November 2018 | Final

University of Florida

Transportation & Parking Strategic Plan

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Strategic Vision

The Transportation and Parking Strategic Plan (TPSP) provides context and direction for the development of the University of Florida's transportation network and supporting infrastructure over the next 10 years and beyond. The TPSP is strongly informed by previous and on-going plans, including the Strategic Development Plan (SDP), Campus Master Plan (CMP) and Landscape Master Plan (LMP), to provide an integrated future campus vision.

1.1. Statement of Purpose

The intent of the Transportation and Parking Strategic Plan (TPSP) is to identify strategies that support UF's growth towards pre-eminence, foster collaboration, and identify innovative solutions to the transportation and arrival challenges faced by students, staff, faculty, and visitors. The TPSP includes policies, programs, and projects for near-term, mid-term, and long-term implementation. The overarching goals of the TPSP are listed below.

1. The TPSP will promote the vision of the *Strategic Development Plan (SDP)* to re-center growth and development between the eastern portion of campus and Downtown Gainesville, unite the University with surrounding communities, and sustain long-term success for the University and City by promoting social, personal, economic and ecological health.

2. The TPSP will promote mobility, by enabling safe and convenient access to and from campus and provide access within the campus area to all modes of travel.
3. The TPSP will promote strategies to reduce the number of single-occupant drivers to and from campus as a means of achieving a more efficient and affordable transportation system.
4. The TPSP will identify strategies to enhance the visitor, employee, and student experience for approaches to campus and on-campus.
5. The TPSP will promote the use of technology and creativity:
   - To aid in reducing peak hour traffic to and from campus;
   - To efficiently manage parking demand on campus;
   - To help in reaching the University's carbon neutrality target; and
   - To enhance safety at major intersections around campus for all modes.

1.2. Study Process

Three main sources of information were used to identify the campus transportation needs for the TPSP: meetings with stakeholder-groups, data gathered for this report or provided by the University of Florida, and a campus-wide transportation survey.

Stakeholder meetings began with the project's initiation in November 2017, including meetings with the City of Gainesville, Gainesville Regional Transit System, and many on-campus stakeholders including Business Affairs, the Construction Project Planning and Approval Executive Committee, UF Health/Shands, Housing, Facilities, Sustainability, Real Estate, the Parking and Transportation Advisory Committee, student groups, and University Police Department. In addition, the TPSP team coordinated with a Steering Committee of diverse stakeholders as well as the team that concurrently developed the campus *Landscape Master Plan (LMP)*.

To gain a more complete understanding of current conditions at the University of Florida, a Campus Transportation Survey (CTS) was administered to the campus population. The goal of the CTS was to gain insight into students' and employees' travel preferences and attitudes about various transportation alternatives and initiatives. In total, 12,658 surveys were collected, consisting of 46% students, 41% UF staff and 12% faculty.

The TPSP Existing Conditions Report includes detailed descriptions of the survey results, data collection and stakeholder meetings.

1.3. Opportunity Identification

Following the data collection phase of the project, the following opportunities were identified as important factors in developing the final recommendations in this report.

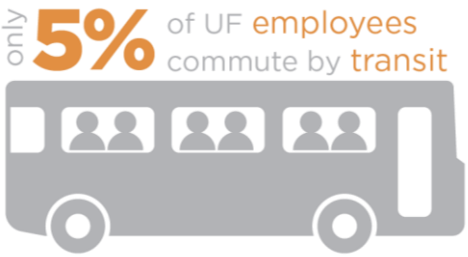
1. **Vehicular conflicts and violations in the auto-restricted zone**

   An important consideration of the *SDP* and *LMP* is to facilitate a dense and walkable academic core. Current vehicular traffic in the densest parts of campus is not compatible with this goal.

2. **Bicycle and pedestrian discomfort on-campus and at the edges of campus**

   A clear message of the CTS and stakeholder meetings was that being a pedestrian or bicyclist is difficult on the University of Florida campus. The most heavily used bike lanes and pedestrian paths along the campus edges are narrow and close to vehicle traffic. Additionally, bicycle and pedestrian connections to the community are lacking and discourage arrival by foot or bike.

3. **Gaps in non-student transit ridership**



While 90% of students live within a direct transit ride to campus, the same is true for only 55% of faculty. This, has resulted in only 5% of faculty and staff commuting by transit, as compared with 27% of students. Along with reduced transit ridership in recent years, this presents an opportunity to capture transit ridership from non-student populations.

4. **Traffic congestion in the peak hour along campus commuter routes**

   Congestion is especially present at Archer Road, Hull Road, Museum Road and University Avenue. A related problem is that that class scheduling and classroom utilization is inefficient, with enrollment being much higher on Mondays and Wednesdays than Tuesdays and Thursdays. The TPSP acknowledges that many policies beyond roadway and parking capacity directly affect morning and afternoon peak hour traffic congestion.

5. **Poor arrival experience for employees, primarily in terms of parking and last-mile connections**

   When parking demand is higher than the available supply, or when system inefficiencies make it difficult to find parking, the arrival experience is diminished. When transit riders must transfer, the arrival experience is diminished. Similarly, when there are not sufficient pedestrian and bicycle connections to campus, the arrival experience is diminished. Since

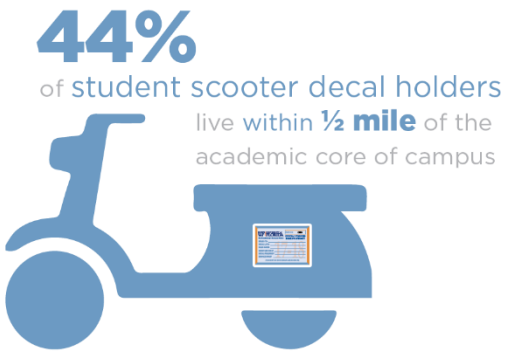
fewer employees live in locations that have access to alternative forms of transportation, this issue affects employees more often. These inefficiencies were highlighted by various stakeholders, Steering Committee members as well as in the data collected, and are addressed in the TPSP recommendations.

6. **Poor arrival experience for visitors in terms of navigation and parking**

In addition to arrival inefficiencies for all users of the University transportation system, visitors face the added challenge of wayfinding. Unfamiliarity makes navigating a complex transportation system difficult; including arrival to campus and navigation to the final destination.

7. **Scooters creating traffic conflicts, increased miles traveled and reductions in travel by other modes to campus (bike, walking or transit)**

While scooters have been prioritized by the University in the past, today they create several transportation problems on campus. The severe crash rate is the highest for scooters as compared with all other modes. 44% of scooter decal holders live within ½ mile of campus, revealing that many travelling to campus by scooter are introducing a greater burden on the transportation system than necessary for them to arrive on campus.



8. **New technology and mobility options require new approaches to campus access and may put pressure on transportation systems as infrastructure struggles to keep up**

New technologies have transformed mobility in the past 10 years and will in the next 10 years. Emerging technologies provide the opportunity to increase transportation efficiencies and continue to mature the University of Florida's reputation of preeminence.

1.4. Guiding Principles

Using the identified opportunities for the campus transportation system, the TPSP sets forth the following guiding principles for the proposed recommendations. Overall, the plan seeks to transition the campus transportation system towards one that is more, accessible by all modes of transportation, equitable, efficient and affordable to both the University and users of the system.

A. Make the Current Transportation System Safer and More Efficient

1. Implement a Bicycle and Pedestrian Zone (BPZ) in the academic core of campus
2. Employ parking management strategies to improve efficiency and maintain balanced supply and demand
3. Identify pedestrian and bicycle facility improvements to address safety, connectivity and increase demand
4. Employ traffic management strategies for greater efficiency and connectivity
5. Improve wayfinding to and on-campus for improved arrival experience
6. Employ scooter restrictions to reduce conflicts
7. Promote travel support programs

B. Position UF for the Future

1. Establish policies that encourage employees and students to live closer to campus, and in range of alternative transportation options
2. Prioritize parking infrastructure improvements to maintain a balanced supply and demand
3. Evaluate future class scheduling and employee work schedules to help alleviate peak-hour traffic congestion
4. Make use of emerging technologies to improve parking and transportation on campus

C. Strengthen Community Partnerships

1. Collaborate with the City of Gainesville and FDOT to enhance pedestrian and bicycle facility connections on and off campus
2. Partner with Gainesville RTS to improve transit efficiency and prepare for the future
3. Collaborate with UF Health for improved visitor/patient access experience

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Recommendations

This chapter includes recommendations based on stakeholder feedback from workshops, meetings, a campus-wide survey and a comprehensive review of data to best address campus transportation opportunities and strengthen the University of Florida Transportation system through both improved policy and physical changes.

A. Make the Current Transportation System Safer and More Efficient

1. Implement a Bicycle and Pedestrian Zone (BPZ) in the Academic Core of Campus

The TPSP was developed in cooperation with the *LMP*, which proposes to link existing pedestrian and bicycle areas by making the portion of campus east of Buckman Drive and North of Inner Road bike and pedestrian only zones. The concept links the existing major pedestrian areas on campus to create a total of 86 acres of pedestrian space as visualized below. The effect of this space is a walkable campus that is able to support greater building densities. When supported by strong bicycle, pedestrian, transit and park and ride connections, in addition to convenient parking, this zone will allow for a more efficient and affordable transportation

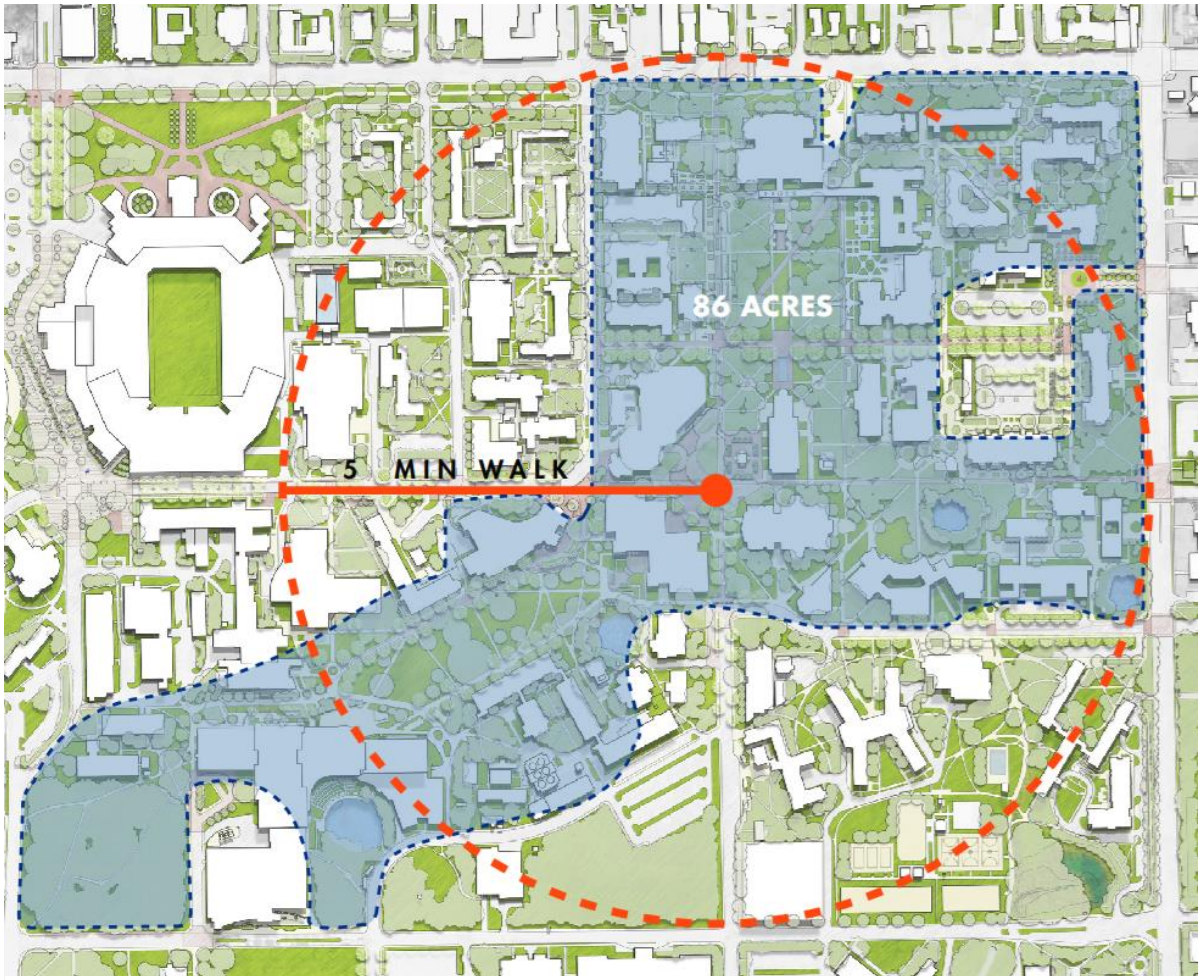


Figure 1: Landscape Master Plan Proposed Bicycle and Pedestrian Zone

system than would otherwise be possible or affordable by supporting only single occupancy vehicle travel.

In order to achieve the recommended Bicycle and Pedestrian Zone (BPZ) it will be necessary to restrict all vehicular access to Union Road and Newell Drive north of Inner Road, with limited access along Buckman Drive. Existing vehicular traffic, transit routes, and service vehicles that rely on Newell Drive to serve the campus core would be redirected around the new Bicycle and Pedestrian Zone.

As part of the BPZ concept, Inner Road would be converted to a two-way roadway to maintain multiple route choices to the core for vehicles and transit. The segment of Buckman Road from Fletcher Drive to W. University Avenue, will remain restricted to transit and limited authorized vehicles.

Additional impacts of this policy will be explored in subsequent sections of this report, including the re-routing of transit around the core area, transit hubs and the use of drop-off and pick-up zones on the edges of the BPZ, and the new traffic circulation patterns (see policies A.3.A, A.3.B, A.4.A, A.4.H, A.4.J, B.4.B, C.2.A).

2. Employ Parking Management Strategies to Improve Efficiency and Maintain Balanced Supply and Demand

Parking has a deep impact on the University's entire transportation system. Not only does it affect traffic patterns, but also mode choice and arrival experience. Further, parking occupies a large portion of land on campus. As of March 2017, there were 24,242 total parking spaces on campus, spread across 99 lots.

A poor parking and arrival experience has produced complaints from students, employees, and visitors of the University and UF Health. High demand for parking, combined with many lot choices have contributed to this problem. Considering the high cost of building additional parking facilities, these challenges require more thoughtful solutions than simple increases in supply.

Scheduling is one issue deeply affecting parking. Monday and Wednesday afternoon classes have an average peak enrollment of 8,600 more students than the average peak enrollment of Tuesday and Thursdays. The perceived inconvenience of other transportation modes has deepened the problem of parking demand. Strategies that strengthen other transportation modes and improve wayfinding will improve the parking experience indirectly. The full TPSP is meant as a cohesive document to holistically address transportation challenges; the following are parking-specific recommendations.

A. Consolidate student resident parking and increase the number of employee decal spaces

As reflected in the CTS responses and in the numerous stakeholder meetings, parking experience for employees in the core campus area (Orange decal holders) is a major issue. This recommendation attempts to improve the arrival experience for these employees.

Students named **"eliminating parking decals for freshman"** as their top response to parking challenges

While demand for Orange decal spaces is high, on campus student residents (Red decal holders) have access to more amenities than ever without needing access to a vehicle. More often than Orange decal spaces, Red decal spaces are used for long-term storage of vehicles. Students do not use these spaces to access campus, but rather to leave campus. Red Three decals are sold to on campus residents with less than 50 credit hours. It is proposed that the approximately 564 Red Three decal spaces in proximity to Flavet Field be reviewed and possibly converted to other decal types (student resident –Red One, graduate student and employee). Red One decal spaces at Murphree hall should be considered candidates for transition to employee parking. In this case, current Red Three spaces could be converted to absorb the removed Red One spaces.

It is not proposed that the supply of first year student resident parking be eliminated (although reducing the available supply for this specific purpose is a possible consideration), simply that it be relocated to other safe campus locations. In the short-term, these spaces can be moved to park and ride lots. As discussed later in the report, the proposed garage south of Beaty Towers may eventually provide parking for student residents.

There is precedent for reducing freshman parking across peer institutions: many outright prohibit first year students from bringing a car to campus. University of North Carolina (UNC) Chapel Hill reserves only a small percentage of their parking for undergraduate students; University of Wisconsin (UW) Madison only distributes 300 parking decals to undergraduate students with extenuating circumstances; and Yale University only allows undergraduate students to park in two remote lots.

In addition to location and allocation, the University should consider a rebalancing of student parking fees and decal type offerings in the near future. This effort is necessary in order for student parking fees to reflect demand and the costs of offering proximate parking to the University. Graduate students in particular have expressed a desire for access to more proximate commuter parking options.

B. Develop a mid-range gated decal level for faculty and staff and convert core campus parking to gated parking

While some lots in the historic core are gated (Silver and Gold permits), most lots are ungated with no limit to permit sales. The gated option has a closely managed decal oversell based on observed vacant parking spaces in the gated parking area, whereas decals without an assigned parking facility are driven by demand for that decal type and the decal holders' tolerance for

searching for a space. This intentional blend of gated and ungated parking spaces has traditionally helped to reduce circling for parking and meet demand for convenient parking, while still offering a level of choice to employees.

Selling more parking decals than there are spaces on campus is a common practice at major universities nationwide and helps to maximize the parking space utilization across campus, reduces the need to build additional parking inventory and keeps decal prices lower than they would have to be if the institution capped the decal sold to the number of parking spaces in its inventory. UF's policy to sell more parking decals than there are spaces on campus for all decal types works well because of the additional capacity in the Any Decal parking facilities. The two most prominent Any Decal parking locations are the Park and Ride #1 (at the Cultural Plaza across from the Southwest Recreation Center) and Park and Ride #2 (off Hull Road west of the Hilton Hotel). Typically, there 500 to 600 vacant parking spaces total in these less proximate parking lots each weekday. The park and ride lots should maintain an important role in the University parking system. While these overflow lots require a transit ride (operating today in 15-minute intervals) to get to the academic core, they are able to provide parkers a greater level of choice by providing convenient access to the academic core at a reduced decal price.

The Orange decal lots north of Museum Road, east of Gale Lemerand Drive, south of W. University Avenue and west of SW 13th Street are among the most in-demand lots on the campus. This demand is the cause of a poor arrival experience. At the same time, there is a waiting list for nearby gated parking permits. Demand for gated permits is expected to increase over the next two years, coinciding with the increase in faculty/staff hiring (500 new faculty and 100 new staff over the next two years). Greatly increasing the supply of parking in the core is not is not congruent with the *SDP's* key goal of making the academic core denser.

In comparison with 13 surveyed peer institutions, proximate non-gated employee parking averaged $581 per year. At the University of Arizona, all garage spaces are $692 per year. Employee proximate parking at the University of Michigan is $736 annually. UNC-Chapel Hill charges between $585 and $1,258 annually for proximate parking spaces, based on income. The University of Virginia charges $600 for proximate employee parking. UW-Madison charges at least $790 for employee proximate parking. Currently Orange decals are sold at $378 annually, Gated Silver decals are $1,212 annually, and Gated Gold decals are $1,362 annually. There is not a mid-range decal price for faculty and staff.

Given the high demand for gated parking and the demonstrated need to have improved access and reliability of parking for employees, it is recommended that the University create a mid-range faculty/staff gated decal with a price point at $700 to $800 annually. This mid-range decal price should be applied to the smaller Orange decal lots adjacent to the core campus area and possibly Garage IV (corner of Newell Drive and Museum Road) as shown in Figure 2. These lots would have controlled oversell similar to other gated lots that could be adjusted based on

demand. Some may be physically gated, and others may be 'virtually gated' as parking on Inner Road is today. A comparable approach may be considered with Blue decal parking at UF Health. Depending on demand, additional lots may be considered to be designated as mid-range decal lots in the future.

Additionally, to meet the existing and projected demand of faculty/staff parking in the campus core, it is recommended that the University convert the faculty and staff Orange and student resident Red lots currently inside the campus core (generally bounded by Museum Road, Gale Lemerand Drive, W. University Avenue and SW 13th Street, but to include the Frazier-Rogers parking lot) to Silver/Gold gated lots with a managed oversell. Figure 2 shows the lots identified for conversion to Silver/Gold and the new mid-range gated lots. The Silver/Gold gated spaces account for approximately 650 spaces and the mid-range gated spaces include many of the

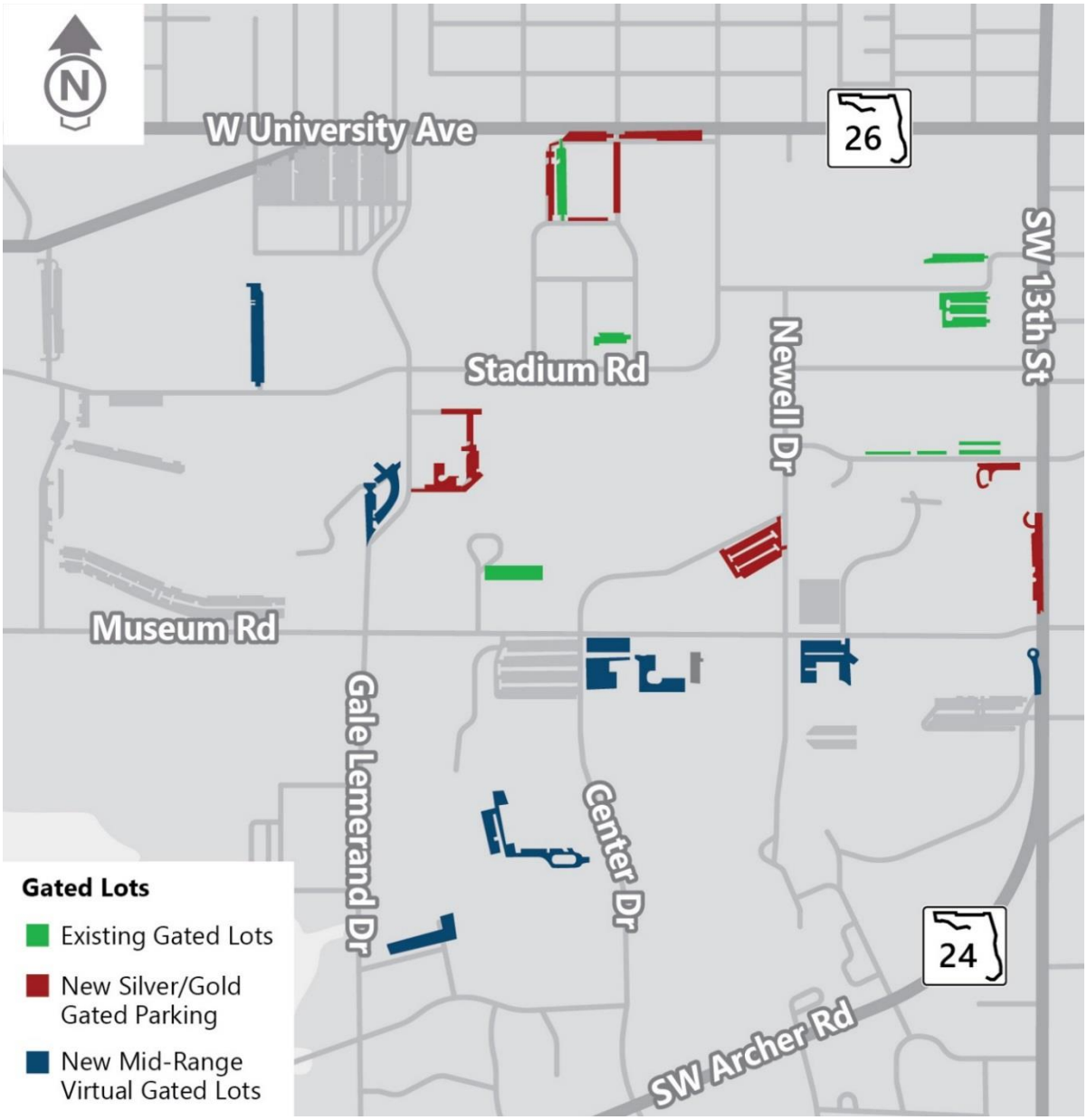


Figure 2: Future Gated Parking

remaining spaces identified in the *SDP* "red-box" area (as seen in Figure 3), including the lots south of Museum Road and east and west of Gale Lemerand Drive.

A phased approach to converting these parking facilities, offering a mix of both Silver/Gold and Mid-range gated options should be taken. Overall, it will be important to monitor the demand for such spaces. The combination of these strategies will help relieve excess demand for parking proximate to the campus core while still providing a range of parking choices.

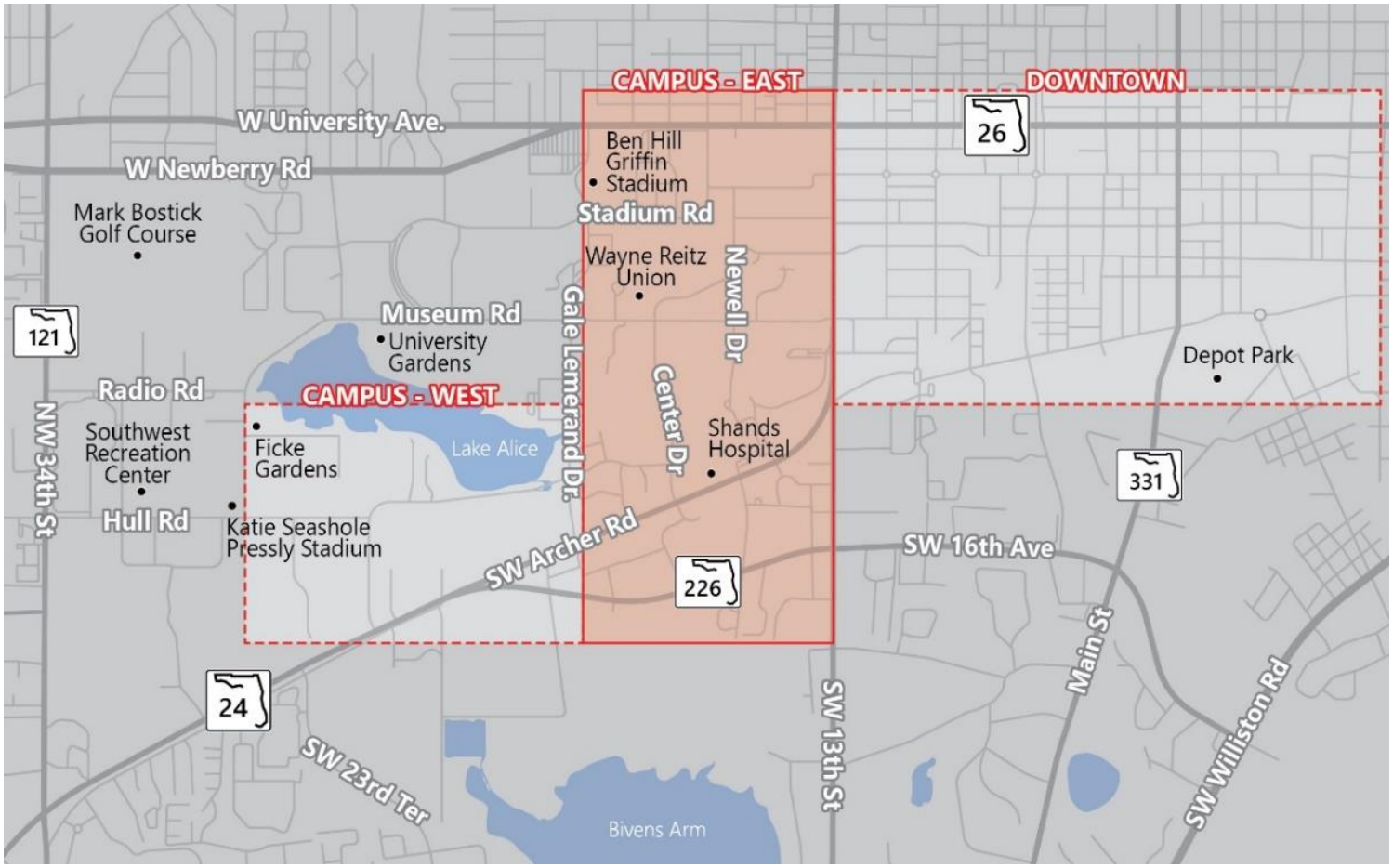


Figure 3: Strategic Development Plan Designated 'Red Box'

C. Convert all employee parking spaces in *SDP* "red box" to Orange, Blue and Gated spaces and add an employee decal limited to park and ride lots

As a general principle, permit pricing should be brought into better balance with market demands. According to observed demand and a review of peer institutions, the University's Green (Faculty/Staff) decal spaces are priced below their market value. Changing these decals to Orange, Blue, and Gated will simplify the parking system and better respond to faculty/staff demand. This recommendation, in conjunction with recommendation A.2.B will bring the parking market into better equilibrium.

Today, there is no park and ride specific decal for employees. An employee decal that is limited to park and ride lots only at a low or no cost should be introduced. This will ensure a greater range of pricing options for employees.

D. Restrict overnight parking at park and ride lots

Parking should be restricted from 3:00 AM to 5:00 AM in park and ride and Any Decal lots. This recommendation is in direct response to students who reside in off campus locations without sufficient parking, who purchase park and ride permits for long term storage. In some instances, the cost of the parking permit to the student has been subsidized by the private off-campus apartment entities as they have reimbursed the student for the decal cost.

This behavior is incentivized by the below-market rate parking rates charged on the University's campus. This policy will address those using the parking lot for non-academic reasons. This policy was implemented in August 2018. Overnight decals or other adjustments to employee permit policies should be considered for those in qualified demographics, such as overnight workers.

E. Limit parking access to one decal per person

Today, users of the UF parking system can purchase multiple decals. This means that a person can purchase a parking decal for both a car and a motorcycle/scooter. Limiting sales to one decal per person will make forecasting transportation demand more predictable.

F. Improve parking for visitors, including the addition of more available pay stations, pay-by-cell and reserved event parking spaces

Visitors and residents of Gainesville have expressed the feeling that the campus is inaccessible. Making a more accessible campus for visitors will increase the value of the university as a public service and foster valuable relationships in the surrounding community. While this posture can be reflected in many ways beyond transportation improvements, it is proposed that making parking available to visitors is an important first step in this process.

A suggested specific implementation of this policy it to presell preassigned parking locations through the ticketing process for all major campus ticketed events except football. This will make both the arrival experience more predictable for attendees of these events and make management of event parking more predictable for the University. Similar enhancements to non-event parking for "true" visitors (those not affiliated with the university) should also be considered. These considerations should be integrated with the proposed wayfinding program.

Today, UNC-Chapel Hill, the University of Michigan and UW-Madison all employ Gorrie-Regan's Parking Access and Revenue Control Systems (PARCS), which are real time computerized parking systems for transient and credentialed customers. The University of South Florida (USF) recently purchased 27 new Digital Luke II parking pay stations for visitor parking. These are specific visitor parking solutions that UF should consider.

G. Evaluate and improve daytime mobility for employees, including the official business permits process

Currently annual business permits are available to departments at a cost of $122 per permit. UF Transportation and Parking Services explicitly asks departments to limit the number of permits requested, and that these permits are not to be used by faculty, staff or students for personal parking. Midday mobility for those needing to drive within campus continues to be a challenge. Washington University in St Louis has raised the price of official business permits above $500 to curb demand. They also require a regular parking permit be displayed when using the official business permit to limit the ability for individuals to substitute the permit for a personal parking permit.

Rather than ask departments to self-enforce, it is recommended that official business permits be limited based on the size of the department and relative to the total available business permit parking spaces. Price increases and other restrictions should be considered if there continue to be complaints around use or abuse of official business permits.

Cornell University provides a 'flex' parking zone that allows two-hour parking for certain permit holders. Strategic placement of flex spaces on UF's campus could be one of several initiatives to foster faculty collaboration and employee attendance at meetings where walking, biking, or transit is not feasible.

H. Expand the hours of decal restrictions in the core campus areas to reduce peak hour congestion

Afternoon peak traffic coincides with many parking lots lifting their parking restrictions for the evening. This causes a heightened demand for parking facilities at the same time that many parkers are attempting to leave parking lots at the end of the work or school day. While this allows the parking spaces to be the most productively used, the overlapping demand causes increased congestion and circling. Peak traffic times on campus are generally between 4:30 and 5:30 pm. It is recommended that daytime parking restrictions be lifted at 5:45 pm in core campus areas at a minimum, allowing for peak egress demand to subside before there is demand for ingress into parking facilities. The current daytime restriction of 4:30 could be maintained outside of the core, though many peer universities have reported that varying times of enforcement can be a key source of confusion.

I. Conduct a study to develop a budget for specific parking costs such as an asset replacement fund, Transportation Demand Management (TDM) program expansion fund, and new garage fund

Budget forecasting is essential to phasing of projects and planning for the future. By introducing future fund line items like an asset replacement fund, a TDM program expansion fund and a new garage fund, the University can proactively prepare for the future and depend less on debt financing for projects. The exact budgeting process is recommended to be the focus of a separate study.

Many peer institutions, including the University of Virginia, Yale University and Princeton University have established TDM programs. At Stanford University, construction projects must pay into a fund that covers the costs of necessary improvements to offset a project's impacts including parking, transportation, and landscaping. Those funds are pooled to finance a new garage or lot, which reduces the need for incurring debt to pay for parking.

3. Identify Pedestrian and Bicycle Facility Improvements to Address Safety, Connectivity and Increase Demand

The University has a robust network of bicycle and pedestrian facilities within the campus core and immediate surrounding areas. Although the pedestrian network within the core of campus is well connected, these networks do not always provide direct connection to off-campus neighborhoods and potentially limit the accessibility of students and employees living adjacent to campus. Additionally, based on results of the CTS and meetings with the student groups, many students do not feel safe riding a bicycle to campus. As a result, there has been a shift from bicycle use to scooter use in recent years.

While bicycle and pedestrian travel to and from campus will never be able to accommodate every employee, student and visitor, bicycle and pedestrian infrastructure (along with complimentary transit service) is an important part of building a welcoming, accessible and equitable campus. A campus that primarily accommodates those arriving by single occupancy vehicles will be difficult to navigate, with infrastructure that is costly to build and maintain, providing only convenience to those that are able to pay for the most proximate parking spaces. The following recommendations seek to address these challenges.

A. Convert Union Road and the east end of Stadium Road to pedestrian and bicycle corridors

Conversion of Union Road and the east end of Stadium Road to pedestrian and bicycle corridors (designed to allow limited vehicular access for emergencies and service access) is a direct recommendation of the *LMP*. It is tied to the establishment of the BPZ within the historic core area.

B. Convert Newell Drive to a pedestrian and bicycle corridor

Conversion of Newell Drive, from Union Road to Inner Road, to a pedestrian and bicycle corridor (designed to allow limited vehicular access for emergencies and service access) is a direct recommendation of the *LMP*. It is tied to the establishment of the BPZ within the historic core area.

C. Provide midblock pedestrian crossings along W. University Avenue at NW 19th Street and at Newell Drive/NW 16th Street

This recommendation aligns with the *SR 26/University Avenue Multimodal Emphasis Corridor Study, Phase 2 Report (June 1, 2015)*, and the recommendations in the *LMP*. These crossings will provide safer crossing opportunities at high pedestrian areas. The crossing at W. University Avenue and Newell Drive/NW 16th Street would serve as a pedestrian gateway into campus. These implementations will require coordination with the Florida Department of Transportation (FDOT) and the City of Gainesville.

Source: Landscape Master Plan

D. Convert the sidewalks along W. University Avenue between Gale Lemerand Drive and 13th Street to a shared-use path

Providing a shaded, well-lit, wide path will increase pedestrian safety and promote walking and bicycling. This recommendation is in line with the *LMP* and responds to heavy pedestrian and bicycle demand along the corridor. Implementation of this recommendation may require coordination with FDOT.

E. Improve pedestrian and bicycle crossings of SW 13th Street at Museum Road, Inner Road, Stadium Road, and Union Drive

With the BPZ restrictions to vehicular access, the importance of these intersections to pedestrians and bicyclists is elevated. Safer and more attractive crossing opportunities are important for the adjacent neighborhood, which includes student and employee residents, the Innovation District, as well as Sorority Row. The University is currently working with a private consultant regarding the use of the east-west streets east of campus and how they tie into the University network. Implementation of this recommendation may require coordination with FDOT and the City of Gainesville.

F. Extend the sidewalk along SW 13th Street from Inner Road to Museum Road

This sidewalk would help to fill in a needed gap in the pedestrian network, as evidenced by the worn walking dirt path, and field observations on campus. The sidewalk would also increase pedestrian safety and connectivity to the neighborhoods to the east, which are densely populated with students; many of which currently either drive or ride scooters to campus. This

recommendation would impact at least half of the 82-space Cypress Hall parking lot. Those Orange-decaled spaces could be relocated to the proposed Beaty Garage discussed later in this report. Implementation of this recommendation may require coordination with FDOT.

G. Provide enhanced bicycle and pedestrian accommodations along Museum Road and other major campus roads

The Museum Road corridor experiences frequent bicycle and vehicle conflicts due to narrow bicycle lanes and high traffic volumes. The Landscape Master Plan recommends an urban cross-section along Museum Road including 5' bicycle lanes to enhance bicycle movement along this key corridor. The Landscape Master Plan further identifies a number of additional Major Campus Roads which generally have bicycle facilities today but may need improvement as driveway density and traffic increase, including Hull Road and Mowry Road.

Additional bicycle improvements have been previously identified as part of the *Campus Master Plan (CMP)* and should continue to be pursued. The Landscape Master Plan identifies a network of shared use paths to enhance east-west and north-south connectivity outside of the historic core and its completion should be prioritized.

In addition to bicycle facilities, pedestrian crossing locations should be improved along Museum Road, especially at the Reitz Union and Beaty Towers locations. While there are crosswalks at these locations today, there are also frequent conflicts that should be considered and resolved.

H. Prepare a separate Bicycle Master Plan

While improved bicycle lanes and connections will improve the bicyclist experience, there are also other ways to improve the University's bicycle infrastructure. It is recommended that separate Bicycle Master Plan be developed to specifically address the University's bicycle infrastructure. For example, it is recommended that covered bicycle parking and bicycle showers be installed in selected locations across campus to improve the viability of biking to and from campus. These investments will build synergy with other infrastructure investments and help to ease the burden on parking facilities and respond to faculty/staff responses in the CTS and in the Sustainable Transportation Fair 2016 Surveys.

I. Employ short-term and low-cost projects to prove the viability of bicycle and pedestrian improvements

While the specific bicycle and pedestrian facility improvements identified in this report will push the University towards the goal of greater safety and mobility, there are other opportunities for short-term improvement. Through the Bicycle Master Plan and other future bicycle and pedestrian planning, the University should be open to implementations with

Source: Seattle Department of Transportation

low-cost materials and temporary installments, using tactical urbanism strategies. These kinds of projects should be community-oriented and allow the opportunity to engage students and employees on which improvements should be made and how. These temporary projects will improve dialogue on bicycle and pedestrian safety and communicate to employees and students that they can participate in improving their campus environment.

4. Employ Traffic Management Strategies for Greater Efficiency and Connectivity

Traffic patterns on campus have remained relatively consistent over the past decade (with some reductions in volume). Traffic peaks coincide with the traditional working hour arrival and departure times of 8:00 AM and 5:00 PM. There are some peaks related to student class times in the mid-day generally between 10:30 AM to 2:00 PM; however, the impact of student travel on the roadway network is less significant as compared to that of employees. In terms of travel, approximately 25% of students drive alone, as compared to over 60% of employees.

A. Transition Inner Road to a two-way corridor in conjunction with implementation of Bicycle and Pedestrian Zone

Demand for this corridor will increase with Union Road being closed as part of the BPZ concept. To maintain access to campus, Inner Road should be transitioned to a two-way road prior to the implementation of the BPZ. This will maintain transit and auto access to the historic core but will eliminate some scooter and vehicle parking. Maintaining bicycle and pedestrian access to this corridor is an important consideration.

B. Connect Hull Road to Archer Road with an extension to SW 23rd Terrace and IFAS Extension Road

Traffic along the west area of campus (along Hull Road) queues over one-third of a mile during the morning and evening peak hours (generally eastbound in the morning and westbound in the evening). Drivers do not have sufficient options for exiting/accessing campus in this area. A north-south connection from the Archer Road and SW 23rd Terrace intersection to Hull Road (via the IFAS Extension Road) will help distribute traffic entering and exiting campus during the peak hours.

Additionally, with added demand in this part of campus by year 2020 due to the new baseball facilities, the various Cultural Plaza events, and the increasing demand at the Southwest Recreation Center, this connection will provide a key and needed alternative to Hull Road.

C. Extend Natural Area Drive to connect with IFAS Extension Road

Connecting the SW 23rd Terrace extension with the current Natural Area Drive will further increase connectivity for Cultural Plaza and the new baseball stadium area. The east-west Natural Area Drive extension would connect the SW 23rd Street extension with Natural Area Drive, provide access to the on-site baseball facility parking and connect the three corridors

(Natural Area Drive, SW 23rd Street Extension and Hull Road), allowing multiple options for drivers.

D. Implement roundabouts at Hull Road and SW 23rd Drive/Mowry Road and at Radio Road and Museum Road as well as other efficiency improvements along Hull Road

The University of Florida *Campus Master Plan (CMP)* identifies new roundabouts at Hull Road and SW 23rd Drive/Mowry Road, and at Radio Road and Museum Road. These roundabouts will help to improve the highly congested traffic flow and safety at peak travel times along Hull Road, Mowry Drive and Museum Road as travelers make their way on and off campus.

It should be noted that the roundabout at Hull Road and Museum Road identified in the *CMP* is no longer recommended due to the location of the new baseball facility and utility constraints along the south side of Hull Road.

A study of the southwest area roads and intersections has recommended improvements to Hull Road at 34th Street to address existing traffic conditions and additional traffic anticipated with the new baseball facilities. Full recommendations can be found in the *Southwest Campus Sub-Area Traffic Study*. Additional improvements along Hull Road are anticipated and will be designed in conjunction with the baseball facilities.

E. Add a new internal roadway connection between SW 2nd Avenue and Stadium Road

This connection is proposed between the O'Connell Center and former baseball field (Alfred A. McKethan Stadium at Perry Field) to facilitate the movement of traffic near the stadium area, especially during peak periods. The removal of the current baseball stadium and reconstruction of facilities adjacent to the O'Connell Center presents an opportunity to improve ingress and egress for the O'Connell Center Garage VII and surface parking lot. During weekday peak hours and during events, exiting this area of campus is difficult. There is only one primary exit from campus to University Avenue, via Gale Lemerand Drive. A secondary exit is located along SW 2nd Avenue. Much of the weekday congestion occurs due to the lack of access/egress from this lot. Although, this roadway connection offers benefits beyond parking access, this recommendation is vital to the proposed expansion of Garage VII. The additional 480 spaces would add 480 new peak hour trips onto the roadway network, and further exacerbate traffic conditions. If this roadway connection is not implemented, the proposed improvement and expansion of Garage VII is not recommended to move forward.

The new north-south road would also provide a needed alternative to Gale Lemerand Drive, and provide access to Stadium Road and SW 2nd Avenue. The road would require the reconstruction of the existing O'Connell Center storage building.

F. Extend Radio Road West Across SW 34th Street

The *CMP* identifies a new roadway connection between Hull Road and the intersection of SW 34th Street and Radio Road, on the west side of SW 34th Street. There is high demand for new

roadway connections in the western half of campus. Many travelers use Radio Road and Hull Road to travel west to access SW 34th Street. An extension of Radio Road across SW 34th Street, connecting back to Hull Road on the west side of SW 34th Street would provide additional network options for those travelers in this area, and relive the long queues along Hull Road in the peak periods.

G. Realign Gale Lemerand Drive at University Avenue

Gale Lemerand Drive intersects with W. University Avenue. The intersection is offset with the W. University Drive and NW 20th Terrace intersection. This long-term recommendation realigns an approximately 200-foot section of Gale Lemerand Drive with the University Avenue and NW 20th Terrace intersection. This realigned roadway would create a needed connection to the surrounding communities (per stakeholder and CTS feedback) and create additional pedestrian and programming space between Gale Lemerand Drive and Ben Hill Griffin Stadium. The *CMP* also recommends the addition of a turn lane at the intersection of Gale Lemerand Drive and Museum Road, a recommendation endorsed by the TPSP

H. Implement a drop-off and service zone between the Murphree Lot and Buckman Drive along University Avenue

A drop-off zone is proposed between Fletcher Road and Buckman Drive along University Avenue. With the implementation of the BPZ and greater use of ridesharing, this zone will accommodate increased drop-off demand along Buckman Drive. It will also provide an enhanced service area to accommodate the implementation of the BPZ. The implementation of this drop-off zone also accommodates the proposed shared-use path along University Avenue (A.3.D). An optionally proposed commuter scooter parking zone along East West Drive off Fletcher Drive is also affected by this drop-off zone. These recommendations should be jointly considered if the scooter parking zone is selected to be maintained.

This drop off-zone is proposed to operate as a one-way facility. Traffic will enter from Buckman Drive and circulate west towards Fletcher Drive, and back to W. University Avenue. Traffic signals at the intersections of W. University Avenue and Buckman Drive and at Fletcher Drive, will ensure traffic operates safely and efficiently. The conversion would require restriping the existing 62-space lot and reducing the parking by at least 36 spaces. More detail on the changes are provided in the *Landscape Master Plan*.

Fletcher Road currently operates as a one-way north roadway, with a dedicated bicycle lane, and Orange decal parking near Murphee Hall and the Infirmary Parking. Based on the existing and proposed traffic circulation in this area of campus, it is recommended that Fletcher Road remain as a one-way facility and retain the existing parking. Converting to a two-way will impact faculty parking near Murphee Hall and parking for the Infirmary. If the Infirmary moves, it is recommended to revisit this location to reassess potential for enhanced bicycle facilities.

I. Reevaluate campus connections to the neighborhoods east of SW 13th Street

As noted earlier, the BPZ changes the importance of the connections between the east side of campus and the adjacent eastern neighborhoods, which house a large portion of the student

population. The corridors, including SW 2nd Avenue/Union Road, SW 4th Avenue/Stadium Road, and SW 5th Avenue/Inner Road, will be redesigned in collaboration with the City of Gainesville to provide enhanced access for automobiles, bicycles, and transit.

J. Reduced speed limit to 15 mph within area north of Museum Road and east of Gale Lemerand Drive

As the University moves toward developing a greater pedestrian and bicycle friendly campus, additional policy recommendations can be implemented to further reduce vehicle/scooter speeds around the BPZ, along Stadium Road, Inner Road and Newell Drive. The lower speed limit supports the intent of the BPZ and improves the safety and quality of the pedestrian environment. The recommended speed limit is 15 miles per hour (mph) for those campus roadways within the area north of Museum Road and east of Gale Lemerand Drive.

5. Improve Wayfinding to and on Campus for Improved Arrival Experience

Wayfinding is a significant factor in the relationship between the University of Florida and the campus population and visitors. Respondents of the CTS noted a poor arrival experience on campus, both in terms of finding available parking and navigation, especially for first time visitors. Wayfinding can have a significant effect on vehicles circling looking for parking, which in turn can reduce congestion on campus and improve parking efficiency. This has been a high impact complaint for visitors and patients of UF Health. Overall, wayfinding is an important solution for increasing the efficiency of the transportation system and should be viewed as a solution equally as urgent as the other transportation improvements proposed in this plan.

A. Construct Gateway treatments at important community connections

Gateway treatments will help communicate to users of the transportation system the location of campus entries and can make for safer bicycle and pedestrian crossings. These memorable campus landmarks will give coherency to the visitor experience and have the potential to directly integrate wayfinding signage to help users find their destination.

The *LMP* identifies specific gateway locations including pedestrian gateways at W. University Avenue and Newell Drive, Inner Road at Newell Drive, Inner Road at SW 13th Street, and W. University Avenue at SW 13th Street. Vehicular gateways are identified at Gale Lemerand Drive at SW Archer Road and at W. University Drive, SW Archer Road at Newell Drive, Museum Road at SW 13th Street and SW 13th Street at Tigert Court.

B. Implement a unified physical and digital wayfinding program

Wayfinding must be unified. It is language that the campus speaks to users of the transportation system. Signage must be cohesive and continuous across a trip to or through campus in order to keep transportation system users aware of the most efficient routes and options available to them. The most efficient paths and most likely destinations should be apparent to users of the transportation system.

While wayfinding should be clear to users on campus, users will increasingly prepare for their trip to campus by seeking out wayfinding materials before arriving on campus. The University of Florida's wayfinding strategy should acknowledge this reality and integrate mobile and desktop wayfinding accessibility into its strategy. Recently, UNC-Chapel Hill invested in CampusBird digital 3D mapping of their campus to improve wayfinding. Similar solutions should be explored for the University of Florida.

Coordination with the City of Gainesville, Alachua County and FDOT is required for wayfinding signage off-campus.

6. Employ Scooter Restrictions to Reduce Conflicts

Scooter use has increased over the past five years, primarily due to the ease of travel between destinations, and the perception of limited bicycle safety while bicycling to campus. As noted earlier, students communicated that they felt safe while biking on campus but did not feel safe while biking to campus. The CTS results further reinforces that sentiment.

In terms of safety, while 6% of traffic on campus were scooters in 2017, scooters were involved in 15% of severe crashes, and 88% of those scooter crashes were severe, the highest percentage of any mode type. By these metrics, scooters are the most dangerous mode of travel to campus. Furthermore, scooters with a two-stroke engine lack the emission controls of car engines, making the amount of smog-forming emissions produced by scooters greater than that of most cars.

In addition to safety, scooters have access to highly convenient parking spaces in many locations across campus. This, along with other policy decisions has resulted in 44% of scooter decal holders living within a half-mile of campus. The number of small scooter lots encourages multiple trips on campus, that would otherwise be completed by other modes such as walking, bicycling or taking transit. Providing improved bicycle and pedestrian safety investments along the edges of campus and into the nearby neighborhoods can aid in instilling confidence among bicycle riders and can aid in reducing scooter parking demand.

A. Consolidate scooter/motorcycle parking for better efficiency and parity with automobile commuters and allocate some of the current scooter parking zones for bike and e-scooter share programs

It is recommended that scooter parking be consolidated from the many dispersed scooter parking zones across campus to a simplified system of six primary commuter zones as shown in the figure below. The six proposed zones are at:

1. Park and Ride #1 and Southwest Recreation Center
2. O'Connell Center Garage VII
3. Garage XIV (at the current Commuter Lot)
4. Garages II and III (UF Health)
5. Newell Garage IV and off Broward Drive
6. Norman Garage VIII and additional Norman Field parking

These six zones will decrease internal scooter traffic on campus and simplify the arrival experience for all users. The intention of this policy is not to decrease the number of available motorcycle and scooter parking spaces, but to consolidate their locations and reduce the number of short on-campus trips made during a day. This strategy has been deployed at UF Health with success, where all student scooter parking was consolidated into a single location at Garage III.

Along with this policy, the University should create a commuter scooter/motorcycle decal, while retaining scooter parking by residence halls for on campus residents. This policy should be combined with the recommendation (A.2.E) for limiting only one decal per person, whether it be a car or a scooter/motorcycle, versus both as allowed today.

These scooter parking zones should also accommodate emerging alternative forms of transportation such as shared e-scooters and bike shares. These locations can direct these activities to consolidated zones and provide enhanced amenities, such as bike and scooter covers and chargers. Focusing all of these activities in these locations will simplify the transportation system and make these emerging forms of transportation easier to plan for.

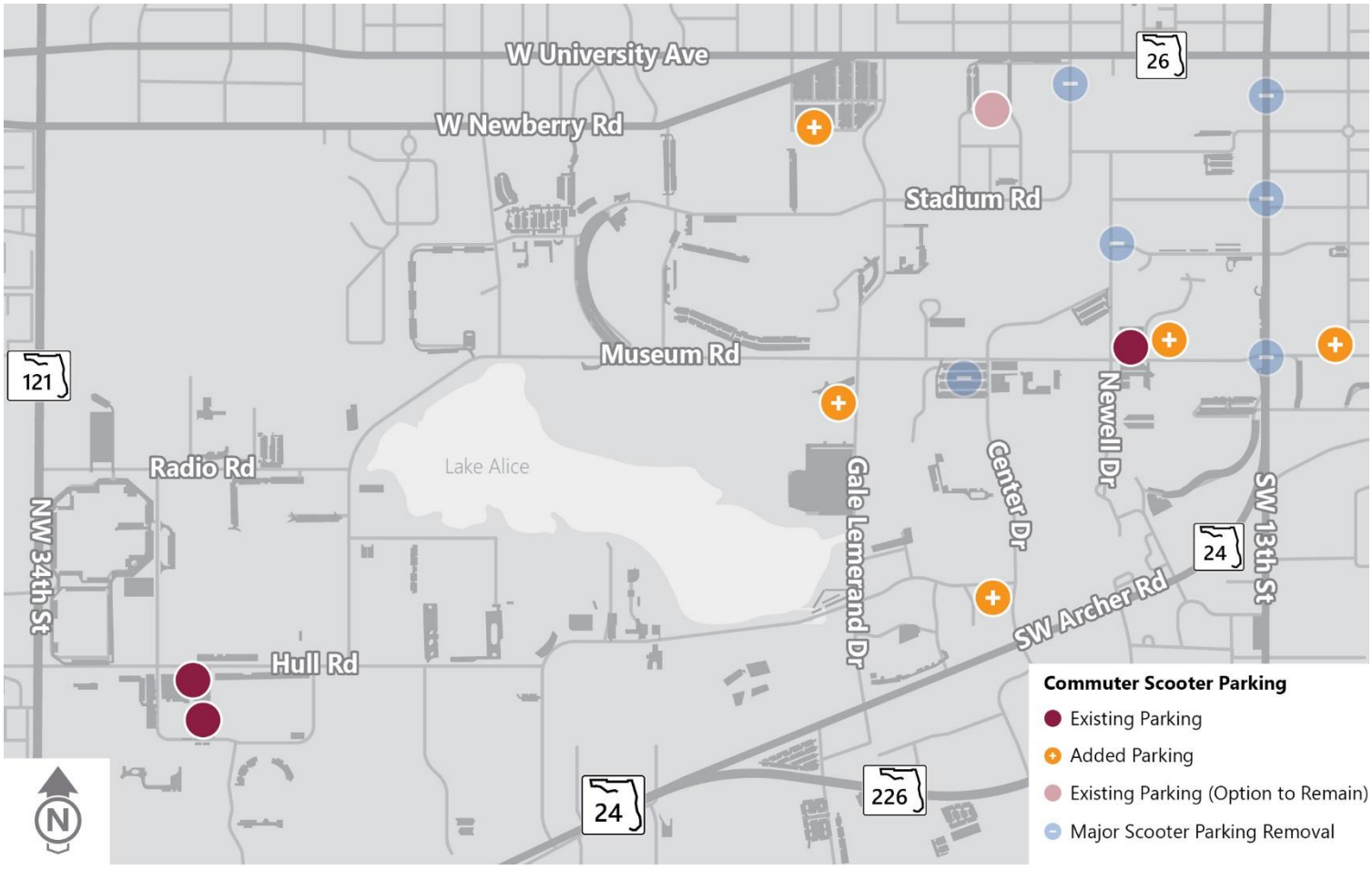


Figure 4: Proposed Commuter Scooter Parking Lots

B. Encourage use of environmentally-responsible scooters

In response to the University's sustainability goals, the University should disallow the use of two-stroke engine scooters as soon as possible. Traditional motorized scooter decals should have a higher associated cost than a decal for scooter types that create less pollution and are more efficient (e.g. electric) as soon as possible. The price of holding a motorized scooter permit should increase annually until 2025, when only low emission scooters are decaled.

C. Improve safety and rule compliance on campus through marketing and communication

As evidenced by the high severe crash occurrences, it is important simply to communicate the value of safe operation of scooters and compliance with rules. One policy that can be implemented for this strategy is to require a safety training annually in order to receive a scooter or motorcycle parking decal. The cost of providing this training could be included in the cost of a decal.

7. Promote Travel Support Programs

The University current offers a wide range of travel support programs including the Carpool program, ride matching, emergency ride home, and occasional parking privileges for program participants. All of these programs promote travel choice and allow flexibility for commuters to select the commute mode that best serves their needs.

It is clear from the CTS, though, that not everyone within the campus community is aware of the current suite of options and benefits. UF Transportation and Parking Services (TAPS) should continue to explore, revisit, and refine its outreach efforts to ensure greater market awareness. A key component should be a regular monitoring program to measure awareness and favorability ratings of current programs. This, in turn, may lead to refinements to program elements that will improve the attractiveness of these programs as user needs change.

The TPSP outlines several related program and policy improvements to support alternatives to SOV travel. It is essential that information about these programs be distributed to the campus community in a comprehensive way, offering a 'one stop shop' for all programs and notifications of improvements. Similarly, innovative outreach may be beneficial to raise awareness of alternative travel options on campus. Several universities have identified bicycle and transit ambassadors who help provide real-word orientation.

B. Position UF for the Future

1. Establish Policies That Encourage Employees and Students to Live Closer to Campus and in Range of Alternative Transportation Options

Not all users of the campus transportation system will be able to walk, bike or use transit to get to campus; however, the more travelers that can arrive by alternative modes, the less stress on the University of Florida transportation system. Policies include providing direct incentives for employees and students to live closer to campus in the form of "payment-in-lieu of parking", or to, in coordination with the City of Gainesville, offer developer incentives to provide a greater number of high quality housing options closer to campus (primarily for faculty and staff). While some incentives may come at a cost to the University, incentives should be compared to the cost of buildings additional parking infrastructure.

2. Prioritize Parking Infrastructure Improvements to Maintain a Balanced Supply and Demand

A. Remove and replace inefficient parking structures over the next 15 years

Inefficient parking structures are unhealthy for the transportation system in terms of inefficiently low parking created, poor arrival experience for users and additional maintenance costs.

Based on stakeholder input and maintenance history, Garages I, II, III and VII were identified as some of the oldest and least efficient garages on campus.

1. Reconstruct Garage VII

Priority 4, Figure 5

The current 607 space Garage VII at the O'Connell Center is an old and inefficient garage located at the edge of the *SDP's* "red box" area identified for infill and redevelopment. Garage VII is already in a high demand location not only during typical weekday periods, but also during events such as UAA sporting events, concerts, and special programs. As the density in the eastern third of campus increases, there will be a need for additional commuter parking for faculty, staff and students.

There is sufficient room in the surrounding O'Connell Center lots to expand the existing garage's footprint to accommodate up to a 1,300-space garage. The additional spaces would address the need for student, faculty and staff commuters by adding approximately 480 new spaces. The net total factors in a loss of approximately 215 surface lot spaces.

Successful expansion and redevelopment of this lot depends on the proposed new internal roadway connection between SW 2nd Avenue and Stadium Road (A.4.E). The proposed garage should also incorporate the proposed scooter parking zone described in recommendation A.6.A.

2. Reconstruct Garages I, II and III

Priority 5, Figure 5

Garages I, II and III all serve the employees, visitors and patients of UF Health and the various other nearby medical facilities. Garages II and III occupy land that fronts Archer Road. This location is prime real estate for the University and may be better served with a building location. Redevelopment of parking Garages II and III presents opportunities to increase the parking supply at UF Health (up to 2,400 spaces), improve the arrival experience for visitors and improve pedestrian connections to the hospital. The potential location of the new redeveloped garage is along Mowry Road on the nearby Chilled Water Plant #2 site. The Chilled Water Plant has been identified for relocation near the new Garage XIV along Gale Lemerand Drive. The optimal orientation of future garages should be evaluated in a later study.

Garage I is located along Newell Drive just north of SW Archer Road. Based on the projected demand for future parking, the renovated Garages II and III would provide net increase of approximately 454 spaces. Garage I has 452 gated spaces for UF Health employees. The addition of a new 2,400 space garage could allow the University to consider removal of Garage I, and repurposing this land into a Civic Square per the *SDP*. The Civic Square could provide a transit stop to accommodate the Newell Drive/UF Health transit circulator (see Section C.2.I). In the interim, this circulator could use the Harrell Building to pick up and drop off riders.

B. Construct parking to replace parking loss

Based on the analysis of existing and future parking demand, it was determined that the current planning ratio of 0.30 decal-only parking spaces per main campus total population (including headcount employees and enrollment) is the correct target based on future growth projections. This has been underscored over the past year as the ratio has dipped below 0.30 and parking complaints have noticeably increased.

In addition to this strategic goal, and in coordination with the various UF stakeholders, the TPSP identifies several specific locations for new parking needed to maintain the 0.30 ratio resulting from redeveloped lots lost to new building construction (i.e. the new Data Sciences Building that will replace the 351 space Engineering Lot). With the addition of Garage XIV at Gale Lemerand Drive, the projected parking loss over the next 10-years is approximately 1,372 spaces. The following new decks and garages along with the new spaces from the potential garage expansions and redevelopments identified in the previous section, would balance out the shortage. It is important to note that the long-term goal of the TPSP is to enhance travel options so that parking demand decreases, and it is no longer necessary to provide parking at the 0.30 ratio. Further, it will not always be feasible to replace parking in the core of campus, but parking at park and rides with reliable and frequent transit service is considered a viable alternative. The timeline of these recommendations, along with the replacement of existing garages are detailed in the implementation section of the TPSP. This should not be considered

a list of garages that must be constructed, simply a priority order for garages if they must be built due to increased demand.

1. Construct a new garage to replace the Beaty Towers lot

Priority 1, Figure 5

A new four-story garage with up to 600 spaces is recommended to replace the Division of Housing parking lot south of Beaty Towers. There are currently 204 spaces at this location for Orange and Red 1 decal holders. This location is one of only a few available parking lots in the eastern portion of campus. Based on the *SDP* vision of increased density in this portion of campus, there will be a future demand for student resident and employee parking in this location. As returning student parking is removed from the campus core, these spaces could be relocated to this location. A new Beaty lot would add approximately 396 net new spaces.

2. Construct a single parking deck for the Veterinary Medicine area on the southwest corner of SW 16th Avenue and Shealy Drive

Priority 2, Figure 5

The Veterinary Medicine area of campus includes facilities for the Veterinary Hospital, Animal Sciences and the Straughn Center. Parking is always in high demand at this location. The existing parking lot at the southwest corner of Shealy Drive and SW 16th Avenue has 213 spaces. The site could accommodate up to an approximate 450 space single parking deck (total of two levels), with an overall net gain of approximately 237 spaces for Orange, Commuter and Any Decal parking.

3. Construct a single parking deck to replace the Tigert lot in front of Tigert Hall

Priority 3, Figure 5

The existing parking lots at this location (Tigert and Criser Lots) are the only available lots for faculty, staff and visitors in this portion of the campus core. There are 163 gated (Gold and Silver decal) parking spaces between the two lots reserved for faculty and staff, and eight metered spaces for visitors. This area of campus is a high visibility location and is a main pedestrian and bicyclist entrance into the University. Additionally, Tigert Hall houses the President's Office and key staff, which includes high-profile visitors. The parking at this location is not ideal nor representative of a preeminent University.

A new 200-space single deck garage is recommended to replace the Tigert Lot. See location 3 in Figure 5. In addition to a new aesthetically pleasing structure to accompany the proposed gateway at SW 2nd Avenue and SW 13th Street, the additional spaces from the new garage align with the vision of the *SDP* to focus dense, walkable development on the northeastern portion of campus.

The number of parking spaces is limited to the deck size, which is limited to two stories, due to the design standards within the historical core area. Additionally, size is limited by the ability of the Union Rd intersection to accept garage egress on SW 13 St at peak hour.

4. New garage on the Park and Ride 1 Lot

Priority 6, Figure 5

Cultural Plaza Garage XI currently provides sufficient parking for the Cultural Plaza area and park and ride users; however, utilization for this garage has increased in recent years and will continue to increase over the next few years. The addition of the new baseball stadium in this portion of campus (expected to open by year 2020) will include approximately 950 new surface lot parking spaces (approximately 450 on-site and 500 near Fifield Field). Overflow parking from the baseball stadium could migrate to the Cultural Plaza parking areas, which could negatively impact the various users of the Cultural Plaza museums and theater and the SW Recreation Center.

A new garage could serve a role in increasing the attractiveness of park and ride facilities. This priority should also be considered dependent on increased park and ride transit route frequency and quality. The new garage could accommodate up to an approximate 1,050 space garage.

5. New garage near the Cancer/Genetics Research Complex along Archer Road

Priority 7, Figure 5

Based on available land and increased density, there is a long-term potential for a new garage near the Cancer/Genetics Research Complex along Archer Road and Gale Lemerand Drive. The site could accommodate up to an approximately 500 space garage. With newly added and soon to come garage additions on Gale Lemerand Drive, this corridor could also be used to connect these parking facilities to the rest of campus by transit. This garage addition could also serve both demand at veterinary, medical, and standard academic facilities.

6. New garage on the Orthopedics and Sports Medicine Lot (Park and Ride 2)

Priority 8, Figure 5

A new garage west of SW 34th Avenue in the Orthopedics and Sports Medicine Lot, near the current Park and Ride 2 lot would provide needed supply to accommodate the rapidly growing western portion of campus. This garage, along with a prioritization of park and ride transit service can relieve parking demand on other parts of campus, especially the northeastern portion of campus. This is especially relevant because of increased residential development west of campus. The site could accommodate up to an approximate 650 space garage.

7. New garage on Norman Field next to the existing Norman Garage

Priority 9, Figure 5

The Norman Hall Garage VIII currently holds 444 Red 1, Red 3 and Orange spaces. This garage is just outside of the *SDP* eastern third of campus "red box" area and is within the Downtown "red box" area. This area has been identified for significant redevelopment. A new garage on Norman Field next to the existing Garage VIII would accommodate up to an approximately 500 space garage and help offset the new demand on this portion of campus by students, faculty

and staff. This location is scheduled to be a site for 172 temporary surface parking spaces until this garage is built.

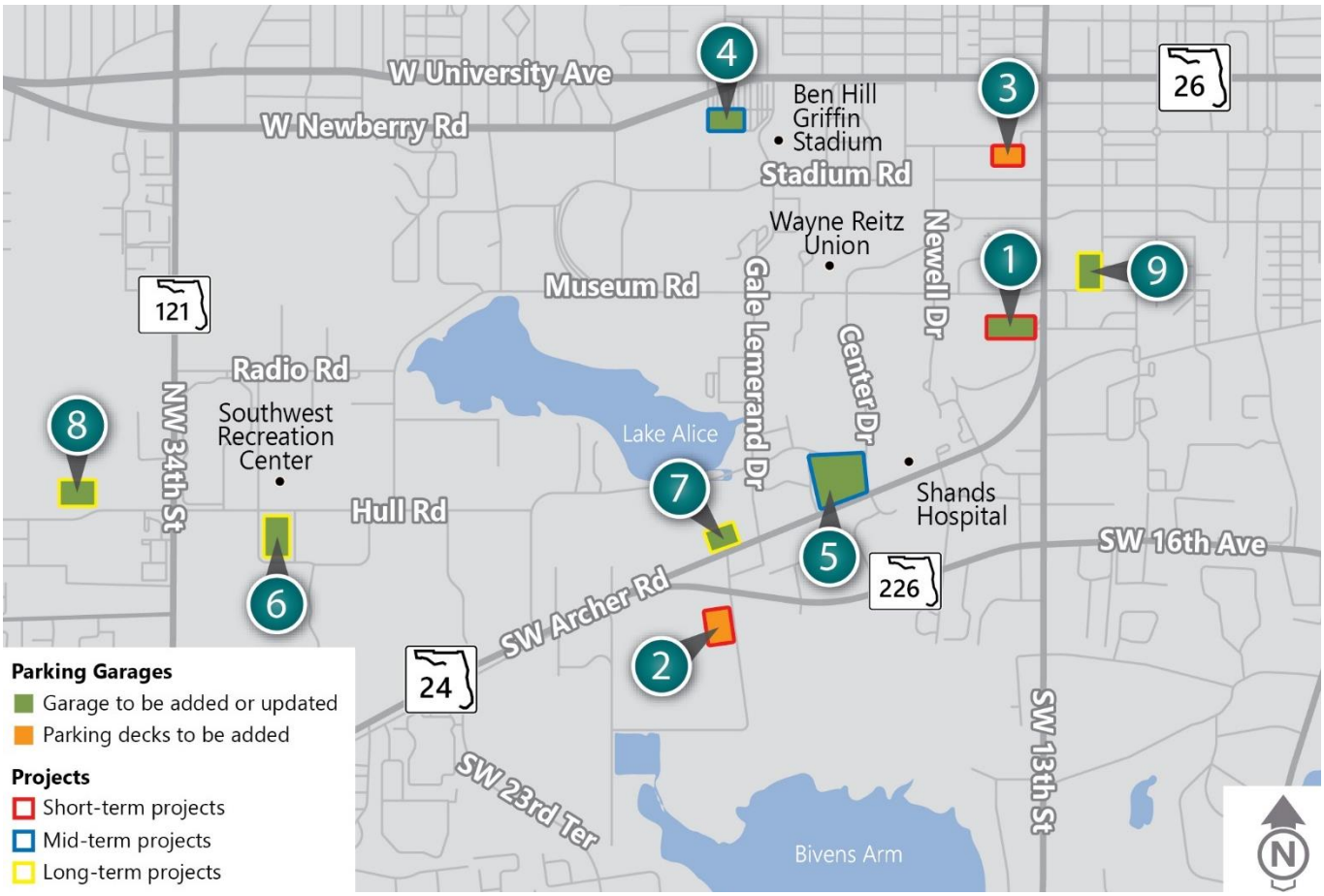


Figure 5: Prioritized Parking Structures to be Added or Updated

As explained in the Implementation section of this report, the Tigert Deck, Veterinary Medicine Deck and the Beaty Garage are identified to be implemented over the next five years, and the renovated Garages I, II, III and VII over the second five-year period, to coincide with an expected 10-year demand for 1,372 new spaces. Based on the expected increase in parking demand over the next 10-year period, as well as new parking additions and losses over the same period, there is expected to be a parking surplus of approximately 947 spaces with implementation of the proposed changes.

The following table shows the net increase in parking supply over the next 10 years.

Table 1: 10-Year Parking Supply

Parking Type	Spaces		
	New	Loss	Net
Garage XIV	+2,000	-560	+1,440
Parking loss due to new Data Sciences Building		-351	-351
New Norman Field Parking Lot	+172		+172
New Archer Field Parking Lot	+185		+185
On-site parking associated with new Baseball Facility	+450		+450
Off-site parking at Fifield Field	+482		+482
New Tigert Deck	+260	-133	+127
New Vet-Med Deck	+450	-213	+237
Parking loss due to AF Zone (Inner Rd)		-126	-126
New Beaty Towers Garage	+600	-204	+396
Parking loss due to 13th Street Sidewalk		-82	-82
Renovated Garages II and III	+2,400	-1,946	+454
Parking loss due Garage I demolition		-452	-452
Renovated Garage VII and part of O'Connell Center North lot	+1,300	-820	+480
Parking loss based on 10-15 Year CMP projects		-1,093	-1,093
Sub-Total	+8,299	-5,980	+2,319
10-year Demand			-1,372
Total 10-year Parking Increase			+947

3. Evaluate Future Class Scheduling and Employee Work Schedules to Help Alleviate Peak-Hour Traffic Congestion

69% of faculty said "UF should schedule more classes on Friday"

Although scheduling is a difficult problem that must be coordinated with almost every stakeholder on campus, there is sufficient evidence that scheduling solutions could reduce peak parking and traffic demands on the transportation system. Classes are densely located in the northeast section of campus, especially during the peak period of late morning to early afternoon. Monday and Wednesday afternoon classes peak at an average enrollment of approximately 33,100 while Tuesday and Thursday's average peak is approximately 24,500, lower than even Friday's afternoon peak of approximately 26,200. It is proposed that the University conduct a broad and collaborative study to rebalance peak class enrollment across times of day and locations on campus. Even if enrollment is only balanced between Monday/Wednesday classes and Tuesday/Thursday classes, the proposed study has the potential to reduce peak enrollment by nearly 4,000 students, which will greatly reduce the burden on the transportation system. Further, 69% of faculty responding to the CTS said that, in response to parking demand issues, more classes should be scheduled on Friday. This presents a specific opportunity to balance classes to Fridays.

It is also recommended that the University conducts a broad and collaborative study of employee work schedules to determine what current practices could be modified to help alleviate peak-hour

traffic congestion. This may include an analysis of current work schedules for employees, as well as what individual and department-wide incentives could create more efficiently scheduled employee and faculty arrival and departures. Establishing clear guidelines will be important if expanded flex-working and/or tele-working policies are recommended by the study.

4. Make use of emerging technologies to improve parking and transportation on campus

A. Increase parking efficiency and user experience through technology

While the opportunities to employ technology will undoubtedly change over the coming years, it is a goal of the University of Florida to increase parking efficiency without having to expand parking. These efficiencies will have a direct effect on arrival and departure experience of students, employees and visitors to the University. Technologies available today include license plate recognition (LPR) systems, Parking Access Revenue Control Systems (PARCS) and spot location assistance.

The University recognizes that although technology can improve user experience, the ability to find convenient parking does not supersede the University's goals of improving student learning experience and making UF the best possible place to learn and grow for students, employees, faculty and researchers. Specifically, in a peer institution survey, UW-Madison reflected this value in saying, "We are spending our revenue on things like pedestrian and bike infrastructure improvements rather than costly conveniences for single occupancy vehicle (SOV) operators."

Today, UNC-Chapel Hill, the University of Michigan and UW-Madison all employ Gorrie-Regan's PARCS. The University of South Florida recently purchased 27 new Digital Luke II parking pay stations for visitor parking.

B. Develop drop-off zones for ride share

Overall, it is important for the University to maintain a posture of openness and preparedness regarding new transportation innovations and shifts in demand. Transportation network companies (TNCs), including Uber and Lyft, will continue to create more drop-off and pick-up demand on campus. While these drop-offs will create other externalities, they should be encouraged because of their potential to reduce demand on parking facilities. It is proposed that drop-off zones be located close to the corner of Newell Drive and Inner Road, along University Avenue on the access road between Buckman Drive and Fletcher Drive, at Tigert Hall, and at the medical center near the Harrell building. A specific implementation of the drop-off zone between Buckman Drive and Fletcher Drive is referenced in recommendation A.4.H.

Additionally, it is recommended that additional drop-off zones be considered in the future and that all drop-off zones be integrated into the wayfinding and transportation branding of the campus. Considering the established Uber Saferides partnership, it may be possible to establish another partnership to encourage staff and faculty to use Uber to arrive on campus which would free up the parking supply. Several institutions have experimented with providing subsidy for use of UberPool and LyftLines to reduce on-campus parking demand.

Another important consideration for these drop-off zones is for them to be well integrated with transit access and other alternate forms of transportation to create synergy between modes and develop a more cohesive transportation system.

C. Study automated vehicle shuttles and other innovative mobility solutions

The University of Florida is in a position to learn from the City of Gainesville's experimentation with automated vehicle shuttles. If pilot routes go well for the City and RTS, there are significant opportunities to bring the next routes on-campus, including the proposed north/south route along Newell Road.

Additional innovative mobility solutions including electric vehicle charging, bike share and electric scooter share should be considered, especially when there is potential to reduce transportation infrastructure investment and eventually shift investment into other campus resources.

C. Strengthen Community Partnerships

Community partnerships are a vital way to help grow the City of Gainesville and University of Florida together and make valuable physical and institutional connections. There is opportunity for greater partnerships with local stakeholders, including the City of Gainesville, Gainesville RTS, FDOT, and UF Health. Peer institutions have found value in community partnerships. Many of the infrastructure improvements identified in the TPSP will require close collaboration with the City and FDOT. The *SDP* identifies a number of additional partnerships and potential collaborations which may directly or indirectly improve the transportation network and mobility; these should continue to be prioritized.

1. Collaborate with the City of Gainesville and FDOT to Enhance Pedestrian and Bicycle Facility Connections on and Off Campus

A. Collaborate with the City on bike share and carshare services to increase the effectiveness of these programs and build relationships for future programs

Current car and bike share programs rely heavily on their ability to travel off campus. Partnerships with the City of Gainesville will make the campus more accessible and more integrated with its surroundings.

It is also recommended that the University coordinate with the City of Gainesville to establish bike share stations at the two primary transit hubs on campus, the McCarty Hub and the Hub at Stadium Road, and at other strategic campus locations to foster collaboration and connections, such as UF Health.

These partnerships will help to establish stronger working relationships for future collaboration. Innovative mobility solutions such as shared electric scooter companies that may come to the City of Gainesville should be integrated into future partnership plans. Many of these discussions are already underway and strong collaboration will be key to their success.

B. Collaborate with the City and FDOT to integrate desired gateway features and bicycle and pedestrian connections to campus

While defining and integrating gateway features on the edge of campus is important, it is equally important that these gateways and intended connections to campus are accessible and useful throughout the greater community. Making sure the transition from campus to City works well will make it easier for travelers to arrive by bike and on foot. It will also create continuity of design. This is another partnership that should be prioritized by the University.

2. Partner with Gainesville RTS to Improve Transit Efficiency and Prepare for the Future

The University of Florida has an agreement with Gainesville's local transit operator, Gainesville RTS, to provide students and employees with transit service. Currently, generally, nine RTS routes operate within the campus boundaries to provide connections across campus. Twenty-one additional RTS routes touch the campus, connecting the University with other neighborhoods in the City. Many of these routes are impacted by the proposed BPZ.

According to responses in the CTS, nearly 38% of students currently use RTS to get around campus at least twice a week and 45% use it to get to and from campus at least twice a week. Among those who do not currently use RTS to get around campus or to commute to campus, service frequency and reliability are barriers, as is travel time. Transit ridership among employees is much lower than student ridership. Nearly half of employees would not use the bus to access the campus regardless of the circumstances. This preference is reflected in the commuting mode split among employees. Among employees who were open to riding transit to work, 15% of staff and 19% of faculty stated that having more stops closer to their residence would incentivize them to ride more.

The following transit recommendations are related to adjusting for the BPZ, improving route efficiencies, capturing new markets, and improving connections to destinations on and off campus.

A. Reroute transit to accommodate the Bicycle and Pedestrian Zone

The BPZ greatly affects Newell Road and Union Road, two heavily travelled transit corridors. Both on-campus and off-campus routes are proposed to be rerouted around the BPZ as shown in the below figures. These reroutes will focus transit activity at the Hub and at Rawlings Hall/McCarty Drive. Because of this newly focused activity, pedestrian connections should be made stronger between these two parts of campus. Transit facilities, including bus shelters, should be improved at these locations. Route 121 is also proposed to be removed. In rerouting transit around the BPZ, route 121 would become redundant with other on and off-campus routes.

Close coordination with RTS will be required. In order to minimize impact on route performance, the realigned routes will have to minimize use of University Avenue and SW 13th Street. The concepts shown in Figures 8 and 10 provide alternatives which attempt to provide little or no increase in circulation time, but additional creative solutions may be required as RTS examines schedules and attempts to implement the route changes. Additionally, these realignments should be tested in advance of the implementation of the BPZ to find optimal routing.

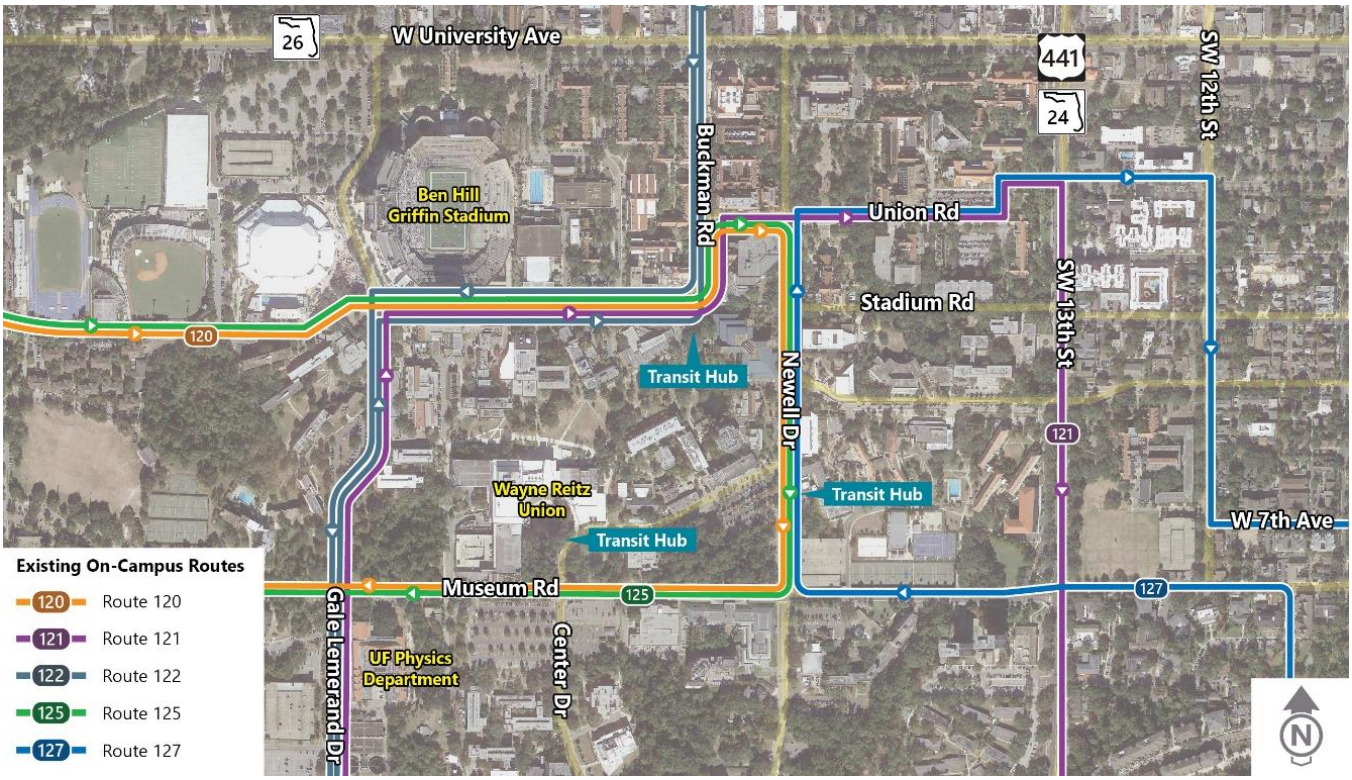


Figure 7: Existing On-Campus Transit Routes

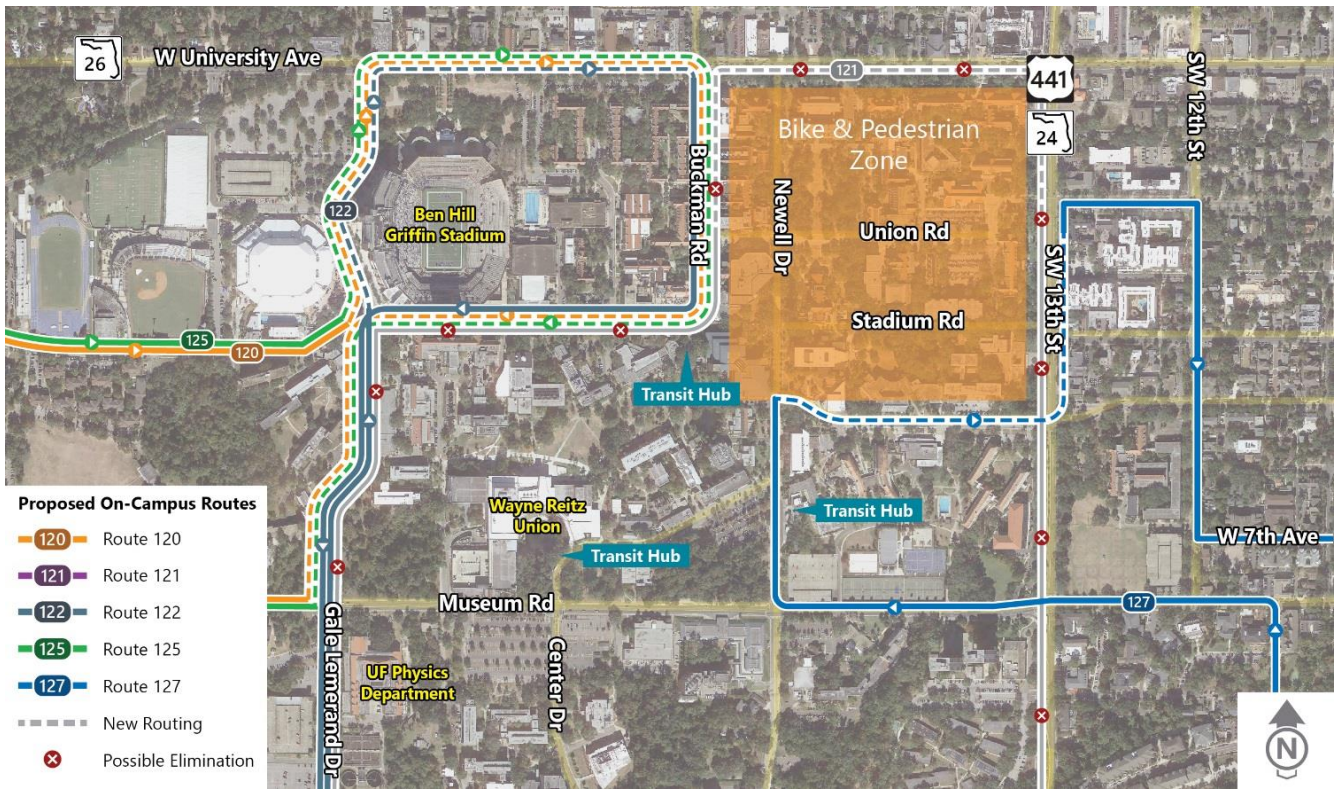


Figure 6: Proposed On-Campus Transit Routes

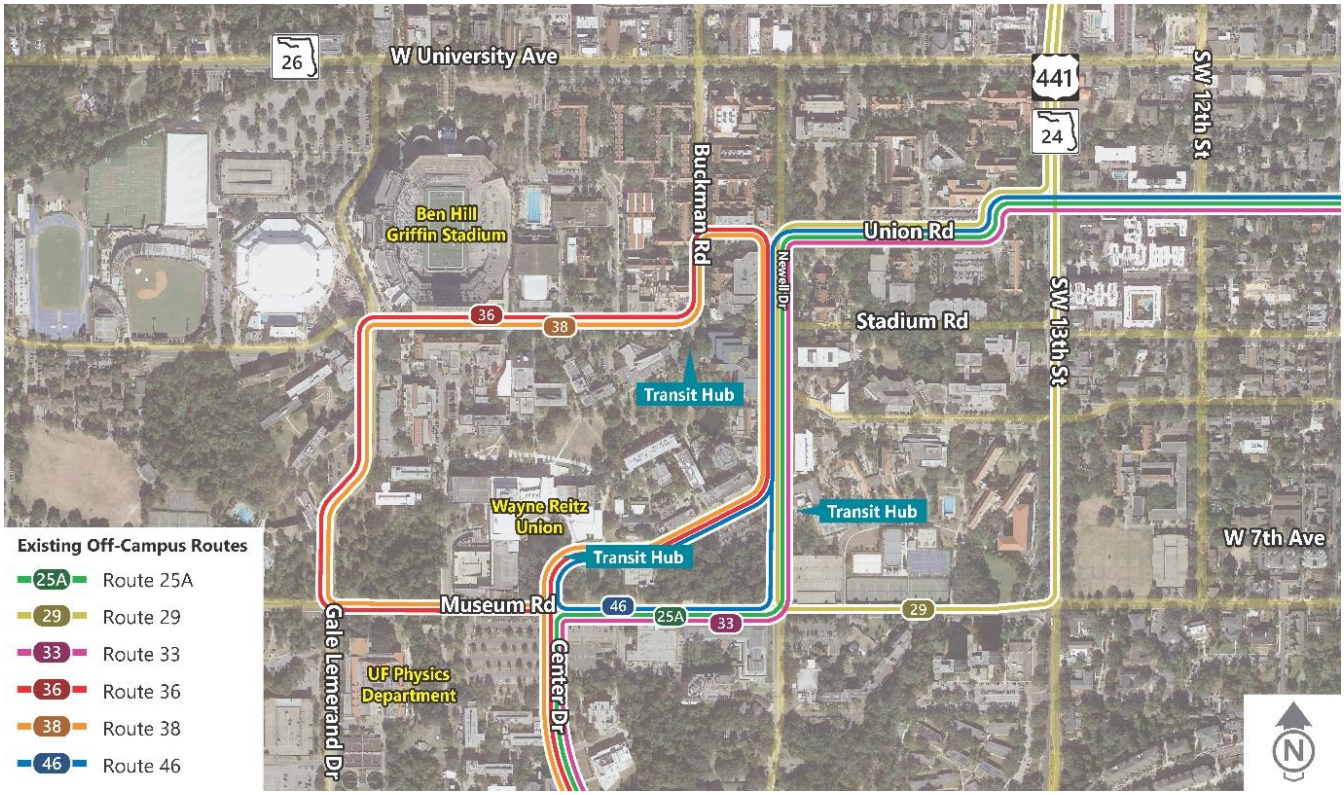


Figure 8: Existing Off-Campus Transit Routes

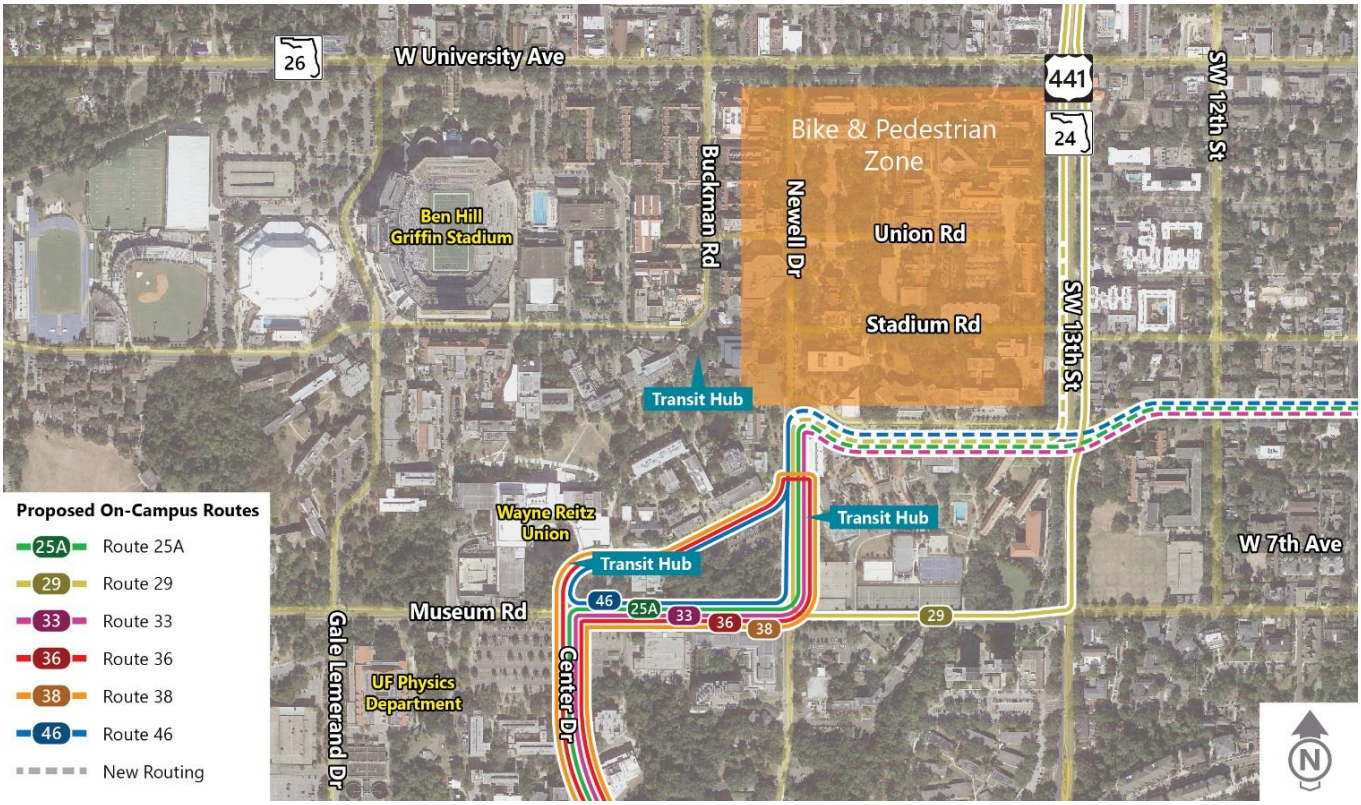


Figure 9: Proposed Off-Campus Transit Routes

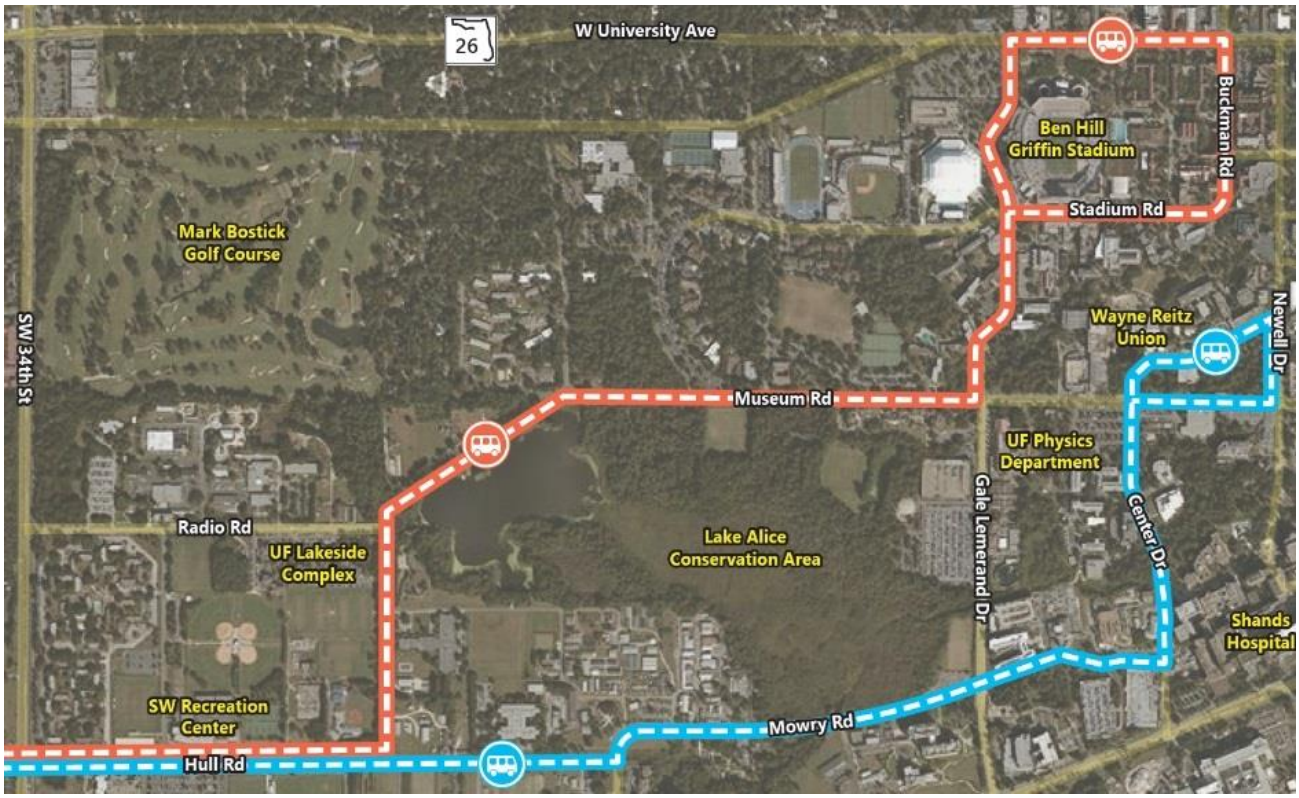


Figure 10: Proposed Park and Ride Shuttle Routes

B. Provide premium transit service from Park and Ride lots 1 and 2

Convert Routes 117 and 118 to express Park and Ride shuttles, with limited stops between the Park and Ride lots, UF Health, and the campus core areas. The ridership on Routes 117 and 118 are among the lowest for on-campus routes. By converting these routes to express routes, travel time could be reduced by up to five minutes for each route, allowing for decreased headways between trips. The University should also consider branding of these routes as "Express Shuttles" versus Gainesville RTS buses. These routes will be vital to other efforts described in this report by providing convenient and reliable access to the campus core at all times. Good transit supporting the park and ride parking facilities will help to relieve parking demand in the core campus while still providing a positive arrival experience for students, employees and visitors.

C. Adjust Route 122 service to achieve higher frequency and expanded service hours

Today, Route 122 extends north beyond the University of Florida campus. Based on ridership data, a more efficient route can be created by shortening the route and improving headways. This change is shown in the proposed transit re-routing Figure 8.

D. Add RTS bus bays in strategic locations to improve permanency of the system and operational efficiencies for other traffic

While the Bicycle and Pedestrian Zone will improve bicycle and pedestrian mobility on campus, it does require today's transit routes to be modified. Transit access to campus should remain a high priority for the University, especially to compliment bicycle and pedestrian access. Because transit access to Union Road will be lost, the University should coordinate with RTS and FDOT to convert some of the on-street parking on the southbound side of SW 13th Street, just south of the SW 2nd Avenue/Union Road intersection in front of Tigert Hall, to a dedicated bus pull-out stop. The pull-out stop provides a safe and convenient location for passengers to board and alight the bus.

This intersection location makes it easier for buses to merge back into traffic, as the traffic signal at SW 2nd Avenue/Union Road would stop through traffic. Because the curb is already cut out for on-street parking, this option would only require milling and resurfacing the roadway, and appropriate striping. The transit stop would work in coordination with the gateway improvements being proposed for at the Tigert Hall/Union Road entry and emphasize the multimodal connections and alternatives in this area.

As part of the bus-bay recommendation, it is also recommended that the scooter parking along SW 13th Street be removed and relocated to a new scooter zone. The scooter parking on SW 13th Street creates safety concerns between scooter and vehicles. Scooters have been observed backing out into through traffic, making illegal turns, and being stored in the two-way center turn lane until a sufficient gap opens to cross the travel lanes. The area could be restriped to prevent parking and driving. This recommendation requires coordination with FDOT.

E. Implement a regional vanpool alternative for employees that reside in the surrounding communities

Based on employee location data provided by the University there are clusters of employees (over 900 employees) that travel from remote areas to and from the UF main campus and UF Health, including Newberry, High Springs, Alachua and as far away as Lake City. Vanpooling serves as a feasible alternative to the single occupant auto-mobile. CTS responses indicated that, although a small number, there is openness to use of a vanpool among faculty and staff.

F. Employ the use of technology to improve the operation of the existing transit system and the planning for future needs

Decision-making for future transit routes and changes is difficult without accurate data. Partnering with RTS to invest in fare-box technology to obtain improved data will better inform

transit decisions for both RTS and the University. Investments in technology can improve the rider experience and make transit more attractive today. Additions, like wifi, would be important investments in drawing transit ridership on longer routes.

Additionally, electric busses can help the University move towards its goal of carbon neutrality. Today, Stanford University operates 23 electric transit buses and in the coming years, all 38 will be electric.

G. Facilitate and incentivize employee transit use by creating direct routes to campus from areas of dense employee population

Supporting data indicates that while 90% of students live within a direct transit ride to campus, the same is only true for 55% of campus employees. As a result, only 3% of employees utilize RTS or shuttle services on a regular basis for travel to campus, as compared to 40% of students. Further, both faculty and non-faculty staff named bus stops closer to their residence as their top incentive to take RTS more frequently.

There are approximately 2,900 employees and an additional 975 students living in the Haile Plantation area, and approximately 834 employees and 340 students residing in the Duck Pond neighborhood. Based on current mode split data, transit service in these areas would capture up to 560 new riders.

It is recommended that RTS, in coordination with UF, implement at a minimum, two new routes that target the employees in the Haile Plantation neighborhood and the Duck Pond neighborhood. A third route to the northern portion of Tower Road is also shown, which further targets the employee population. The routes are recommended to be express routes to reduce travel times and be competitive with driving a personal vehicle. The new routes, coupled with more housing attractive to faculty and staff closer to campus, as recommended in the *SDP*, will aid in reducing overall traffic congestion in the AM and PM peak hours as well as demand on parking infrastructure. Potential park and ride facilities close to residences are also shown in Figure 11. Adding park and ride facilities closer to residences may increase the attractiveness and accessibility of these routes.

Figure 11: Proposed Employee-Focused Transit Routes

H. Support Transit Connections Between Major Destinations

Based on stakeholder feedback, there are two areas that lack transit connection: the link between the UF Cultural Plaza and Downtown Gainesville, and the link between the campus core and UF Health. The *SDP* includes recommendations to unite the University with the City of Gainesville by providing physical connections between the downtown, the campus core and UF Health. These connections include "complete streets" along the east-west neighborhood roads that promote walkability and bicycle use, along with robust transit service. Transit routes can supplement these physical connections.

1. Enhance the connection between the City and the Campus through an 'Arts Axis' transit route.

Specifically, the TPSP recommends an enhanced transit connection that links Cultural Plaza, UF's academic core and Downtown Gainesville. This concept is pictured above in Figure 11 as the route between the Duck Pond neighborhood and Cultural Plaza, and can be jointly pursued with the concept of employee focused transit.

2. Connect UF Health to the main campus with a transit route that travels north/south along Newell Drive.

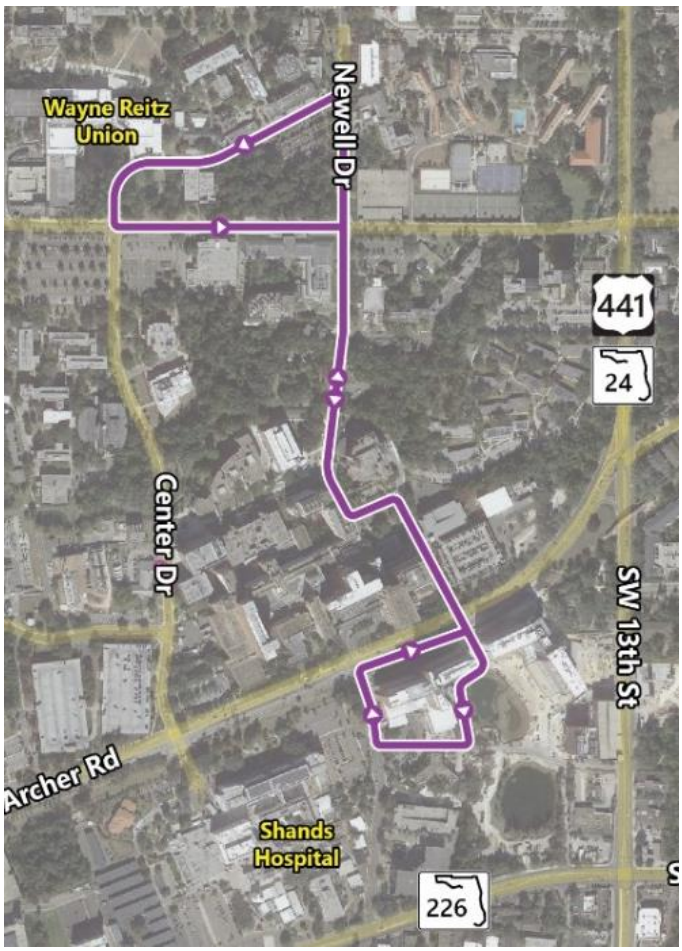


Figure 12: Proposed North/South Newell Shuttle Route

The *SDP* includes recommendations for a re-imagined Newell Drive with transit to provide improved access to the UF Medical Center from the campus core and the community. Newell Drive provides a direct connection between the UF Health campus and the University's academic core. Many students and faculty travel this corridor via automobile. Due to sloping topography, it is a difficult corridor to walk or use a bicycle.

It is recommended that the University develop a route that connects UF Health to the main campus with a fixed route that travels north and south along Newell Drive. The approximately 1.8-mile Newell Drive north/south route would provide a needed non-personal automobile connection between the core campus area and the UF Health facilities. The proposed route is shown in Figure 13. It is recommended to explore the implementation of a further north location for this route to turn around, likely in conjunction with making Inner Road a two-way facility. In this scenario, the route would end just prior to the BPZ limits at Inner Road and at the UF Health Shands Cancer Hospital on the south side of Archer Road.

A new transit connection in the form of a branded circulator would help the University build even greater synergy between the two organizations. As noted earlier, the topography impedes pedestrian and bicycle traffic; however, the short distance provides the opportunity for well-spaced headways. Because of the reduced headways, smaller vehicles are recommended. Additional UF Health-based routes could be expanded with the same branding and size if there is demand. A strong brand can foster trust with riders and can have a significant impact on a system's performance. As autonomous vehicle technology matures, this route has the opportunity to become a signature feature on the campus.

3. Collaborate with UF Health for Improved Visitor/Patient Access Experience

Organizational cooperation between the University of Florida Transportation and Parking and UF Health can greatly benefit the University of Florida transportation system overall. UF Health faces unique parking demand challenges, including hospital client satisfaction and unconventional working hours for employees. While long-term planning for the UF Health system can be done independently of the University, the transportation system is greatly affected by the decisions of both organizations and would benefit from greater levels of partnership. The TPSP seeks to provide some guidance on future decision-making.

A. Jointly reevaluate parking ownership and decision-making processes and form a new agreement

While today much of UF Health's parking is managed by UF TAPS, it is important for both groups to understand their impact on the other and work to create the most efficient transportation system possible. This partnership should be evaluated, and regular collaboration should be encouraged. Peer universities have indicated that parking ownership and leadership is a difficult and contentious issue nationwide, and strategies vary on how to solve it. Most indicated that consistent communication and consensus are valuable in creating a successful partnership. This partnership is particularly important considering Garages I, II and III, the primary parking facilities for UF Health, have all been identified as priorities for redevelopment.

B. Collaborate on branding RTS buses and access to transit

Collaboration on branding for the north/south Newell Drive route will help create synergy between UF Health and the University. This collaboration can be leveraged to seek further branding and wayfinding partnerships in the future.

3

Implementation

This section summarizes the capital parking and transportation prioritization with preliminary cost estimates for the recommendations outlined in the University of Florida Transportation and Parking Strategic Plan (TPSP).

The numbered priorities provided in this section consider the timing and cost for new transportation and parking recommendations with regard for the *SDP* and planned development of the University of Florida campus.

The capital priorities are included below in Tables 2 through 5. Unless otherwise noted, the preliminary roadway improvement cost estimates are based on FDOT Long-Range Estimates (LRE) and do not include costs related to right-of-way, drainage/stormwater nor utility relocations. Parking costs are based on a conservative $20,000 per parking space. Transit costs are based on Gainesville Regional Transit unit and operating costs. All costs are estimates and should be refined during the design phases of each project.

The improvements are prioritized based on policy recommendations that can be implemented immediately and capital improvements that can be implemented in the short-term (ST) during the next one to five years, mid-term (MT) during the next five to 10 years, and long-term beyond 10 years.

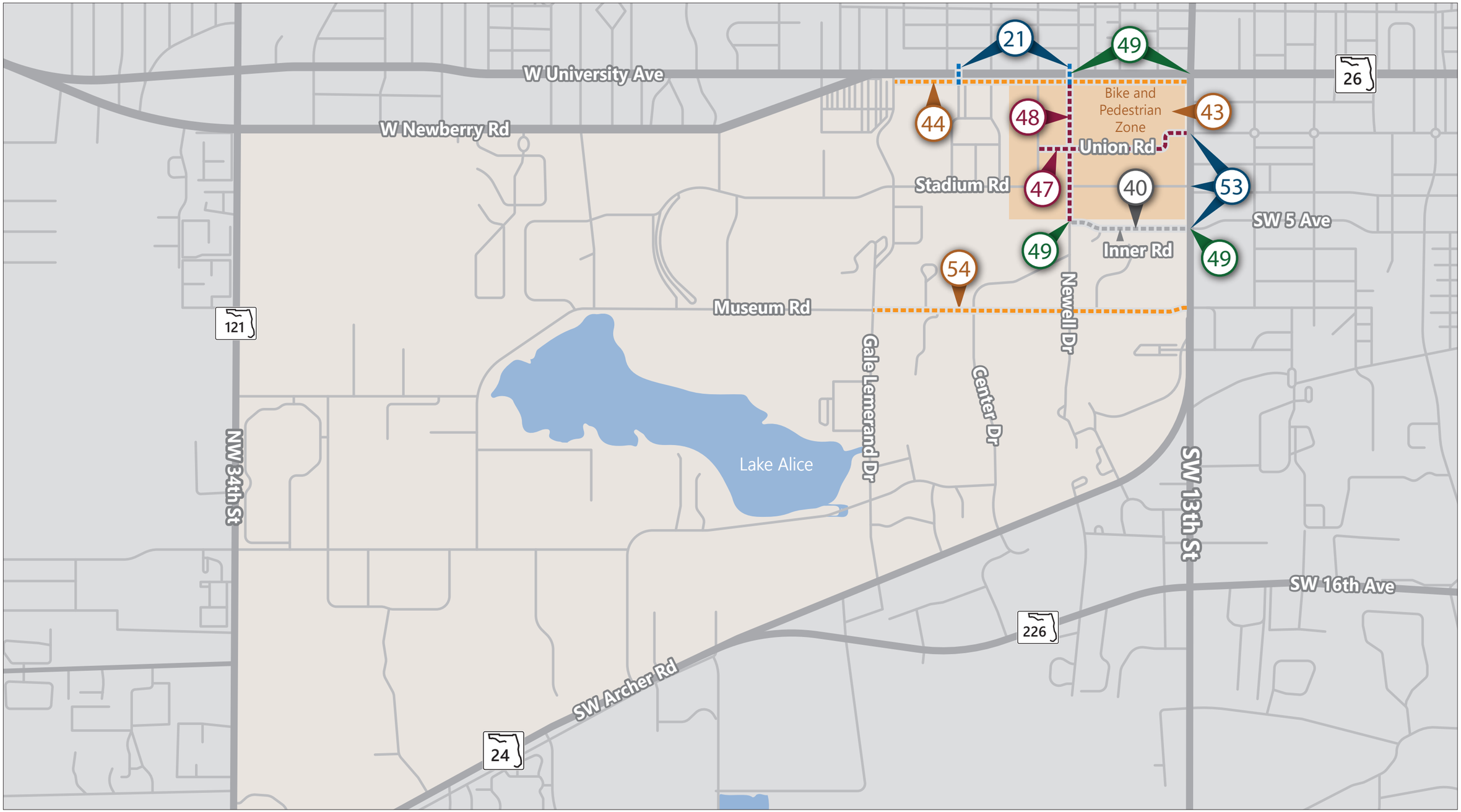
The recommendations made in this report and prioritized in Tables 2 through 5 are summarized in the following four figures, which are split into recommendations based on category. as follows: Bike and Pedestrian Summary, Transit Summary, Roadway Summary and Parking Summary. In these figures, labeled priority numbers correspond to those in Tables 2 through 5.

3.1. Funding

The TPSP recommendations represent a significant investment in the transportation system at UF. Some of these improvements will be funded fully by UF. Many represent benefits to various partners, such as UF Health, or have broader impacts to overall mobility within Gainesville and beyond. To realize all of these projects will require cooperation and foresight in project funding and execution.

While many funding sources exist, the likely sources for these will focus on the following:

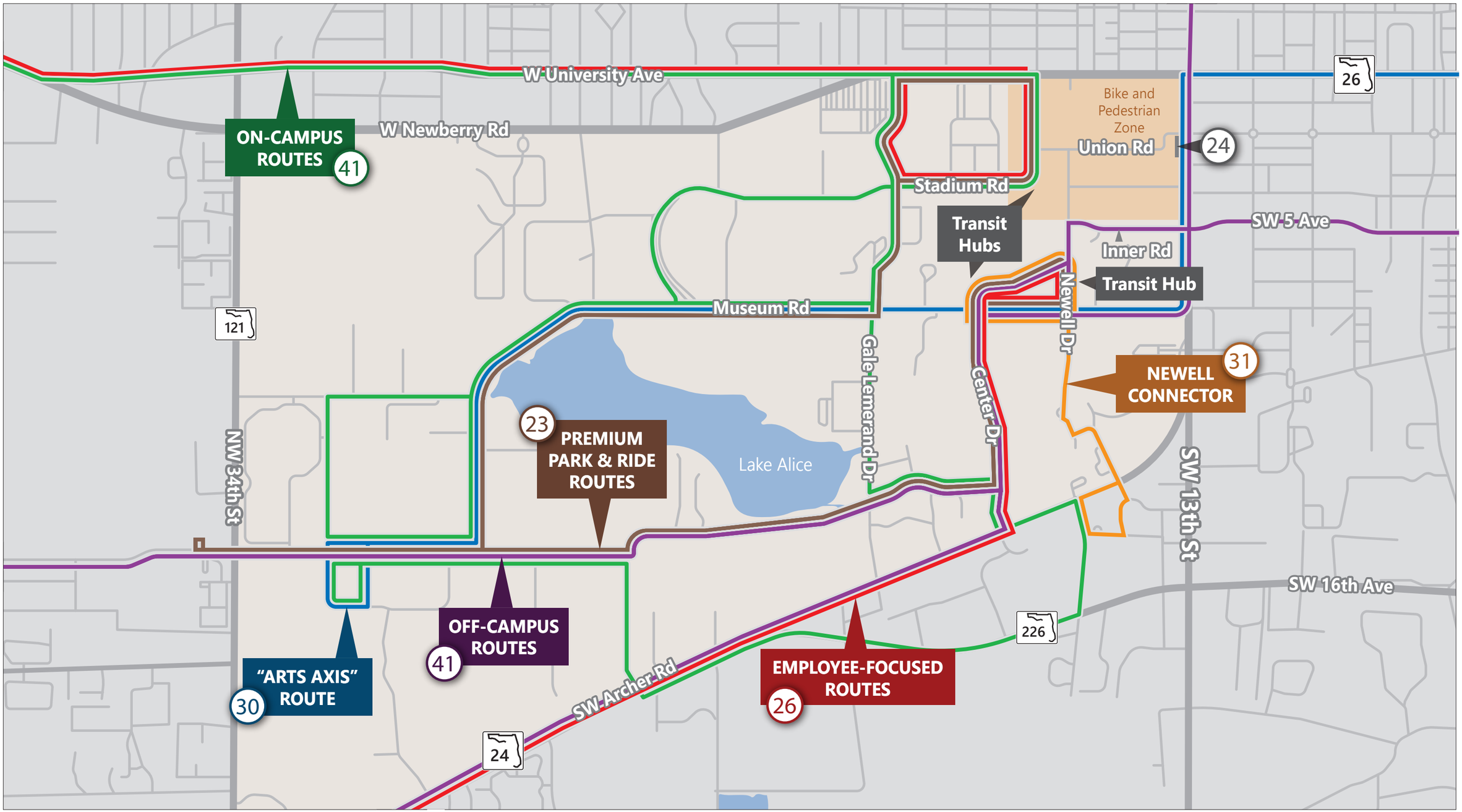
- **Decal revenue**: Most of the funding for TAPS programs, including parking construction and operation, comes from the sale of parking decals. The designation of additional gated lots, accompanied with growth in enrollment and employment, permit revenue is expected to increase by $650,000 to $1 million per year. The range will depend on demand for new permit zones as well as the potential introduction of lower-cost employee permit options. Increases in pricing, beyond that of inflation, have the potential to increase revenue further. In particular, a reevaluation of the student decal pricing, and accompanying parking access, could result in a sizeable increase given the number of student decals sold and the incongruity between the cost of providing parking facilities and the price of student parking decals.
- **Project-related improvements**: Many of the transportation improvements are located proximate to building or other capital improvements planned for the campus. It will be important to review existing projects, as well as those arising from the *Campus Framework Plan* and subsequent *Campus Master Plan* update, for opportunities to partner and leverage donor or other funds to enhance the campus. For example, several improvements are anticipated in conjunction with the new baseball stadium.
- **PECO funding**: For major projects, Public Education Capital Outlay (PECO) funding may be available. Such funding is highly competitive so may require a long wait but offers an opportunity to leverage state funding. This is generally only an option for large projects such as road construction.
- **Local, state and federal transportation funding**: There are a range of state and federal programs, both formulary and grant-based, which support enhancements to infrastructure to support various transportation modes. Several of the crossings of University Avenue are programmed for funding through the MPO's funding program. Similarly, there are opportunities for transit funding, particularly to support pilot programs as well as those to improve transit efficiency. RTS is about to update its transit development plan, a multi-year guidance document, so it will be important for UF to collaborate and explore both pilots as well as permanent changes to service in support of the TPSP.
- **Partnerships**: There may be opportunities for new partnerships to support capital or operating expenditures to improve the regional transportation network. This could range from additional partnerships with UF Health to potential partnership with the Redevelopment Authority or a public-private partnership.



N.T.S.

21. Midblock Crossings
40. Transition Inner Rd. to 2-Way
43. Bike and Pedestrian Zone (BPZ)
44. Shared-Use Path
47. Convert Union Rd to BPZ
48. Convert Newell Dr to BPZ
49. Gateway Treatment
53. Improved Pedestrian Crossings
54. Shared-Use Path

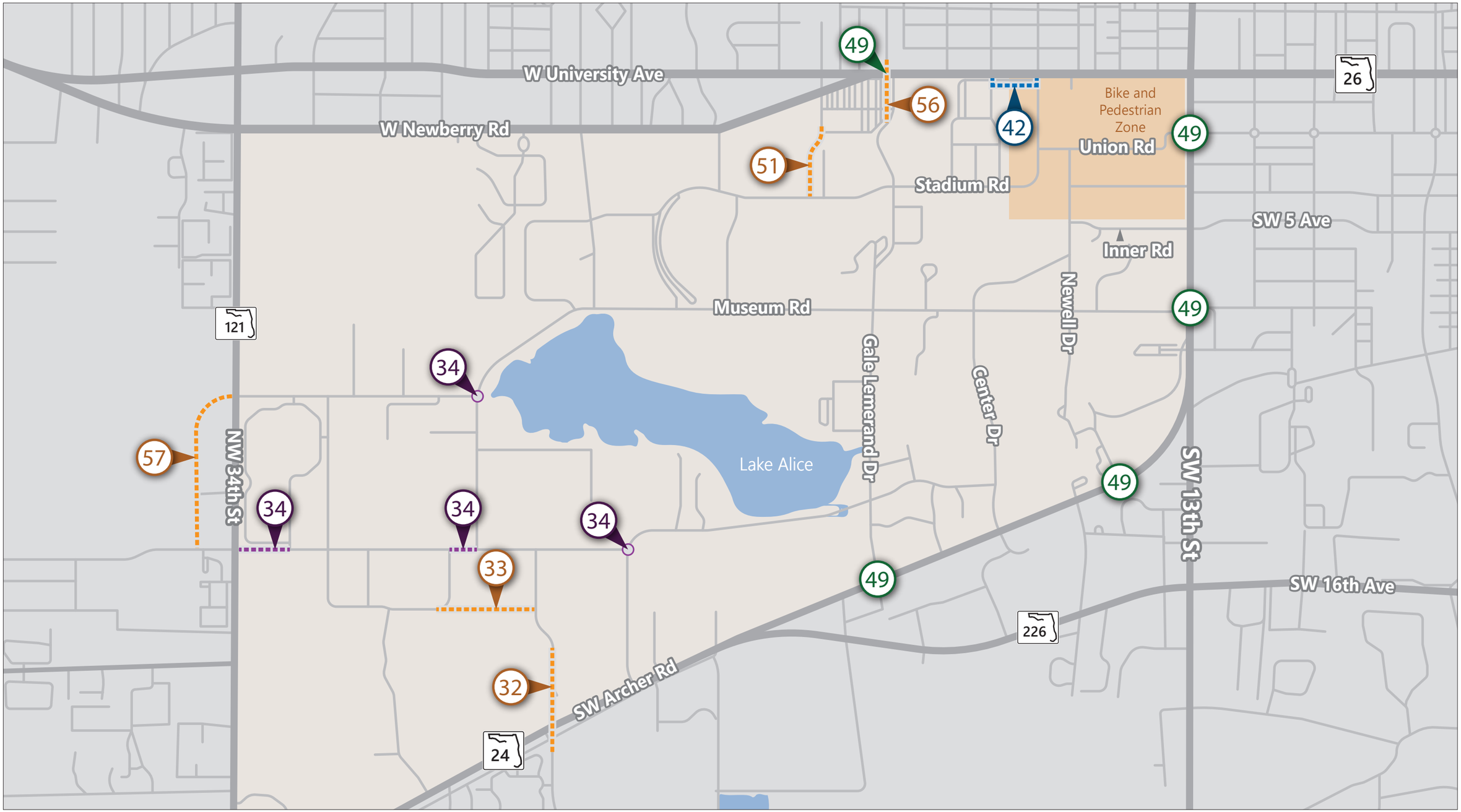
vhb **Bike & Pedestrian Summary**



N.T.S.

- **23.** Employee-Focused Routes
- **26.** Premium Park & Ride Routes
- **30.** "Arts Axis" Route
- **31.** Newell Connector
- **41.** Proposed On-Campus Routes
- **41.** Proposed Off-Campus Routes

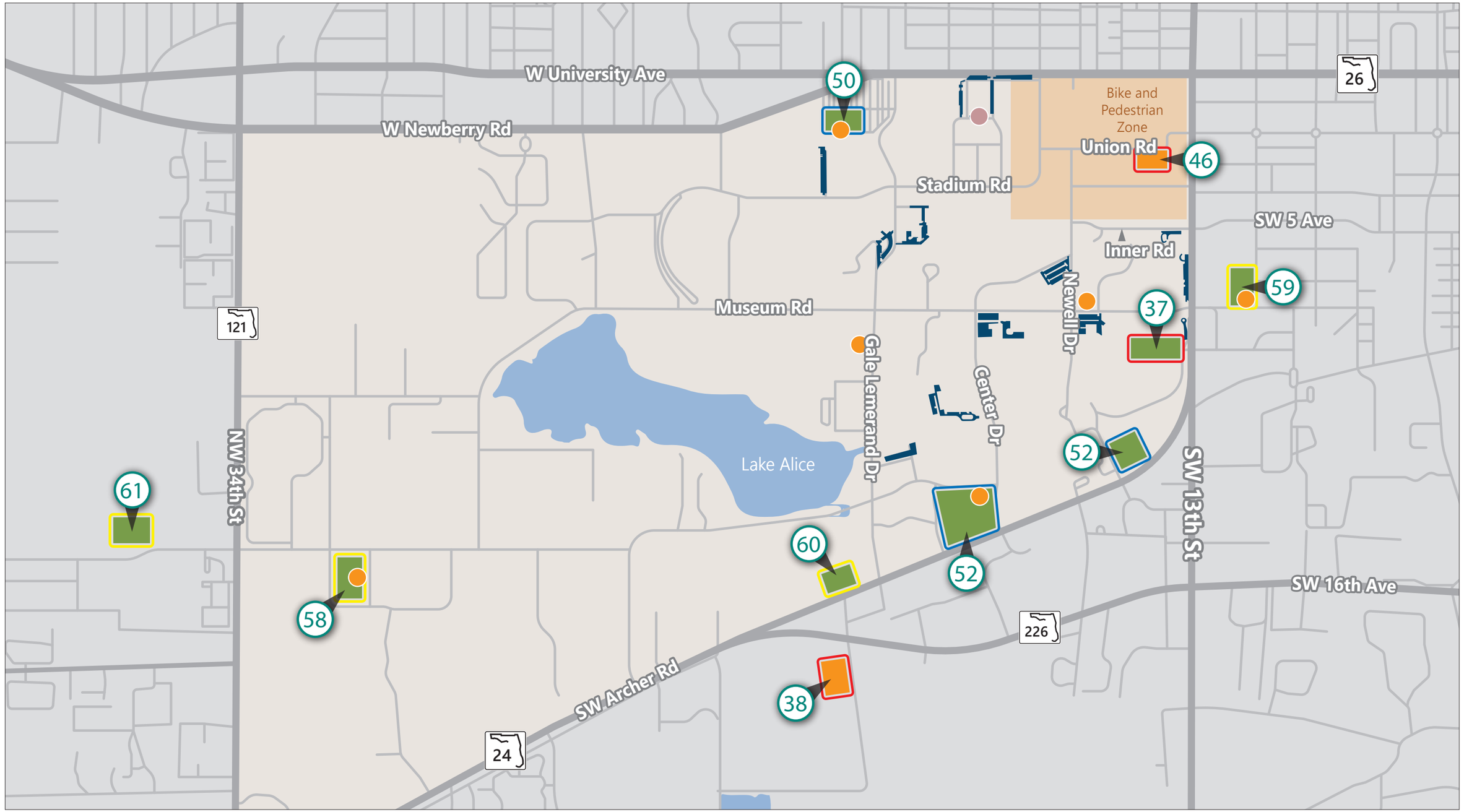
vhb **Transit Summary**



N.T.S.

32. Roadway Extension
33. Roadway Extension
34. Roundabouts and Traffic Improvements
42. Drop-off Zone
49. Gateway Treatments
51. New Roadway
56. Realign Roadway
57. Roadway Extension

vhb **Roadway Summary**



N.T.S.

Parking Garages

- **37, 50, 52, 58, 59, 60, 61** Garage to be added or updated
- **38, 46.** Parking decks to be added
- Short-term projects
- Mid-term projects
- Long-term projects

- **16.** Gated Lots
- **19.** Commuter Scooter Parking
- **19.** Commuter Scooter Parking (Option to Remain)

vhb **Parking Summary**

Table 2: Summary of Policy Projects

ID	Recommendation	Recommendation Description	Implementation				External Coordination	Notes	
			Start Date	Difficulty	Capital Cost	Prerequisite Projects/Policies		Comment 1	Comment 2
1	Restrict overnight parking at park and ride lots	A.2.D	August 2018	Low	N/A	N/A	N/A	Already implemented by UF TAPS	Reduces student storage of cars
2	Collaborate with the City on bike share and Zipcar services	C.1.A	Immediately	Low	N/A	N/A	City of Gainesville	Begin collaboration now	Promotes other modes of travel
3	Evaluate Future Class Scheduling and Employee Work Schedules to Help Alleviate Peak-Hour Traffic Congestion	B.3	Immediately	Low	N/A	N/A	N/A	Being considered as part of the Campus Framework Plan	Improve peak hour traffic congestion
4	Conduct a study to develop a budget for specific parking costs such as an asset replacement fund, Transportation Demand Management (TDM) program expansion fund, and new garage fund	A.2.I	Spring 2019	Low	N/A	N/A	N/A	Begin study to identify appropriate strategies at the start of the next academic year	Identifies funding for future improvements
5	Limit parking access to one decal per person	A.2.E	Fall 2019	Low	N/A	N/A	N/A	Begin implementation at the start of the next academic year	Reduces parking demand
6	Expand the hours of decal restrictions in the core campus areas	A.2.H	Fall 2019	Low	N/A	N/A	N/A	Begin implementation at the start of the next academic year	Reduces peak hour congestion
7	Improve scooter safety and rule compliance on campus through marketing and communication	A.6.C	Fall 2019	Medium	N/A	N/A	Gainesville PD	Begin implementation at the start of the next academic year	Reduces number of vehicle trips
8	Evaluate and improve daytime mobility for employees, including the official business permits process	A.2.G	Fall 2019	Medium	N/A	N/A	N/A	Begin implementation at the start of the next academic year	Improves business parking permit process
9	Employ short-term and low-cost projects to prove the viability of bicycle and pedestrian improvements	A.3.I	Fall 2019	Low	N/A	A.3.H.	City of Gainesville, FDOT	Begin implementation at the start of the next academic year	Improves safety dialogue and engagement with students and employees
10	Establish policies that encourage employees and students to live closer to campus, and in range of alternative transportation options	B.1	Fall 2019	Medium	N/A	N/A	City of Gainesville	Begin study to identify appropriate policies at the start of the next academic year	Reduces vehicle trips and parking demand
11	Promote Travel Support Programs	A.7.	Fall 2019	Medium	N/A	C.2.E., B.1.	City of Gainesville	Identify appropriate policies and begin implementation at the start of the next academic year	Will support use of alternative modes of transportation
12	Implement automated vehicle shuttles and other innovative mobility solutions	B.4.C	Fall 2019	Medium	N/A	N/A	City of Gainesville, FDOT, RTS	Begin discussions with City and RTS regarding potential uses and routes on campus	Reduces vehicle trips and parking demand
13	Convert all Employee parking spaces in SDP “red box” to Orange, Blue and Gated spaces and add an employee decal limited to park and ride lots	A.2.C	Fall 2019	Medium	N/A	N/A	N/A	Begin implementation at the start of the next academic year	Improves faculty parking experience
14	Encourage use of environmentally-responsible scooters	A.6.B	Fall 2020	Medium	N/A	N/A	N/A	Begin enforcing policy at the start of next academic year	Improves air quality
15	Jointly reevaluate UF TAPS and UF Health parking ownership and decision-making processes and form new agreement	C.3.A	Fall 2019	High	N/A	N/A	UF Health	Begin discussions with UF Health regarding new agreement on parking ownership and management	Streamlines decal process
16	Develop a mid-range Gated decal level for faculty and staff and convert core campus parking to gated parking	A.2.B	Fall 2019	Medium	N/A	N/A	N/A	Requires time to notify employees of changes and to add gates to parking lots	Improves faculty parking experience
17	Consolidate student resident parking and increase the number of employee decal spaces	A.2.A	Fall 2021	Medium	N/A	N/A	N/A	Tied to identification of internal campus location for relocated Red 3 spaces	Improves faculty parking experience

Table 3: Summary of Short-Term Capital Projects

ID	Recommendation		Recommendation Description	Implementation			Prerequisite Projects/Policies	External Coordination	Notes	
	Type	Description		Start Date	Difficulty	Capital Cost			Comment 1	Comment 2
18	Transit	Collaborate with UF Health on branding RTS busses and access to transit	C.3.B	Spring 2019	Medium	N/A	N/A	UF Health, RTS	Begin coordination with UF Health	Improves employee, student and visitor access to/from UF Health and campus core
19	Parking management	Consolidate scooter/motorcycle parking for better efficiency and parity with automobile commuters	A.6.A	Fall 2019	Medium	N/A	N/A	N/A	Requires time to notify students and employees of changes and to prep parking lots	Improves traffic congestion and safety, and organizes scooter parking
20	Parking management	Improve parking for visitors, including the addition of more available pay stations, pay-by-cell and reserved event parking spaces	A.2.F	Fall 2020	Medium	N/A	N/A	N/A	Requires meetings with various vendors to determine most appropriate technology for use on campus	Improves visitor parking experience
21	Bike/ped	Provide midblock pedestrian crossings along W. University Avenue at NW 19th Street and at Newell Drive/NW 16th Street	A.3.C	Fall 2019	Low	$1,070,505 (SR 26/University Avenue Multimodal Emphasis Corridor Study)	N/A	N/A	Design underway by FDOT	Improves pedestrian safety and encourages pedestrian activity
22	Transit	Adjust Route 122 service to achieve higher frequency and expanded service hours.	C.2.C	Fall 2019	Low	N/A	N/A	RTS	Begin implementation at the start of the next academic year	Provides more attractive mode choice to vehicle use
23	Transit	Provide premium transit service from Park and Ride lots 1 and 2	C.2.B	Fall 2019	Low	N/A	N/A	RTS	Begin implementation at the start of the next academic year	Provides more attractive mode choice to vehicle use
24	Transit	Add RTS bus bays in strategic locations, including in front of Tigert Hall along SW 13th Street	C.2.D	Fall 2019	Medium	$10,000 at Tigert Hall	N/A	RTS	Requires coordination with the City and FDOT	Improves transit user experience
25	Transit	Implement a regional vanpool alternative for employees that reside in the surrounding communities	C.2.E	Fall 2019	Medium	$42,000	N/A	RTS	Requires 2 dedicated shuttles	Improves employee access to campus and reduces parking demand
26	Transit	Facilitate and incentivize employee transit use by creating direct routes to campus from areas of dense employee population	C.2.G	Fall 2019	Medium	$1.1 million in first year	N/A	RTS, Employees	Requires coordination with RTS	RTS is currently exploring technology options as part of TDP update
27	Parking management	Increase parking efficiency and user experience through technology	B.4.A	Spring 2020	Medium	N/A	N/A	N/A	Requires meetings with various vendors to determine most appropriate technology for use on campus	Improves employee, student and visitor parking experience
28	Transit	Employ the use of technology to improve the operation of the existing transit system and the planning for future needs	C.2.F	Fall 2020	Medium	N/A	N/A	RTS	Requires coordination with RTS	RTS is currently exploring technology options
29	Ped/bike	Prepare a separate Bicycle Master Plan	A.3.H	Fall 2020	Low	N/A	N/A	N/A	Requires identification of equipment and location	Improves bicyclist experience
30	Transit	Enhance the connection between the City and the Campus through an 'Arts Axis' transit route	C.2.H.1	Fall 2020	Medium	N/A	N/A	RTS, City of Gainesville	Requires coordination with RTS	Improves Cultural Plaza access and reach to the community
31	Transit	Connect UF Health to the main campus with a transit route that travels North/South along Newell Drive	C.2.H.2	Fall 2020	High	$700,000 in first year	N/A	UF Health, RTS	To be branded as an express route	Improves connections between UF Health and Main campus

ID	Recommendation		Recommendation Description	Implementation			Prerequisite Projects/Policies	External Coordination	Notes	
	Type	Description		Start Date	Difficulty	Capital Cost			Comment 1	Comment 2
32	Roadway	Connect Hull Road to Archer Road with an extension to SW 23rd Terrace and IFAS Extension Road	A.4.B	Fall 2021	Medium	$2.2 million (includes new signal; does not include utilities)	N/A	N/A	FDOT funding a redesigned signal	Improves transportation network connectivity and reduces congestion
33	Roadway	Extend Natural Area Drive to connect with IFAS Extension Road	A.4.C	Fall 2020	Medium	$1.69 million	N/A	N/A	Tied to increased event demand	Improves transportation network connectivity and reduces congestion
34	Traffic Operations	Implement roundabouts at Hull Road and SW 23rd Drive/Mowry Road and at Radio Road and Museum Road as well as other efficiency improvements along Hull Road	A.4.D	Fall 2020	High	$560,000 per roundabout; $250,000 at SW 34th St. and Hull Road	N/A	N/A	To improve traffic flow	Full recommendations can be found in *Southwest Campus Sub-Area Transportation Study*
35	Wayfinding	Collaborate with the City and FDOT to integrate desired gateway features and bicycle and pedestrian connections to campus	C.1.B	Fall 2021	Medium	N/A	Landscape Master Plan	City of Gainesville	Requires design and construction of gateway areas	Improves visitor experience
36	Wayfinding	Implement a unified physical and digital wayfinding program	A.5.B	Fall 2021	Medium	N/A	N/A	N/A	Requires coordination with the City and FDOT in developing a wayfinding plan	Improves visitor experience
37	Parking facilities	Beaty Garage	B.2.B.1	Fall 2022	High	$12.0 million	N/A	N/A	Meets short-term parking demand and adds more faculty parking options	Improves employee, student and visitor parking experience
38	Parking facilities	Veterinary Medicine Parking Deck	B.2.B.2	Fall 2022	High	$3.0 million	N/A	N/A	Meets short-term parking demand and adds more faculty parking options	Improves employee and visitor parking experience
39	BPZ	Reduced speed limit to 15 mph within area north of Museum Road and east of Gale Lemerand Drive	A.4.J	Fall 2019	Low	N/A	N/A	N/A		
40	BPZ	Transition Inner Road to a two-way corridor in conjunction with implementation of Bike and Pedestrian Zone	A.4.A	Fall 2022	High	$1.45 million (via LMP)	N/A	N/A	Required before transit and drop-off zone improvements	Improves vehicle access around the BPZ
41	BPZ	Reroute transit to accommodate the Bike and Pedestrian Zone	C.2.A	By Fall 2022	Medium	N/A	N/A	RTS	Can implement with Inner Road conversion; may begin sooner	Improves pedestrian experience and safety
42	BPZ	Implement a drop-off and service zone between the Fletcher Road and Buckman Drive and at Inner Road and Newell Drive, then at additional locations	B.4.B A.4.H	Fall 2022	Medium	N/A	N/A	N/A	Implement after transit and Inner Road conversion	Improves pedestrian experience and safety
43	BPZ	Implement Bike and Pedestrian Zone (BPZ)	A.1	Fall 2022	Low	N/A	A.4.A, B.4.A, C.2.A	N/A	Implement after transit and Inner Road conversion	Improves pedestrian experience and safety
44	Ped/bike	Convert the sidewalks along W. University Avenue between Gale Lemerand Drive and 13th Street to a shared-use path	A.3.D	Fall 2024	Medium	$3.56 million (SR 26/University Avenue Multimodal Emphasis Corridor Study)	Landscape Master Plan	N/A	Implement after BPZ	Improves pedestrian experience and safety
45	Ped/bike	Extend the sidewalk along SW 13th Street from Inner Road to Museum Road	A.3.F	Fall 2024	High	$451,000	N/A	N/A	Implement after BPZ	Improves pedestrian experience and safety
46	Parking facilities	Tigert Parking Deck	B.2.B.3	Fall 2025	High	$5.2 million	N/A	N/A	Meets short-term parking demand and adds more faculty parking options	Improves employee and visitor parking experience

Table 4: Summary of Mid-Term Capital Projects

ID	Recommendation		Corresponding Recommendation	Implementation				External Coordination	Notes	
	Type	Description		Start Date	Difficulty	Capital Cost	Prerequisite Projects/Policies		Comment 1	Comment 2
47	BPZ	Convert Union Road to pedestrian zone	A.3.A	2025-2030	Medium	$2.8 million (via LMP)	N/A	N/A	Implement after BPZ	Improves pedestrian experience and safety
48	BPZ	Convert Newell Drive to pedestrian zone	A.3.B	2025-2030	Medium	$1.6 million	N/A	N/A	Implement after BPZ	Improves pedestrian experience and safety
49	Ped/bike	Construct Gateway treatments at important community connections	A.5.A	2025-2030	Medium	$14.6 million	Landscape Master Plan	City of Gainesville	Requires design and construction of gateway areas	Improves visitor experience
50	Parking facilities	Garage VII Reconstruction	B.2.A.1	2025-2030	High	$26.0 million	N/A	N/A	Includes removing surface lot spaces	Improves employee, student and visitor parking experience
51	Roadway	Add a new internal roadway connection between SW 2nd Avenue and Stadium Road	A.4.E	2025-2030	High	$1.25 million (includes reconstruction of warehouse and fill to transition the grade change)	B.2.A.1	N/A	To be completed with Garage VII reconstruction	Improves traffic circulation
52	Parking facilities	Garage I, II and III Reconstruction	B.2.A.2	2025-2030	High	$48.0 million	A.4.F	N/A	To be integrated with new medical buildings fronting Archer Road	Improves employee, patient and visitor parking experience
53	Ped/bike	Improve pedestrian crossings along SW 13th Street at Museum Road, Inner Road, Stadium Road and Union Drive.	A.3.E	2025-2030	Medium	N/A	N/A	City of Gainesville, FDOT	To improve connections to BPZ	Improves neighborhood connections and pedestrian safety
54	Ped/bike	Provide a shared-use path along Museum Drive	A.3.G	2025-2030	High	N/A	N/A	N/A	To improve bicycle movement	
55	Ped/bike	Reevaluate campus connections to the neighborhoods east of SW 13th Street	A.4.I	2025-2030	Medium	N/A	N/A	N/A	As recommended in the SDP	Improves neighborhood connections

Table 5: Summary of Long-Term Capital Projects

ID	Recommendation		Corresponding Recommendation	Implementation				External Coordination	Notes	
	Type	Description		Start Date	Difficulty	Capital Cost	Prerequisite Projects/Policies		Comment 1	Comment 2
56	Roadway	Realign Gale Lemerand Drive at University Avenue	A.4.G	Beyond 2030	High	$1.22 million (includes new signal)	N/A	City of Gainesville, FDOT	To connect with NW 20th Terrace	Improves traffic circulation
57	Roadway	Radio Road Extension	A.4.F	Beyond 2030	High	$11.1 million	N/A	N/A	To connect with Hull Road	Improves traffic circulation
58	Parking facilities	Park and Ride 1 Garage	B.2.B.4	Beyond 2030	High	$21.0 million	N/A	N/A	Meets long-term parking demand and adds more faculty parking options	Improves parking experience
59	Parking facilities	Norman Garage Addition	B.2.B.7	Beyond 2030	High	$10.0 million	N/A	N/A	Meets long-term parking demand and adds more faculty parking options	Improves parking experience
60	Parking facilities	Cancer/Genetics Research Complex Garage Addition	B.2.B.5	Beyond 2030	High	$10.0 million	N/A	N/A	Meets long-term parking demand and adds more faculty parking options	Improves parking experience
61	Parking facilities	Park and Ride 2 Garage	B.2.B.6	Beyond 2030	High	$13.0 million	N/A	N/A	Meets long-term parking demand and adds more faculty parking options	Improves parking experience

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