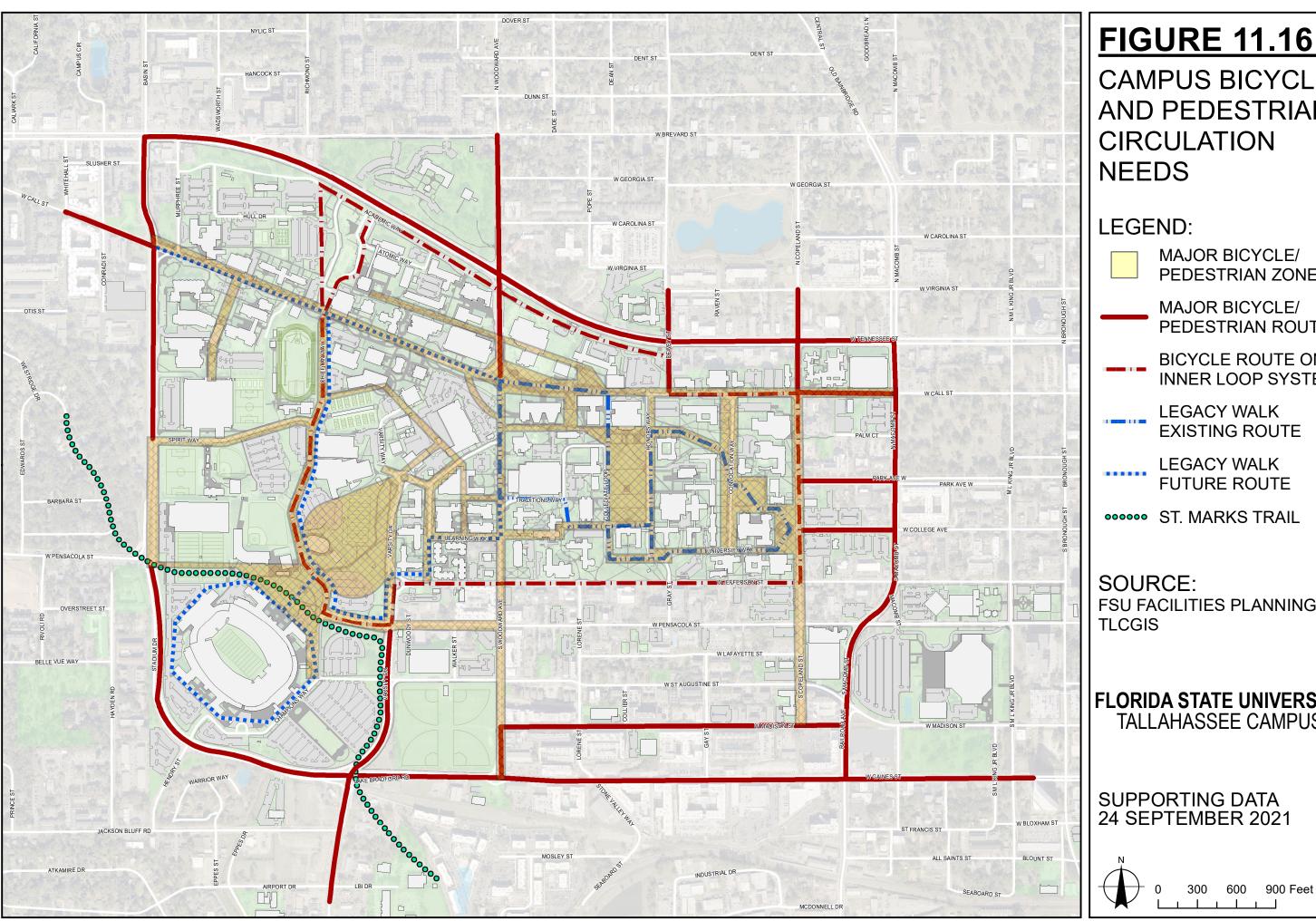


#### SOURCE: FSU FACILITIES PLANNING PERKINS & WILL 2020 STUDY

### FLORIDA STATE UNIVERSITY TALLAHASSEE CAMPUS

SUPPORTING DATA 24 SEPTEMBER 2021





# **FIGURE 11.16** CAMPUS BICYCLE AND PEDESTRIAN



MAJOR BICYCLE/ PEDESTRIAN ZONES

MAJOR BICYCLE/ PEDESTRIAN ROUTES

**BICYCLE ROUTE ON INNER LOOP SYSTEM** 

**EXISTING ROUTE** 

**FSU FACILITIES PLANNING** 

FLORIDA STATE UNIVERSITY TALLAHASSEE CAMPUS

