



**DAYTONA
STATE COLLEGE**

2016

**Daytona Beach Campus
Master Plan**

November 4, 2016



DAYTONA
STATE COLLEGE



I am pleased to present the Daytona Beach Campus Master Plan. This document represents a Renaissance for the campus by providing a guide for growth and improvements through 2036. Our District Board of Trustees approved the 5-Year and 20-Year Campus Master Plan in April of 2016. Utilizing our Strategic Plan, *Soaring to Success*, as a foundation, the Campus Master Plan is an exciting flexible framework for growth that promises to be the expression of great things to come. Anticipating new facilities such as expanded athletics, recreation and a new student center, we will truly witness an amazing transformation in just a few years.

The nine-month planning process was guided by more than 100 members of our campus community including students, staff, leadership and faculty. The Facility Planning Advisory Council and the Board of Trustees diligently worked to ensure that a fully vetted plan was completed. Overall, the plan addresses new buildings, transportation, utilities, architecture, green space and parking. All by maintaining and fostering a forward-thinking approach with the Daytona Beach community, its workforce and environment.

The master plan is a living document that is constructed as a flexible tool to guide growth and articulate our vision. Moving forward, this tool will prove to be a well spring for ideas by adapting to our needs as we continue our commitment to students, faculty, staff, the community and the future of Daytona State College.

Dr. Thomas LoBasso
President



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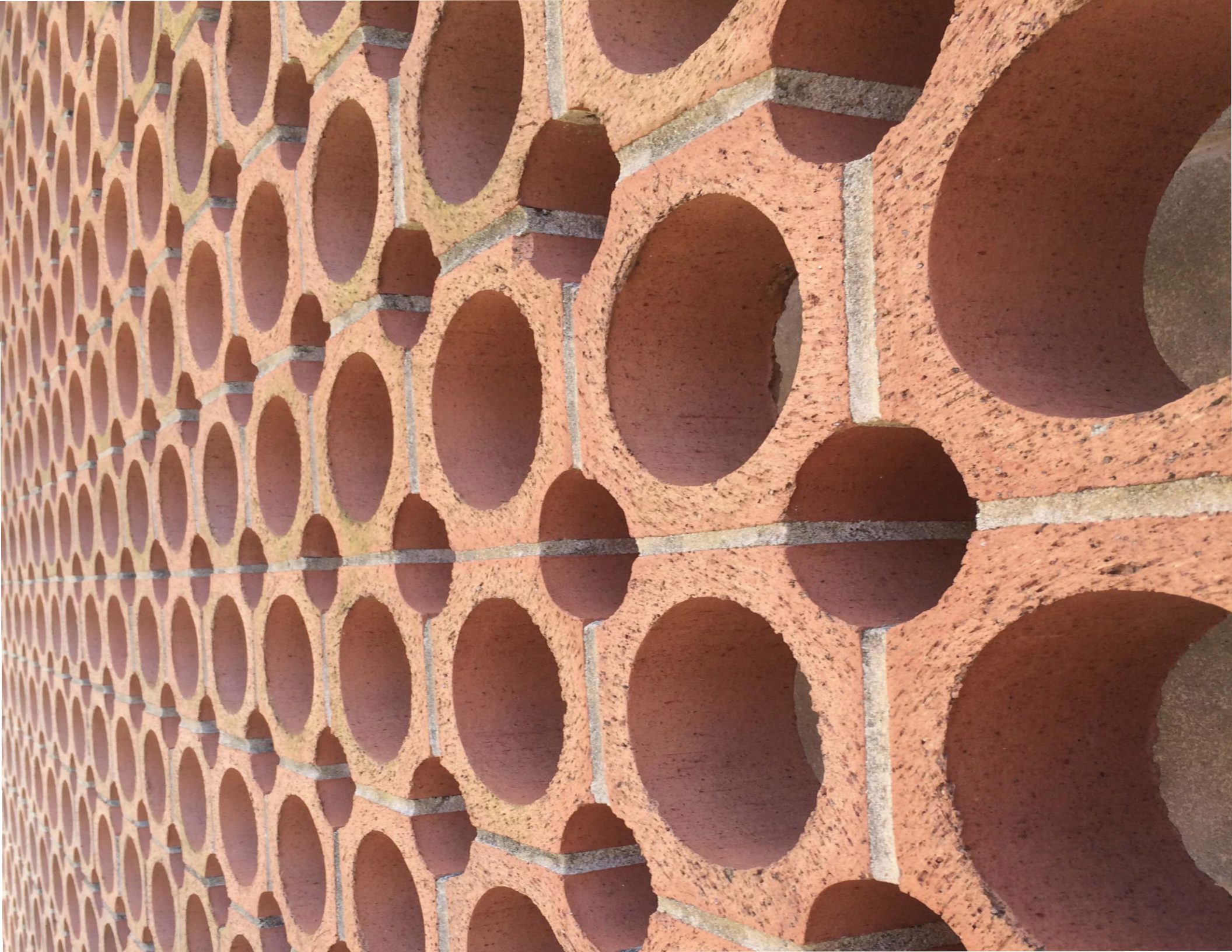
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Executive Summary



Executive Summary

Daytona State's 2016 Daytona Beach Campus Master Plan is the product of a nine-month comprehensive effort grounded in consensus building, design and the integration of the College's Strategic Plan. The *Soaring to Success* Strategic Plan, adopted by Daytona State College for the years 2014-2017, includes a mission, vision, values and strategic priorities, all of which influenced the development of the Campus Master Plan. The plan is intended to be implemented incrementally with an emphasis on a 5-Year planning horizon together with a long-term (20-year) vision for the Daytona Beach Campus. The 20-year plan is principally aspirational in nature with its focus on creating a framework for coordinated long-term campus and facility development.

One of the key elements that permeated the master planning process is the recognition of the College's location along the West International Speedway Boulevard (ISB) corridor. The prominence of ISB within the community and region is among the most influential planning elements informing the Campus Master Plan and its development. The College's frontage and visibility along ISB is a fundamental asset to the Daytona Beach Campus. The linkage between the Strategic Plan and the master planning process yielded a specific emphasis focusing on the geography of ISB as a primary element in the creation of the vision for the Campus Master Plan.

The master planning process clarified the qualities of the Daytona Beach Campus from a functional and aesthetic perspective through analysis and assessment. These qualities are integrated with the College's goals, needs and State-mandated requirements to create a comprehensive approach to campus and facility development. An engagement process with College faculty, students, administration and leadership was the foundation for obtaining relevant information that would inform the master planning process. Ultimately, more than 100 members of the College community were directly engaged – representing all facets of the Daytona Beach Campus to ensure that the planning process achieved broad consensus.

The Campus Master Plan synthesizes the College's strategic goals, needs and desires with the unique opportunities associated with the Campus's setting and visionary leadership.



Campus Master Plan Goal and Objectives

Initiating the Daytona State College Daytona Beach campus planning process entailed a dual track process. The first track focused on analyzing the campus elements from a site conditions perspective while concurrently deploying a process to obtain applicable information related to campus needs, desires and a vision. The second track utilized a series of qualitative interviews, investigations and targeted discussions utilizing questionnaires and interviews aimed at formulating the Campus Master Planning Goal and Objectives. The Campus Master Plan Goal is a single statement intended to define the overall focus of the planning effort tempered by the College's Strategic Plan and its correlating values in supporting: Community, Integrity, Excellence, Diversity, Innovation and Student Success. Through the planning process the Campus Master Plan Goal that was derived is:

The Daytona State College Daytona Beach Campus Master Plan shall be an enduring and actionable approach to facilities growth that positions the College as the regional destination for higher education.

The Campus Master Plan Goal is supported by five objectives:

Objective 1:

Ensure that the quality, integrity, innovation and achievement offered at Daytona State College is clearly recognizable

Objective 2:

Enhance the student experience

Objective 3:

Incorporate measures that support campus safety needs

Objective 4:

Incorporate short and long term measures for utilities and infrastructure

Objective 5:

From a facilities perspective, align the State of Florida's Performance Funding Measures with Daytona State College's Strategic Plan

The 5-Year Campus Master Plan at a Glance

The Campus Master Plan is based on the synthesis of the physical attributes of the Daytona Beach Campus; its context; needs assessment; and, the previously identified Goal and Objectives. Additional elements influencing the development of the Campus Master Plan included a quantitative analysis of enrollment statistics as well as targeted discussions with key College stakeholders and leadership. The product of this synthesis was the development of the following **Campus Findings** for inclusion in the 5-Year planning horizon:

- 1** Create a new campus arrival experience and “Front Door”
- 2** Strategic Acquisition of Property to the East of Campus
- 3** Incorporate a central hub that will support student study, interaction and general\special use
- 4** Provide the necessary space for a multipurpose structure that is flexible and supports a broad range of needs
- 5** Support the needs of new athletic programming
- 6** Maintain and set the groundwork for better vehicular circulation
- 7** Incorporate relevant parking and infrastructure improvements

The Campus Findings informs the master planning process and becomes the primary influence for the development of the conceptual diagrams that will lead to the creation of the 5-Year and the 20-Year Campus Master Plan approved by the Daytona State College Facility Planning Advisory Council and the Board of Trustees.

5-Year Campus Master Plan (2016 to 2021)

The 5-Year Campus Master Plan signifies the Renaissance of Daytona State College. The plan calls for a grand vision along ISB with new iconic buildings, landscape improvements and signage. These improvements coalesce with the vision for ISB. The new facilities are envisioned to be buildings that function for campus uses and are visible to the community. The 5-Year Campus Master Plan also includes the beginnings of a new athletics district starting with a New Soccer Complex and Residence Halls located to the north of the campus core. The next five-years at Daytona State College promises to be among the most exciting campus evolutions that Daytona has seen.

Estimated 5-Year Facility Needs and Solution (Square Footage)

Description	Estimated Student Need (SCUP CFI)	Estimated Student Need (SREF)	New Student Center Programming	SCUP CFI 5-Year Need	SREF 5-Year Need
Classroom Facilities	23,091	1,763	3,960	19,131	0
Vocational Labs	na	76,724	9,970	0	66,754
Non Vocational Labs	na	-55,081	0	0	0
Class Lab	-3,286	na	0	0	0
Open Lab	-602	na	0	0	0
Offices	-65,316	-81,699	8,700	0	0
Study	30,736	58,013	24,420	6,316	33,593
Athletic/Recreation	3,252	-6,827	2,500	752	0
Special Use	38,950	-2,778	0	38,950	0
General and Campus Use	10,299	-39,643	15,840	5,792	0
Critical and Assignable SF	37,124	-49,528	65,390	70,941	100,347
Support	-555	5,307	0	0	5,307
Central Storage	-1,643	-1,643	0	0	-1,643
Vehicular Storage	-19,789	-19,789	0	0	-19,789
Health Care	0	0	0	0	0
Student Residential	10,407	10,407	0	10,407	10,407
Non-Student Residential	-2,523	-2,523	0	0	-2,523
Cust/Corr. Util.	38,510	110,325	tbd	45,545	105,290
Total	82,688	47,521	65,390	126,893	197,396

The table approximates 5-Year Campus Master Plan needs based on the State Requirements for Educational Facilities (SREF) and the Society for University of College Planners Campus Facilities Index (CFI) formulas. The programmed area for the Student Center is from the Williamson Dacar, Inc. report. These estimates are based on enrollment and forecasted building demolition. The "Not Programmed" figures could be incorporated into the proposed Multi-Purpose Building but do not constitute a complete program for that building.

5-Year Parking

Needed	Provided	Paved	Unpaved/Handicapped
3,811	3,966 ¹	3,137	829

¹ Includes additional parking east of White Street

20-Year Campus Master Plan (2021 to 2036)

Picking up from the 5-Year Campus Master Plan, the vision for the subsequent 15 years articulates the completion of the campus renaissance. The frontage along ISB is lined with architectural improvements and the creation of an internal campus loop road is contemplated. Extensive landscape improvements, plazas and internal buildings supporting campus needs are expressed to support the College's Strategic Plan as well as create a student experience that is unmatched.



Existing Conditions and Data

Existing Conditions and Data

Daytona State College is part of the Florida College System and is unified through the State's Division of Florida Colleges. The Daytona Beach Campus is the flagship campus of the College which is comprised of seven campuses located throughout the region. The Florida College System has 28 institutions serving more than 900,000 students (2013 data). According to the Florida Department of Education, Daytona State College is the 12th largest State College. The College's Daytona Beach Campus is vibrant and energetic, with expansive educational programs. The College provides a wide array of general education and degree tracks through online, face-to-face and hybrid instructional methods. There are more than 100 certificate, associate and bachelor's degree programs available. These offerings include:

- Bachelor of Applied Science in Supervision and Management

- Bachelor of Science in Education

- Bachelor of Science in Engineering Technology

- Bachelor of Science in Information Technology

- Bachelor of Science in Nursing

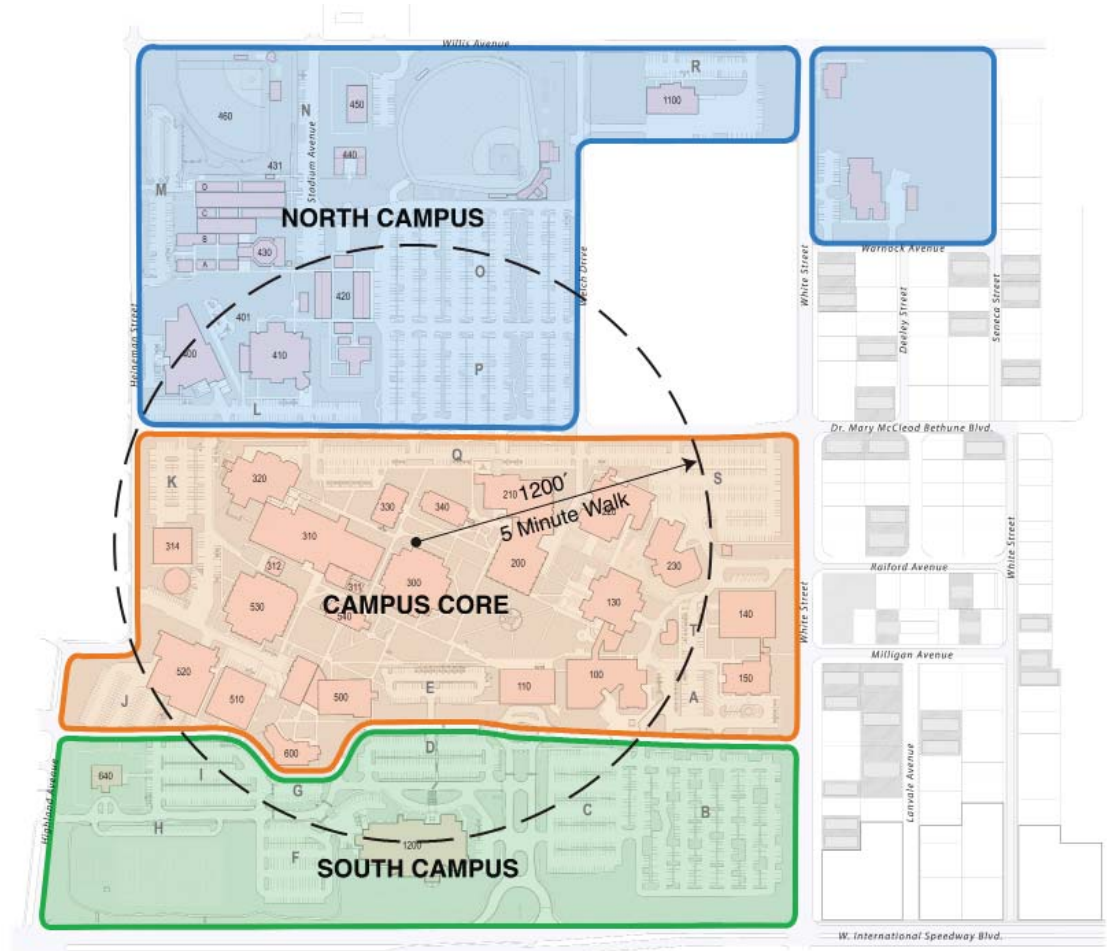
- Associate of Arts

- Associate of Science

- Advanced Technical Certificates

- Occupational Certificates

Multiple degree specializations and specific certification programs are provided through the above degree offerings by Daytona State College.





History and Legacy

The College as it is known today started nearly 60 years ago in 1958, but its origins date to 1929 with the Opportunity School. Focused on teaching students business and commercial skills during the Great Depression the College's early beginnings were a beacon of hope for the community.

During World War II the Opportunity School changed its name to the Volusia County Vocational School with a focus on training war production workers. During this time the Opportunity School kept its focus in sight under the leadership of Mary Brennan Karl. This emphasis of providing an education to those eager to learn a vocation to obtain a better life was the central mission of the school. The 1930s and 1940s saw the evolution to the Mary Karl Vocational School which eventually became the technical division of the Daytona Beach Junior College (DBJC). This transition to the DBJC was supported by a land gift in 1948. The gift was the platform for a sequence of opportunities culminating in DBJC being one of the six junior colleges approved by the State of Florida in 1957. In the beginning, the College inhabited multiple locations including the current site which was 29 acres, as well as the Princess Isseña Hotel located near the beach. By the early 1960s enrollment at DBJC had grown to nearly 1,000 students and the Princess Isseña Hotel was declining in its viability as an adequate educational facility for DBJC. The opening of the new Science Building (Davidson Hall) on the current Daytona Beach Campus further highlighted the need for a centralized campus. DBJC soon after became a more consolidated campus on the site to the east of Halifax Hospital.

In the 1960s DBJC experienced significant change and expansion due to the merger with Volusia County Community College which resulted in expanded course offerings. In 1968, the College registrar announced that more than 82,000 students had attended the College's three divisions. By the end of the 1960s, at least 12 buildings comprised the College's environs at the Daytona Beach Campus and the assemblage of a strong institutional environment was evident.

In 1971 DBJC became Daytona Beach Community College (DBCC) and by the late 1970s the institution had matured to include multiple campus buildings in Daytona Beach. The growth also spurred the expansion of satellite campuses, all of which aimed at the original goal established decades before.

A growth period in the 1980s and 1990s yielded to a new century with the Florida State Board of Education unanimously approving the offering of baccalaureate degrees at DBCC. With partnerships being created with Florida State University's College of Medicine and the University of Central Florida, DBCC continued to expand. The onset of online instruction for education reflects a recent influence on the academic and physical environment for the Daytona Beach Campus. In 2006 DBCC became Daytona State College, a fully accredited four-year institution.



Location

Daytona State College is located along the heavily traveled ISB corridor and encompasses approximately 2,300 linear feet of frontage. ISB (SR 600) is a State Road under the jurisdiction of the Florida Department of Transportation. ISB is one of the highest volume roadways in Volusia County with an estimated Annual Average Daily Trips along the College's frontage at 36,500 vehicles (FDOT 2014 data). The Daytona Beach Campus frontage along ISB is specifically addressed due to its relevance in the master planning process and its influence to growth within the region. The Daytona Beach Campus facilities are distant from the ISB frontage with the exception of the Mori Hosseini Center (Building 1200). The Campus boundaries include White Street to the east, Willis Avenue to the north and Heineman Street\Highland Avenue to the west. The Campus is comprised of approximately 94.6 acres. Additional properties to the east of Campus have been acquired over time with the total area for these parcels amounting to approximately 12.2 acres. The Campus is well positioned to support access from the region, this is due primarily to proximity to major transportation corridors.



General Economic Environment

The regional economy is an influential factor on the College's academic offerings. Daytona State College's mission is focused on developing the region's workforce. The obligation to provide facilities and academic programs that are linked to the region's workforce is well established. Additionally, the economic and business forecasts promote dialogue with relevant partners and leadership in the College of Workforce and Continuing Education. Past student enrollment peaked significantly during the Great Recession in 2008 due primarily to the decline in employment throughout the region.

Regional Workforce Information

This section focuses on a generalized discussion of regional economic topics. The approach is to connect discussions from the master planning process with published economic data – to support the case for the College's facilities needs from a regional perspective.

Discussions with Daytona State College occurred in August and September of 2015 with targeted information on this topic being provided by staff and leadership. The regional workforce is a developing resource with particular escalation in the manufacturing, biotechnology and mechatronics (primarily maintenance) industries. Additionally, the need to support the expanding corporate environment within the region was a key point of discussion in terms of current educational needs. Above all, the creation of flexible environments and the facilities to support the transition from College to workforce is fundamental to address employment diversity within the region.

The Volusia County Division of Economic Development issued its report in May of 2016 with data supporting the educational offerings of Daytona State College. The population in Volusia County is forecasted to grow by 3% by 2020 along with the median household income increasing by 19%. The median household income figures are slightly higher than the estimated State-wide growth rate. In addition to these supportive figures, the Top Five 2015 Volusia County private sector employers are aligned with offerings provided by Daytona State College. These industries are: Health Care, Retail Trade, Accommodation\Food Services, Educational Services and Construction.





General Campus Site Information

The Daytona Beach Campus site has been occupied since the early 1900's. The Daytona Beach Campus contains an assortment of buildings that are an evolution of architecture dating back to 1959 with Davidson Hall (Building 340). Expanding the Daytona Beach Campus beyond its current boundaries is possible, but is limited to areas east and north. The lands to the west and to south of the campus are developed and not conducive for expansion.



Topography and Land Cover

The areas within the Daytona Beach Campus are generally flat with elevations ranging from approximately 35 to 25 feet. The Daytona Beach Campus generally slopes from west to east with the highest elevation located near the southwest corner at the intersection of Highland Avenue and ISB. Slopes are typical of Florida and easily support barrier free pedestrian circulation with gradients estimated at about 2%.

Vegetation throughout the campus includes a range of indigenous and naturalized species. Can-



Topography Map



opy densities are sparse with the largest organization of canopy tree cover occurring within Parking Lots O and P. An additional canopy grove of significant mass exists to the south of Davidson Hall (Building 340). Significant tree species existing on campus include:

- *Lagerstroemia indica* (Crape Myrtle)
- *Pinus elliotti* (Slash Pine)
- *Pinus taeda* (Loblolly Pine)
- *Sabal palmetto* (Cabbage Palm)
- *Quercus laurifolia* (Laurel Oak)
- *Quercus virginiana* (Live Oak)

Additional plantings include an array of ornamental shrubs and large lawns generally comprised of Bahia turf. It is worth mentioning that much of the Daytona Beach Campus could be considered xeric and thus irrigations demands are minimized.

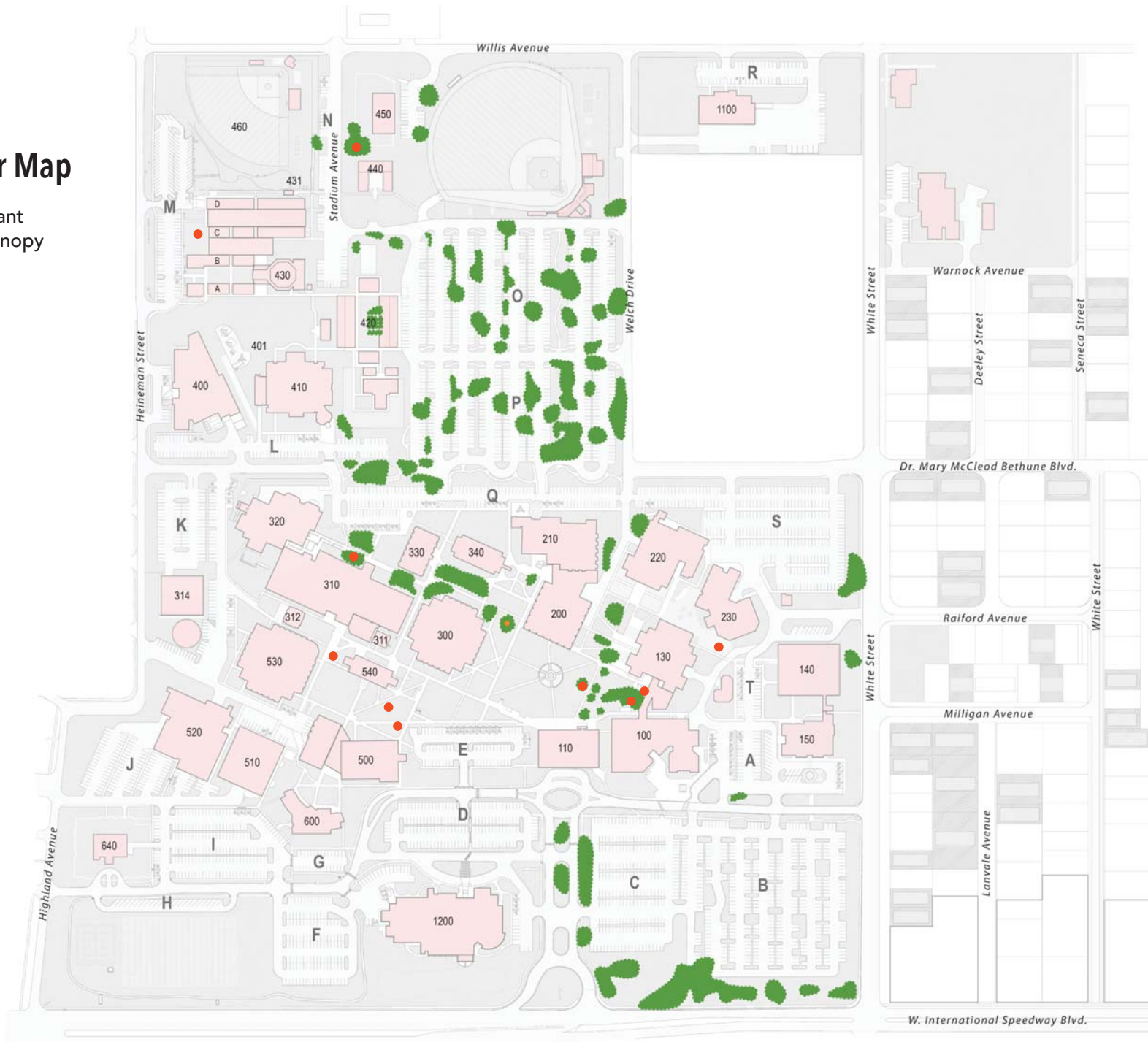
There are also a few trees on Campus that appear to be dedicated to special figures and historical events. Special care should be taken when considering development adjacent to these areas.

Zoning and Land Use

The Daytona Beach Campus is within the jurisdiction of the City of Daytona Beach and its Future Land Use category is Schools pursuant to the City of Daytona Beach Comprehensive Plan. The Zoning District is classified as Single-Family Residential-5 (SFR-5). With respect to the Zoning District, Colleges and Vocational\Trade Schools are allowed with a Special Use Permit. The Zoning District classification is a remnant of the previous residential use of the College property. As a State institution, the College utilizes its exemption status with regard to the City's Land Development Code. However, it is the College's policy to coordinate, obtain and maintain certain pertinent local approvals commensurate with past practices.

Tree Cover Map

-  Significant Tree Canopy
-  Plaque



Pedestrian Circulation

There are an abundance of sidewalks and non-paved pedestrian options throughout the Daytona Beach Campus. Parking areas are connected throughout to the Campus by sidewalks allowing access to buildings and outdoor spaces. In general, the Daytona Beach Campus is a walkable and pedestrian friendly environment, especially in the core area which restricts traffic access.

There are several areas within the Daytona Beach Campus where potential conflicts between pedestrian and vehicle traffic is intensified – this is primarily along the periphery of the Campus core where the higher pedestrian corridors and vehicles converge in the same space. These areas include the entire north frontage of the Campus core along Health Sciences Hall, Arts and Sciences Hall, Davidson Hall, the Karl Learning Resource Center and the Theater Center (Buildings 320, 330, 340, 210 and 220) and the adjoining parking and vehicle use areas. There are also potential conflict zones along the south frontage of the Campus core, in particular, the area between the Wetherell Center (Building 100) and Parking Lots B and C.

The Mori Hosseini Center (Building 1200) resides along the south extent of Campus adjacent to Parking Lot D. Its location is isolated and external to the Campus core as a result of the intervening parking lot. There is no direct pedestrian corridors which accommodate students and faculty traversing the parking lot to access Building 1200 from the main part of the Campus. Although there have been discussions regarding enhancing pedestrian

circulation between Building 1200 and the Campus, the need for a new pedestrian connection is essential to facilitate a linked and safe Campus environment.

Lastly, many of the gathering spaces and walkways throughout Campus lack tree canopy coverage and



amenities such as seating and lighting to support a comfortable exterior student gathering space. Pavement widths vary and appear to support traffic during class changes, but it is evident a hierarchical system of pathways is minimal. These pathways are important to emphasize and support primary, secondary and tertiary routes.

Pedestrian Circulation Map

-  Primary Pedestrian Circulation
-  Conflict



Vehicular Circulation

Daytona State College enjoys a comprehensive vehicular support network through its parking availability and access to the roadway system. This section focuses on the traffic circulation network and access throughout Campus and along its periphery.

The primary points of access are along the Campus's southern frontage with ISB. There are three access points that vary in their functionality to support vehicular movements to and from the Daytona Beach Campus.

ISB: Among the more important assets associated with the Daytona Beach Campus, its primary frontage is also the window to the community. As mentioned previously ISB is a highly traveled corridor with more than 36,000 vehicles passing by each day. It is also an important pedestrian route with an extensive sidewalk system which connects with commercial activity centers located in the vicinity. ISB is a six-lane divided highway with bike lanes and is under the jurisdiction of the FDOT as State Road 600.

White Street: The eastern boundary of the campus (not including ownership east of White Street) is defined by White Street which is an undivided 4-lane City of Daytona Beach roadway. The roadway is a minor collector that links primarily residential and commercial uses to the north with ISB. According to the Florida Department of Transportation (2014), White Street has approximately 4,800 annual average daily trips (AADT) indicating significant capacity is available. White Street is an important asset to the College due to the access it

provides, but of equal value is the signalized intersection at ISB. The signalized intersection provides for full turning movements at ISB that supports student\faculty traffic and is safer option for Campus ingress\egress by service vehicles.

There are three access points to the Daytona Beach Campus from White Street north of ISB. The access point at the intersection with Bethune Boulevard is signalized. All access points provide for full vehicular turning movements.

Campus Entry Boulevard: The Campus Entry Boulevard is located to the east of the Mori Hosseini Center (Building 1200) and serves as the Daytona Beach Campus "Front Door". Its current configuration supports all modes of ingress\egress except for eastbound left turning movements onto ISB. Therefore any traffic utilizing this access is precluded from traveling directly eastbound on ISB. Internally the Campus Entry Boulevard terminates into an elliptical roundabout intersecting at a major internal east\west Campus roadway that connects White Street with Highland Avenue to the west.

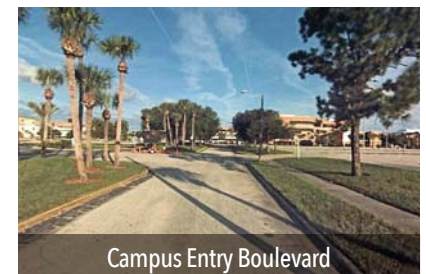
Highland Avenue: At the west boundary of the Daytona Beach Campus Highland Avenue provides ingress and egress to ISB but is limited to right-in\right-out turning movements for westbound traffic only. Highland Avenue transitions to Heineman Street to the north, both of which are two-lane roadways in the jurisdiction of the City of Daytona Beach. Field observations and correlating traffic data provided by the FDOT indicates there is minimal traffic on these roads with an estimated AADT of 1,950 vehicles. These roads are also the bound-



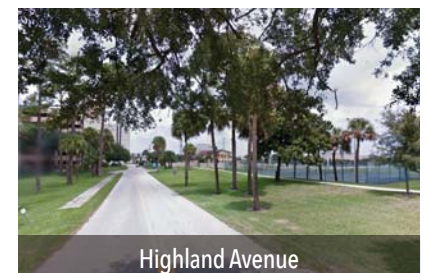
International Speedway Boulevard



White Street

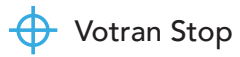


Campus Entry Boulevard



Highland Avenue

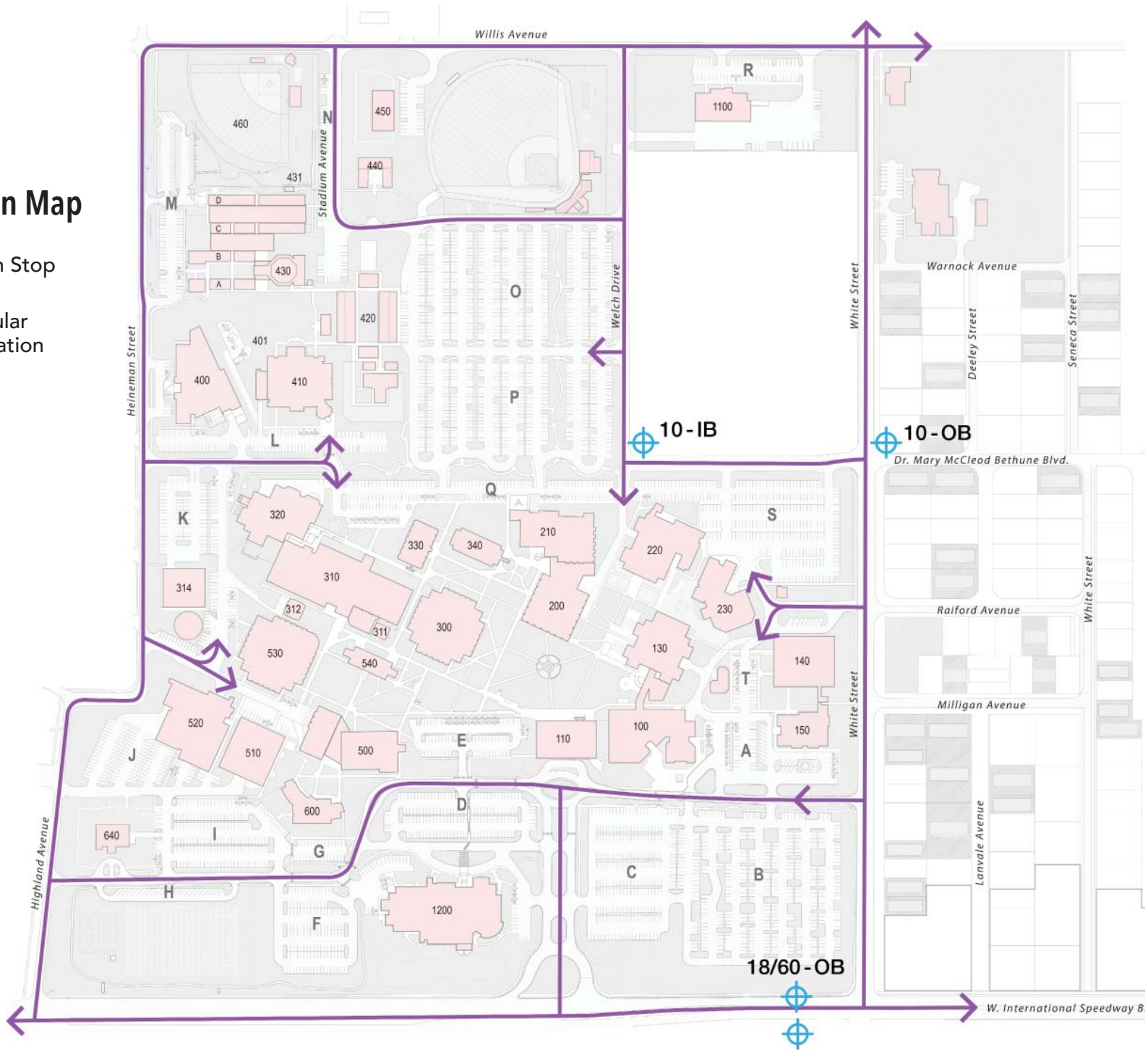
Vehicular Circulation Map



Votran Stop



Vehicular Circulation



ary between Halifax Hospital to the west and the Daytona Beach Campus and accommodating high volumes of service traffic for the hospital as well as deliveries to the College Facility Services (Building 430). There are eight access points along Highland Avenue and Heineman Street for the Daytona Beach Campus.

Willis Avenue: Willis Avenue is parallel to the north boundary of the Daytona Beach Campus and is a two-lane roadway within the City of Daytona Beach. Based on observation Willis Avenue appears to be a minimally traveled road that is primarily used to service the College and the businesses/entities located north of the Campus. Access to Business Services (Building 1100) is directly from Willis Avenue. There are five access points along Willis Avenue for the Daytona Beach Campus with two of greater importance as they provides connections to Welch Drive and Stadium Road. These roads traverse southward internal to the Campus and function as important ingress\egress routes, but also for traffic dispersion and alternate roads during special events and periods of vehicular congestion.


Internal Roadways: There are two additional road networks of importance to describe. They are internal east\west oriented circulation routes which serve parts of the Campus. The first is the extension of Bethune Boulevard which transitions from a City of Daytona Beach roadway from White Street to a Campus thoroughfare as it traverses west. The transition on Campus is configured as an unloaded two-lane road prior to becoming a parking lot drive aisle. The second network is an unnamed (previously known as Pinecrest Avenue) road segment located in the southern portion of Campus. It is a road that is located north of Parking Lots B, C, D, F and H. This is an important circulation route and provides a majority of ingress and egress to the Campus. Both of these routes integrate parallel and perpendicular pedestrian movements with some potential conflict.



Composite Existing Conditions

The map shown to the right illustrates the current existing conditions at the College. The Campus includes 36 buildings/complexes with a range of uses to support the College's mission. Buildings 140, 150 and 600 are joint-use facilities with Florida State University and the University of Central Florida.

Existing Conditions Map

- 100 Wetherell Center
- 101 Utility Building
- 110 Bergengren Hall
- 130 Lenholt Student Center
- 140 DSC/UCF (Joint Use Facility)
- 150 Business Hall (Joint Use Facility)
- 200 Nunamann Hall
- 210 Karl Learning Resources Center
- 220 Theater Center
- 230 Goddard Performance Hall
- 300 Greene Center
- 310 Lemerand Center
- 320 Health Sciences Hall
- 330 Arts and Sciences Hall
- 340 Davidson Hall
- 400 WDSC TV/15
- 401 Transmitter Relocatable
- 410 Schildecker Science Hall
- 420 Criminal Justice Hall/Marine Sciences
- 430 Facilities Services
- 431 Pesticide Mixing Facility
- 440 Multi-Use Recreation Facility
- 450 Kindercare Daycare Facility
- 455 Storage Facility
- 460 Softball Facility
- 500 Baker Academic Support Center
- 510 Cosmetology Hall
- 520 Studio Arts Hall
- 530 Photography Hall
- 540 Bailey Hall
- 600 McKinnon Hall
- 640 Conference Center
- 1100 Business Services (Cent. Rec./Purch.)
- 1200 Mori Hosseini Center
-  Parcels owned by College



Enrollment and Campus Statistics

The 94.6 acre Daytona Beach Campus is comprised of 36 buildings and complexes with construction spanning from the late 1950s to present day. With approximately 1.27 million square feet (SF) of enclosed space, the Daytona Beach Campus represents an extensive assemblage of building and facility assets. Classrooms, laboratories and associated support space comprise 27 percent (288,600 SF) of the Daytona Beach Campus. The largest on-campus facility dedicated to instruction is the Health Sciences Hall (Building 320). Health Sciences Hall amounts to 111,640 SF with 50,571 SF dedicated to classrooms and laboratories. The allocation of space on the Daytona Beach Campus by type is depicted in the pie chart (see Figure 1).

Enrollment at Daytona State College is tracked utilizing both Headcount and Full-Time Equivalent (FTE) student counts. The unduplicated Headcount at the Daytona Beach Campus amounted to 9,902 students for the 2014\2015 academic year (face to face and hybrid instruction methods). Furthermore, the funded FTE enrollment figures for face to face and hybrid for the same period is 7,530 students. (see Figure 2, 3 and 4)

Figure 1
Existing Campus Uses

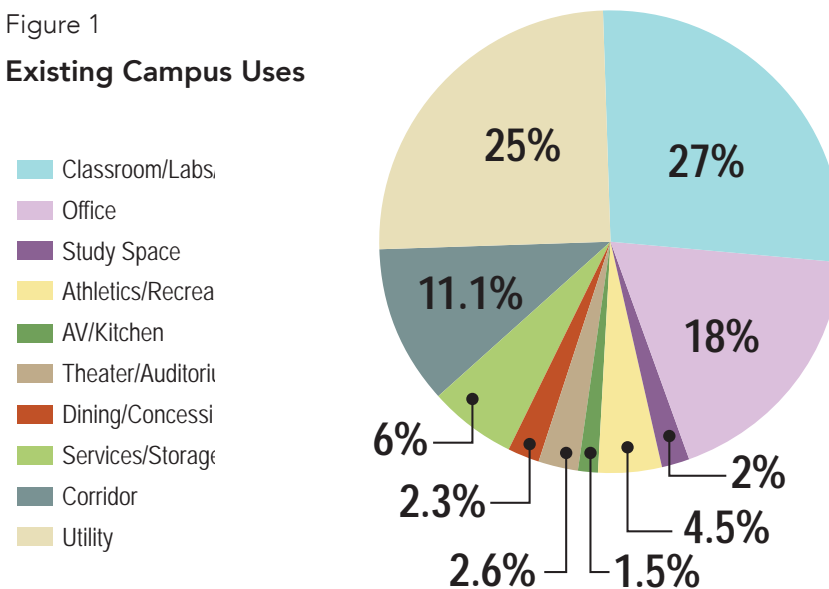


Figure 2
Duplicated Headcount by Instructional Method (All Campuses)

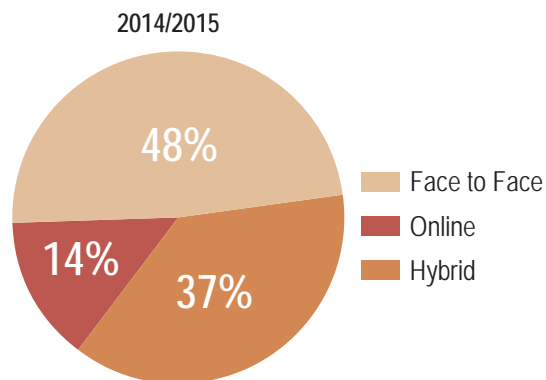


Figure 3
Base FTE by Instructional Method (All Campuses)

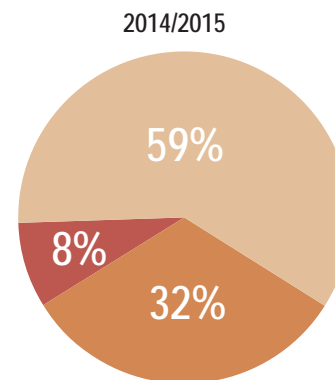
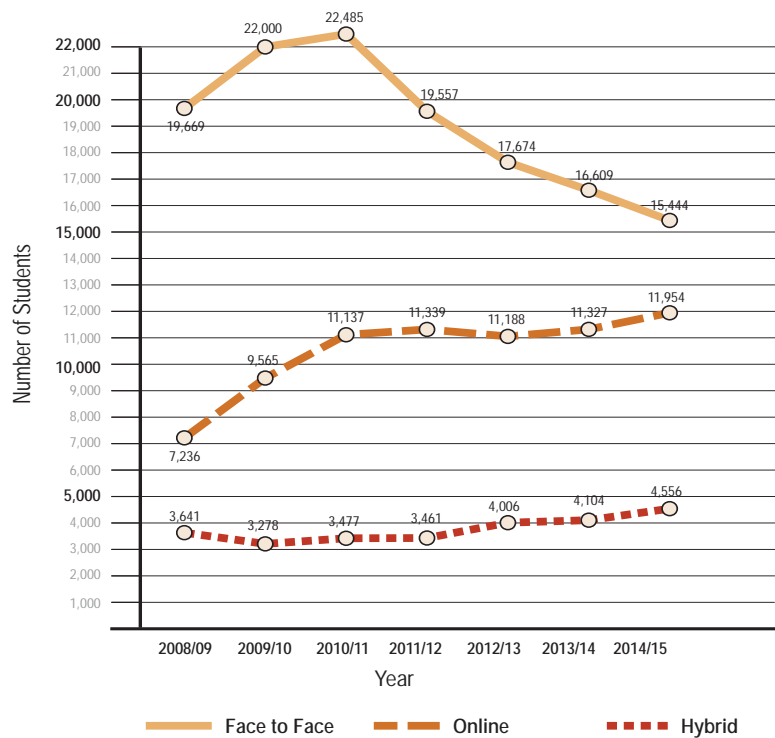


Figure 4

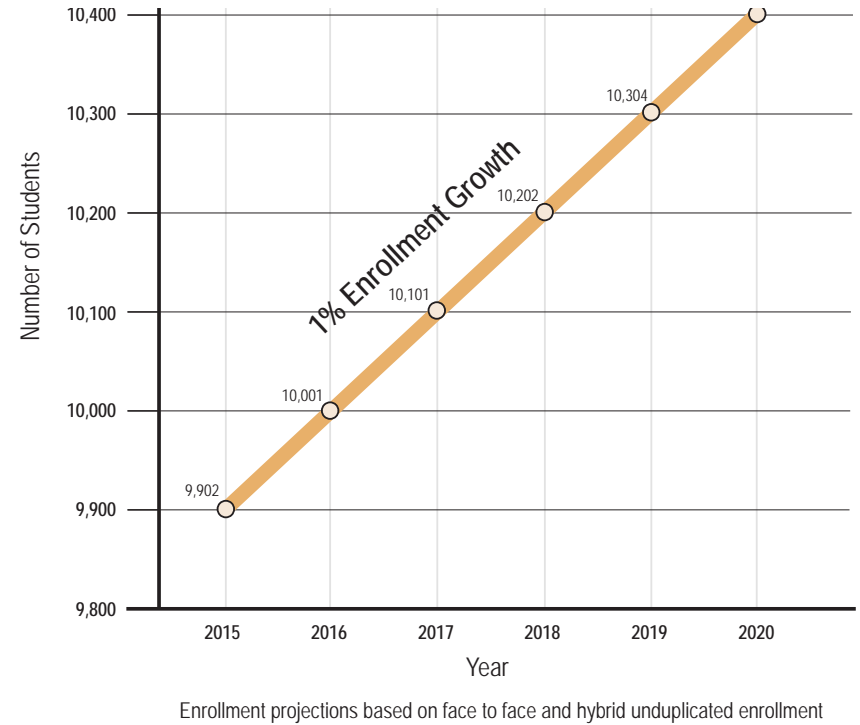
Daytona State College Duplicated Enrollment Trend by Instructional Method (All Campuses)



The Daytona State College leadership has established a goal to increase enrollment annually by 3 percent with 1 percent comprising the face to face instructional method. The remaining 2 percent is targeted to reflect the annual increase in the student enrollment regarding the online instructional method. (see Figure 5)

Figure 5

Enrollment Projections (face to face and hybrid Daytona Campus Only)



Comparative Data

The ratio of Headcount to FTE is a relevant planning tool when analyzing student enrollment and facility needs. Nationally, the data shows a trend of increasing numbers of part time students. Studies indicate that from 1993 to 2012, the student ratio has increased from 1.49 to 1.59 students enrolled to one FTE. It is noted that the higher the ratio, the greater the potential for resource deficiencies. This data is derived from an article authored by Chris Meinzer, Senior Director of Administration\CFO at the Association of Theological Schools Commission on Accrediting.

Reviewing comparative State Colleges in Florida, the average ratio in 2014/2015 amounted to 1.96 per FTE. In the same period, the Daytona State College ratio amounted to 2.72 students per FTE. Developing and monitoring an enrollment plan to decrease the student FTE ratio at Daytona State College is a recommended action to facilitate resource stewardship. (see *Figure 6 and 7*)

Parking

Parking is provided at the Daytona Beach Campus through an array of designated unassigned parking lots. There is no fee for parking on Campus for students, faculty, staff or visitors and the parking lots are managed by the Campus Safety Office. Students and faculty can obtain a no-fee permit which is non-renewable year to year. The Campus Safety Office does not maintain a database of parking permits. The Campus Parking Inventory identifies 2,966 paved parking spaces (not including handicap) with an additional 724 parking spaces in unpaved overflow parking areas. Handicap spaces available are 105.

The results from outreach with students, faculty, leadership and administration yielded varying opinions regarding on Campus parking conditions. Results ranged from parking being a major concern to more of a “walking problem”. Observations during the master planning process confirmed the analysis that there is adequate parking within the Campus, but there are specific parking lots

Figure 6

Daytona State College (All Campuses)

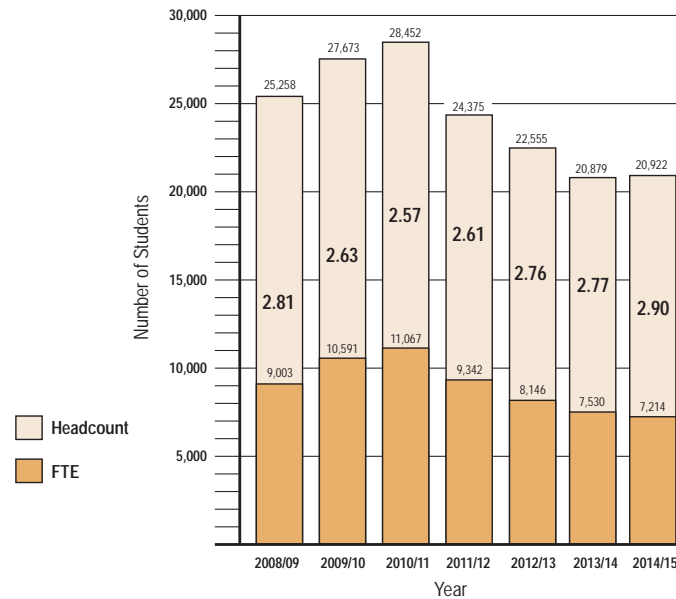
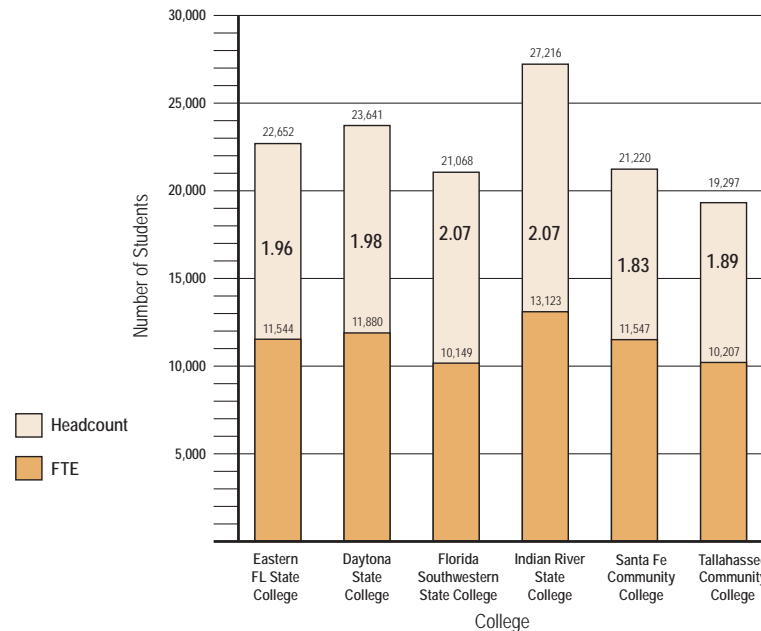


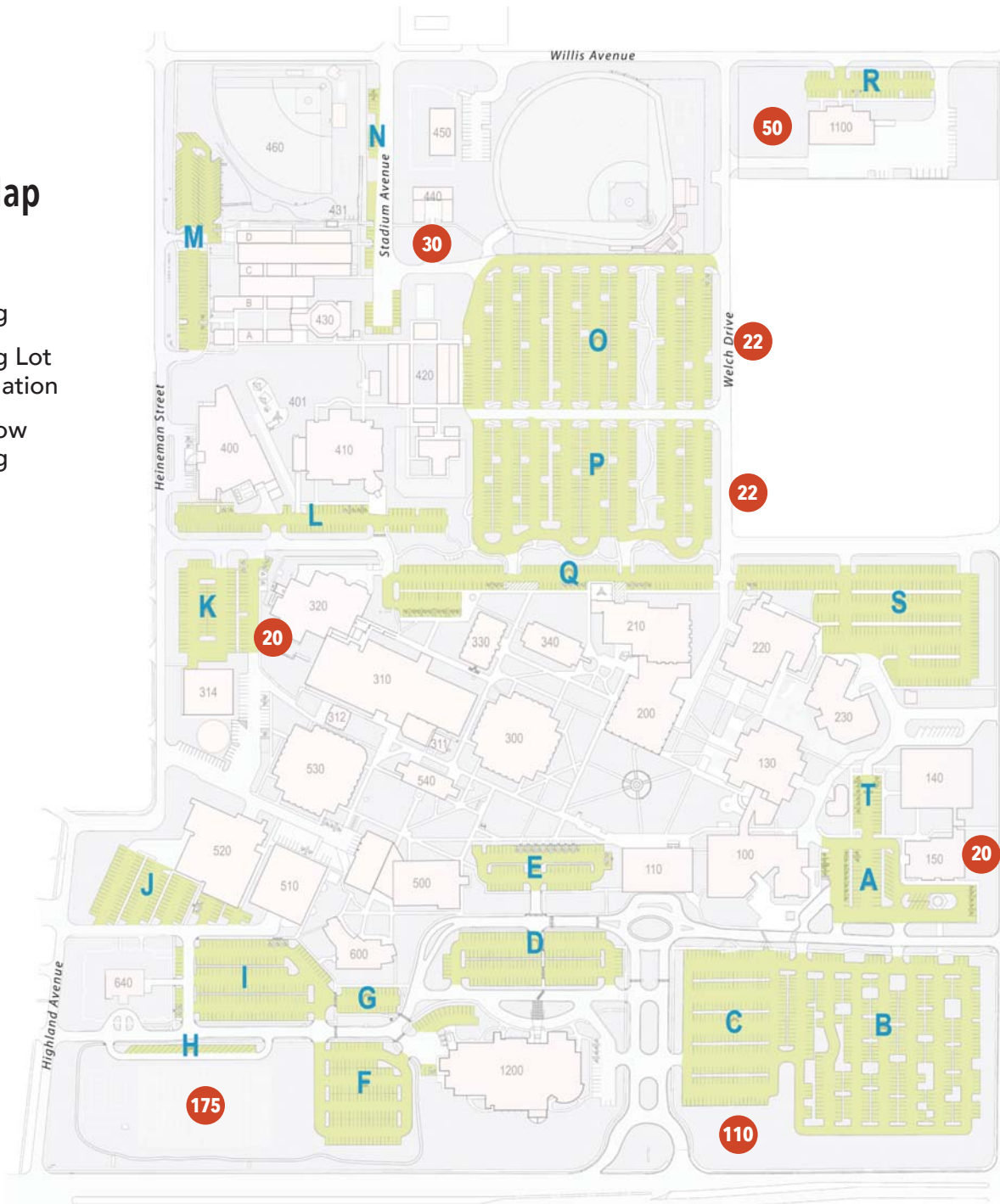
Figure 7

Comparative State Colleges



Parking Map

- Parking
- A Parking Lot Designation
- # Overflow Parking



Paved Parking

Lot	Parking Space	Handicap	Total
Lot A	52	20	72
Lot B & C	584	-	584
Lot D	154	4	158
Lot E	50	11	61
Lot F	145	1	146
Lot G	27	-	27
Lot H	23	-	23
Lot I	175	4	179
Lot J	98	2	100
Lot K	144	12	156
Lot L	93	9	102
Lot M	98	2	100
Lot N	69	2	71
Lot O	455	2	457
Lot P	348	2	350
Lot Q	118	22	140
Lot R	70	2	72
Lot S	252	2	254
Lot T	11	8	19
Subtotal	2,966	105	3,071
Overflow	724		
Grand Total	3,690		



which do not provide a sufficient number of parking spaces to accommodate higher demand in peak periods that are proximate to the destination. Additionally, very recent observations pertaining to existing construction projects are potentially a precursor for the need to evaluate parking in the near future.

Quantitatively, the minimum requirements by guideline for parking are defined by standards contained in the State Requirements for Educational Facilities 2014 (SREF). The SREF standards state that vehicular parking areas shall provide at least one space for each faculty and staff, one space for every two students and the level of visitor spaces appropriate for the facility.

For the purposes of this analysis, the required parking for the Daytona Beach Campus includes the faculty, non-faculty and adjunct faculty and student enrollment figures. The table below is for the Fall 2014 semester as it typically reflects the highest student enrollment figures for the academic year. The student enrollment figures reflect unduplicated within the face-to-face and hybrid instructional methods.

Adjunct Faculty	344
Faculty	195
Non-Faculty	530
Total	1,069
Visitor	100
Enrollment	7,664*
Total Required Parking	5,001
Total Parking Provided	3,690
Deficit	1,311

*Headcount (face-to-face/hybrid) divided by two to obtain parking requirements

Although a deficit of 1,311 parking spaces appears to be a significant, the functional and observed status appears adequate. This could be partially due to the College's class scheduling format. Daytona State College maintains data which indicate the numbers of students on Campus by day and hour, based on the anticipated attendance in enrolled classes. The Daytona State Campus student population is generally the highest between 09:00am and 01:00pm between Monday and Thursday of each week when the semester is in session. During these days, the period between 09:00am and 10:00am reflects the peak of on Campus student population. Based on class scheduling, the overall student population on Fridays are approximately one-third of the weekday peak. In the Fall of 2014, the peak on Campus population was approximately 3,500 students on Mondays between 09:00am and 10:00am. Most students attend Campus on a Monday and Wednesday or Tuesday and Thursday class schedule format (see Figure 8).

Based on field observational study, carpooling, the use of mass transit and some pedestrian access to and from campus, the master planning process yielded an adjusted multiplier for calculating parking. The consensus was to utilize a factor of 3.1 students per every space. The following table summarizes the approach.

Enrollment	7,664 spaces
Parking Multiplier	3.1 spaces
Required Student Parking	2,473 spaces
Non-student Parking Required	1,069 spaces
Visitor Parking	100 spaces
Parking Required	3,641 spaces
Parking Provided	3,690 spaces
Surplus	49 spaces

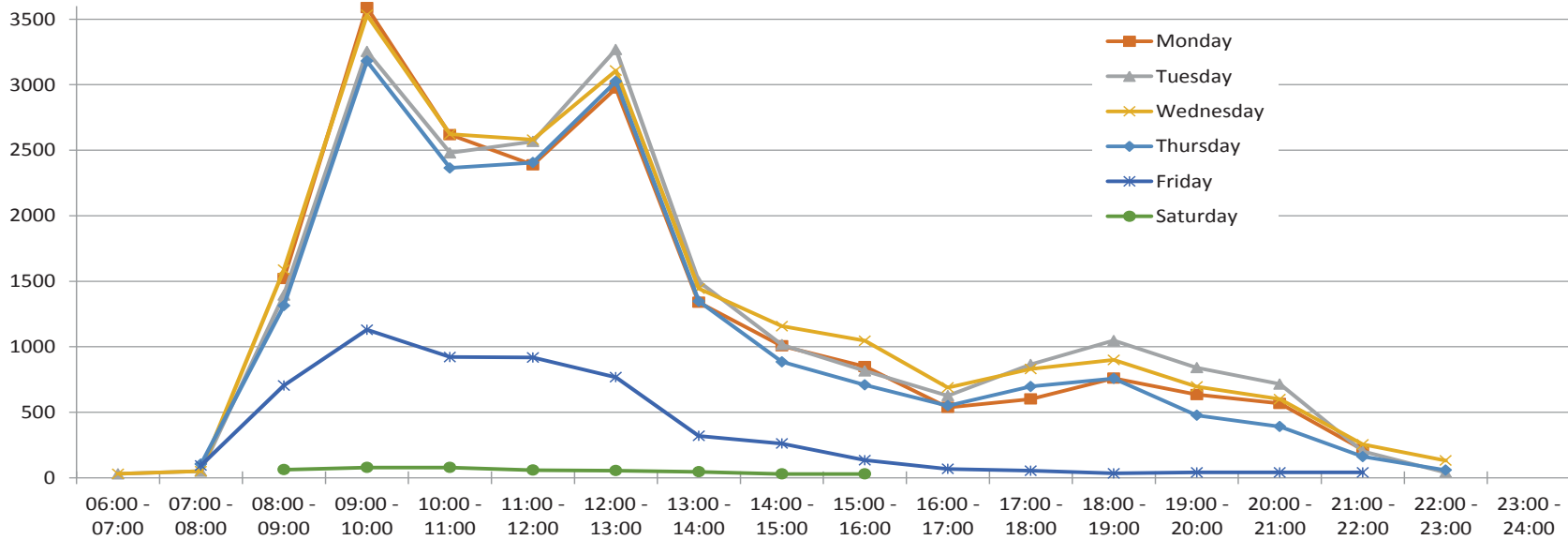
Public Transportation and Car Pooling

Volusia County provides public bus transit services throughout the region through Votran. Daytona State College has a bus stop (serviced by Routes 18,19,60,10 and 6) located on ISB near White Street (east and westbound stops) and Bethune Boulevard on the east side of White Street and internal to the Campus at Bethune Boulevard and Welch Drive. Discussions with Votran regarding ridership produced a profile stating that internal to the Campus 12,639 riders boarded and alighted the service in 2015. The bus stops on ISB indicate a ridership of 15,622 boarding and alighting at that location. Assuming there are 231 class days in academic year, the average ridership to locations served near Daytona State College is approximately 60 riders per class day. The data does not correlate riders as students or staff/faculty at this time.

The College also promotes a "Save Gas get to Class" initiative which includes support and information related to rideshare and vanpool.

Figure 8

Students on Campus by Time



Distinct Count of Students on Campus by Hour – Fall 2015

Data Date: 08/27/2015

Exclusions:

- Students in on-line, co-op, job training courses
- Students in open labs with no days or times
- Friday, Saturday and Sunday Courses
- Off campus courses
- Courses starting after 10/26/15
- Fall "B" session courses

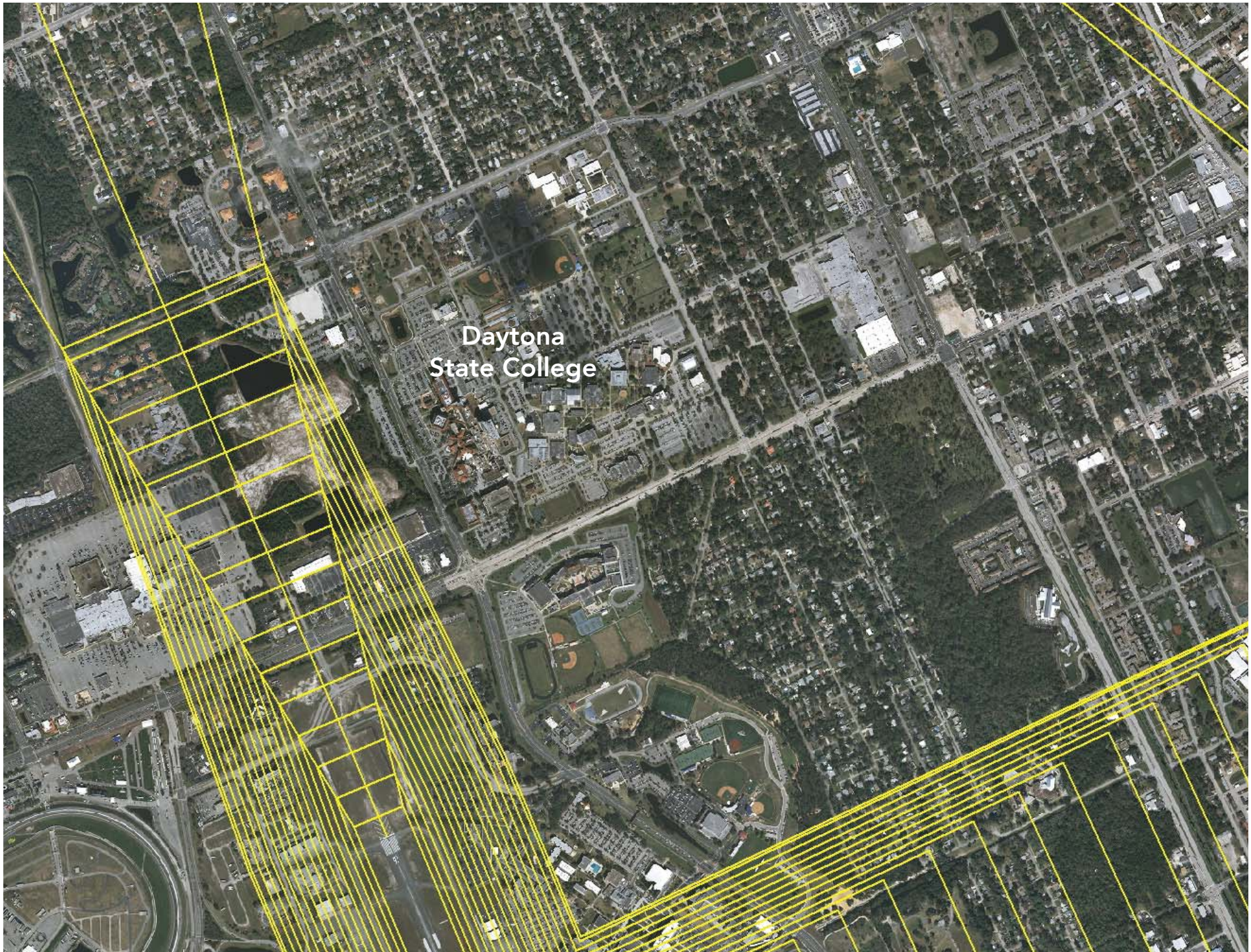
TIME	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
06:00 - 07:00		30	30			
07:00 - 08:00		50	50	104	94	
08:00 - 09:00	1521	1395	1587	1313	704	62
09:00 - 10:00	3588	3253	3533	3180	1130	79
10:00 - 11:00	2618	2480	2622	2365	922	79
11:00 - 12:00	2388	2566	2580	2406	918	59
12:00 - 13:00	2974	3269	3107	3025	767	55
13:00 - 14:00	1339	1497	1444	1347	320	46
14:00 - 15:00	1007	1016	1157	885	261	29
15:00 - 16:00	849	816	1046	709	134	29
16:00 - 17:00	537	627	689	550	68	
17:00 - 18:00	601	865	830	697	54	
18:00 - 19:00	760	1048	900	758	34	
19:00 - 20:00	635	840	696	477	41	
20:00 - 21:00	567	715	600	391	41	
21:00 - 22:00	216	202	255	162	41	
22:00 - 23:00		40	132	59		
23:00 - 24:00						

Daytona Beach International Airport (DBIA)

DBIA is addressed as part of this analysis due to its potential impact to future implementation projects at Daytona State College. The Federal Aviation Regulations Part 77 defines “Safe, Efficient Use and Preservation of the Navigable Airspace” around airports through the implementation of an imaginary surface which limit the heights of potential obstructions within established areas. For Daytona State College, the maximum allowed building height is 184 feet above mean sea level per FAA regulations. The estimated maximum building height on campus is 151 feet. Prior to construction, any structure on Campus should be required to be coordinated with the FAA to confirm conformance with Part 77 of the Federal Aviation Regulations.

Bicycles

The bicycle is typically a common characteristic of the College campuses. However, in the case of Daytona State College the vehicle is the predominant travel mode which characterizes the Campus as “commuter-focused” and has minimized the requirement for extensive bicycle facilities.



General Infrastructure

Stormwater Management - Existing Conditions

The Daytona State campus covers approximately 100 acres of sand ridge in the northeastern corner of Volusia County Florida. The primary topography on the site flows from west to east and drops approximately 10 feet from the high point around 35' above sea level on the western corner of the campus.

The campus is bound on all four sides by FDOT and local roadways that prevent major stormwater interaction at the surface. However, given the limited amount of fall across the site, the majority of the existing stormwater infrastructure is interconnected with both FDOT and local roadway stormwater pipe systems. These offsite pipe networks act as conveyance from existing systems and emergency stormwater outfalls for the campus. Given the limited number of these outfalls, much of the stormwater generated on the campus is treated via onsite retention and detention systems.

Many of the existing systems pre-date the establishment of the current rules and criteria of the St. Johns River Water Management District (SJRWMD). The SJRWMD has regulatory responsibility for stormwater discharge, consumptive use and surface water management permits in this region of the State of Florida. In reviewing the existing permits for the campus with the SJRWMD, it was determined that a master drainage plan and permit has not been completed for the entire campus and that each project has been permitted independently. Each project accounts for the treatment and attenuation that is required for it. As such, there

are over 15 permitted stormwater treatment facilities within the main campus.

The current individual environmental resource permits (ERP) should be maintained and modified as required during the detailed design phases to provide the best benefit to Daytona State College. Prior to initiation of any new campus core improvements, a revised permit will be required to be submitted and approved by the St. Johns River Water Management District. The revised permit application should include all scheduled program elements. Future development beyond the campus core will require modifications to current ERP permits or issuance of a collective or multiple new permits.

The existing stormwater retention and detention systems are maintained in good condition. It is important that the college continues to monitor these facilities so that these systems remain functional and in working condition. While it's easy to identify the wet detention pond to the south of the Building 1200, the college needs to ensure that the other dry retention facilities remain. This includes dry retention facilities behind the outfield of both the baseball and softball fields. The functionality of these facilities are important to not only maintain water levels during major rainfall events, but to ensure that the college is continuing to treat all stormwater in accordance with the St. Johns River Water Management District rules and regulations and thus meeting the college's goal of being environmentally sensitive.

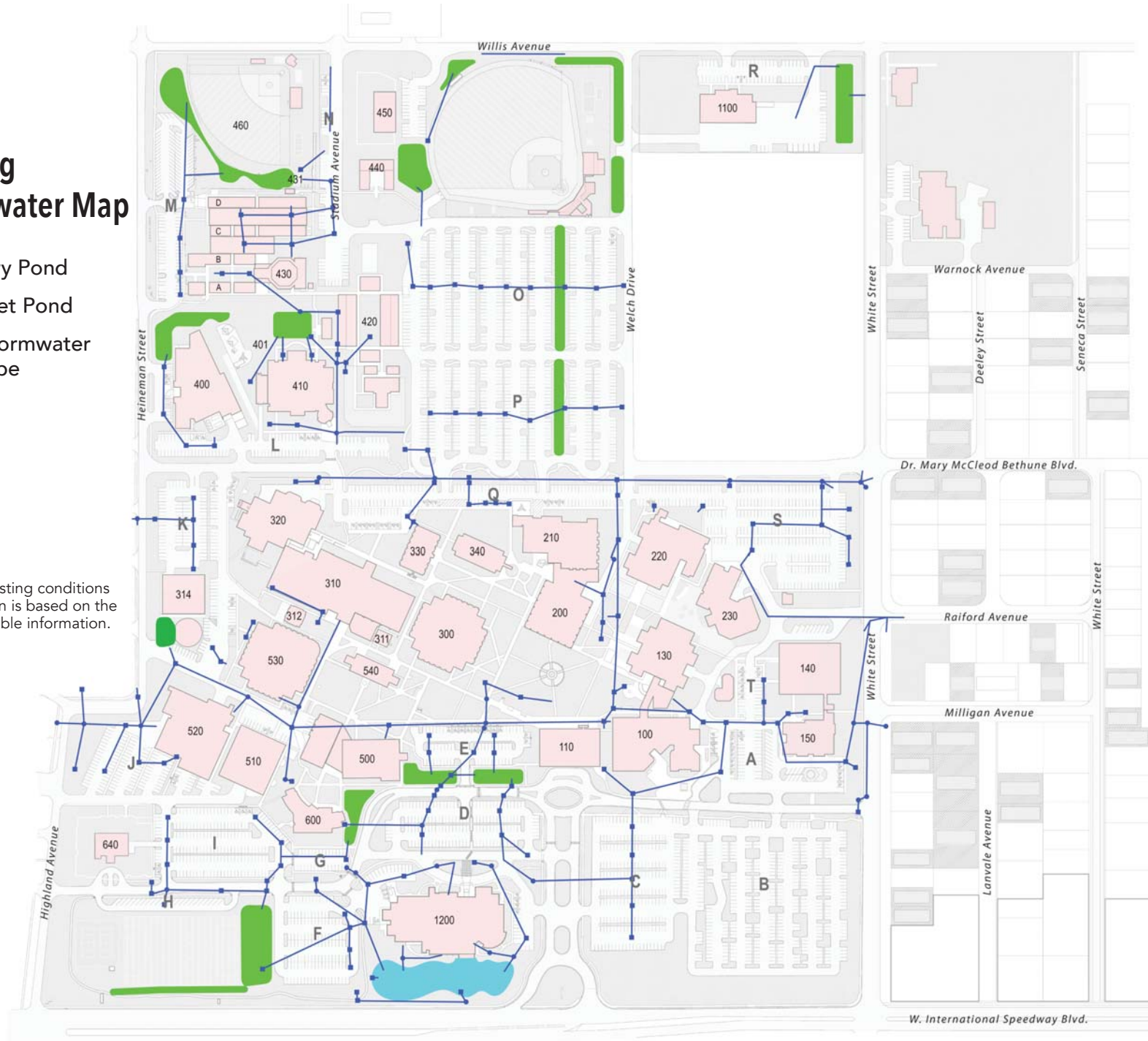
Based upon our discussions with College personnel, the existing stormwater systems perform adequately on the main campus. The two exceptions included some minor flooding along Highland Avenue to the west of campus and minor ponding in existing parking areas. These items are anticipated to be addressed within the 5-Year Campus Master Plan.

The campus sits outside the 100-year flood zone per FEMA FIRM panel 12127C0358H dated February 19, 2014.

Existing Stormwater Map

- Dry Pond
- Wet Pond
- Stormwater Pipe

NOTE: Existing conditions information is based on the best available information.



Potable Water - Existing Conditions

The Daytona State campus is served by facilities provided by the City of Daytona Beach. There is an existing 16-inch City of Daytona potable water main that traverses the campus from west to east (from Highland Avenue to White Street just north of Building 1200 along the Pinecrest Avenue and through Parking Lot's B & C. This 16" water main serves as the primary source of potable water for the southern portion of the campus through an existing 6-inch water meter to the northwest of Building 1200. It is our understanding that this 16-inch water main must be maintained (or rerouted) for any future expansion to the campus. There are 4 additional water meters (two located along Heineman Street to the west, one along Willis Avenue to the north and one along White Street to the east). The southernmost connection along Heineman Street connects across the campus via a private 10-inch water main to the connection on White Street. While the northern connection on Heineman Street connects via a private water main between Buildings 410 and 420 to the north at the Willis Avenue Connection. Having two meters on the same line allows the campus to back feed (from 2 meters at once) as necessary based on water demand. Each of these connection points also provides a source for the onsite private fire protection (fire hydrants) throughout the campus.

Existing regulations related to the potable water system:

Federal Regulations: The Federal Safe Drinking Water Act (Public Law 93-523) establishes operating standards and quality controls for the protection of public water supplies. As directed by this Act, the Environmental Protection Agency (EPA) has estab-

lished minimum drinking water standards, to which every public water supply system must conform. Included are "primary" standards required for public health, and "secondary" standards which are recommended to attain a higher aesthetic quality of water.

State Regulations: In accordance with federal guidelines, the Florida Safe Drinking Water Act (Sections 403.850 -403.864, F.S.) has been adopted, which designates the Florida Department of Environmental Protection (DEP) as the state agency responsible for the regulation of drinking water. The DEP has therefore promulgated rules classifying and regulating public water systems, including mandatory water treatment criteria (Chapter 17-550. F.A.C.). The DEP enforces both the primary and secondary water quality standards for public water supplies in Florida.

Local Regulations: As a Department of Education facility, Daytona State College is subject to the State Uniform Building Code for Public Educational Facilities and exempt from local regulations. Section 6A-2.012, F.A.C. states,

"All educational facilities constructed by a board ... are hereby exempt from all other state, county, district, municipal, or local building codes, interpretations, building permits and assessments of fees for building permits, ordinances and impact fees or service availability fees."

Rule 6A-2.001(48), F.A.C., however, states that educational facilities are not exempt from assessments "... for that length and size of line actually needed to service the educational or ancillary plant on that site".

The City of Daytona Beach also has implemented backflow prevention standards and cross connection control standards that are to be implemented on all new connections to the City's public water supply.

Existing Water Map

- Potable Water
- City Water
- Meter Location

NOTE: Existing conditions information is based on the best available information.



Sanitary Sewer - Existing Conditions

The campus is primarily served via existing onsite Terra Cotta gravity sewer lines that generally flow from west to east across the campus. There is one sanitary lift station located northwest of Building 320. This lift station simply serves to transmit the sewer from this building into the gravity sewer system to the north. The existing onsite gravity act as transmissions lines from the College buildings to the offsite City of Daytona Beach gravity sewer system. It shall be noted that sewage flows do existing from Halifax Hospital to the west through the DSC sewer system to the ultimate outfall on the east side of the campus in the White Street right-of-way. Wastewater treatment for the DSC campus is provided by the City of Daytona Beach and therefore no wastewater treatment plant is located on the DSC campus. Offsite wastewater is transmitted to the City's lift station which pumps the sewage to the City's wastewater treatment plant.

Existing regulations related to the sewer system:

Federal Regulations: The Federal Pollution Control Act (PL 92-500) is the controlling national legislation relating to the provision of sanitary sewer service. The goal of this act is the restoration and/or maintenance of the chemical, physical and biological integrity of the nation's waters. The act established the national policy aimed at implementing area-wide waste treatment and management programs to ensure adequate control of pollutant sources.



State Regulations: At the State level, the Florida Department of Environmental Protection (DEP) is responsible for compliance with federal and state regulations within Florida. Florida's Safe Drinking Water Act provides for the regulation of public water systems. The act is administered under Chapter 17-22, F.A.C. which contains State standards for potable water.

Local Regulations: As a Department of Education facility, DSC is subject to the State Uniform Building Code for Public Educational Facilities and exempt from local regulations. Section 6A-2.012, F.A.C. states, "All educational facilities constructed by a board ... are hereby exempt from all other state, county, district, municipal, or local building codes, interpretations, building permits and assessments of fees for building permits, ordinances and impact fees or service availability fees."

Rule 6A-2.001(48), F.A.C., however, states that educational facilities are not exempt from assessments "... for that length and size of line actually needed to service the educational or ancillary plant on that site"

The City of Daytona Beach controls all sewer service for the campus.

Existing Sewer System Map

-  Sanitary Lift Station
-  Sewer Line

4" Force Main

NOTE: Existing conditions information is based on the best available information.



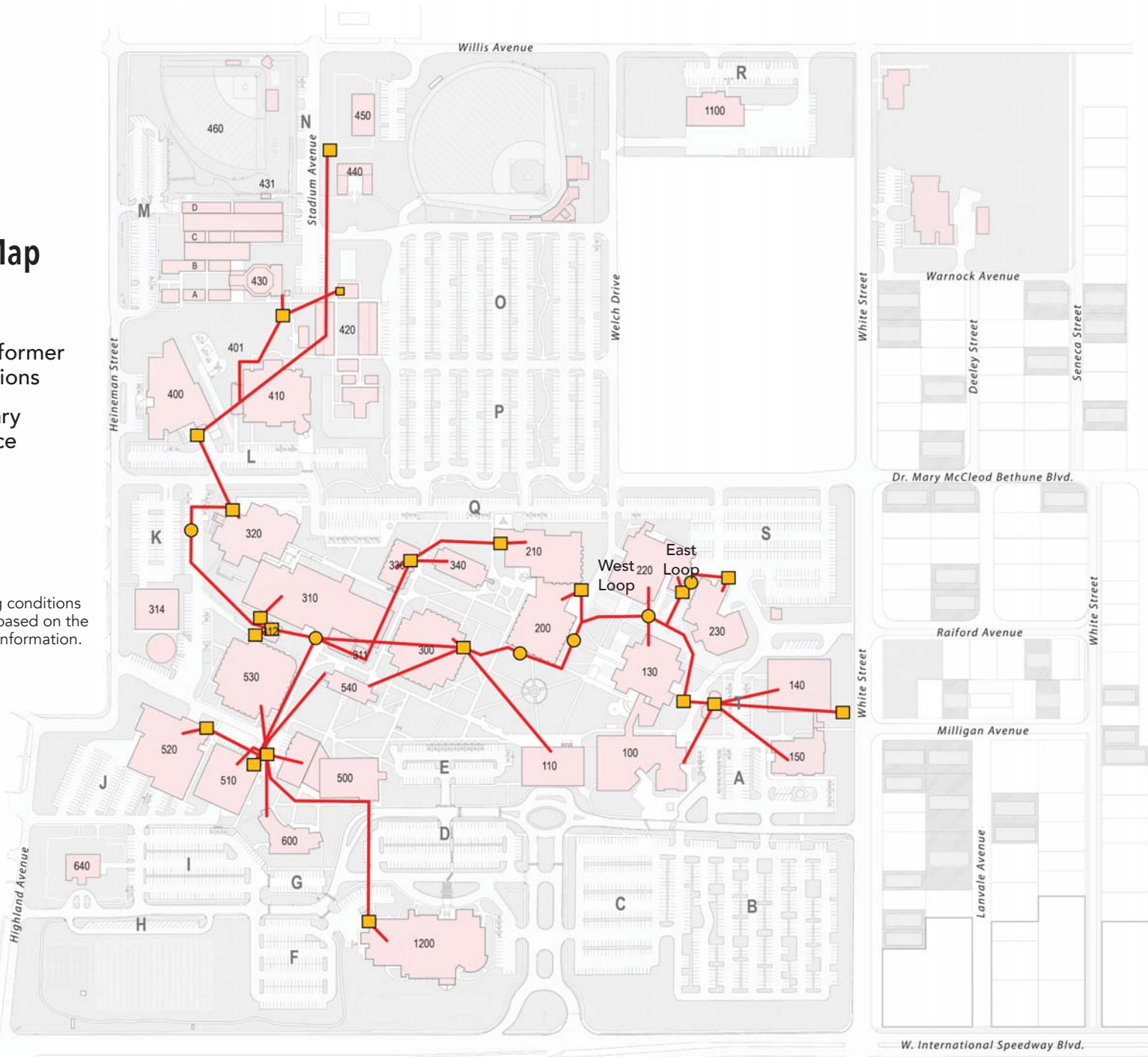
Electrical Service - Existing Conditions

The electrical system at Daytona State College is provided by Florida Power & Light (FPL) via 3 existing electrical meters. One of the meters is located along the east side of campus along White Street and the other two are located to the south of Building 530. These meters distribute 13.2KV primary distribution throughout the campus with secondary services of 480/277V or 208/120V being provided as needed to select lower voltage service needs.

Existing Electrical Service Map

- Transformer Locations
- Primary Service

NOTE: Existing conditions information is based on the best available information.



Irrigation/Reuse - Existing Conditions

The campus is currently served with reuse/reclaimed water via an existing 12-inch reuse main owned by the City of Daytona Beach. The 12-inch main runs along the western, eastern and northern boundary of the campus with connections being made in all 3 locations. In addition to the existing reuse lines, the campus has an existing Consumptive Use Permit with the SJRWMD for withdrawal of back-up water via wells located throughout the campus. See the included map showing the approximate location of these points from the existing SJRWMD Consumptive Use Permit #8589-6.

Existing Irrigation/Reuse Main and Well Map

- Well Locations
- Reuse Main
- ▲ Proposed Reclaimed Meter

NOTE: Existing conditions information is based on the best available information.

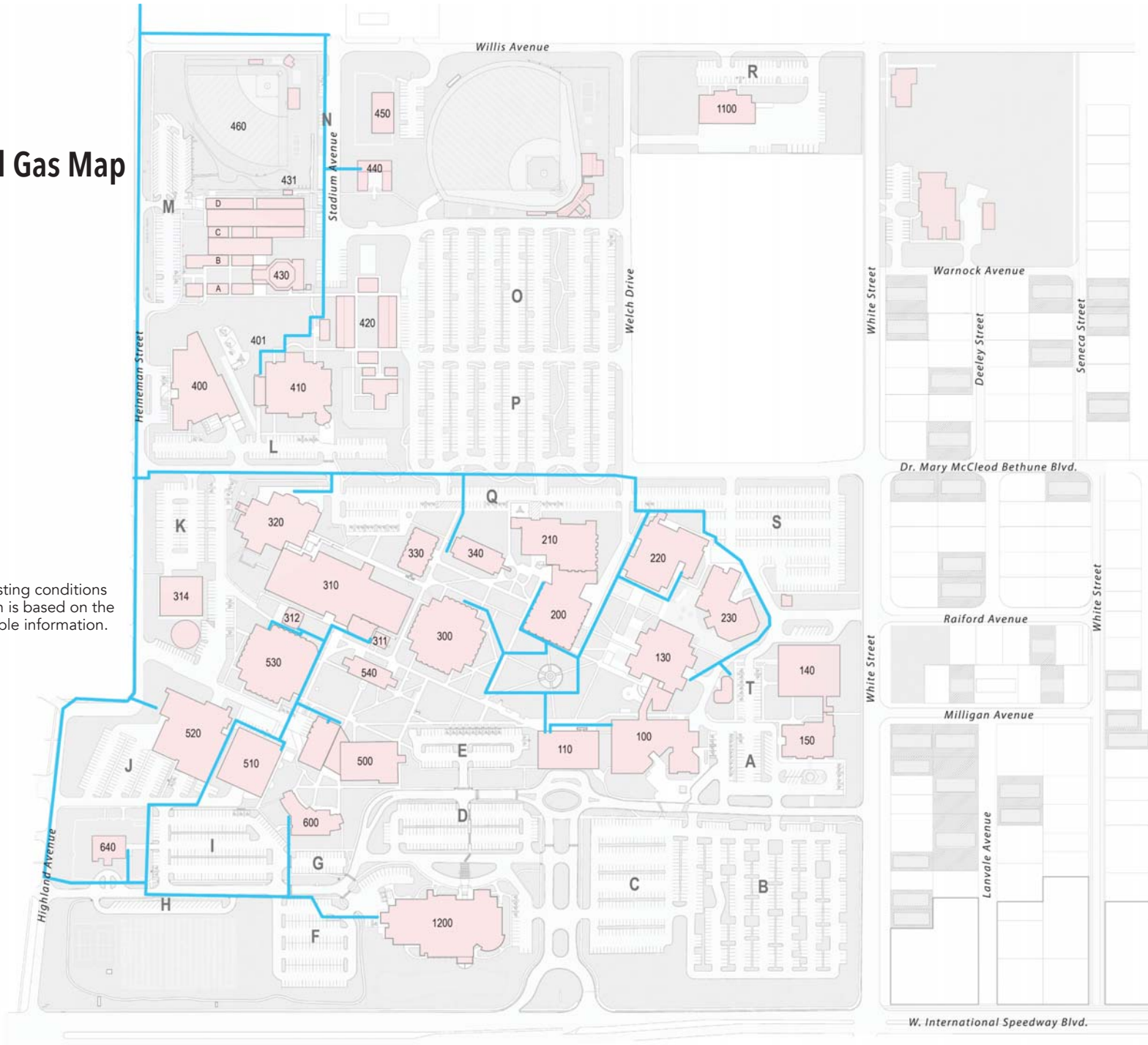


Natural Gas - Existing Conditions

The campus is served with natural gas via mainlines along Highland Avenue and Willis Avenue. Distribution lines are located throughout the campus primarily located along Dr. Mary McLeod Bethune Boulevard and Stadium Road. Natural gas is provided by TECO.

Natural Gas Map

NOTE: Existing conditions information is based on the best available information.



Mechanical - Chilled Water/ Hot Water (CHW) Map

- Hot Water
- Chilled Water

NOTE: Existing conditions information is based on the best available information.



Fiber, Communications and Cable

- Fiber
- Phone
- Cable

NOTE: Existing conditions information is based on the best available information.





Analysis and Campus Findings

Analysis and Campus Findings

The existing conditions information and campus data were integrated through interviews and a quantitative analysis to derive the Campus Findings. The Campus Findings are the foundation of the Campus Master Plan and represents a synthesis of relevant information translated into a planning approach that guides the implementation of facility development on the Daytona Beach Campus. The Campus Findings are interrelated with the Campus Master Plan Goal and Objectives and are illustrated in the Conceptual Master Plan diagram.

Interviews and Targeted Discussions

Commencement of the planning effort for the Campus Master Plan entailed gathering key information from interviews and targeted discussions with College faculty, staff, leadership and administration. Responses from a questionnaire and a Campus Open House with students were also conducted. The process culminated in the identification of similar needs and directives from amongst the Campus community. The compilation of the information into a general summary acts as a basis for the Campus Findings which are described below:

- Leverage the frontage along ISB as it is among the Campus's most fundamental assets
- The need for a centralized place for students to interact, study, socialize, relax and obtain College information is lacking and needed on Campus
- Providing more baccalaureate programs in the future is highly desired
- Adequate parking is not an issue
- The Campus environment is safe but improved illumination of exterior spaces at night is necessary
- Minimizing pedestrian and vehicular conflicts is necessary with an improved wayfinding and pedestrian system on Campus for users
- The need for a flexible facilities to accommodate community forums, events and workforce transition expos is absent on Campus
- Expand new Athletics offerings and facilities, including a housing complex for student athletes
- A defined identity along ISB with unified signage, landscape and architectural improvements to improve Campus aesthetics
- Continued improvement of Campus facilities to address outdated and non-functional facilities
- Ensure Campus vocational space is flexible and can accommodate the needs of local industries



Enrollment Growth and Space Needs

An extensive analysis and categorization of existing facilities was conducted to evaluate the current allocation of use and space utilization on the Campus. This information was integrated into a facility space planning model to assist in identifying space needs based on projected enrollments. The data compares two multipliers to clarify space needs in the future. The Campus Facilities Inventory (CFI) produced by the Society of College and University Planners (SCUP) and the multipliers as provided by the SREF manual(2014). In this section, the facility space planning model analyzes needs in 5-Year (through 2021) and 20-Year (through 2036) to the current condition.

The figures derived from these analyses provide a framework for projecting space needs based on enrollment estimates. This information should be viewed as a general expression of potential space needs, assuming a 1 percent annual student headcount enrollment growth. The findings for the Campus Master Plan in the 5-Year period are derived from SCUP's CFI and SREF metrics. The findings indicate that facility requirements through 2021, based on enrollment projections and existing assets, will generate a need for additional classrooms, study space, athletic facilities and special use areas. (see Figures 9 and 10) Note that these figures do not account for building demolition.

Figure 9

5 and 20-Year Estimated Space Needs (SREF)

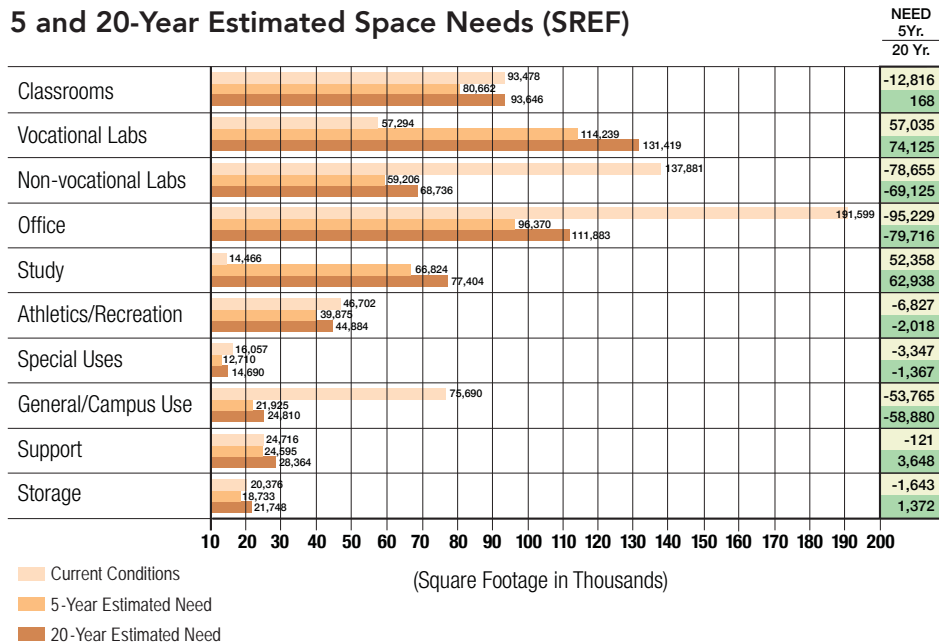
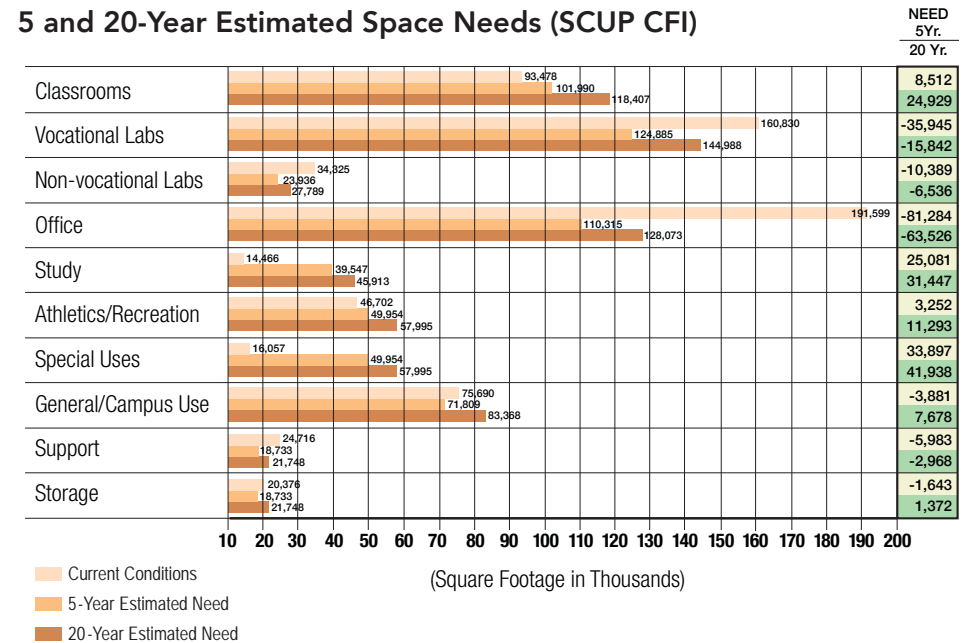


Figure 10

5 and 20-Year Estimated Space Needs (SCUP CFI)



Facility Demolition

Throughout the master planning process there was extensive discussion pertaining the demolition of existing building facilities. Building upon the work undertaken as part of the 2012 Campus Master Plan along with updated discussions, the following buildings were identified to be demolished as part of the 5-Year Campus Master Plan. The primary characteristics which influenced the decision to identify a structure for demolition included its existing condition, current placement, compliance with existing codes and configuration.

Condition – reliance on previous studies that assessed building condition were utilized in the 2016 master planning process. Condition of the building envelope, infrastructure systems and structural systems were the primary elements analyzed. Part of the building condition assessment is linked to the age of the structures; all of the structures identified for removal are more than 40 years of age with the exception of Building 520. However, as discussed in later sections, based on the scheduled timing of its demolition, Building 520 will have exceeded the 40 years of age condition.

Current Placement – Part of the assessment considers the Goal and Objectives of the Campus Master Plan. Some of the structures reside in locations that are prominent Campus locations where new improvements are identified for implementation. Current building placement is a the primary characteristic when considering potential demolition, but it is a factor utilized to support and identify building which are to be removed.

Compliance with Existing Codes – Many of the existing structures on Campus were constructed prior to the requirement of the Florida Building Code and the Americans with Disabilities Act (ADA). Considerations related to the ADA, electrical, mechanical and building code compliance have been utilized to evaluate if certain structures should be renovated or demolished.

Configuration – Modern teaching methods, technology in the learning environment, the current demands of students and academic missions require integration into the College’s facilities. In order to support these requirements, academic buildings need to be configured to accommodate the modern learning environment. Analysis and review of these factors influenced the decision to remove certain buildings based on their configuration or their ability to accommodate future building needs.

The decision to remove a building on Campus is a significant undertaking and presents several challenges. The consideration of available resources, existing space to accommodate interim instructional offerings and support services during the construction phase as well as maintaining the character and heritage of the Campus are important factors in the implementation of building demolition and the post-construction process.

Upon the completion of this process during the master planning process, the following facilities were identified for demolition in the 5-Year Campus Master Plan:

- 110 Bergengren Hall**
22,675 sf
 - 210 Karl Learning Resources Center**
28,667 sf
 - 220 Theater Center**
34,908 sf
 - 330 Arts and Sciences Hall**
13,670 sf
 - 340 Davidson Hall**
14,282 sf
 - 420 Criminal Justice Hall**
17,203 sf
 - 520 Studio Arts Hall**
33,089 sf
-

5-Year Facility Demolition Map

 Demolish



Facility Needs

A facility needs assessment model was completed to determine the Campus improvements required to support student enrollment projections simultaneously as existing facilities are phased out of occupancy due to planned demolition. Two models were developed, the first utilizing the SCUP CFI multipliers and the second utilizing SREF standardized requirements. As discussed in the “Enrollment Growth and Space Needs” section, the findings reflecting facility requirements for the Campus Master Plan in the 5-Year Plan are derived primarily from the SCUP CFI model. The SREF model is utilized to provide an alternative perspective.

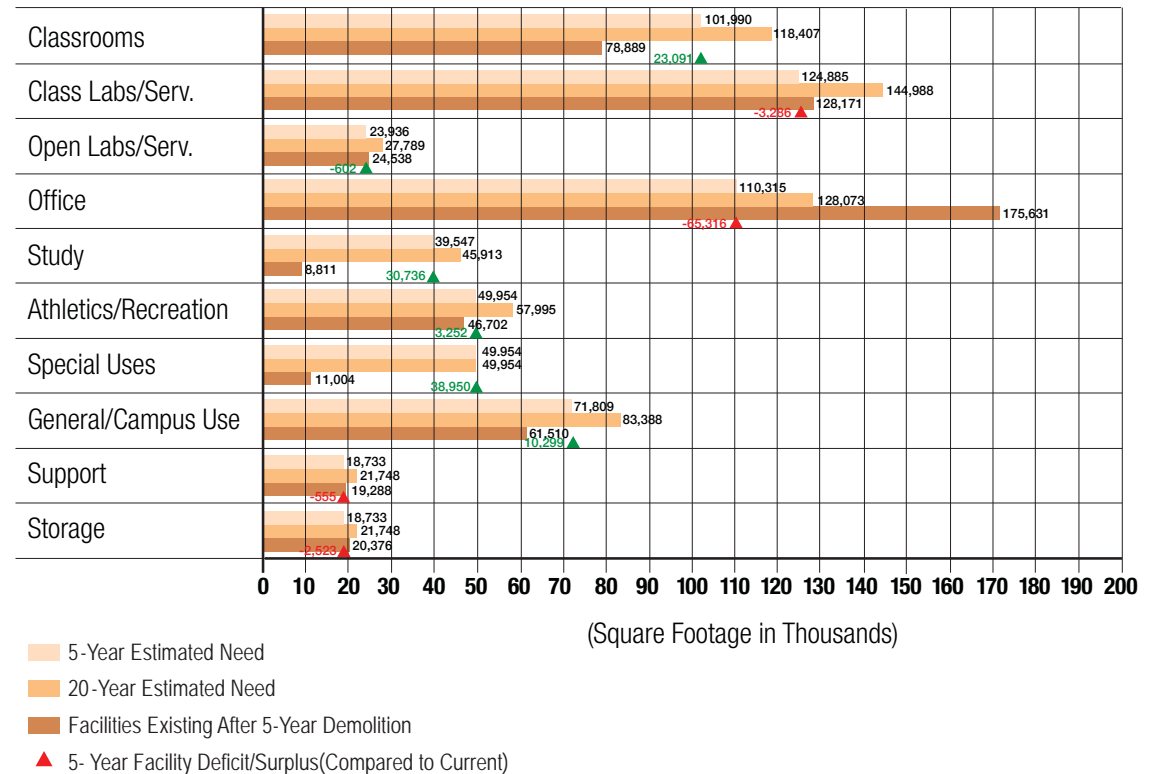
Although these models provide an understanding of projected facility needs, these figures should be considered as preliminary and for use at the master planning level only. Moreover, these assessments are a framework and should be analyzed further with additional detailed building needs assessment and programming information during the building design phase.

The findings of this analysis yielded an estimated need through 2021 of approximately 61,531 square feet (SCUP CFI) /47,521 square feet (SREF) for the Daytona Beach Campus. Integrating the SREF facility requirements with projected student enrollments validate the need for additional classroom, study and vocational laboratories space. However, in both models (SCUP CFI and SREF), a surplus of office space on the Daytona Beach Campus was evident. (see Figure 11 and 12)

The results of the SCUP CFI model for classroom space indicate an estimated need of 23,901 square

Figure 11

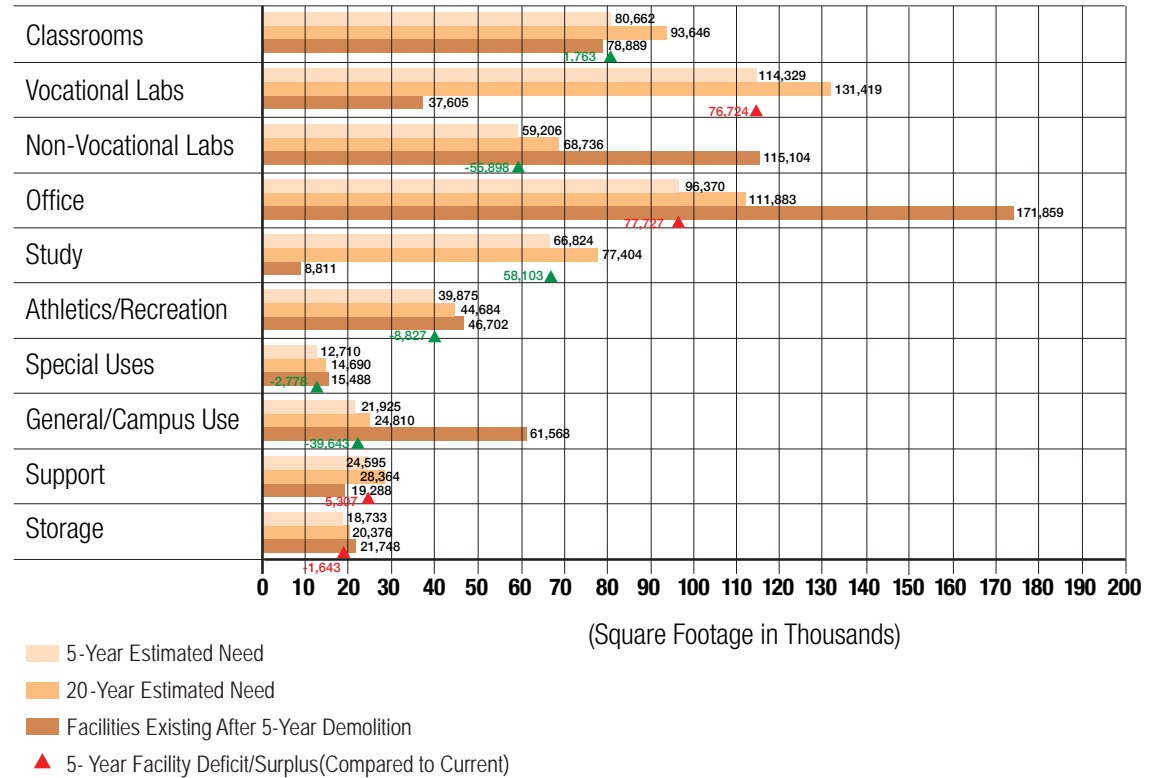
5 and 20-Year Space Model (SCUP CFI)



feet of additional classroom space in the 5-Year Plan (see Figure 11 and 12). Based on space utilization reports provided by Daytona State College, classroom utilization at the Daytona Beach Campus in 2015 is approximately 42 percent. Pursuant to State Statute, classrooms are to be utilized a minimum of 40 hours per week and that 60 percent of the student stations are to be occupied. It is possible to reduce the need for new classroom space by 18 percent to 19,598 square feet through more efficient utilization of existing classroom space and modified course scheduling.

Figure 12

5 and 20-Year Space Model (SREF)



Campus Findings Summary and Conceptual Master Plan

Campus Master Plan Goal

The Daytona State College Campus Master Plan shall be an enduring and actionable approach to facilities growth that positions the College as the regional destination for higher education.

Objective 1:

Ensure that the quality, integrity, innovation and achievement offered at Daytona State College is visible and attainable.

Strategy 1.1

Focus enhanced growth to the South along ISB

Strategy 1.2

Create a vibrant and diverse experience inward and outward through the creation of exciting campus arrival experience

Strategy 1.3

Balance strategic acquisition of properties where available

Objective 2:

Enhance elements of the student experience.

Strategy 2.1

Provide enhanced technology throughout the existing campus core and in future facilities

Strategy 2.2

Incorporate new athletic facilities and associated support to continue building the student experience

Strategy 2.3

Incorporate new academic and support facilities that meet the needs expressed by students, leadership, staff and faculty

Objective 3:

Incorporate measures that support campus safety needs.

Strategy 3.1

Create a safe and sustainable approach to traffic

Strategy 3.2

Minimize vehicle and pedestrian conflicts

Strategy 3.3

Develop and identify measures related to the synergies of campus maintenance and safety

This section summarizes the Campus Findings and correlates the results with the Conceptual Master Plan diagram. The Conceptual Master Plan diagram was developed through an iterative process based on evaluation from presentations and discussions with key stakeholders. Prior to discussing the Campus Findings it is important to reiterate the Campus Master Plan Goal and Objectives along with specific Strategies to implement. These Strategies were developed as the connection between the broad Objectives with the detailed Campus Findings.

Objective 4:

Incorporate short and long term measures for utilities and infrastructure

Strategy 4.1

Align campus growth with stormwater requirements

Strategy 4.2

Ensure proper preservation and implementation of infrastructure to support growth

Strategy 4.3

Address transportation needs through appropriate use of existing assets

Objective 5:

From facilities standpoint, align the State of Florida's Performance Funding Measures with Daytona State College's Strategic Plan

Strategy 5.1

Accommodate flexible facilities that equip students for placement in the workforce

Strategy 5.2

Target outdated facilities for enhancement, modification or removal if inefficient, outdated or lack the configuration to support student success, retention or completion.

Strategy 5.3

Emphasize the implementation, expansion and/or modification of facilities to support programs that all graduates to attain increased wages.

Aligning all of the previous information derived during the master planning process resulted in the Campus Findings and the creation of the Conceptual Master Plan. The Campus Findings are the integration of interviews, data analysis and discussions with the Campus Master Plan Mission, Goal, Objectives and Strategies. The Campus Findings informed by the Existing Conditions Data created the Conceptual Master Plan diagram.

Campus Findings

1 Create a new campus arrival experience and “Front Door”

- Create a new vehicular arrival sequence
- Enhance Campus frontage along ISB to create a new arrival experience
- Create new entry signage and features

2 Strategic Acquisition of Property to the East of Campus

- Identify and confirm needs
- Target acquisition based on need

3 Incorporate a central hub that will support student study, interaction and general\special use

- Develop a central location for a new student life facility (student union)
- The central hub should be an exuberant expression of the Daytona State College student experience
- The hub should be multi-use and flexible with an emphasis on integrating outdoor and indoor space

4 Provide the necessary space for a multi-purpose structure that is flexible and supports a broad range of needs

- A new facility that is multi-purpose and flexible should be implemented
- The facility should be well integrated into the campus environment but be a strong community element with visibility from the campus periphery
- The facility should include the flexible programming to support community instructional and vocational needs

5 Support the needs of new athletic programming

- Locate new soccer facilities
- Provide for the basis of an expanded athletics area
- Locate new residence hall to support student athletes

6 Maintain and set the groundwork for better vehicular circulation

- Emphasize basis for utilization White Street
- Maintain east\west circulation south and north of the campus core

7 Incorporate relevant parking and infrastructure improvements

- Maintain or enhance parking facilities impacted by new projects
- Initiate relevant stormwater solutions
- Develop and identify measures related to the synergies of campus maintenance and safety

Concept Master Plan

Parking Expansion

Potential Residence Hall

Parking Expansion

Focused Campus Expansion

Focused Campus Expansion

Emphasized Campus Experience

Athletics Expansion

Parking Expansion

Athletics Expansion

Target Acquisition





ENCOUNTER

Campus Master Plan

Campus Master Plan

Throughout the nine-month master planning process the notion of a rebirth of the Daytona Beach Campus was discussed, some even used the word “renaissance” to describe the proposed planned Campus improvements. The Campus Master Plan is articulated in 5-Year (2021) and a 20-Year (2036) planning horizons. The 5-Year Plan is intended to be used as a program for capital improvements, while the 20-Year Plan is diagrammatic and provides general guidance for proposed Campus improvements.

The 5-Year Campus Master Plan

The central theme to the 5-Year Campus Master Plan is the focus on expansion of the Campus core southward to increase exposure of proposed facilities along ISB. With expansion proposed to extend southward, the need to maintain synergy with the Campus core is both challenging and vital. This is particularly evidenced by the need to create a strong pedestrian connection with the College’s main quadrangle. The quadrangle is the heart of the Daytona Campus and was identified as an important space to be preserved. Strengthening the linkages to the quadrangle through the incorporation of new facilities and amenities was a primary approach to enhance this space. The importance of the quadrangle as a collegiate-focused gathering space is critical to the success of the Campus environment. The enhancement of the student experience and the objective to “reach out” to the Daytona Beach community are primary considerations of the 5-Year Campus Master Plan.

Quantitatively, the implementation analysis for the 5-year Campus Master Plan was completed with a focus on deriving the forecasted need based on SREF metrics along with a second study using SCUP CFI multipliers as reference data set. The analysis integrates forecasted demolition figures (by use type), existing facility square footages and the programmed areas for the New Student Center to create a “need” in the 5-year term. It is important to note that when comparing the figures for SREF and SCUP CFI that the multipliers vary considerably with regard to lab space. This is due to categorization between the two references where SREF focuses on Vocational\Non-Vocational Labs and SCUP CFI utilizes Class (Closed) and Open Laboratories.

The overall space needs for the campus in 5 years is estimated to be approximately 105,000 square feet based on the SREF multipliers (including construction of the New Student

Figure 13

5-Year Implementation Analysis

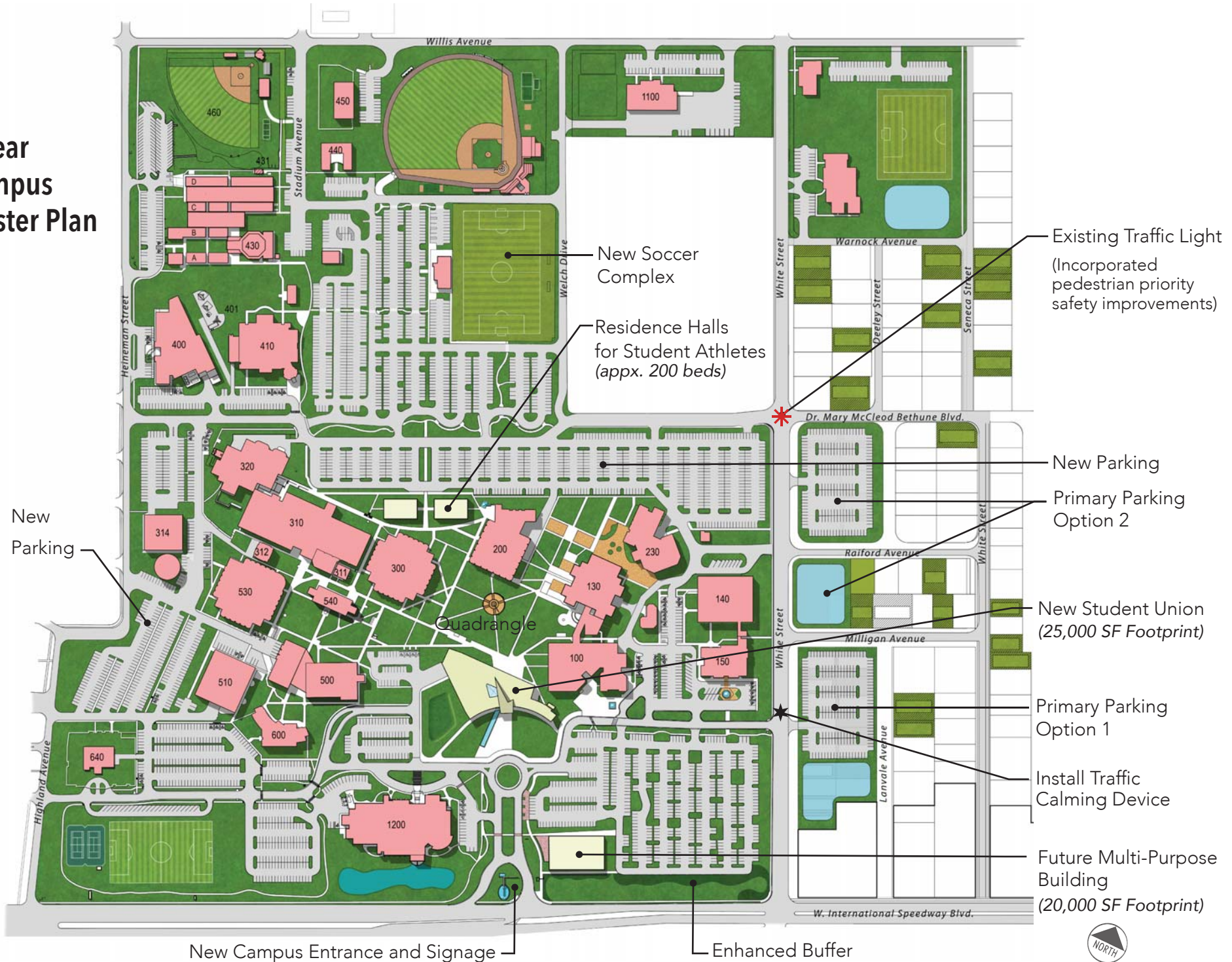
	SREF	SCUP CFI	Student Center ³	SREF Actual Need
Classrooms	1,763	23,091	19,131	-17,368
Vocational Lab	76,724	-3,286 ¹	9,970	-66,754
Non-vocational Lab	-55,898	-602 ²	0	-55,898
Office	-81,699	-65,316	8,700	-72,999
Study	58,013	30,736	24,420	33,593
Athletics/Recreation	-6,827	3,252	752	-6,075
Special Uses	-2,778	38,950	0	-2,778
General/Campus Use	-39,643	10,299	15,840	-23,803
Support	5,307	-555	0	5,307
Storage	-1,643	-1,643	0	-1,643
Subtotal	-46,681	36,569	70,941	-74,910
ACTUAL NEED Not counting surplus	141,807	106,328	70,941	105,654

¹ Utilizes class lab category

² Utilizes open lab category

³ Based on Williamson Dacar, Inc. report

5-Year Campus Master Plan



New Soccer Complex

Residence Halls for Student Athletes (appx. 200 beds)

Existing Traffic Light (Incorporated pedestrian priority safety improvements)

New Parking

New Parking

Primary Parking Option 2

New Student Union (25,000 SF Footprint)

Primary Parking Option 1

Install Traffic Calming Device

Future Multi-Purpose Building (20,000 SF Footprint)

New Campus Entrance and Signage

Enhanced Buffer

Center). This figure does not consider the conversion of existing surplus space into new uses. The needs are focused on vocational lab space (approximately 67,000 square feet) and study (approximately 33,513 square feet). The New Multi-Purpose Building (see Phase 4 of the 5-Year Campus Master Plan) proposed on ISB would be approximately 60,000 – 80,000 square feet (three to four stories) when implemented. This facility is intended to solve the majority of the forecasted space deficit. Additionally, increased utilization of Buildings 140 and 150 would be beneficial to make up for the anticipated shortfalls in space. According to the Winter/Spring Space Utilization Report for 2014-2015, these facility's average use is approximately 22%. There may also be additional flexibility in utilizing Building 200 (Nunamann Hall) as well. It will be critical to understand the actual flexibility of these buildings and others to provide space during interim times while demolition\construction of facilities is occurring.

Linking Campus to Community

The greatest challenge became the best opportunity. One of the most important projects at the Daytona Beach Campus is the proposed New Student Center. Programmed at approximately 80,000 square feet, the facility will be an icon within the community and function as a student life hub, a place for teaching and learning, and a gathering place for the Campus. Siting the proposed New Student Center within view of ISB and proximate to the Mori Hosseini Center along the axis of the main Campus entrance creates a bridge to the core of the Campus. When completed, the New Student Center will enhance the College's interface with the region, community and pro-

spective students. The New Student Center will open onto the quadrangle – further enhancing two important Campus spaces.

In addition to the New Student Center, the creation of an enhanced Campus main entrance and arrival sequence is a complementary improvement along the ISB corridor. Pedestrian walkways, landscaping, lighting and signage will be implemented along the improved main Campus entrance. The elements of the 5-Year Campus Master Plan that are the most notable include a proposed Multi-Purpose Building located to the east of the Mori Hosseini Center and the improved main Campus entrance. Based on preliminary programming, the proposed Multi-Purpose Building will consist of a number of flexible learning spaces that support Campus needs, accommodate community outreach and special events, provide vocation-focused laboratories and provide opportunities for students to interact with industry workforce entities.

Supporting Recreation and Student Athletes

Parking Lots O and P located to the east of the Building 420 complex is proposed to be partially converted into a New Soccer Complex including enhanced pedestrian improvements and support facilities. The New Soccer Complex will support intercollegiate athletics and implements the Daytona State College Athletic Department's mission to improve recruitment and retention of intercollegiate student athletes. Further, consistent with this mission, the Campus Master Plan relocates the functions of the Arts and Sciences Hall (Building 330) and Davidson Hall (Building 340) to other facilities to incorporate a new residential housing complex for student athletes. Upon completion, the

Athletics District located on the north side of Campus will be a clearly defined area serving the needs of the student athletes and the region.

Enhancing Campus Circulation

From a transportation perspective, the main Campus entrance from ISB located east of the Mori Hosseini Center (Building 1200) remains in its current location but is substantially improved. The vision for the new main Campus entrance includes an array of elements intended to enhance the gateway to the Daytona Beach Campus and provide improved wayfinding and circulation.

Of equal importance to ISB for the Daytona Beach Campus is White Street located along the College's eastern boundary. From a vehicular circulation per-

spective, the Campus Master Plan identifies White Street as an important access connection for the Daytona Beach Campus due to the signalized intersection located at ISB which enables full vehicular traffic movements for ingress and egress. Based on the circulation functionality that White Street provides for the Daytona Beach Campus, it is critical to maintain the connection to White Street within the 5-Year Campus Master Plan.

The extension of Dr. Mary McLeod Bethune Boulevard ("Bethune Boulevard") westward through the Daytona Beach Campus is a primary element of the Campus Master Plan. Upon implementation, the Bethune Boulevard improvements will improve vehicular and pedestrian safety while providing an east-west connector (between White Street and Highland Avenue) that will be the foundation of an integrated Campus transportation circulation system. Improvements to Parking Lots Q and S are intended to promote wayfinding and vehicular travel paths and reduce confusion.

Opportunities to the East

To the east of White Street are a number of parcels owned by Daytona State College with the largest and most usable parcel located at Willis Avenue and White Street. This parcel

Figure 14

Parking Model

	Current					Phase One (2017)					Phase Two (2018)					Phase Three (2019)					Phase Four (2020)					Phase Five (2021)				
User Type	Users					Users					Users					Users					Users									
Face to Face/Hybrid Enrollment	7,664					7,741					7,818					7,896					7,975					8,055				
Faculty	195					195					197					199					201					203				
Adjuncts\Non-Faculty\Total	344	530		874		344	530		874		347	535		883		351	541		892		354	546		900		358	552		909	
Total Non-Student Staff	1069					1069					1080					1090					1101					1112				
Parking Use (spaces:user)	Parking Req.	Ex. cond. ¹	Parking Loss/Add	Adjusted Total	Need / Surplus	SREF Req.	Ex. cond. ¹	Parking Loss/Add	Adjusted Total	Need / Surplus	SREF Req.	Ex. cond. ¹	Parking Loss/Add	Adjusted Total	Need / Surplus	SREF Req.	Ex. cond. ¹	Parking Loss/Add	Adjusted Total	Need / Surplus	SREF Req.	Ex. cond. ¹	Parking Loss/Add	Adjusted Total	Need / Surplus	SREF Req.	Ex. cond. ¹	Parking Loss/Add	Adjusted Total	Need / Surplus
Faculty/Employee/Contractor (1:1)	1,069	—	—	—	—	1,069	—	—	—	—	1,080	—	—	—	—	1,090	—	—	—	—	1,101	—	—	—	—	1,112	—	—	—	—
Student Parking Required (1:3.1)	2,474	—	—	—	—	2,497	—	—	—	—	2,522	—	—	—	—	2,547	—	—	—	—	2,573	—	—	—	—	2,598	—	—	—	—
Visitor Parking Assumption (1:1)	100	—	—	—	—	100	—	—	—	—	100	—	—	—	—	100	—	—	—	—	100	—	—	—	—	100	—	—	—	—
Total Required/Existing/Estimated Need	3,641	3,690	0	3,690	-49	3,666	3,690	-145	3,545	121	3,702	3,545	-127	3,418	284	3,738	3,418	76	3,494	244	3,774	3,494	89	3,583	191	3,811	3,583	0	3,583	228
Primary Parking Option 1	—	—	—	—	—	—	—	—	—	—	—	—	185	3,603	99	3,738	3,603	76	3,679	59	3,738	3,679	89	3,768	-30	3,738	3,768	0	3,768	-30
Primary Parking Option 1 & 2	—	—	—	—	—	—	—	—	—	—	—	—	370	3,788	-86	3,738	3,788	76	3,864	-126	3,738	3,864	89	3,953	-215	3,738	3,953	0	3,953	-215

¹Existing conditions figures exclude handicap parking spaces

is occupied by two existing structures which are not currently utilized by the College. The 5-Year Campus Master Plan proposes improvements on these parcels to accommodate expansion of athletics facilities, a soccer practice field, parking and associated stormwater facilities. The Phase Two improvements incorporate impacts to significant parking areas on campus. These improvements are associated with the New Student Center. Although historic observations of parking conditions were favorable, recent discussions coinciding with the construction of the New Soccer Complex yielded some potential concerns. Based on these discussions the need to consider constructing parking improvements east of White Street may be important.

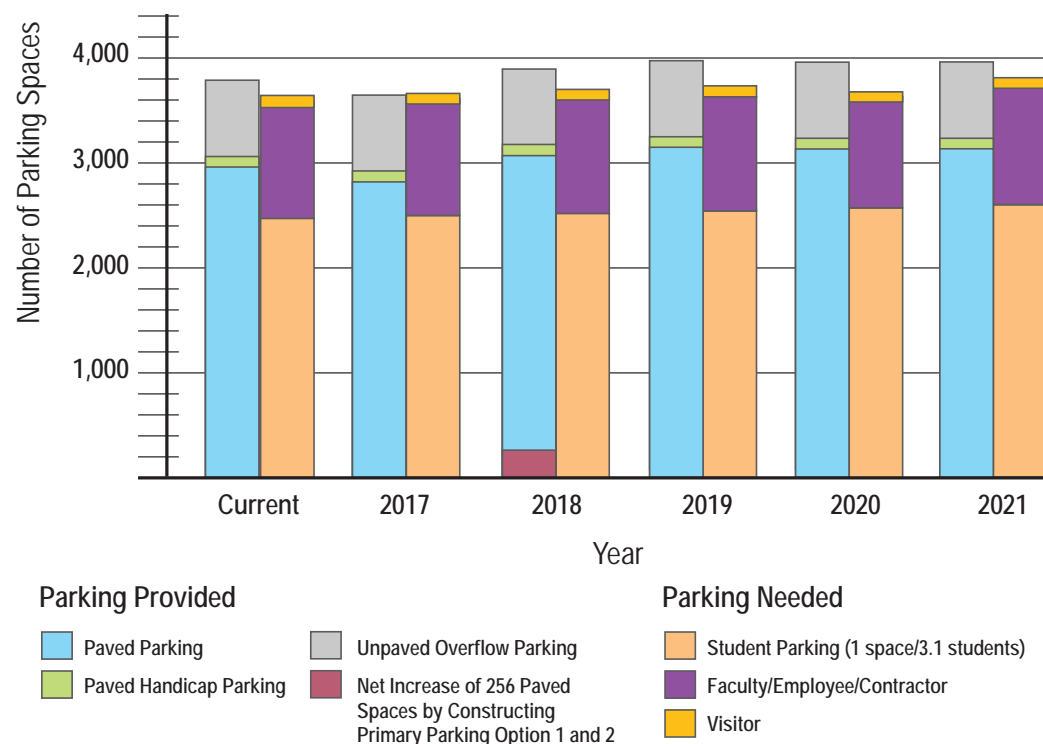
Campus Parking

The 5-Year Campus Master Plan includes extensive renovation and reconfiguration of the parking inventory on Campus. Improving circulation and maintaining parking quantities as new facilities are constructed are the primary element of the proposed improvements. The parking requirements for the Campus are a function of multiple factors. Those factors include a qualitative assessment that is supported by field observations and quantitative analysis (See Figure 14).

The current parking status on Campus is adequate to support existing needs. This was confirmed by field analysis and through interviews and questionnaire responses. There is an underlying concern that parking is inadequate in terms of proximity of specific destinations within the Campus. The Campus Master Plan endeavors to remedy this issue in the long-term by developing a more compact and walk-

Figure 15

5-Year Parking Model Summary (SREF)



able Campus and ensuring the parking deficits are minimized.

The quantitative aspects of parking were studied and discussed at length. A multiplier of 1 space per 3.1 students was the greed upon factor to use. This multiplier is particularly relevant when considering online and hybrid instructional methods.

During the various phases in the 5-Year Campus Master Plan the parking need expands. The parking model assumes that unpaved overflow and handicap spaces remain at 724 and 105 respectively. It is worth noting that the overflow (unpaved) spaces provided in the Campus Parking Inventory may be further impacted due to the construction of the

Multi-Purpose Building (see Phase Four - page 77). In that location there is the potential to park 110 cars. The construction of the Multi-Purpose Building should be carefully analyzed with parking utilization Campus-wide. The 5-Year Parking Model Summary (See Figure 15) shows a continuous need for paved parking. Based on current ratios and utilization the need to take action in 2018 is an important factor to consider due to increased enrollment and scheduled construction projects. This deficit could be further impacted due to construction activity causing additional impacts to parking areas temporarily. The following recommendations are potential solutions to forecasted deficits:

Potential Parking Recommendations

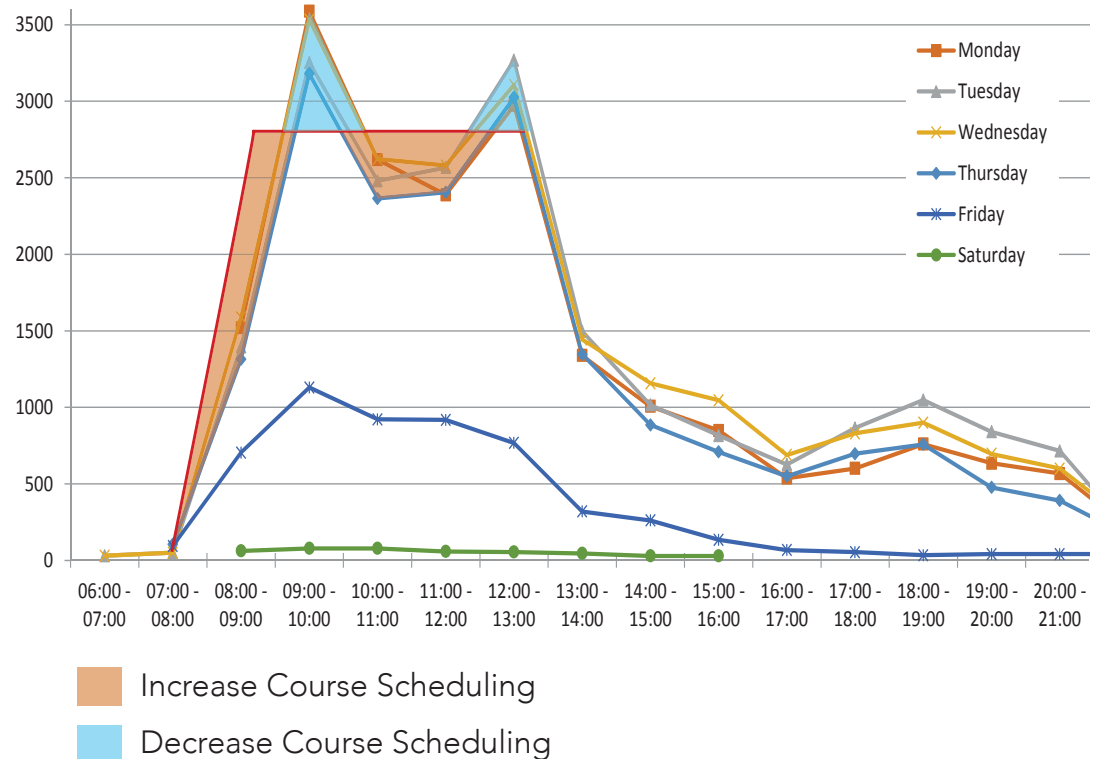
Recommendation 1: The projected parking deficit can be completely absorbed by overflow parking on campus (unpaved areas). A study or scenario could be deployed to utilize and expand these areas in times of need between 2016 and 2021.

Recommendation 2: A parking management study and correlating action plan could be deployed that includes enforcement and course scheduling. Referring to Figure 16, providing a course schedule to decrease the peak times when students are on campus and replacing it with lower populated times could be helpful in managing parking issues.

Recommendation 3: During discussions with Votran representatives there was a conversation that focused on a potential new program at the College where free ridership was being linked to tuition payment. A campus-wide campaign fostering utilization of Votran could aid in overcoming potential parking deficits.

Figure 16

Students on Campus by Time



Recommendation 4: Considerations to advance acquisition of parcels east of White Street. In addition to acquiring parcels creating a temporary parking lot may partially remedy a portion of the deficit. The most feasible location based on current ownership is the block south of Milligan Avenue and the lots owned along the frontage of Bethune Boulevard.

There are a range of potential options to remedy any temporary for long term parking issues generated due to construction or enrollment growth

The 20-Year Campus Master Plan

The aspirations of the 20-Year Campus Master Plan embrace the ideals developed throughout the planning process while integrating a long-term vision. The primary function of the 20-Year Plan is to identify projects that further the needs and goals of Daytona State College by setting aside areas for development and to ensure current needs are coordinated with this future vision. The 20-Year Campus Master Plan is diagrammatic and a conceptual space-planning model for use in long-term facility programming and development.

Central Theme

Continuing with the Campus Master Plan Goal and Objectives, a greener and compact regional destination of higher education are exemplified in the 20-Year Campus Master Plan. An enhanced architectural edge along ISB linked to the Campus core to the north through extensive pedestrian greenspaces is the central theme of the 20-Year Campus Master Plan.

Consideration for an enhanced Quadrangle with new pedestrian spaces, landscape, seating and features is an important project. If funding allows, moving the Quadrangle improvements to the 5-Year Campus Master Plan is strongly recommended.

Athletics and Recreation

The 20-Year Campus Master Plan contemplates continued expansion of athletic and recreation facilities. An extensive Athletics District located north of the Campus core is contemplated. These improvements focus on the expansion of facilities within existing Parking Lots O and P. Implementing these improvements can offer an extraordinary sports complex for athletics and recreation activity; however, the impact to parking on-Campus will be considerable. To compensate for the loss in parking will involve the expansion of surface parking east of White Street as well as further the discussion amongst College administration to analyze the costs and benefits of parking structures to accommodate parking deficits in the future.

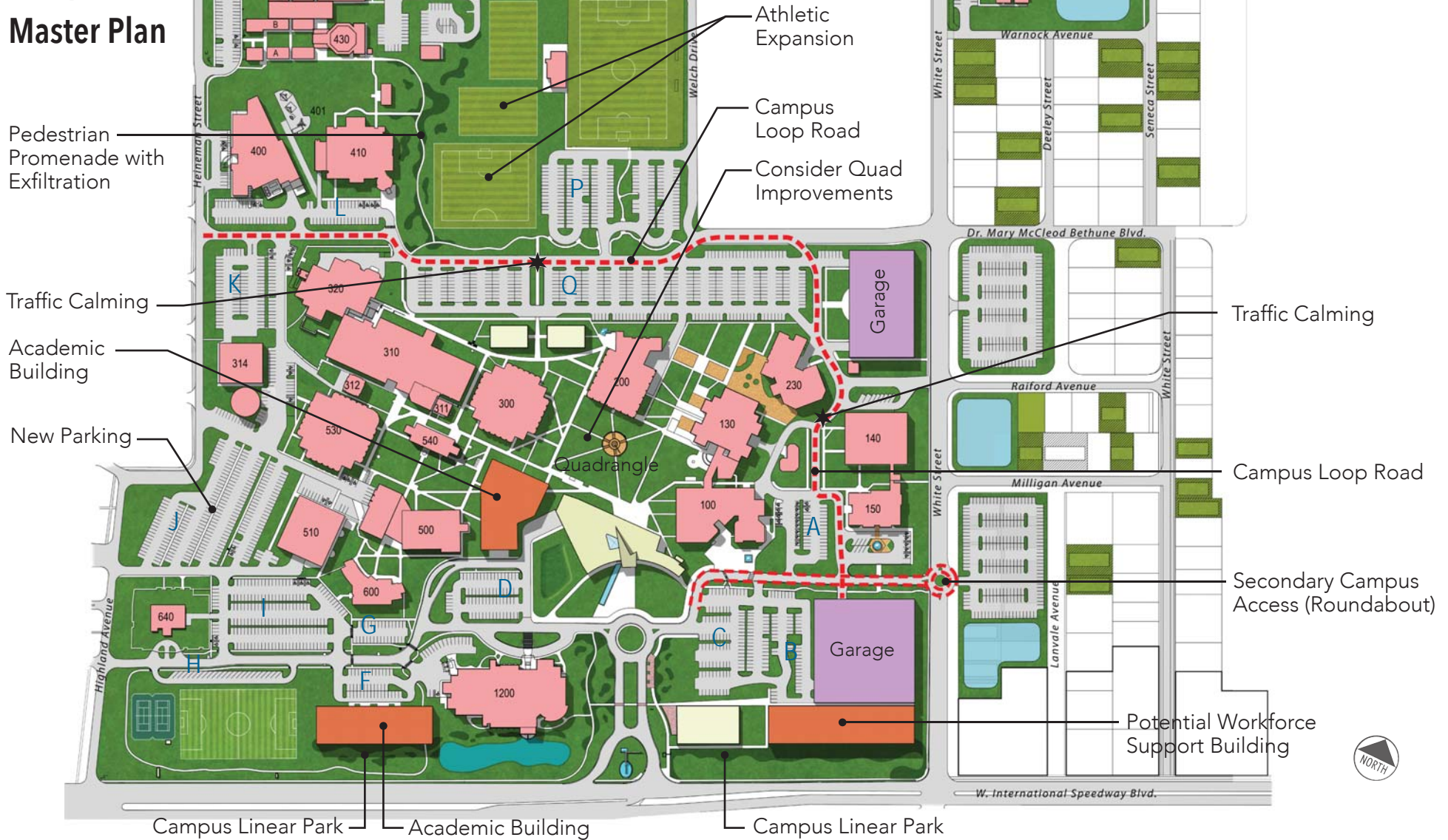
Campus Architectural Improvements

Based on projected space requirements, additional classrooms and laboratories are estimated to amount to approximately 60,000 square feet by 2036 using both SCUP CFI and SREF. This estimate will need to be evaluated periodically based on current student data, building demolitions and new facilities programmed in the 5-Year Campus Master Plan. The overall estimate for new facilities by 2036 is relatively minimal, representing an increase in new building Square Feet of approximately 16 percent. If new facilities are proposed between 2021 and 2036, the 20-Year Campus Master Plan provides siting options within the Campus core and along the ISB corridor.

The Campus Loop Road

The creation of an internal Campus Loop Road is expressed in the 20-Year Campus Master Plan. The Campus Loop Road is articulated with a preferred access connection beginning at White Street. The connection is depicted north of ISB at White Street with a proposed roundabout or traffic calming improvement. Implementation of the roundabout at this location will reinforce White Street as a secondary entrance to Campus and an element of the Loop Road system. The roundabout improvement should incorporate signage, wayfinding, landscaping and specialty pedestrian treatments.

20-Year Campus Master Plan



Implementation Synopsis – The 5-Year Plan (2016-2021)

The master planning process generated an array of potential opportunities that were considered in the vision for the Daytona Beach Campus. In addition to the planning results, one of its most important elements was the development of a flexible Campus Master Plan. Changes in the College's vision, instructional priorities, resources, funding, the economy and Campus needs are inevitable and should be factored into the implementation of the 5-Year Plan. However, maintaining the core principles that informed the development of the Campus Master Plan is critical to sustaining the continuity of overall Campus development at Daytona State College.

The Campus Master Plan is configured for implementation over five phases during the 5-Year planning period from 2016 to 2021. The implementation sequence is the result of considerable deliberation to yield a responsive and realistic approach to development within the Daytona Beach Campus in the short-term.

Phase One

Phase One provides for the expansion of assets for intercollegiate athletic programs with the implementation of a New Soccer Complex. The New Soccer Complex is proposed to be located to the north in Parking Lots O and P. Phase One also includes the expansion of the parking areas to the east of the

Schildecker Science Hall (Building 410) in space currently occupied by individual structures that comprise the Building 420 complex. Portions of the Building 420 complex are demolished in this phase with the exception of the Marine Science Building.

From a stormwater perspective, the renovation of Parking Lots O and P, the demolition of Building 420 and the construction of the New Soccer Complex will replace large parking areas with a pervious soccer field. This parking area is currently served by a below grade infiltration drainage system with a small area for visible retention within two swales inside existing parking medians. This system will likely need to be replaced as part of the soccer field project with a subsurface stormwater storage and treatment systems. These systems are typically used in constrained areas and may include implementation techniques such as subsurface vaults, pervious pavements or above ground retention swales around the soccer field; similar to the system that is constructed around the College's baseball and softball field complex.

The work in this phase includes the demolition of most of Building 420 and the construction of the soccer complex. Building 420 is currently served by Pad 6 and it is anticipated that the demolition of this building will reduce load and provide space within the transformer for electrical needs at the soccer facility. If lighting of the soccer field is proposed during final engineering, we recommend that a complete electrical analysis be completed on the loads on Pad 6 during final design to confirm adequate power is available.

From a mechanical standpoint, Building 420 is not currently served by the CEP and thus no modifications will need to occur with this demolition phase. Any facilities constructed in association with the soccer complex (restrooms, locker, concessions, etc.) could be serviced through conventional heating\cooling means. The feasibility and impact of extending service from the Buildings 400 and 410 appears to be prohibitive for the programming.

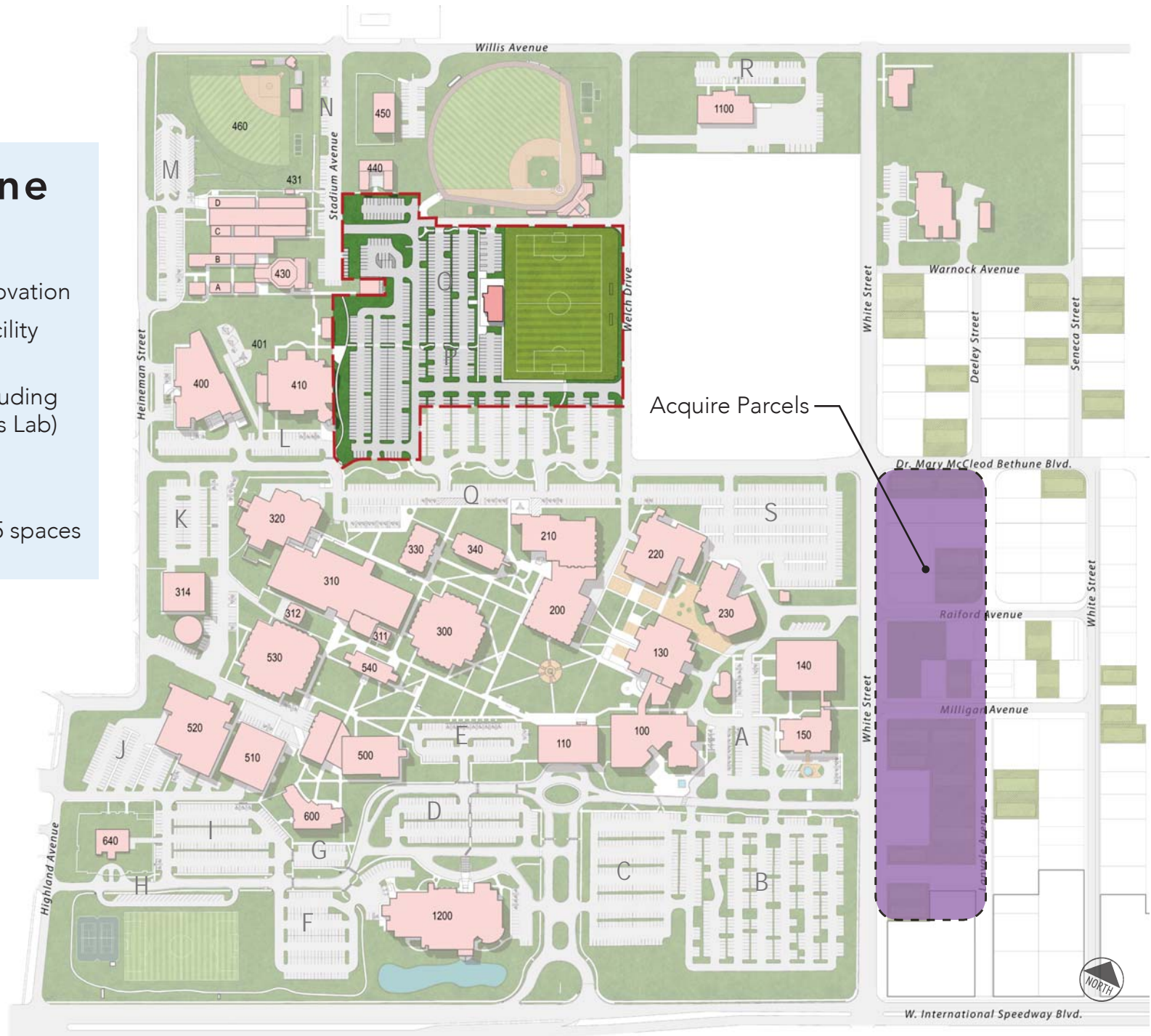
Acquisition of parcels east of White Street is an important consideration due to potential increased demand on parking. The loss of parking in this phase and in Phase Two is considerable and the installation of parking to the east is strongly recommended.

Phase One

(2016-2017)

- Lots O & P Renovation
- New Soccer Facility Improvements
- Demo 420 (Excluding Marine Sciences Lab)
- Acquire Parcels

Parking Loss = 145 spaces



Phase Two

Phase Two is the most crucial implementation sequence identified in the Campus Master Plan. Bergengren Hall (Building 110) and the Theater Center (Building 220) are demolished to accommodate re-configuration of Parking Lot S and the construction of a New Student Center. The proposed New Student Center will be the centerpiece of the Daytona Beach Campus and a focal point for the community. Improvements to entry signage, landscaping of Parking Lot B and a renovated main entry sequence are related projects implemented concurrently in this phase. Phase Two improvements reflect a visible and perceptible outcome of the Campus Master Plan's Goal, Objectives and Findings.

The renovation of Parking Lot S, the demolition of Buildings 110 and 220 and construction of the New Student Center are examples of building within established impervious areas. These projects include demolition and new construction and it will be important for the College to receive credit for existing impervious areas in future permits. Stormwater systems are already in-place to accommodate these locations which will minimize main Campus entrance improvements will likely require a new stormwater treatment facility in the vicinity of the frontage to ISB. This stormwater treatment facility may be developed as complimentary water amenity to compliment the existing stormwater facility front of the Mori Hosseini Center (Building 1200).

The impact Parking Lots D and E are significant. The process of construction is also a consideration influencing parking and circulation on campus. The need to construct additional parking east of White Street

Preliminary Entry Concept



is strongly encouraged. This parking could be permanent or temporary. The plan currently depicts 185 spaces in each lot east of White Street. Rezoning and coordination with the City of Daytona Beach should be incorporated into the process of implementing these improvements.

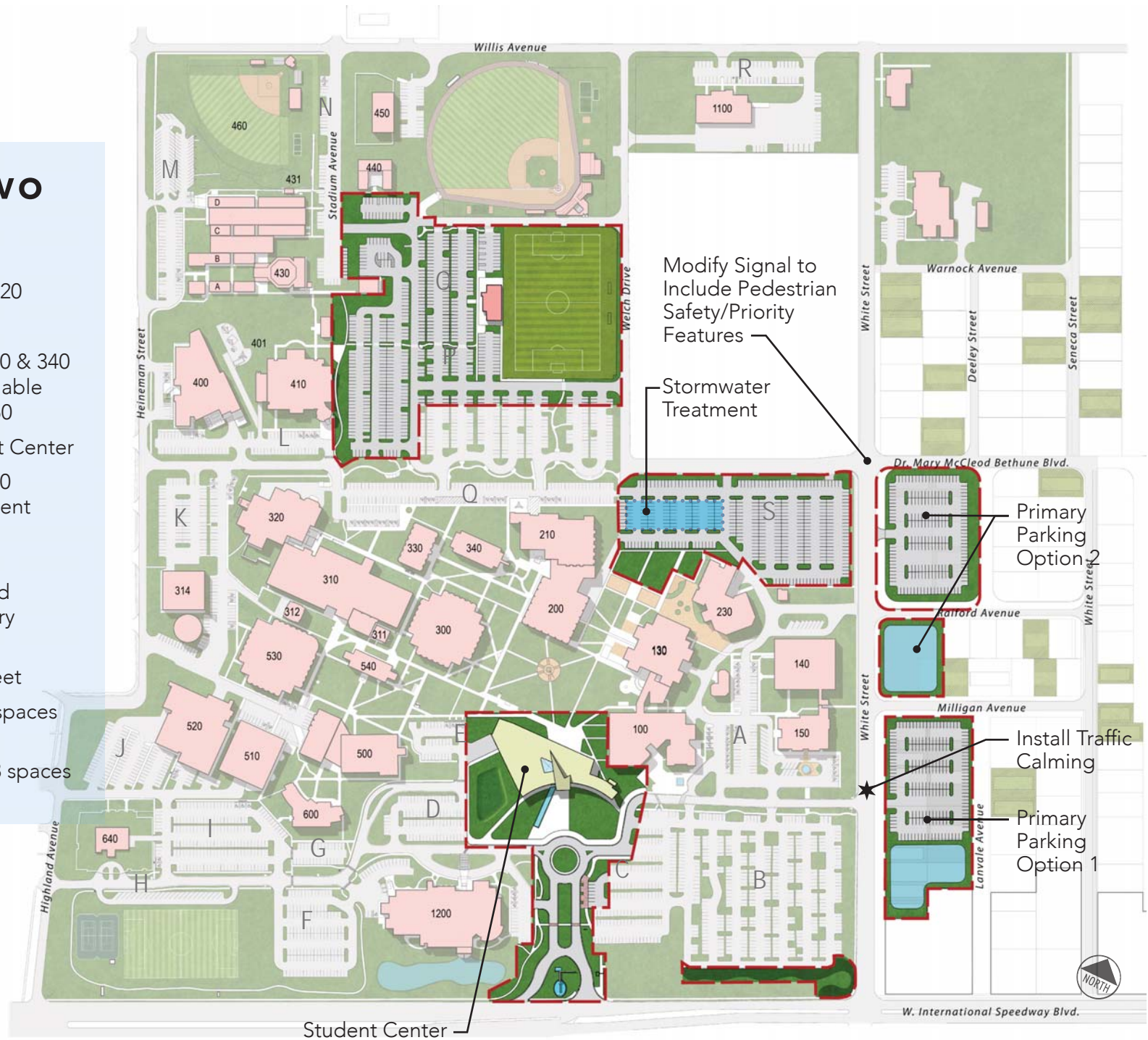
Phase Two

(2018-2019)

- Demolish 110 & 220
- Lots S Renovation
- Move Relevant 330 & 340 Functions to Available Space in 140 & 150
- Construct Student Center
- Move Relevant 210 Functions to Student Center
- Construct Buffer South of Lot B and New Campus Entry
- Construct Parking East of White Street

Parking Gain = 243 spaces

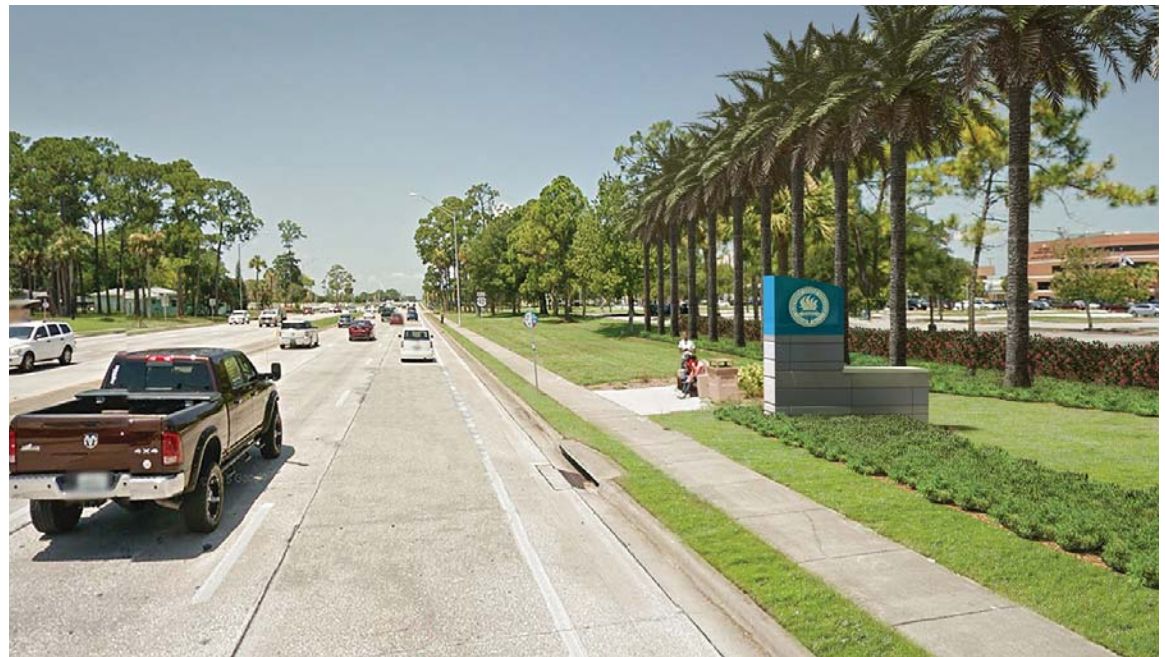
Net Gain through Phases = 98 spaces



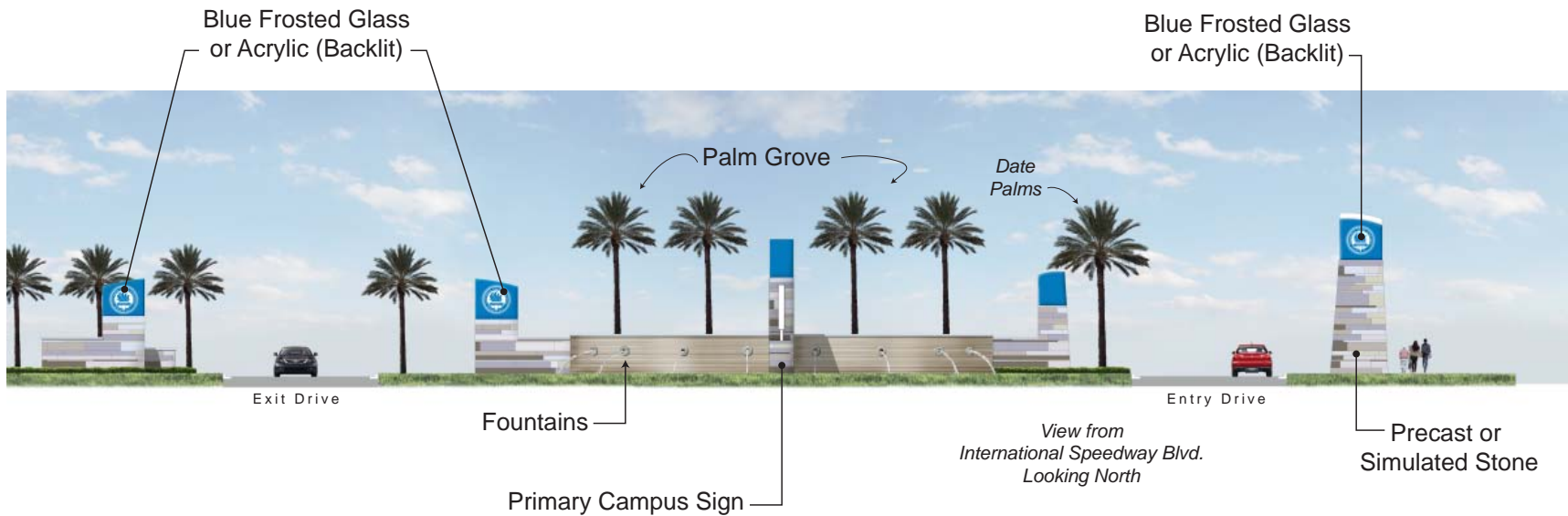
The demolition of Buildings 110 and 220 and construction of the New Student Center Building represents the majority of work for this phase. During the design of the Student Center we recommend a full analysis of the campus electrical system be completed to determine if any improvements will be required to the primary distribution system as part of this phase and the near ensuing improvements articulated to complete the 5-Year Campus Master Plan. This analysis shall include the new Multi-Purpose Building so that proper sleeves can be installed under the new Campus Entry to avoid future construction disruption to the new entry. It is anticipated that new primary and secondary distribution will be required to serve each of these buildings. We highly recommend that installing adequate electrical sleeves be installed beneath the new Campus Entry to serve the future Multi-Purpose Building.

The demolition of Buildings 110 and 220 which are served by the CEP will free up capacity for the construction of the New Student Center Building. During the design of the Student Center we recommend a detailed analysis of the campus system be completed to determine if any improvements will be required to the CEP as part of this phase including the future 5-Year Campus Master Plan Improvements. For planning purposes and based on a cursory review, it appears that expansion will not be required for the New Student Center or Multi-Purpose Building. However, the (chilled water\hot water) CHW service to Building 1200 will be impacted by the New Student Center

construction. Considerations for permanently relocating the feed westerly must be considered prior to disruption of service. Additionally, during this phase the new Campus Entry will be constructed. In order to avoid future construction disruption to the new entry, we recommend that the new chilled water line be sized, routed and constructed through the entry road for the future Multi-Purpose Building shown in Phase Four. At a minimum a large diameter sleeve should be installed and capped under the entry road to prevent disruption in the future phases.



Conceptual Campus Entry Feature



Phase Three

Phase Three realizes the completion of the east-west vehicular connection through the extension of Bethune Boulevard (between White Street and Highland Ave). Implementation of this roadway connection will accommodate vehicular and pedestrian circulation with an emphasis on traffic calming. Additionally, the expansion of Parking Lot Q is related to the demolition of the Arts and Sciences Hall (Building 330), Davidson Hall (Building 340) and the Karl Learning Resource Center (Building 210) which supports the need for parking expansion in this part of the Campus. The last component in Phase Three is the construction of a Residential Complex for Student Athletes. An estimated 200-bed Residence Hall Complex is proposed to be located north of the Greene Center (Building 300).

The renovation of Parking Lot Q and construction of the Residence Hall Complex is located adjacent to the core of the Campus where only limited stormwater systems exist today. The stormwater system within this area is conveyed via large diameter stormwater collection pipe to the east and outfalls to White Street. As new development occurs in this area, it is anticipated that additional stormwater treatment systems may be required. Underground vault systems may be the most appropriate stormwater facilities approach to implement in this area.

Buildings 330, 340 and 210 demolition constitutes a significant portion of Phase Three. The demolition of these structures will reduce the electrical load on the existing system. This phase includes the construction of the Residence Hall which likely can be

serviced from Pad 4 once Buildings 330, 340 and 210 have been demolished. Upon final completion of concept plans for the Residence Hall, including anticipated electrical loads, we recommend the analysis completed with Phase Two be updated. This update should incorporate the analysis performed at the conceptual phase for the Residence Hall. This will allow any upgrades that may be required to the electrical system to be completed with the construction of these buildings.

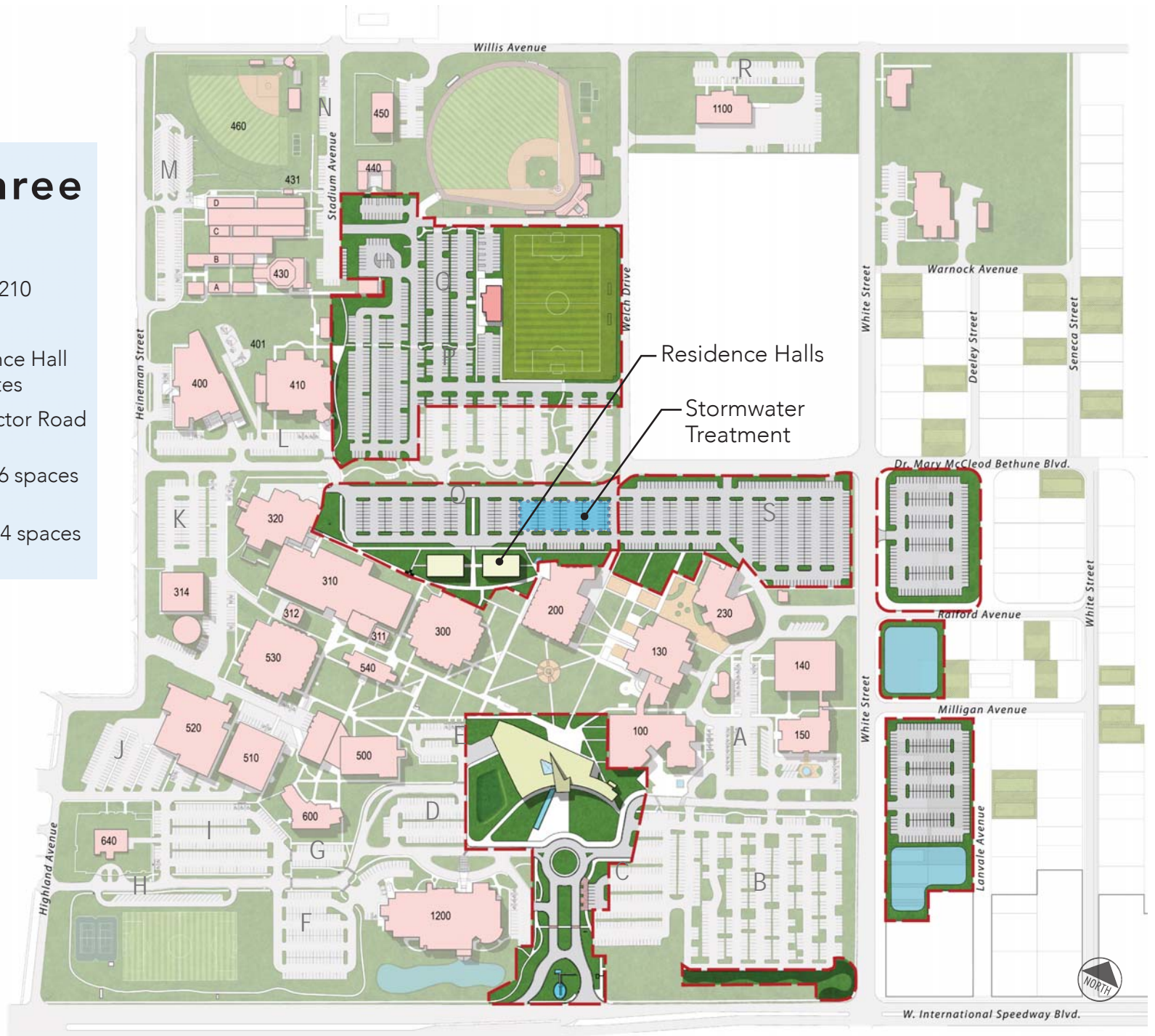
The demolition associated with this phase will reduce the current load on the CEP from a CHW perspective. This phase includes the construction of the Residence Hall which can be served off the existing chilled water campus loop lines. We recommend the analysis completed with Phase Two for the New Student Center include the new Residence Hall so any upgrades that may be required to the CEP can accommodate the construction of these buildings.

Phase Three (2019-2020)

- Demo 330, 340 & 210
- Lot Q Renovation
- Construct Residence Hall for Student Athletes
- East/West Connector Road

Parking Increase = 76 spaces

Net Gain through Phases = 174 spaces



Phase Four

Phase Four represents the continuation of the development of Campus facilities towards ISB through the construction of the proposed Multi-Purpose Building located east of the Mori Hosseini Center (Building 1200) and the main entrance to the Daytona Beach Campus. The Multi-Purpose Building is intended to be an iconic element for the community and completes the implementation of a unique and memorable entry sequence into the Daytona Beach Campus. The Studio Arts Hall (Building 520) will be demolished in Phase Four to facilitate the expansion of Parking Lot J as well as to accommodate related pedestrian and landscape improvements to complete the creation of this new space.

The construction of the proposed Multi-Purpose Building along ISB should be contemplated by the stormwater revisions associated with Phase Two. The Multi-Purpose Building will be located within the stormwater basin that is being modified during Phase Two and new impervious area will need to be accommodated as part of the project. The renovation of Parking Lot J during this phase should also include addressing the drainage failures that commonly exist offsite along Highland Avenue.

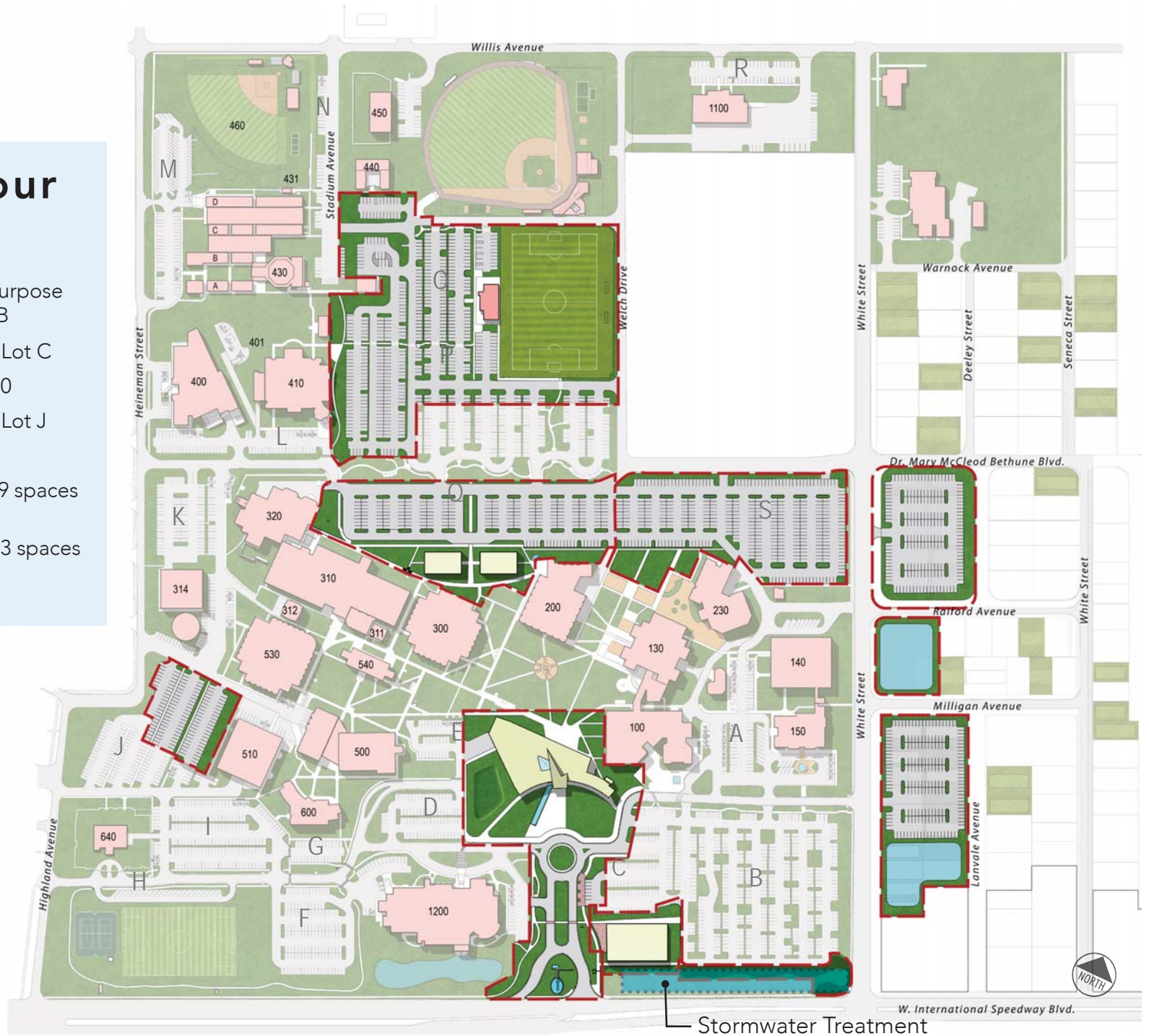
The demolition of Building 520 will reduce electrical load on the system and should be considered during the Phase Two electrical analysis. A new primary electrical line will be required to serve the Multi-Purpose Building. The recommendation that additional primary service and correlating distribution is considered at this time is prudent for future development shown in the 20-Year Plan to the east of the Multi-Purpose Building.

The construction of the new Multi-Purpose Building along International Speedway Boulevard and the demolition of Building 520 will reduce a significant load off the CEP and should be considered during the Phase Two analysis of the entire CHW system. This phase will include the extension of this main line to serve the new Multi-Purpose Building with future expansion to the east as a consideration.

Phase Four (2020-2021)

- Construct Multi-Purpose Building along ISB
- Renovate Parking Lot C
- Demo Building 520
- Renovate Parking Lot J

Parking Increase = 89 spaces
 Net Gain through Phases = 263 spaces



Phase Five

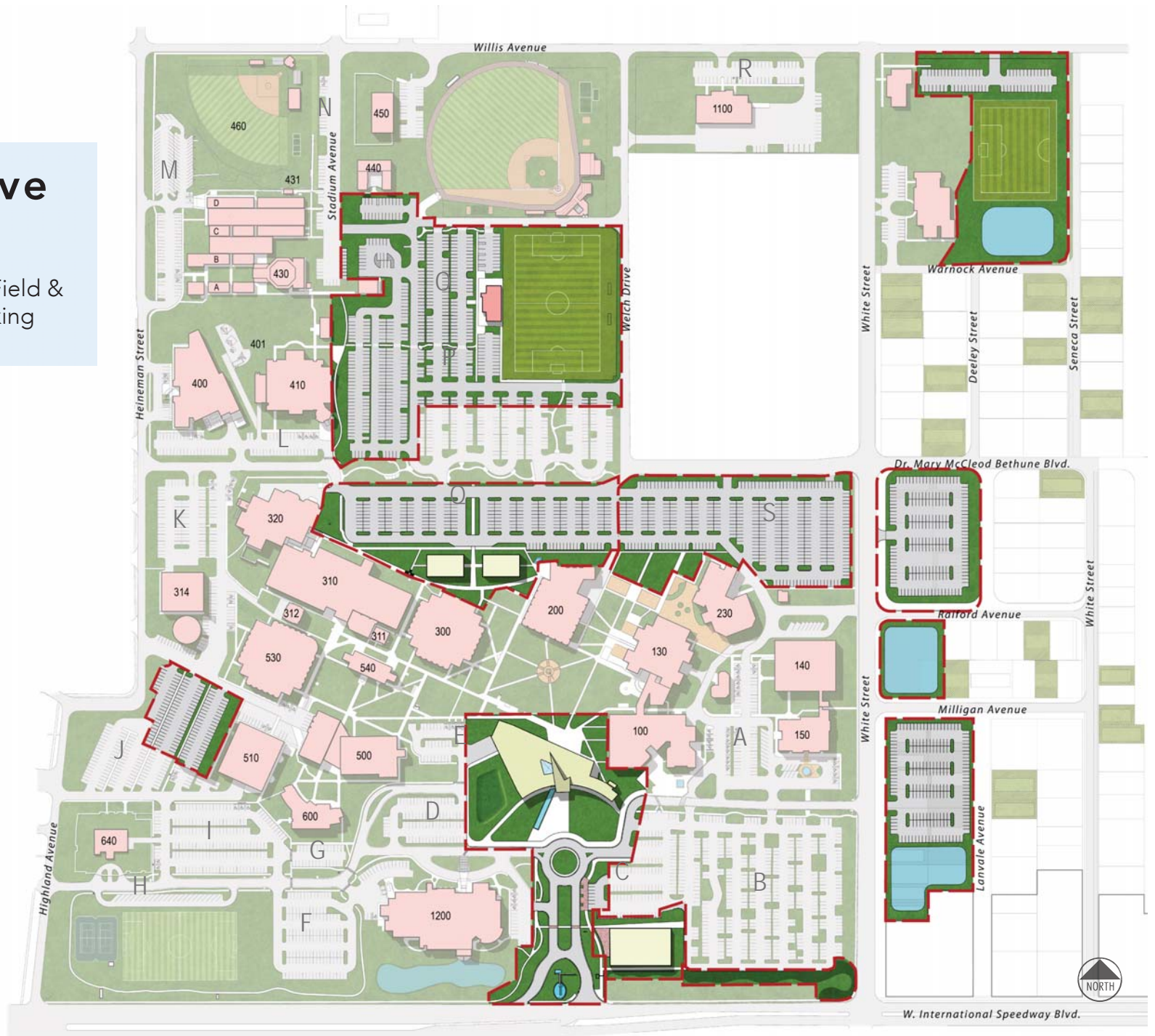
Phase Five focuses on the expansion of athletic facility assets, associated parking and stormwater infrastructure improvements within the off Campus property owned by the College located east of White Street. The property is located northeast of the Campus and along Willis Avenue (east of the Business Services Center – Building 1100).

The construction of a new multi-purpose play field and associated parking along Willis Avenue is located outside the existing Campus stormwater system. As such, this phase will not likely require modification of existing stormwater permits and it is anticipated that conventional stormwater treatment methods can be implemented in this area.

This phase includes the construction of a new multi-purpose field to the northeast of the core Campus. This phase will require a new electrical meter and service for any electrical needs. An application will be required to FPL and the project need to be designed to meet all applicable Building Codes for the electrical service to this area.

Phase Five

- Construct New Multi-Purpose Field & Associated Parking



Infrastructure and Related Recommendations

Planning for Stormwater

The Campus Master Plan for the Daytona Beach Campus depicts numerous changes, additions and modifications to existing buildings, parking areas and open spaces. Each of these changes results in impacts on the existing stormwater conveyance and treatment systems and will require permitting with the St. Johns River Water Management District. It is our recommendation that the College completes a master stormwater analysis and develops a master stormwater management plan. These efforts will accommodate the College to obtain a master permit that allow the greatest amount of flexibility in the implementation of the Campus Master Plan while minimizing permit review requirements. Given the limited amount of open space within the Campus core and relatively flat topography, it may be challenging to obtain permit flexibility. It is important that the College utilize that the existing impervious coverage of existing buildings and parking areas when permitting new facilities. Documenting all existing facilities prior to demolition will be important to minimizing the size of future stormwater treatment facilities.

Since the majority of campus growth over the next five years is generally located within the core Campus and with existing impervious areas, the modification of existing stormwater systems will likely be sufficient in the short-term. However, as the impervious

area increases, an overall Campus Master Stormwater Plan to locate stormwater treatment areas would greatly assist in developing an efficient stormwater treatment system. This will likely include the utilization of offsite properties already owned by the College to the east for additional stormwater treatment. Installing exfiltration systems underground ahead of future projects as well as open dry retention systems along the eastern (lower) portions of the Campus would also be a beneficial approach.

Supplemental Stormwater Commentary

Federal legislation known as the "Water Quality Act of 1987" amended the Clean Water Act and provided federal provisions for the permitting of stormwater drainage. This resulted in the Phase I National Pollution Discharge Elimination System (NPDES) rule. The Phase I rule required all stormwater discharges to waters of the United States from construction activities disturbing a total land area of 5.0 or more acres to be authorized by a permit from the United States Environmental Protection Agency.

In 2003, the NPDES Phase II rules were implemented. This more restrictive regulation requires NPDES permitting of construction activities on sites as small as one acre. The following typical steps are required as part of the Phase II NPDES permitting process and must be completed prior to construction activity:

Submit a notice of intent for Generic Permit for Stormwater Discharge from Construction Activities (CGP) to FDEP;

Develop and implement a Stormwater Pollution Prevention Plan (SWPPP). This plan must in part include:

- a) a site evaluation of how and where pollutants may be mobilized by stormwater.
- b) a site plan for managing stormwater runoff.
- c) identification of appropriate erosion and sediment controls and stormwater BMPs.
- d) a maintenance and inspection schedule.
- e) a recordkeeping process.
- f) identification of stormwater exit areas.

When the project is completed a Notice of Termination (NOT) must be submitted to DEP to discontinue permit coverage. A NOT may be submitted only when the site meets the eligibility requirements for termination specified in the CGP.

Mechanical Considerations

Proposed HVAC system design, equipment selection, and energy conservation shall meet the requirements of the 2014 Florida Building Code – Mechanical. In addition, the latest editions of the design and application guidelines of the Industrial Ventilation Manual, ASHRAE Handbooks, and SMACNA shall be utilized.

Cooling and heating loads shall be performed to properly size all equipment. The volume of outside air/ventilation for all areas shall be determined by using the Ventilation Rate Procedure in accordance with latest edition of ASHRAE Standard 62. The use of the Indoor Air Quality (IAQ) Procedure shall be used to achieve air quality equivalent to the Ventilation Rate Procedure preference. If minimum outside air ventilation is reduced by using bi-polar ionization generator products, then GPS IAQ spreadsheet calculations shall be shown on the Construction Documents. The GPS bi-polar ionization generators shall have a set of dry contacts allowing for the Building Automation System (BAS) to monitor the unit's operational status.

A Life Cycle Cost Analysis (LCCA) shall be performed to determine the most efficient HVAC system to be used.

Installation of rooftop equipment should be avoided where possible. When the installation of rooftop equipment or piping is unavoidable, permission and a waiver shall be requested from the Facilities Department. Upon approval, a clearance of 18 inches under the equipment (if no curb is furnished) or piping shall be provided for roof maintenance. The equipment shall be anchored to sustain hurricane

force winds as outlined in ASCE Standard 7-98 and details of the method of anchoring shall be provided on the mechanical drawings and detailed on the structural drawings.

Ensure positive pressure in all areas except in kitchens, toilets, custodian rooms, etc. Show CFM values on all supply and return air openings so that the system can be properly balanced. Building positive pressure shall not impact the operation of exterior doors.

Noise levels due to air conditioning unit fan, ventilating equipment, ducts, grilles, diffusers and air system pressure reducing devices shall conform to the RC Noise Rating Procedure outlined in the latest edition of the ASHRAE HVAC Applications Handbook. Classrooms and all spaces, other than those listed below, shall be designed for a noise criteria range of RC-25(N) to RC-30(N). The exceptions shall be:

- Corridor, Lobbies RC-40(N)
- Chiller Rooms RC-60(N)
- Storage, Toilets, Custodial RC-45(N)
- Mechanical Rooms RC-45(N)
- Kitchens RC-40(N)

The existing central energy plant (CEP) located in Building 314 generates chilled water for the campus. As the campus grows over the next 5 years a number of the existing buildings being served by the CEP will be demolished. The demolition of these buildings will assist in freeing up capacity for the existing chilled water system as the new buildings will be more efficient than the existing older buildings.

Potable Water in Future Implementation

The present and future potable water needs are currently being met by the existing infrastructure that exists through the public water mains that surround the Campus and the 16-inch water main that traverses the Campus. The College has been able to connect to these water mains as needed to meet the demand of previous facility development. It is our understanding that the level of service is adequate for the existing student population.

As the Campus core expands, existing facilities will be demolished that will make available additional capacity within existing water mains. However, it is anticipated that new connection points and additional water meters may be required to accommodate projected development. This may also include the need to loop the potable water system internally. This would involve a connection between the 6-inch meter that connects with the existing 16-inch water public main to the south with the northern Campus private main or a connection with the northernmost lines around the athletic facilities. The looping of these systems will provide increased flows and improved pressures throughout the Campus.

Over the course of the development of the 5-Year and 20-Year Plans, fire protection should be evaluated. Fire flow tests were not performed as a part of the master planning process, but should be performed on an annual basis to confirm adequate flow and pressure is being maintained on the Campus. In the event of decreased flows being observed, additional looping of the system and additional connection points to the City system should be considered.

Sanitary Sewer System

The proposed growth of the Campus core and demolition of existing buildings concurrent with new construction allows for the reuse of the existing sewer capacity. Hence, the future development of the Campus appears to be accommodated by the existing sanitary sewer lines. Availability to accommodate projected development will need to be confirmed at the time each project is engineered with the City of Daytona Beach. To provide for adequate sewer facilities in the future phases, the following sewer improvements should be evaluated:

- As internal campus core projects require relocation of sewer lines and/or new parking areas are constructed over existing sewer lines, ensure all existing Terra Cotta Sewer Pipes do not require lining via television inspection and/or replace these lines with PVC lines to ensure long term operation of the system. It shall be noted that any relocations shall be coordinated with the City of Daytona Beach due to the offsite flows that are present in the Campus's system.
- Ensure adequate sewer service exists for all improvements located outside the main Campus core and determine if these locations will require remote lift stations to pump the sewage back to the Campus core or the City of Daytona Beach systems.

Irrigation/Reuse - Proposed Conditions

The existing 12-inch reuse main and back-up wells provide adequate service for the Campus's irrigation needs at this time. However, as the Campus continues to expand and more intensive irrigation sources such as soccer field and athletic fields are developed,

the College needs to perform an analysis of the irrigation and reuse systems. The City of Daytona Beach and St. Johns River Water Management District standards require that the lowest level of water quality source available is utilized for irrigation purposes. Future development projects should anticipate reuse water for irrigation and onsite lines shall be installed with anticipated growth throughout the Campus. The long-term plan for the existing Consumptive Use Permit is to eliminate the need for onsite wells and utilize the back-up source in the event reuse water was not available.

The implementation of a smart irrigation systems using two-wire technology should be deployed to allow for monitoring, the addition of new irrigation zones and to minimized maintenance issues.

Natural Gas – Proposed Conditions

The natural gas service provided is currently adequate to meet the Campus demand. As growth occurs, DSC shall coordinate with TECO for availability of additional gas and design of the system. TECO provides these services internally for their clients and will coordinate during the design phase of each individual project.

Rapidly Advancing the Campus Master Plan

The 5-Year Campus Master Plan implementation commenced during the completion of this report. Phases One and Two are currently underway with the programming and initial design studies for the New Student Center are almost completed. Integrating

the programming data into the 5-Year Campus Master Plan allows for a comprehensive analysis of information related to the New Student Center. The confirmation of this data with the 5-Year Campus Master Plan's Space Needs Model along with key strategies indicates that the Campus space needs according to the SCUP CFI and SREF multipliers are being satisfied.

The speed and enthusiasm associated with implementing the Campus Master Plan speaks to the commitment and efficiency of staff and leadership at Daytona State College.



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STATE COLLEGE
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Appendix

Campus Architectural Elements

Daytona State College is an architecturally diverse campus. The styles include mid-century modern, post-modern and interpretative Mediterranean compositions. A few buildings are utilitarian in style and are primarily a derivative of use lacking any significant architectural value. The range of vernaculars is a function of the campus history which has evolved for nearly 60 years. The oldest building existing at the College is from 1959 (Davidson Hall) and the latest structure implemented is McKinnon Hall completed in 2008. These buildings alone represent a diversity of style and speak to the history of Daytona State College. As with most campuses with deep histories, the architectural evolution is evident and embraced through preservation and design.

It is important to acknowledge the campus history exemplified in its architecture. Fabian Kremkus, AIA stated that, “the essence of the historic fabric of a campus or a building needs to be respected with any new building or addition... replication of an historic style or plan is not the answer, but careful integration to enhance the public experience is.” This statement is the perfect platform to support the approach to architectural style at Daytona State College. Creating a methodology to characterize existing architecture on campus to support a general approach to future implementation was a key expectation of the College’s leadership. Categorizing existing buildings in order to identify the benefits of future design translations is the most appropriate method to articulating these building options. To expound on this ideal, the following definitions were developed to articulate a method to implementing architecture on campus as well as provide general guidance pertaining to renovation of key existing buildings.

Demolition – These buildings are selected for demolition and their existing architectural framework will not be transferred to future buildings.

Supportive Elements – These buildings incorporate architectural features that support a campus architectural pattern that could inform future building design.

Pattern – These buildings incorporate significant features that support an architectural pattern that should inform future building design.

Non-Supportive – These buildings do not incorporate features that should be the basis for future building design.

During the assessment of the campus architecture a few buildings were identified to have a value to the campus, but the need for enhancement through facade renovation is encouraged. These structures are defined as “Enhancement” in the Building Options plan.

“the essence of the historic fabric of a campus or a building needs to be respected with any new building or addition... replication of an historic style or plan is not the answer, but careful integration to enhance the public experience is.”

Fabian Kremkus, AIA

Architectural Conditions

- Demolition
 - Supportive Elements
 - Pattern
 - Non-supportive
 - Enhancement
- 500 and 600 existing facades could be used as pattern



Greene Center (Building 300) – Classified as both **Supportive** and **Enhancement**, the Greene Center was constructed in 1969 and is located on the west boundary of the quadrangle. The two-story building is comprised primarily of classrooms, office and lab space and is approximately 52,000 square feet. The exterior elements are strong forms for the period and have value in terms of potential replication to architecture proposed on campus in the future. The valuable elements include the repetitive panels and two-story entry volume that serves as a covered entry. The Greene Center could be enhanced by adding additional articulation to the precast panels along the facade.

L. Gale Lemerand Center (Building 310) – There are elements associated with the exterior of Building 310 that could influence architectural design in the future making a **Supportive** building option. Constructed in 1986, the 310 serves primarily as an athletics building. Its strong entry portal that contrast yet integrates with primary facade is a potential philosophical approach that would translate well to new buildings.

WDSC – TV/15 (Building 400) – Constructed in 1999, Building 400 serves to support instruction related to television production and broadcasting. Its architecture is **Supportive** because there are forms and materials that could successfully be translated to future building projects. The metal skin combined with the overlapping exterior forms work to create a composition that could inform campus architecture.

Schildecker Science Building (Building 410) – The strong cylindrical entry form combined with a clean simplicity make Building 410 a **Supportive** building. The structure was built in 2000 and serves to fulfill academic needs. The most striking element is the cler-

story entry comprised of brick and glass. This element along with the brick could be translated to future architecture on campus.

Baker Hall (Building 500) – The eastern portion of Baker Hall was part of a renovation to Building 12. The renovation represents one of the most refined buildings on campus and elements should be strongly considered in future buildings. Baker Hall is classified as **Pattern** due to a successful execution of materials, form and scale. The brick, stucco, banding and color palette work well to create a distinctive vernacular associated with Daytona State College.

Photography Hall (Building 530) – Photography Hall functions primarily as classroom and labs with a focus on the fine arts. Constructed in 1969 the building carries through a continuity of style shared by many of the other buildings on campus. The repetitive precast exterior clad is a strong statement and worth exploring for future buildings. The curved and glazed exterior wall also is an appropriate compliment to the rest of the structure. This building is classified as both **Supportive** and **Enhancement**. The facade could be improved by exploring the addition of updated the cladding associated with precast slabs and void present between these elements.

Bailey Hall (Building 540) – Bailey Hall is classified as both **Supportive** and **Enhancement**. Constructed in 1963 it is a good representation of the heritage of Daytona State College. The composition of exterior panels of brick, precast and open voids is worth exploring as a philosophical method of treatment for future buildings. This is particularly evident in the east facing facade. Enhancement through rethinking the covered exterior area with a new modern approach along the north elevation is appropriate.



Greene Center



L. Gale Lemerand Center



WDSC - TV/15



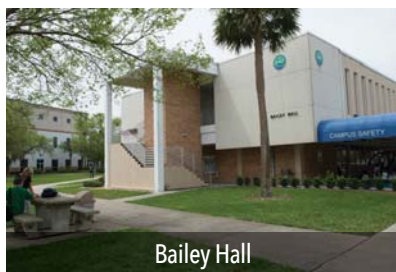
Schildecker Science Building



Baker Hall

McKinnon Hall (Building 600) – As the newest building on campus (constructed in 2008), McKinnon Hall is great composition and mixture of materials. The brick, stucco and glazing are an appropriate translation of the architectural heritage of the Daytona State College. Classified as **Pattern**, Building 600 demonstrates a good baseline for establishing an architectural design for the any new buildings.

Mori Hosseini Center (Building 1200) – Constructed in 2007, Building 1200 possesses a strong style that is worth study for translation to future buildings. The mixture of stucco, glazing and smooth pre-cast cladding along with a strong hierarchical approach to building height make it a **Pattern** that could be transferred to architecture on campus.



Building Number	Building Name	Demolition	Supportive Elements	Pattern	Non-Supportive Elements	Enhancement
100	Wetherell Center				●	
101	Utility Building				●	
110	Bergengren Hall	●				
130	Lenholt Student Center				●	
140	DSC/UCF Hall				●	
150	Business Hall				●	
200	Nunamann Hall				●	
210	Karl Learning Resource Center	●				
220	Theater Center	●				
230	Goddard Performance Center				●	
300	Greene Center		●			●
310	Lemerand Center		●			
311	Pool Support				●	
312	Electrical\Mechanical\Storage				●	
314	Chiller Plant				●	
320	Health Sciences Hall				●	
330	Arts and Sciences Hall				●	
340	Davidson Hall	●				
400	WDSC\TV - Channel 15		●			
410	Schildecker Science Hall		●			
420	Marine and Environmental Science Building				●	
430	Facilities Services				●	
431	Pesticide Mixing				●	
440	Multiuse Recreation Field House				●	
450	Kindercare Storage				●	
460	Softball Facility				●	
500	Baker Academic Support Center			●		
510	Cosmetology Hall				●	●
520	Studio Arts Hall	●				
530	Photography Hall		●			●
540	Bailey Hall		●			●
600	McKinnon Hall			●		
640	Conference Hall				●	
1100	Business Services Center				●	
1200	Hosseini Center			●		

Advance Technology College



Deland Campus



Flagler/Palm Coast Campus



Additional Daytona State College Campus Location Master Plans

The master plans for the Daytona State College campuses outside of the Daytona Beach location is included in the following pages. The documents were completed by Hunton Brady Architects in 2011 and are included as configured in that process.

New Smyrna Beach Center





Deltona Center Campus





Advance Technology College Proposed Campus Master Plan

Option A

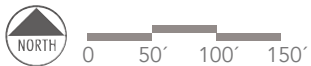
SITE DATA

-  Existing Paving
-  Proposed Paving Revisions

 Existing Building Area	160,234 GSF	1 Advance Technology
 New Buildings	-	
Surface Parking	752 Cars	







June 5, 2012



Advance Technology College Proposed Campus Master Plan

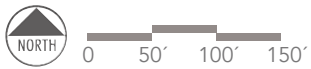
Option B

SITE DATA

	Existing Paving	
	Proposed Paving Revisions	
	Existing Building Area	160,234 GSF 1 Advance Technology
	New Buildings	60,000 A 60,000 B
<hr/>		
	Total Building Area	280,234 GSF
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	Surface Parking	1,523 Cars





June 5, 2012





Deland Campus

Proposed Campus Master Plan

SITE DATA

-  Existing Paving
-  Proposed Paving Revisions

	Existing Building Area	18,478 GSF	1 <i>Lm Resources/Admin.</i>
		6,909 GSF	3 <i>Facilities Services</i>
		28,706 GSF	4 <i>Business Education</i>
		19,776 GSF	5 <i>Science Building</i>
		31,989 GSF	6 <i>Bert Fish Building</i>
		21,600 GSF	7 <i>Admin/Student Service</i>
		7,256 GSF	8 <i>Early College Facility</i>
		New Buildings	60,000 GSF
		60,000 GSF	B
		40,000 GSF	C
		40,000 GSF	D
		40,000 GSF	F
		60,000 GSF	G
<hr/>			
Total Building Area	434,714 GSF		
<hr/>			
Surface Parking	2,133 Cars		




June 5, 2012





Flagler/Palm Coast Campus Proposed Campus Master Plan

SITE DATA

 Existing Paving

 Proposed Paving Revisions

	Existing Building Area	16,070 GSF	1 Instructional Building
		27,466 GSF	2 Instructional Buildings
	New Buildings	40,000 GSF	A
		35,000 GSF	B
		40,000 GSF	C
		35,000 GSF	D
		40,000 GSF	E
		35,000 GSF	F

Total Building Area 268,536 GSF

Surface Parking 1,329 Cars







June 5, 2012



New Smyrna Beach Center Proposed Campus Master Plan

SITE DATA

-  Existing Paving
-  Proposed Paving Revisions

	Existing Building Area	21,085 GSF	
		1 Instructional Building	
		23,300 GSF	
		2 Instructional Building	
	New Buildings	25,000 GSF	A
		25,000 GSF	B
		25,000 GSF	C
		25,000 GSF	D
		25,000 GSF	E
		25,000 GSF	F
	25,000 GSF	G	
	25,000 GSF	H	

Total Building Area	244,385 GSF
Surface Parking	1,307 Cars





June 5, 2012





Deltona Center

Proposed Campus Master Plan

SITE DATA

-  Existing Paving
-  Proposed Paving Revisions

 Existing Building Area	42,526 GSF	1 Instructional Building
	60,000 GSF	A
	60,000 GSF	B
	60,000 GSF	C
	60,000 GSF	D
	60,000 GSF	E
	60,000 GSF	F
	60,000 GSF	G
	60,000 GSF	H

Total Building Area	522,526 GSF
Surface Parking	2,696 Cars



June 5, 2012



Building Summary 2015

Building Number	Building Name	Number of Stories	Year Built/ Renovated	Net Area (ft ²)	Classroom	Classroom Service	Class Storage	Class Lab	Lab Service	Open Lab	Lab Service/ Storage	Office	Office Service	Conf Rm/ Storage	Study Space	Reading Stack	Materials Processing	Reception	Athletic/ Recreation	AV Storage/ Equipment	Demo Kitchen/ Storage	
					110	115	120/125	210/212	215	225/240	245	310	315	350/355	410	420/430	440	455	520/525	530/535	550/555	
100	Wetherell Center			86,018	-	-	-	-	455	618	-	30,789	12,489	4,025	-	-	-	-	-	-	-	
101	Utility Building			2,378	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
110	Bergengren Hall			22,675	1,597	111	-	-	-	766	-	5,090	1,661	2,146	-	-	-	-	-	-	-	
130	Lenholt Student Center			21,157	-	-	-	-	-	777	40	2,884	1,088	-	-	-	-	-	-	-	-	
140	DSC\UCF Hall			46,385	9,431	788	5,194	-	-	1,677	-	5,141	4,026	-	-	-	-	-	-	-	-	
150	Business Hall			38,966	7,810	-	1,956	-	-	132	-	6,217	3,093	1,118	-	100	-	-	-	-	-	
200	Nunamann Hall			69,045	10,477	310	1,189	5,239	-	2,679	23	9,643	1,685	556	2,695	3,387	-	62	-	-	-	
210	Karl Learning Resource Center			28,667	1,919	-	-	-	243	9,787	-	1,774	1,280	503	293	4,782	580	-	-	569	-	
220	Theater Center			34,908	1,238	-	-	4,520	1,602	-	-	1,894	261	-	-	-	-	-	-	-	-	
230	Goddard Performance Center			19,920	-	-	-	2,936	873	-	-	1,108	126	-	-	-	-	-	-	-	-	
300	Greene Center			52,459	-	-	-	7,904	77	3,470	-	10,324	3,417	1,347	-	-	-	-	-	-	-	
310	Lemerand Center			63,420	1,822	141	-	-	-	-	-	2,837	210	774	-	-	-	-	38,133	-	-	
311	Pool Support			1,395	-	-	-	-	-	-	-	285	-	-	-	-	-	-	-	-	-	
312	Electrical\Mechanical\Storage			1,809	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
314	Chiller Plant			10,639	-	-	-	-	-	-	-	144	-	-	-	-	-	-	-	-	-	
320	Health Sciences Hall			111,640	1,885	-	-	34,567	10,624	3,030	465	7,832	3,922	1,231	-	-	-	-	1,539	-	-	
330	Arts and Sciences Hall			13,670	4,114	120	-	-	-	-	-	3,404	839	330	-	-	-	-	-	-	-	
340	Davidson Hall			14,282	4,537	335	-	2,650	-	-	-	1,425	320	-	-	-	-	-	-	-	-	
400	WDSC\TV - Channel 15			24,286	-	-	-	-	-	-	-	2,060	2,469	2,039	-	-	-	-	-	9,824	-	
410	Schilder Science Hall			45,703	8,352	781	857	10,641	4,857	1,165	-	2,568	383	244	317	-	-	-	-	-	-	
420	Marine and Environmental Science Building			19,185	1,332	-	-	5,433	504	-	-	1,493	343	602	-	-	-	-	-	-	4,484	
430	Facilities Services			50,750	-	-	-	-	-	-	-	3,926	1,868	468	-	-	-	-	209	-	-	
431	Pesticide Mixing			296	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
440	Multiuse Recreation Field House			9,117	-	-	-	-	-	-	-	553	-	-	-	-	-	-	5,932	-	-	
450	Kindercare Storage			5,834	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
460	Softball Facility			1,697	-	-	-	-	-	-	-	-	-	-	-	-	-	-	889	-	-	
500	Baker Academic Support Center			54,405	18,542	445	-	500	-	7,945	408	5,019	925	1,057	1,000	-	-	-	-	-	-	
510	Cosmetology Hall			16,540	-	-	-	8,282	3,520	-	-	986	108	-	-	-	-	-	-	-	-	
520	Studio Arts Hall			33,089	984	-	-	12,216	7,473	-	-	1,500	-	-	-	-	-	-	-	-	-	
530	Photography Hall			54,316	1,975	1,538	-	5,048	19,642	1,113	-	2,982	839	2,656	-	-	-	-	-	517	-	
540	Bailey Hall			14,636	-	-	-	-	-	-	-	5,324	1,841	829	493	-	-	-	-	-	-	
600	McKinnon Hall			16,507	3,698	-	-	-	-	-	-	1,779	1,014	1,608	603	-	-	-	-	-	-	
640	Conference Hall			4,569	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1100	Business Services Center			11,818	-	-	-	-	-	-	-	2,499	525	343	-	-	-	-	-	-	-	
1200	Hosseini Center			65,896	-	-	-	10,258	766	230	-	2,174	331	1,006	-	154	-	-	-	-	251	
Totals:				1,068,077	79,713	4,569	9,196	110,194	50,636	33,389	936	123,654	45,063	22,882	5,401	8,423	580	62	46,702	10,910		4,735

Greenhouse	Theater/Stage/ Podium	Exhibition/ Collections	Dining/Café	Food Facilities Service	Lounge	Concessions	Concessions Service	Recreation	Auditorium	Auditorium Storage	Lockers	Computer Serv/Storage	Shop/ Storage	Cen.Stor	Vehicle/Equip. Stor. Grounds Equip. Stor.	Cen. Service	House	Misc/ Inactive	Custodial	Corridor	Utility/RR	Calculated Area	
580	610/615	620/625	630	635	650	660	665	670	680	685	690	710/715	720/725	730/735	740/745	750	970	50	10	20	30		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	367	31,103	6,172	86,018	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,378	2,378	
-	-	-	-	-	-	-	-	-	3,377	560	-	-	-	-	-	-	-	-	87	4,872	2,408	22,675	
-	-	-	3,735	4,604	149	-	-	962	1,883	-	-	-	-	-	-	-	-	-	110	3,410	1,515	21,157	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	173	17,239	2,716	46,385	
-	2,309	-	-	-	463	-	-	-	487	-	-	-	-	-	-	-	-	-	459	11,930	2,892	38,966	
-	-	-	-	-	-	4,781	1,516	-	1,505	-	-	-	-	-	-	-	-	-	320	18,902	4,006	69,045	
-	-	-	288	243	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	4,662	1,705	28,667	
-	12,861	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	230	9,615	2,687	34,908	
-	7,632	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	64	5,012	2,169	19,920	
-	-	-	-	-	-	75	-	-	464	66	-	4,636	-	-	-	-	-	-	239	17,651	2,789	52,459	
-	-	-	-	-	-	304	215	-	-	-	-	-	-	-	-	-	-	-	315	12,390	6,279	63,420	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	169	777	1,395	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,809	1,809	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10,495	10,639
-	-	-	-	-	-	-	-	-	632	-	-	-	-	-	2,745	-	-	-	588	29,782	12,798	111,640	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	91	3,572	1,200	13,670	
-	-	-	-	-	-	-	-	-	250	-	-	-	-	-	-	-	-	-	130	3,757	878	14,282	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	204	5,581	2,109	24,286	
412	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	78	11,561	3,487	45,703	
-	-	-	-	-	-	58	-	-	-	-	-	-	-	-	-	-	-	-	140	3,654	1,142	19,185	
-	-	-	-	-	-	29	-	-	-	-	-	-	-	-	20,080	-	-	-	173	2,144	2,064	50,750	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	296	296	
-	-	-	-	-	-	132	-	-	-	-	-	-	-	-	-	-	-	-	10	1,855	635	9,117	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,425	-	-	-	64	103	242	5,834	
-	-	-	-	-	-	183	-	-	-	-	-	-	-	-	-	-	-	-	-	499	126	1,697	
-	-	-	148	67	-	136	-	-	-	-	-	-	-	-	-	-	-	-	390	13,036	4,787	54,405	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	1,905	1,689	16,540	
-	-	480	-	-	-	-	-	-	-	-	-	-	-	5,428	-	-	-	-	348	3,647	1,013	33,089	
-	-	812	-	-	232	-	-	-	-	-	-	-	-	-	-	-	-	-	187	12,306	4,469	54,316	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	110	4,983	1,056	14,636	
-	-	-	-	-	406	68	-	-	-	-	-	-	-	-	-	-	-	-	39	5,223	2,069	16,507	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,523	-	-	1,447	599	4,569	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,534	-	5,010	-	-	17	1,312	578	11,818	
-	6,305	8,859	3,295	3,305	-	340	-	-	1,122	-	352	-	-	-	-	-	-	-	605	19,895	6,648	65,896	
412	29,107	10,151	7,466	8,219	1,250	6,106	1,731	962	9,720	626	352	4,636	20,080	15,366	19,789	5,010	2,523	-	5,627	263,217	98,682	1,068,077	



DAYTONA
STATE COLLEGE

