

ELEMENT 11 – TRANSPORTATION ELEMENT

TRANSIT, CIRCULATION, PARKING, PEDESTRIAN, & NON-VEHICULAR CIRCULATION

Introduction

The following narrative describes the concepts on which the transportation plan is based. Goals, Objectives and Policies (GOPs) which implement these concepts follow this narrative.

Transit

Palm Tran has extended service to Abacoa from its present nearest service point of PGA and Military Trail. Route 10 has been placed into service. The route continues up Military Trail to Donald Ross, heads west on Donald Ross to Central, heads North on Central to the University, then East back to Military Trail and south to PGA and the Mall.

Regarding the Tri-Rail system, the Florida Department of Transportation (FDOT) is currently undergoing a multi year study for the Jupiter Corridor. It is anticipated that the result of the study will be the extension of Tri-Rail service along Alternate A1A to one or more Jupiter stations. Should future expansion of the Tri-Rail system to the City of Jupiter occur, a potential Tri-Rail station site near the intersection of Alternate A1A and Frederick Small Road has been identified, less than 1.5 miles from the campus. The following goals, objectives and policies provide a basis for active support of transit and alternative modes of travel.

Circulation

Traffic circulation on campus will be accomplished through an internal roadway system that connects primary parking areas. The internal roadways will primarily serve intra-campus movements and quick conveyance of traffic to and from the external roadway accesses.

Access to and from the campus is provided through a series of perimeter accesses to the external roadway network. It is anticipated that the majority of traffic movements will occur at the main entrance on Parkside Drive and the primary entrance to the large parking area from Donald Ross Road. Because these locations are conveniently located near Donald Ross Road, a major arterial connecting I-95, Military Trail and Alt A1A, most students will utilize these entrances. However, accesses on Main Street will also satisfy some demand originating north of the campus. Future access locations along Donald Ross road into the large parking area might be considered if traffic demand dictates. Future access to the Scripps campus may be considered from the roundabout at Central Boulevard.

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A proposed full access connection is being planned at Donald Ross Road between Parkside Drive and Central Boulevard. This access connection would be constructed at the time of development of the additional Research and Development Facility tentatively scheduled from the 8 to 10 year horizon.

Parking

Parking lots at the campus are designed in a manner that permits movement from the most remote parking areas to primary academic and administrative buildings in approximately an eight to ten minute walk, with most parking areas being less than a five minute walk to the desired building. This is of particular importance to commuting students, who often times arrive on campus with just enough time to walk to class. Parking areas are designed to surround the campus core area and separate pedestrian movements occurring between academic and administrative buildings from vehicular movements related to parking and campus ingress and egress.

The original Master Plan parking analysis indicates that there will have been an opening day demand of 689 parking spaces and a ten year build-out demand of 2,855 parking spaces at the FAU John D. MacArthur Campus. This corresponded to an opening day requirement of 5.54 acres and a build out requirement of 22.94 acres, which is about 17% of the total campus land area. Total parking as of this update is 1187 spaces. The Scripps development will provide enough parking to support the facility (approximately 1,200 spaces).

Level of Service

A concurrency traffic impact analysis is being performed independently of this master plan and is available from the University in a separate document. The Briger development site located on the south side of Donald Ross Road across from FAU and the addition of the Max Planck site on the MacArthur campus is now being incorporated into the concurrency traffic impact analysis. The findings of that report examined the level of service standards (LOS) of the campus entrances and surrounding roadways. The current 2007 LOS at the main campus entrances after the development of the Scripps project vary. The entrance at Parkside Drive and Donald Ross Road (unsignalized) is at LOS B. The entrance at Central Boulevard and Donald Ross Road (signalized) is at LOS F.

At the close of the planning horizon, 2015, the Level of Service Standard for both intersections will be LOS F. The intersection of Parkside Drive and Donald Ross Road is warranted for a full traffic signal. The traffic signal was installed and became operational on May 9, 2007. It is anticipated that the signal installation at this intersection will improve the operation and the LOS observed at this location. Drive lane and turn lane revisions have been recommended in this master plan to help alleviate traffic congestion as well.

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Goal 1

It is the goal of the University to promote efficient, safe, and accessible local transit service that enhances the mission of the University.

Objective 1A

The University shall, when identified by others, evaluate appropriate future transit systems and revenue streams which support transit servicing the University.

Policy 1A-1

Coordinate operational and planning efforts with Tri-Rail, Palm Tran and private sector efforts within the Abacoa DRI to provide efficient and convenient transit connections with the University.

Policy 1A-2

Coordinate operational and planning efforts with other FAU campuses, Palm Beach Community College, Indian River Community College, Broward Community College, and Broward County Transit to provide efficient and convenient transit connections.

Policy 1A-3

The University will designate the stops at appropriate locations on campus in consultation with transit providers. Bus stop location and service shall be reviewed every two years in coordination with the Town of Jupiter and transit providers.

Objective 1B

The University shall promote the application of alternative modes of travel and related Transportation Demand Management (TDM) strategies.

Policy 1B-1

Upon its completion, review and apply the *FAU Transportation Demand Management (TDM) Application Manual (Boca Campus study)* which shall include a qualitative and quantitative assessment of various TDM strategies and their implementation to the campus.

Policy 1B-2

Concurrent with the TDM applications manual, develop and distribute a *TDM Facts* brochure to all students, staff and faculty and implement at least one TDM initiative such as a carpool matching service or telecommuting alternative at the campus.

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Goal 2

It is the goal of the University to provide and support safe and efficient campus transportation systems and support context area transportation systems that enhance the mission of the University.

Objective 2A

The University shall continue to plan and provide for proper vehicular access from context area roadways to meet University demand and mitigate impacts to the host community. (See Figure 11.1)

Policy 2A-1

Coordinate with appropriate agencies and provide the proposed vehicular connections to Parkside Drive, University Boulevard, Main Street, and Donald Ross Road. We have coordinated with Palm Beach County Traffic Engineering Division regarding the warrant for the traffic signal at Donald Ross Road and Parkside Drive. A traffic signal has been installed at this location. Coordination with local authorities to seek the addition of a stop sign on Parkside at the main FAU entry road is still on going. Monitor campus access and parking and coordinate future campus development with consideration to potential future access points to Central Boulevard and Donald Ross Road.

Policy 2A-2

Construct a dedicated campus vehicular access on Donald Ross Road between Parkside Drive and Central Boulevard. The access should be signalized and provide full access to and from the campus. A full access construction connection exists on Donald Ross Road. The proposed connection will relocate this access to the midpoint of the Donald Ross frontage when construction is completed. For the immediate future, the construction access from Donald Ross Road should be used for all new construction projects to avoid daily campus pedestrian and vehicular traffic. As previously mentioned, this connection is anticipated between 8-10 years from this update.

Policy 2A-3

Provide coordination efforts with the Town of Jupiter, Palm Beach County, the Metropolitan Planning Organization of Palm Beach County, and the Florida Department of Transportation regarding transportation improvements and development plans by designating University representation and attending regularly scheduled meetings.

Policy 2A-4

Upon commissioning of the Campus Police Department and in a joint effort with the University, Town of Jupiter, Palm Beach County, the Abacoa DRI, and State agencies,

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develop and maintain a comprehensive data base for analyzing and documenting vehicular and non-vehicular incidents both within the campus and immediate context area. The Town of Jupiter Police Department has provided three year crash data from 01/01/04 through 02/20/07 for the intersections of Donald Ross Road and Parkside Drive, Central Boulevard and Main St. and Central Boulevard and Donald Ross Road.

Policy 2A-5

Continue to monitor campus development and consider access from the first roundabout at Central Boulevard as part of future master plan amendments.

Objective 2B

The University shall develop an internal campus roadway network as a low speed, low capacity facility which facilitates the safe movement of automobiles, transit vehicles, bicycles and pedestrians.

Policy 2B-1

Develop and implement specific loading zones along the edges of the Forum buildings, near the limited access drive/utility loop. Improve service access to existing buildings.

Policy 2B-2

Ensure that all campus transportation facilities consider multi-modal applications including bicycle, pedestrian, and non-automobile vehicles, particularly the limited access drive/utility loop. Designated bicycle lanes are provided on Central Boulevard, Parkside Drive and University Drive.

Policy 2B-3

In accordance with the Capital Improvement Program, prioritize and establish an implementation schedule for campus circulation and access enhancement projects based on a phased Master Plan development schedule. Encourage the use of safety stop signs and yield signs where considered useful. Consider the widening of campus roads and/or turning radii to accommodate tractor trailers, where their access is required to serve the campus buildings.

Policy 2B-4

Provide information kiosks and campus guidance materials for visitors at appropriate campus entrances to facilitate their conveyance to visitor parking areas and campus buildings.

Policy 2B-5

Provide convenient drop-off areas for Life Long Learners and persons attending public events held at the auditorium and other campus facilities.

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Policy 2B-6

Provide bicycle and pedestrian pathways which provide direct linkage to Abacoa including commercialized town center areas.

Goal 3

It is the goal of the University to provide and support safe, sufficient, cost-effective and accessible parking facilities for students, faculty, staff and visitors that enhance the mission of the University and respect the visual standard of the traditional neighborhood development of the Abacoa Development.

Objective 3A

The University shall seek to ensure a high level of safety within parking facilities with both technology and personnel.

Policy 3A-1

The "Code Blue" emergency phone system shall be expanded to include all existing and new parking facilities.

Policy 3A-2

Provide parking facilities which maintain sufficient and energy efficient lighting at all facilities used after dusk.

Policy 3A-3

Enhance University security by continued evaluation of new technologies regarding surveillance and way-finding systems.

Objective 3B

The University shall limit and/or minimize conflicts between vehicular and non-vehicular traffic within University parking facilities.

Policy 3B-1

Establish administrative procedures and coordination mechanisms for the comprehensive review of development plans and their impact on the transportation, parking and transit systems. Representatives from the following departments and organizations should be involved with the review of development plans: grounds, police, traffic and parking, faculty, facilities planning, and administration.

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Policy 3B-2

Dedicate, at a minimum, 10 percent of all vehicular parking areas as landscaped non-parking areas not including pervious parking surfaces.

Policy 3B-3

Provide separate and convenient bicycle and motorcycle parking facilities.

Objective 3C

The University shall, on a continual basis, monitor and analyze the demand/supply relationship of parking while providing a sufficient number of spaces for students, faculty, staff and visitors.

Policy 3C-1

Target parking space to enrolled student ratios of *35:1* for non-Honors campus students and *0.8:1* for honors college students.

Policy 3C-2

Target a faculty/staff parking space to full time employee ratio of *.80:1* employee.

Policy 3C-3

Target the number of parking spaces for campus visitors at 5% of student & faculty spaces. Continue to increase parking capacity, as funds are made available, to provide for peak requirements of the auditorium, the Lifelong Learning Complex and other venues that may overload the system on a daily basis.

Policy 3C-4

Available parking space not being used by the University for their purposes may be used by other entities by agreement. Any such agreement shall not interfere with the University mission. The University will strive to provide parking for other guest functions such as Life Long Learning and Scripps Research Laboratories per Table 11.1. It must be recognized that the Scripps Laboratories will revert to FAU as classroom and Lab space and the parking requirement for Scripps employees will no longer exist.

Table 11.1 Parking Analysis

Year	Headcount			Number of Parking Spaces						Total
	Honors Students	Non-Honors Students	Faculty & Staff	Spaces Honors Students	Spaces Non-Honors Students	Spaces Faculty & Staff	Visitor Spaces	Peak hour Auditorium Spaces	Scripps Personnel	
2006/07	500	1442	164	400	505	131	52	400	254	1,742
2007/08	500	1484	168	400	519	134	53	400	254	1,760
2008/09	500	1550	173	400	543	139	54	400	254	1,790
2009/10	500	1624	179	400	568	144	56	400	0	1,568
2010/11	500	1654	182	400	579	146	56	400	0	1,581
2011/12	500	1709	187	400	598	149	57	400	0	1,604
2012/13	500	1750	190	400	613	152	58	400	0	1,623
2013/14	500	1813	195	400	635	156	60	400	0	1,651
2014/15	500	1877	201	400	657	161	61	400	0	1,679
2015/16	500	1944	206	400	680	165	62	400	0	1,707

Table 11.1 Notes:

Headcount number represents total at each interim period.

Number of spaces based on: 0.8 spaces per honors student, 0.35 spaces per commuter student and 0.8 spaces per employee.

Note: The original master plan factor for employee spaces was .65 - now raised to .80 above.

Per agreement with Roger Dean Stadium, 500 additional spaces will be reserved on an as-needed basis for peak use.

Visitor parking needs were estimated at 5% of the total student parking.

Number of faculty and staff for 2005/06 is existing staff. Growth of staff is apportioned to total headcount.

Spaces for Scripps Personnel based on 3.3 cars per 1000 GSF.

Scripps I is 42,490 GSF for 05/06; I & II is 75,656 GSF for 06/07 and 07/08.

Thereafter Scripps I & II revert to FAU Student use and TRSI is 360,000 GSF is used.

Objective 3D

The University shall minimize the visual impact of parking areas.

Policy 3D-1

Parking spaces shall be masked by berms. Parking areas will be subdivided with large islands with mature trees and landscaped walkway “fingers” (See **Introductory Master Plan Rendering**).

Goal 4

To provide adequate pedestrian and non-vehicular circulation facilities on campus to meet the needs of the University.

Objective 4A

Develop and maintain a pedestrian atmosphere for the campus. Provide a system of safe and convenient pedestrian and non-vehicular facilities designed to meet the needs of the University.

Policy 4A-1

Create naturally shaded, uncovered pedestrian ways on campus, including a major connection from the Plaza to the Forum.

Policy 4A-2

A "Code Blue" emergency phone system shall be expanded to include all new pedestrian and bicycle paths on campus.

Policy 4A-3

Coordinate the locations for future pedestrian circulation facilities with recommendations contained in the Campus Safety Plan.

Policy 4A-4

Coordinate the locations for additional lighting along campus pedestrian circulation routes with recommendations contained in the Campus Safety Plan.

Objective 4B

Provide convenient and safe bicycle facilities on the campus.

Policy 4B-1

Provide and maintain bicycle paths on the campus.

Policy 4B-2

Include clear and visible signage to encourage campus bicycle utilization

Policy 4B-3

Provide convenient, covered bicycle parking, as funds allow.

Policy 4B-4

Include provisions for bicycle parking facilities in all new construction.

Policy 4B-5

Coordinate the locations for future bicycle circulation facilities with recommendations contained in the Campus Safety Plan.

Policy 4B-6

Coordinate the locations for lighting along campus bicycle circulation routes with recommendations contained in the Campus Safety Plan.

Goal 5

To coordinate the location of on-campus pedestrian and non-vehicular circulation facilities with those planned by the host community.

Objective 5A

Coordinate planned on-campus pedestrian and non-vehicular circulation facilities with those proposed in future circulation systems as described in local Comprehensive Plans.

Policy 5A-1

Create a pedestrian and non-vehicular circulation network that clearly, safely, and easily meshes with the host community's networks. FAU shall coordinate with host and affected local governments to ensure that the University's proposed pedestrian and non-vehicular circulation network is coordinated with and not in conflict with facilities proposed in local government comprehensive plans.

Goal 6

To recapture the FAU John D. MacArthur Campus building rights, after deferring the original FAU building rights to this space, this allowed the Scripps Research Facility to be approved as a location on the Jupiter campus.

Policy 6A-1

The building rights would include additional Research space beyond the original master plan. A summary of the 10 year horizon development phasing can be seen in **Figures 11.1** through **11.7**. The improvements to the transportation and traffic infrastructure as required by the traffic concurrency would be funded in part by funds set aside by Palm Beach County.