UNIVERSITY OF MIAMI MOBILITY PLAN

June 2018

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Executive Summary

The University of Miami is committed to reducing its impact on the environment through mobility programs and strategies that reduce single-occupant vehicle trips and maximize efficiency for moving to, from, within, and around the Coral Gables campus. Improved mobility has become an integral part of the daily life of students, faculty, and staff. Mobility policies contribute to a reduction in the amount of traffic coming to and moving around campus and, correspondingly, reduce the carbon footprint of the university leading to a greater sense of personal well-being and a more sustainable, green campus.

In 2007, the University formalized its commitment to a sustainable future by signing the American College and University Presidents Climate Commitment (ACUPCC) which provides a framework for institutions of higher learning to become carbon neutral. The University's sustainability efforts are all part of Green U which aims to make the University a "community leader in...the practice of ecologically sound maintenance and operations procedures." To this end, the University has become increasingly residential, eliminated cars for resident freshmen, launched an employee discount public transit program, and maintains an efficient parking management program in an effort to reduce the impact on roadways and the environment. The University encourages the use of fuel efficient and electric vehicles, trip sharing, transit, walking, and bicycling. Hurry 'Canes shuttles transport students, faculty, and staff around campus and connects them to other campuses, off-campus activity centers, and nearby public transit stops. In addition, street closures and traffic-calming measures have reduced non-University traffic on adjoining residential streets.

Traffic is one of the leading generators of carbon pollution. The University has contributed to a reduction in pollution through mobility strategies and neighborhood traffic improvements that have resulted in a **14.3% decline** in overall University traffic during peak morning and evening periods between 2012 and 2018. In the San Amaro/Campo Sano neighborhood, the reduction in traffic has been 4.5%, a result of the cumulative strategies and policies that have been employed to improve mobility. The effectiveness of the University's mobility programs, strategies, and policies is measured by the Regional Traffic Study (RTS) that the University prepares every 5 years. The most recent RTS was submitted on June 1, 2018 to the City.









Mobility plan components are generally grouped as follows:

REDUCTION OF TRAFFIC NORTH OF LAKE OSCEOLA

The University influences traffic patterns by managing its parking resources with the goal of diverting traffic away from the single-family residential areas north of Lake Osceola. Roadway improvements along Campo Sano and San Amaro Drive have also helped to reduce through-traffic in the residential areas.

RESIDENTIAL CAMPUS STRATEGY AND ENHANCED CAMPUS LIFE PROGRAMS

The University has increased on-campus residential living options and is building over 1,100 new resident beds. Off-campus private market sector rental units in nearby areas have also increased. In addition, campus activities encourage students to view the campus as a place to live, study, eat, and play.

PARKING MANAGEMENT PROGRAM

The University's parking management program assigns permits to specific zones where commuters are guaranteed to find parking, eliminating the need to drive around searching for a parking space and reducing traffic on surrounding roads. Freshmen residents are also prohibited from having a car on campus.

HURRY 'CANES SHUTTLE PROGRAM

The Hurry 'Canes shuttle program promotes campus connectivity and facilitates the movement of people around the campus. The shuttle program serves the University community within the campus as well as those who live within walking distance.

PUBLIC TRANSIT PROGRAM

The University has convenient access to public transit and promotes its use by its students and employees through its Public Transit Program.

APP-BASED TRIP-SHARING PROGRAMS

The University population demographic embraces trip sharing programs and app-based on-demand transportation services such as Uber and Lyft. Carpool app RideFlag is promoted on the University website and participants are incentivized with prime parking locations.

BICYCLE AND PEDESTRIAN PROGRAMS

The University's UBike program encourages the use of bicycles as a mode of transportation. The University has been named a Bike Friendly University, Bronze Level, by the League of American Bicyclists in 2012 and again in 2016 and validates the University's continued efforts to develop and support a healthy bike culture on campus.

Through all of the aforementioned measures, the University continues to enhance programs and strategies that maximize efficiency for moving to, from, within, and around the campus.









University of Miami Mobility Plan

Reducing the traffic that comes to the campus benefits both the community and the University. It helps to preserve the tranquility of the residential area, supports a sustainable campus with a reduced carbon footprint, and encourages the increased well-being of students, faculty, staff, and visitors. In order to reduce the number of single-occupant vehicles that come to the campus, the University has implemented strategies and programs that have a direct and immediate impact on trips.

Since the adoption of the first Campus Master Plan in 1992, the University has prepared technical traffic studies and reports including a Regional Traffic Study (RTS) in 1992, 2003, 2008, 2013 and 2018. The University also measures the overall campus traffic volumes in the Spring and Fall semesters at each campus access driveway. As a result, the University has been able to clearly document and understand traffic patterns both at a regional and local level. The overall Spring 2018 campus traffic volumes are 1.4% lower in the areas north of the lake and 6.5% lower campus-wide compared to 2017. Both north of the lake and overall to the campus, traffic volumes demonstrate a level of stability for the past 5-6 years despite new development throughout campus and are 14.3% less as compared to the corresponding Spring 2012 traffic volumes. (See *Exhibit A: 1990 - 2018*

Peak Period Vehicle Trips and Appendix 2: Historic Traffic Counts 1990-2018).

University traffic has remained stable in the San Amaro Drive/ Campo Sano Avenue corridors despite an increase of over 1.2 million square feet of campus development since 2012. The Spring 2018 traffic volumes in the San Amaro/Campo Sano corridor are 3.7% less in the morning and 5.2% less in the afternoon peak periods as compared to corresponding volumes in 2012. The overall peak period traffic volume in the northern sector of campus is **4.5%** less compared to volumes recorded in 2012 (See *Exhibit A: 1990 - 2018 Peak Period Vehicle Trips*).

The stability in the University's traffic in this area is reflective of significant neighborhood traffic calming and improvements on San Amaro Drive, Miller Road, and Campo Sano Avenue that slow and divert traffic, an increase in the number of students living on campus and in the immediately surrounding neighborhoods, policies that encourage students to move throughout campus without using a car, and a parking management plan that assigns parking permits to specific lots.

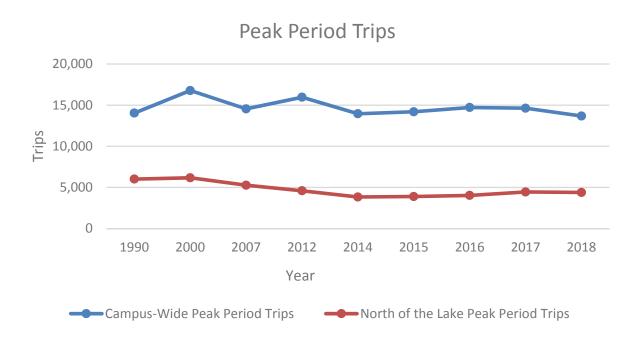


EXHIBIT A | 1990 - 2018 PEAK PERIOD VEHICLE TRIPS

The University's Mobility Plan is comprised of a series of components as described below:

A. Reduction of Traffic North of Lake Osceola

The Spring 2018 traffic counts north of Miller Road continue to demonstrate that since 2012, University traffic has remained stable. This has been accomplished by the construction of University Village (UV) student housing, more parking south of Lake Osceola, eliminating resident freshmen cars, encouraging alternate modes of transportation, improving the parking management program, roadway improvements to Campo Sano Avenue and San Amaro Drive, and completing the Internal Road.

The completion of the Internal Road in 2018 resulted in a reduction of nearly 350 spaces north of the lake. The road connects surface parking lots on the north side of campus and allows service vehicles to circulate from the Miller Road entrance to University Drive via a controlled access service road behind the Physics building.

Traffic improvements to the roadways separating the campus from the neighborhoods have helped divert, reduce, and calm traffic. Mataro, Delgado, Zoreta, Consolata, and Zuleta Avenues are closed at Red Road. City installed medians and plantings along Ponce de Leon Boulevard and the roundabout at Miller Road and San Amaro Drive serve as an effective traffic calming feature as do enhanced sidewalks, medians, landscaping, lighting and limitation of access points to the residential cross streets in the area.

The University Hurry' Canes shuttle enters the campus at the Miller Road entrance instead of continuing north on San Amaro Drive to Memorial Drive, further reducing traffic in the residential streets.

B. Residential Campus Strategy and Enhanced Campus Life

An important goal of the University's strategic plan is to encourage students to live, eat, and play on campus in order to enhance the student experience and reduce the amount of traffic coming to and leaving from the campus. This goal is achieved by providing more student housing and continuing to expand campus life facilities. The increased number of students living or spending longer time on campus has a direct correlation with reduced traffic during peak hours. (See *Exhibit B: Adopted Campus Master Plan*).

See *Mobility Plan Matrix, Appendix 1*, for information on the campus population under the Residential Campus Strategy section.



Brunson Drive Improvements



Controlled Access Service Road behind Physics Building



Delgado Street Closure



Miller Road Entrance

B.1. Residential Campus Strategy

Currently, the University has a resident student population of 4,193 students and a faculty/staff resident population of about 60. The Student Housing project currently under construction will add 1,115 new student beds south of the lake by Fall 2019. This shift in campus population from commuters to residents is expected to reduce vehicular trips by approximately 252 trips in the morning and 284 trips in the afternoon peak hours.

University Village includes 16 two-and-three bedroom town-home units for University faculty and staff. This results in an estimated trip reduction of approximately 130 trips per day during peak hours and frees up about 30 campus parking spaces.

B.2. Off-Campus/Non-University Residential Development Private-sector residential development near campus serves students, faculty, and staff and makes it easier to either walk, bike, or use public transit to get to the campus.

B.3. Enhanced Campus Life Programming

The University provides a number of facilities and programs that help keep students on campus. More than 290 student clubs, organizations, fraternities, and sororities provide a variety of activities that engage students.

The Student Center Complex which includes the Donna E. Shalala Student Center and the Whitten University Center is



New Student Housing Village



University Village

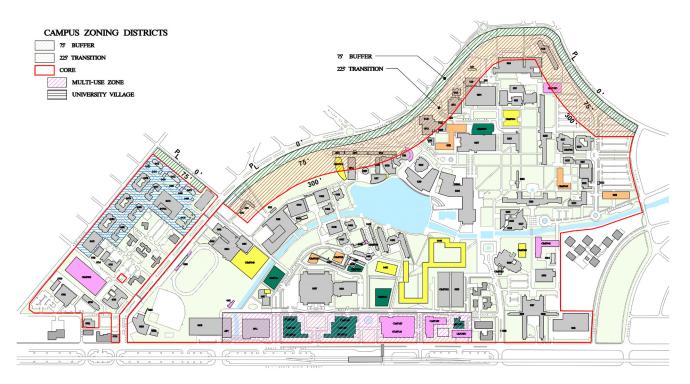


EXHIBIT B | Adopted Campus Master Plan

a hub for campus life activities. Extensive dining options at the Student Center Complex lead to more people staying on campus for meals.

The addition of lounge and study spaces, including the 24-Hour Kornspan Study Lounge, has encouraged commuter students to stay on campus during breaks in their day.

Late night programming includes a monthly "Canes After Dark" event, Canes Night Live, and food truck events aimed towards keeping students on campus. A full-time staff position was created in the Department of Student Activities and Student Organizations to facilitate these types of events. Commuter initiatives by the Department of Orientation and Commuter Student Involvement have also been developed. This includes "Good Morning Commuters", a program encouraging commuter students to remain on campus throughout the day. The Commuter Assistant Program sponsors events aimed at keeping commuters on campus and hosts an area which members can use as a "home away from home

The Cosford Cinema, Lowe Art Museum, Watsco Center, Ring Theater, dining areas, libraries, and a variety of outdoor campus areas continue to provide a host of activities that add value to campus life. The new Student Housing project will include additional recreational areas such as game rooms, an outdoor gym, meditation rooms, and multiple outdoor plazas to host daytime and nighttime events and activities.

C. Parking Management Program and Policies

The University's Parking and Transportation Department (PTD) is responsible for the overall management of parking facilities, services, and traffic control. All vehicles that park on campus must be registered and are required to display a current and valid parking permit. See *Mobility Plan Matrix*, *Appendix 1*, for information on parking supply and parking permits under the Parking Management Program and Policies section.

The University has 9,367 parking spaces distributed among surface lots and six parking garages. Of these spaces, 2,473 surface spaces are located north of Lake Osceola and 6,894 spaces are located south of the lake. 4,186 of these spaces are located in parking garages. See *Exhibit C: Campus Parking Map*. Parking spaces south of the lake include 1,070 spaces used by The Lennar Foundation Medical Center and 235 spaces located under the Metrorail.

Based on a parking accumulation study conducted in October 2017, there are approximately 1,500 spaces vacant campus wide during peak occupancy hours. There has been a



Red Road Commons



Donna E. Shalala Student Center



Lowe Art Museum

net reduction of 323 spaces overall to the campus parking supply in the past year. 300 spaces south of the lake were removed due to construction of the Student Housing and the connection of the parking lots north of the lake as part of the Internal Road project removed approximately 80 spaces in that area. A detailed analysis of the University's parking conditions was submitted to the City as part of the Parking Impact Analysis Report on June 1, 2018.

C.1. No Freshmen Resident Car Policy

The University restricts first-year resident students from bringing a car on campus. This policy reduces parking demand and traffic.

C.2. Parking Management Program

The University's parking management program issues parking permits for specific color-coded lots to commuter students, faculty, and staff. The number of permits sold for each parking area is calibrated to the number of spaces in lots of the same color and nearly eliminates the need for commuters to utilize external surface roads to search for parking once they have entered their assigned lot. Due to the distribution of parking on campus, with nearly three-quarters of parking resources located south of Lake Osceola, the program has served to redirect commuters from lots north of the lake to areas south of the lake, further away from the surrounding residential neighborhoods.





Parking Management Program

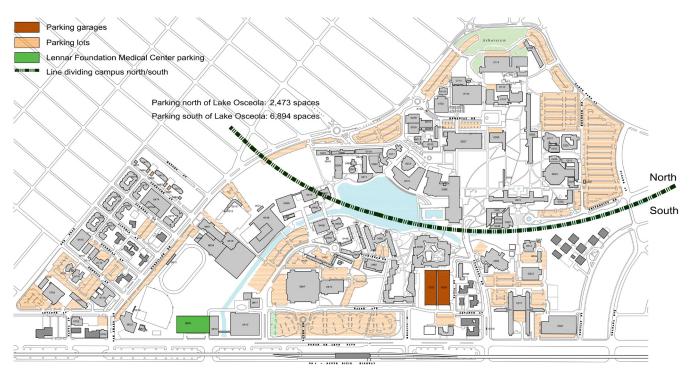


EXHIBIT C | Campus Parking Map

C.3. Service and Deliveries

Delivery vehicles are encouraged to utilize Ponce de Leon Boulevard to access the campus to reduce the number of delivery vehicles that approach the campus through the residential neighborhoods. Service vehicles circulate north of the lake by utilizing the controlled access service road behind Physics that was completed as part of the Internal Road project. In addition, the University has reduced the number of service vehicles that are in use on campus and has added numerous electric vehicles to its fleet.

D. Hurry 'Canes Shuttle Program

The University's Hurry 'Canes Shuttle is a free service that provides easy and direct connectivity throughout the campus as shown in *Exhibit D: Campus Shuttle Map. Mobility Plan Matrix, Appendix 1*, provides supporting information on the Hurry 'Canes Shuttle program.

D.1. On-Campus Shuttle

The two main routes of the Hurry 'Canes Shuttle on the Coral Gables campus connect major parking areas, academic core buildings, University Village, and the public transit system at the University Metrorail Station.

The Miller/Brescia route serves the western side of the campus and the Stanford/Ponce route serves the eastern side. The



Controlled Access Service Road behind Physics



Hurry 'Canes Shuttle

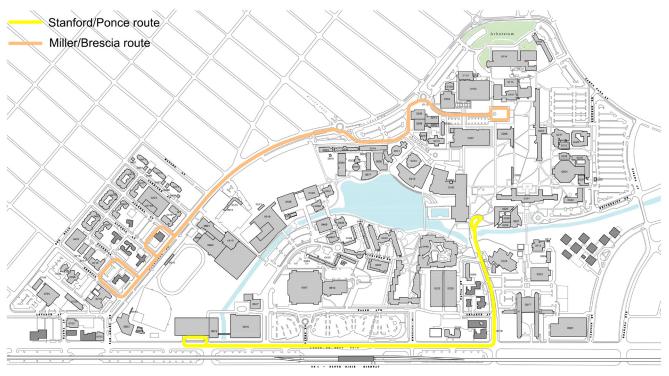


EXHIBIT D | Campus Shuttle Map



Miller/Brescia shuttle provides connectivity between Miller Drive and University Village via San Amaro Drive and is the route most utilized by Red Road Commons residents to come to campus. The Stanford/Ponce shuttle provides connectivity between Stanford Circle and the Ponce Garage. Shuttle stops are conveniently located throughout campus.

The annual ridership for academic year 2017-2018 was estimated at approximately **705,405** passengers. Shuttle ridership increased from the previous academic year by nearly 50,000 riders.

The shuttles operate on weekdays from 7 a.m. to 10 p.m. during the Spring and Fall semesters, with approximate headways of seven (7) to nine (9) minutes during class days, and fifteen (15) to twenty (20) minutes at other times. During the Summer semester, the shuttles operate between 7 a.m. and 7 p.m.

Saferide, an after-hours University shuttle service, runs from 10 p.m. to 3 a.m. This on-demand University transportation service allows students to forego utilizing a car even if they know they will be on campus late in the evening. This service is available to all University students including those at University Village and Red Road Commons.

D.2. RSMAS, Recreational/Shopping, and Football Game Shuttles

The RSMAS, recreational/shopping, and football game shuttles serve approximately **20,600** riders and provide a safe and efficient transportation to these destinations. The routes operate during the Fall and Spring semesters.

The recreational/shopping shuttle serves approximately **1,600** students. The Sunset Shuttle operates on Fridays from 7 p.m. to midnight, on Saturdays from 2 p.m. to midnight, and on Sundays from noon to 6 p.m. The shuttle operates from Hecht Athletic / UV, Merrick Street, and Stanford Circle and transports students to the many retail locations at South Miami's Shops at Sunset Place and Dadeland Mall. In previous years, a shuttle was provided to other recreational areas but ridership on these shuttles has dropped dramatically from a high of 41,700 passengers in 2012. This drop may reflect students' preferences for services such as Uber and Lyft. Shuttles from the campus to all home football games transported **9,200** riders to Hard Rock Stadium.

The RSMAS Shuttle transports over **9,800** students, faculty, and staff annually from the Coral Gables campus to RSMAS on Virginia Key with stops at the Vizcaya Metrorail station to encourage the use of public transit. This route operates on weekdays from 7:30 a.m. to 6:30 p.m.







Hurry 'Canes Shuttles

E. Public Transit Program

The campus is included in the City's "Gables Redevelopment Infill District" (GRID) due to the availability and proximity to mass transit. The University is well served by Miami-Dade Transit (MDT) which provides an accessible elevated rapid transit system (Metrorail) at the University Station and bus service (Metrobus) in close proximity to the campus (see *Exhibit E: Transit Availability Map*). In addition, University shuttles provide linkages between campuses and Metrorail stations.

MDT is the 15th largest public transit system in the country and the largest transit agency in the State of Florida. This integrated transportation system consists primarily of the Metrobus fleet, connecting most areas of Miami-Dade County, Metrorail, and Metromover which serves the downtown central business district of Miami. MDT connects to the regional Tri-Rail commuter service, which provides heavy rail commuter services within Miami-Dade, Broward, and Palm Beach Counties. *Mobility Plan Matrix, Appendix 1*, provides information on ridership under the Public Transit Program section.

A pedestrian overpass over US-1 provides pedestrians a safe overhead path across US-1 and helps connect Gables One Tower, the commercial, office, and residential uses on the south side of US-1 with the Metrorail Station and the campus on the north side of US-1. Pedestrian observations by the City indicate that crossings at grade have been nearly

eliminated and that over 1,000 people are using the overpass on weekdays. See *Pedestrian Overpass Counts*, *Appendix 3* for counts.

To encourage mass transit ridership, the University Public Transit Program provides subsidized and discounted Tri-Rail and Miami-Dade Metropasses for faculty and staff, and facilitates the purchase of passes by students. Program participants are restricted from purchasing University parking permits. Every month, approximately 2,800 employees of the Coral Gables campus, Miller School of Medicine, and RSMAS campus take advantage of this program. Of those, approximately 380 participants work in Coral Gables.



US1 Pedestrian Bridge at University Station

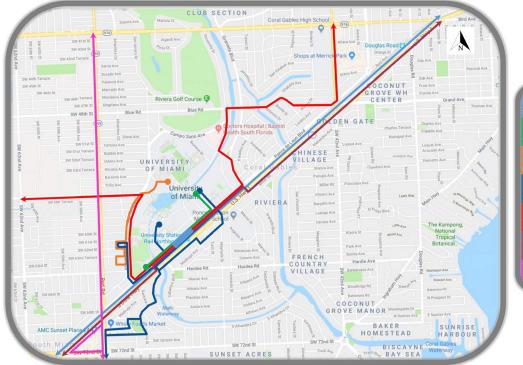




EXHIBIT E | Transit Availability Map

Transit ridership on both buses and Metrorail is slightly lower than last year as documented in the *Mobility Plan Matrix*, *Appendix 1*. In September, 2017, the University was closed for 14 days due to the effects of Hurricane Irma and this may have contributed to this reduction.

E.1. Metrobus

The Coral Gables campus is served by two regular Metrobus routes (Routes 56, and 57) and the Midnight Owl Service (Route 500). MDT bus routes serve the area along the peripheral roads and, in several instances, share bus stops with University Hurry 'Canes shuttle buses. On an average day, approximately 280 people board or disembark from buses in the 29 bus stops most adjacent to campus. Annualized, approximately 72,500 people embark or disembark from bus stops adjacent to the campus.

E.2. Metrorail

Metrorail is a 25-mile dual track, elevated rapid transit system with 23 accessible stations which runs from Kendall in southern Miami-Dade County through South Miami, Coral Gables, and downtown Miami; to the Civic Center/ Health District; and to Brownsville, Liberty City, Hialeah, and Medley in northwest Miami-Dade, with connections to Broward and Palm Beach counties at the Tri-Rail/Metrorail transfer station. A second line, Miami-Dade Transit's Airport-Link Metrorail Extension, provides a key linkage to Miami International Airport (MIA) to University students, staff and faculty travelling to and from MIA and to communities to the north via the Tri-Rail.

Metrorail runs along the southeast edge of campus between Ponce de Leon Boulevard and US-1, with University Station located just south of Merrick Drive. University Station is accessible from the campus via a signalized midblock pedestrian crossing on Ponce de Leon Boulevard.

The station ranks 10 out of 23 for most heavily utilized stations in the system, with approximately **355,000** boardings between August 2017 and March 2018. The station has connecting service provided by MDT Routes 56, and 500 and University's Hurry 'Canes Shuttle buses.

F. Trip-Sharing Programs

The University provides access to a car share program, encourages van/carpools, and app-based transportation networks such as Uber and Lyft. *Mobility Plan Matrix, Appendix I*, provides supporting information on trip-sharing programs. The University website, www.get2um.com collects in one



Tri-Rail Commuter Train



Metrorail



Metrobus at University Station

place all the ride-share and mobility options for University faculty, staff, and students.

F.1. Zipcar

Zipcar is an innovative and affordable car-sharing program. Car-sharing industry standards report that car sharing takes about 20 personally-owned vehicles off the road, reduces parking demand, saves money, and is good for the environment. It has been reported that car-sharing members:

- Drive 40 percent fewer miles;
- Use public transportation about 46 percent of the time:
- Increase bicycle trips by 10 percent; and
- Increase walking trips by 26 percent.

At present, the Zipcar program includes 14 vehicles on campus stationed at Hecht/Stanford, Mahoney/Pearson and University Village.

Zipcar members, 18 and older, may rent a vehicle for an hour, a day, or longer for a small fee. Zipcars are available 24 hours a day, seven days a week, and can be reserved online. This program is particularly convenient to resident populations that do not have a car on campus and also for faculty and staff that use public transportation or ride-sharing programs.

There are over 1,200 University and community members of the Zipcar program, a nearly 26% increase since 2010 (see *Mobility Plan Matrix, Appendix 1*). Based on current usage statistics, each Zipcar is in use approximately 35% of the time.

F.2. Campus Pick-Up and Drop-Off Areas

Uber, Lyft, and taxis are an effective means of transportation for students, particularly in the evening hours. UM has 7 suggested pick-up and drop-off locations away from the neighborhood residential areas:

- Miller Drive, near Richter Library and Shalala Student Center;
- University Drive, near School of Business Administration;
- Stanford Circle;
- Lowe Art Museum;
- Herbert Wellness Center;
- Watsco Center; and
- Newman Alumni Center located at San Amaro Drive and Levante Avenue.



Zipcar





App-Based On-Demand Transportation

Parking service officers inform Lyft/Uber drivers of the designated UM drop-off and pick-up locations.

F.3. Carpool

In partnership with South Florida Commuter Services the University promotes RideFlag, a carpool on-demand app that matches participants with real-time carpool rides. Students, faculty, and staff who register and utilize RideFlag are provided with premium parking as an incentive.

G. Bicycle and Pedestrian Programs

The Coral Gables campus is an attractive environment conducive to biking and walking. The University is a medium-sized, semi-urban campus, surrounded on three sides by single-family residential neighborhoods and on one side by the heavily travelled US-1 / Ponce de Leon Boulevard commercial corridor. *Mobility Plan Matrix, Appendix 1*, provides supporting information on bicycle and pedestrian programs. The Internal Road Phase II project improved the public right of way on the western side of Pisano Avenue between Campo Sano Avenue and University Drive and added new multi-use paths into the University at Wilder and Brunson Drives.

G.1. UBike

The University of Miami bike program, UBike, encourages the use of bicycles and works to make biking accessible, enjoyable and safe on campus. The program is managed by the Parking and Transportation Department (PTD), with input and coordination from other campus departments.

The bike program includes the following components:

- Bike sales on campus by outside vendors;
- Traffic safety classes for bicyclists;
- Bike registration by the University Police
 Department. In the 2017- 2018 academic year over 900
 bikes were registered;
- Adequate bike parking throughout campus and monitoring of bike usage patterns and needs. There are 351 bike racks throughout campus, with a current capacity for 1,812 bikes. These efforts ensure that bike riders will find convenient and secure places to park their bicycles overnight and around campus;
- Air stations for tires provided at three locations on campus;
- Fix-it repair stations at two locations on campus;
- Free shower access for students, faculty, and staff commuting to the University by bicycle;
- Support and funding to the UBike student group;
- Yearly bike sweeps by the University of Miami Police and Facilities Department to ensure that abandoned bikes are



Pisano Avenue



Brunson Drive



UBike Program

- removed from campus and donated to local charities;
- Distribution of information on local and regional bike events hosted by outside groups; and
- Easy access to the M-Path located along the southeast side of the campus providing connectivity to campus for bicyclists. The M-Path is a paved path that runs the length of the Metrorail guideway and is part of Miami Dade County's Bicycle Plan. This path provides access north to the Vizcaya Metrorail station and south to the Metro Busway. A proposed enhancement of the M-Path (The Underline) would provide a more active and engaging linear park experience for pedestrians and bicyclists.

G.2. Pedestrian and Bike Pathways

The University has developed an extensive system of paths that are used by bicycles and pedestrians and has improved and widened sidewalks to minimize areas of pedestrian and bicycle conflict. Recently, two new pedestrian bridges over University waterways have provided the campus community with more direct paths within campus. The Fate Bridge connects the campus core from the Student Center Complex to the housing and parking garages south of the lake. The Athletic/Wellness pedestrian bridge connects University Village and the Hecht Athletic Complex with the Watsco Center and other areas south of the lake. In addition, new campus projects consider circulation and connectivity when designing pedestrian walkways.

The University is committed to incorporating new and evolving strategies and technologies for greater mobility as part of campus sustainability efforts.



M-Path



Fate Pedestrian Bridge



Athletic/Wellness pedestrian bridge

APPENDIX



| | | 1: Mobility M Years 2010-2 | | | | | | |
|---|--------------------------|-------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Program | Academic Year 2010-11 | Academic Year 2011-12 | Academic Year 2012-13 | Academic Year 2013-14 | Academic Year 2014-15 | Academic Year 2015-16 | Academic Year 2016-17 | Academic Year 2017-18 |
| A. Residential Campus Strategy ¹ A.1. Number of on-campus beds | 4,468 | 4,431 | 4,344 | 4,344 | 4,344 | 4,344 | 4,293 | 4,300 |
| Campus Population (Headcount) | , | | , | , | | , | | |
| A.2. Total Number of enrolled students Total Number of Resident students | 14,091 4,284 | 14,451 4,373 | 14,442 4,216 | 15,009 4,243 | 14,978 4,153 | 14,666 4,013 | 14,459 4,048 | 14,572 4,193 |
| Total Number of Commuters students | 9,807 | 10,078 | 10,226 | 10,766 | 10,825 | 10,653 | 10,411 | 10,379 |
| A.3. Total Number of Faculty and Staff B. Academic Parking Management Program and Policies ² | 3,197 | 3,186 | 3,152 | 3,214 | 3,338 | 3,326 | 3,344 | 3,447 |
| Academic Parking Supply | 0.054 | 0.000 | 0.072 | 0.074 | 0.070 | 0.004 | 2 200 | 0.007 |
| B.1. Total on-campus parking (surface and garage) Parking Supply North of the Lake | 9,351 | 9,289 | 9,273 | 9,274 | 8,878 | 8,824 | 8,620 | 8,297 |
| B.2. Total on-campus parking north of the lake (surface and garage) Surface Parking | 2,892 2,892 | 2,543 2,543 | 2,469 2,469 | 2,473 2,473 | 2,470 2,470 | 2,471 2,471 | 2,469 2,469 | 2,473 2,473 |
| Red Zone | 2,092 | - 2,040 | 1,784 | 1,784 | 1,774 | 1,775 | 1,782 | 1,734 |
| Purple Zone Garage Parking | - | - | 685 | 689 | 696 | 696 | 687 | 739 |
| Parking Supply South of the Lake | | | | | | | | |
| B.3. Total on-campus parking south of the lake (surface and garage) Surface Parking | 6,459 3,503 | 6,746 3,501 | 6,804 3,564 | 6,801 3,561 | 6,408 3,168 | 6,353 3,113 | 6,151 3,120 | 5,824 2,697 |
| Garage Parking | 2,956 | 3,245 | 3,240 | 3,240 | 3,240 | 3,240 | 3,031 | 3,127 |
| Yellow Zone Pink Zone | - | - | 1,497 1,136 | 1,495 1,136 | 1,245 1,128 | 1,190 1,128 | 1,281 980 | 1,261 919 |
| White Zone | - | - | 408 | 590 | 594 | 594 | 329 | 326 |
| Grey Zone Green Zone | - | - | 867 1,338 | 866 1,338 | 794 1,279 | 794 1,279 | 807 | 759 |
| Brown Zone | - | - | - | - | - | - | 863 | 859 |
| Burgundy Zone Blue Zone | - | - | 722 | 540 | 532 | 532 | 235 774 | 235 590 |
| University Village | - | - | 836 | 836 | 836 | 836 | 836 | 839 |
| Ponce Garage (UMPD/Psychology) Supporting Information: | - | <u> </u> | - | - | - | - | 46 | 46 |
| B.4. Change of Total on-campus parking | - | -62 -341 | -16 -41 | 1 | -396 | -54 | -204 | 323 |
| Change of North Campus Area parking supply Change of South Campus Area parking supply | | -341 307 | -41 25 | -3 | -3 -393 | -55 | -2 -202 | -4 327 |
| Permits issued | 12 220 | 12.502 | 12.049 | 12.027 | 12.406 | 11.000 | 11 600 | 0.422 |
| B.5. Total on campus permits issued UPDATE - to correct permit counts | 12,339 | 12,592 | 12,048 | 12,937 | 12,496 | 11,968 9,818 | 11,682 9,624 | 9,122 |
| Permits Issued North of the Lake B.6. Permits issued north of the lake | N/A | 2 600 | 2 207 | 2.464 | 2.522 | 2.526 | 2.606 | 2.240 |
| B.6. Permits issued north of the lake UPDATE - to correct permit counts | IN/A | 3,698 | 3,297 | 3,464 | 3,533 | 3,536 2,566 | 3,606 2,523 | 2,340 |
| Red Zone UPDATE - to correct permit counts | N/A | 2,710 | 2,730 | 2,950 | 3,002 | 2,995 2,165 | 3,010 2,109 | 1,894 |
| Purple Zone | N/A | 988 | 567 | 514 | 531 | 541 | 596 | 417 |
| UPDATE - to correct permit counts Lot A | | | | | | 401 | 414 | 29 |
| Permits Issued South of the Lake | | | | | | | | |
| B.7. Permits issued south of the lake Residential | N/A 1,320 | 8,894 1,377 | 8,751 1,400 | 9,473 1,483 | 8,963 1,333 | 8,432 1,194 | 8,340 1,137 | 6,782 697 |
| UPDATE - to correct permit counts | 1,320 | 1,577 | 1,400 | 1,400 | | 797 | 764 | |
| Blue Zone UPDATE - to correct permit counts | N/A | 1,377 | 700 | 733 | 663 | 577 404 | 542 388 | 297 |
| Yellow Zone | | | | | | - | - | 60 |
| University Village UPDATE - to correct permit counts | N/A | N/A | 700 | 750 | 670 | 617 393 | 595 376 | 340 |
| Commuter/all others | N/A | 7,517 | 7,351 | 7,990 | 7,630 | 7,238 | 10,736 | 5,265 |
| UPDATE - to correct permit counts Yellow Zone | N/A | 5,039 | 2,320 | 2,537 | 2,203 | 5,412 1,818 | 5,354 2,002 | 1,189 |
| UPDATE - to correct permit counts | 21/2 | · | • | • | • | 1,298 | 1,419 | |
| Pink Zone UPDATE - to correct permit counts | N/A | N/A | 1,745 | 1,815 | 1,528 | 1,296 913 | 1,452 983 | 958 |
| White Zone | N/A | N/A | 653 | 427 | 554 | 749 | 243 | 250 |
| UPDATE - to correct permit counts Grey Zone | N/A | 788 | 576 | 774 | 863 | 474 747 | 222 993 | 621 |
| UPDATE - to correct permit counts | N1/A | 1.000 | 0.057 | 0.407 | 0.400 | 619 | 754 | |
| Green Zone UPDATE - to correct permit counts | N/A | 1,690 | 2,057 | 2,437 | 2,482 | 2,628 1,602 | 579 | - |
| Burgundy Zone | - | - | - | - | - | - | 244 | 164 |
| UPDATE - to correct permit counts Brown Zone | - | - | - | - | - | - | 155 1,690 | 1,086 |
| UPDATE - to correct permit counts Miscellaneous permits - Retiree, Vendor, Wellness, OLLI, etc. | | | | | | 1043 | 914 983 | 820 |
| C. Non-Academic Parking Management Program and Policies ² | | | | | | 1043 | 903 | 020 |
| Non-Academic Parking Supply C.1. Total parking | | | | | | | 1.067 | 1.070 |
| Lennar Foundation Medical Center - Ponce Garage | - | - | - | - | - | - | 1,067 1,056 | 1,070 1,059 |
| Lennar Foundation Medical Center - Yellow Zone | - | - | - | - | - | - | 11 | 11 |
| D. Public Transit Program ³ Total University of Miami System** | | | | | | | | |
| D.1. Average Number of Monthly Metropasses/Tri-Rail Passes distributed | 2,952 | 2,849 | 2,743 | 2,770 | 2,666 | 2,840 | 2,845 | 2,776 |
| University of Miami Coral Gables Only D.2. Average Number of Monthly Metropasses/Tri-Rail Passes distributed | 460 | 388 | 428 | 400 | 369 | 371 | 360 | 381 |
| University Metrorail Station (source: Miami-Dade County Transit) | 450,007 | 400,000 | F0C F40 | 500.040 | 400.744 | 255 424 | 202 772 | 255 200 |
| D.3. University Metrorail Station Ridership* UPDATE to include August through May | 456,937 | 486,896 477,005 | 536,518 | 562,212 556,364 | 438,711 539,754 | 355,431 512,398 | 323,773 473,905 | 355,308 |
| Metrobus Ridership Routes and Stops (source: Metro-Dade Transit) | 50,000 | 04.000 | 07.000 | 20.000 | 05.000 | · | 11.700 | 70.540 |
| D.4. Route 48/56/57/500, UM stops (yearly total based on weekday average)** UPDATE to reflect boardings and deboardings at each stop | 53,820 | 81,380 | 67,600 | 60,060 121,940 | 65,000 134,680 | 58,500 114,400 | 44,720 98,024 | 72,540 |
| E. Trip-Sharing Program ⁴ | | | | | | | | |
| Zip Car Program E.1. Number of Zipcars on Coral Gables campus | 13 | 13 | 15 | 15 | 15 | 16 | 19 | 14 |
| E.2. Number of UM and Coral Gables participants | 969 | 1,218 | 1,402 | 1,582 | 1,558 | 1,540 | 1,296 | 1,219 |
| Car/Van Pool E.3. Total number of program registrants | - | - | - | 279 | 3 | 3 | 0 | 187 |
| Taxi/Ride Share Stand Areas | | | | | | | | . 31 |
| E.4. Number of pickup / drop off locations (formerly taxi/ride share stand areas) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 7 |
| F. Hurry'Canes Shuttle Program ⁵ | | | | | | | | |
| On-Campus Shuttle** F.1. Total ridership during academic year* | 560,100 | 803,100 | 620,600 | 634,736 | 698,042 | 721,532 | 654,566 | 705,405 |
| Recreational and Shopping Shuttles** | | | | | | · | | |
| F.2. Total ridership during academic year* Off-Campus Shuttles (RSMAS)** | 37,600 | 41,700 | 32,300 | 35,675 | 14,306 | 8,146 | 4,694 | 1,657 |
| F.3. Total ridership during academic year* | 12,400 | 11,000 | 11,000 | 12,161 | 12,900 | 13,856 | 13,357 | 9,827 |
| C Discusio Data 6 | | | | | | | | |
| G.1. Total annual UM Bicycle registration | 1,070 | 1,037 | 1,155 | 1,213 | 1,137 | 1,164 | 913 | 515 |
| | 1,070 234 1,658 | 234 | 1,155 294 1,707 | 1,213 294 1,703 | 1,137 293 1,686 | 335 | 913 349 1,808 | 515 351 1,812 |

6. See Volume II, Section G for supporting documentation

^{2.} See Volume II, Section B for supporting documentation 3. See Volume II, Section D for supporting documentation

^{5.} See Volume II, Section F for supporting documentation **Includes available data up to April 2018

Appendix 2

Historic Traffic Counts 1990-2018

VOLUMES AT THE FIVE MAIN DRIVEWAYS ON SAN AMARO DRIVE AND CAMPO SANO AVENUE

| Three-Hour, Two-Way AM Peak Period Volumes (7 AM to 10 AM) | | | | | | | | | | | | |
|--|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-------------|-------------|
| UM Entrance | 1990 (1) | 2000 (2) | 2011 (3) | 2012 (4) | 2013 (5) | 2014 (6) | 2015 (9) | 2016 (10) | 2017 (12) | 2018 (13) | | |
| San Amaro Drive/Miller Road (7) | N/A | N/A | N/A | N/A | 238 | (8) | 264 | 374 | 402 | 467 |] | |
| San Amaro Drive/Miller Drive (7) | 810 | 821 | 645 | 466 | N/A | N/A | N/A | N/A | N/A | N/A | Percent | Percent |
| San Amaro Drive/Memorial Drive | 566 | 608 | 661 | 582 | 849 | 782 | 556 | 528 | 541 | 528 | Change | Change |
| San Amaro Drive/Robbia Avenue | 236 | 222 | 226 | 223 | 177 | 162 | 183 | 165 | 191 | 186 | 1990 - 2018 | 2011 - 2018 |
| Campo Sano Avenue/Wilder Drive | 76 | 136 | 201 | 146 | 205 | 251 | 225 (11) | 248 | 302 | 326 | | |
| Campo Sano Avenue/Brunson Drive | 1,041 | 1,522 | 643 | 568 | 521 | 473 | 367 | 427 | 429 | 405 | | |
| AM THREE HOUR TOTALS | 2,729 | 3,309 | 2,376 | 1,985 | 1,990 | 1,668 | 1,595 | 1,742 | 1,865 | 1,912 | -29.9% | -19.5% |
| Three-Hour, Two-Way PM Peak Period Volumes (3 PM to 6 PM) | | | | | | | | | | | | |
| UM Entrance | 1990 (1) | 2000 (2) | 2011 (3) | 2012 (4) | 2013 (5) | 2014 (6) | 2015 (9) | 2016 (10) | 2017 (12) | 2018 (13) | | |
| San Amaro Drive/Miller Road (7) | N/A | N/A | N/A | N/A | 371 | (8) | 383 | 445 | 648 | 556 | | |
| San Amaro Drive/Miller Drive (7) | 1,093 | 876 | 975 | 816 | N/A | N/A | N/A | N/A | N/A | N/A | Percent | Percent |
| San Amaro Drive/Memorial Drive | 830 | 848 | 877 | 640 | 820 | 1,024 | 720 | 624 | 686 | 589 | Change | Change |
| San Amaro Drive/Robbia Avenue | 274 | 174 | 191 | 184 | 171 | 195 | 236 (11) | 190 | 181 | 195 | 1990 - 2018 | 2011 - 2018 |
| Campo Sano Avenue/Wilder Drive | 162 | 197 | 247 | 222 | 286 | 329 | 383 | 415 | 428 | 504 | | |
| Campo Sano Avenue/Brunson Drive | 927 | 767 | 828 | 745 | 692 | 621 | 576 | 615 | 640 | 628 | | |
| PM THREE HOUR TOTALS | 3,286 | 2,862 | 3,118 | 2,607 | 2,340 | 2,169 | 2,298 | 2,289 | 2,583 | 2,472 | -24.8% | -20.7% |
| Total Six-Hour, Two-Way Peak Period Volumes | | | | | | | | | | | | |
| YEAR | | | | | | | | | Percent | Change | | |
| SIX-HOUR TOTAL VOLUMES | 1990 | 2000 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 1990-2018 | 2011-2018 |
| | 6,015 | 6,171 | 5,494 | 4,592 | 4,330 | 3,837 | 3,893 | 4,031 | 4,448 | 4,384 | -27.1% | -20.2% |

NOTES:

- (1) Traffic counts conducted April 18-19, 1990, University of Miami Coral Gables Campus Parking and Traffic Study, Ralph Burke Associates and Joseph L. Rice.
- (2) Traffic counts conducted in April 2000, University of Miami, Coral Gables Campus, Year 2000 Update & Concurrency Analysis, Keith and Schnars and Jack A. Ahlstedt, P.E., June 2000.
- (3) Traffic counts conducted April 12-13, 2011, Traffic Survey Specialists, Inc.
- (4) Traffic counts conducted March 29 April 12, 2012, Traffic Survey Specialists, Inc.
- (5) Traffic counts conducted April 2, 2013, Traffic Survey Specialists, Inc.
- (6) Traffic counts conducted April 2, 2014, Traffic Survey Specialists, Inc.
- (7) San Amaro Drive/Miller Road operated as signalized intersection until late 2012 with no access to the Campus. Intersection converted to roundabout mid-October 2012 with a new Miller Road access to the UM Campus via the roundabout. The Miller Drive access to the UM Campus was permanently closed.
- (8) UM access at Miller Road Roundabout closed due to campus copnstruction (School of Music). Traffic diverted to Memorial Drive access.
- (9) Traffic counts conducted April 1, 2015, Traffic Survey Specialists, Inc.
- (10) Traffic counts conducted March 30, 2016, Traffic Survey Specialists, Inc.
- (11) Volumes revised as result of review of 2015 data.
- (12) 2017 Traffic counts conducted March 2, 2017, Traffic Survey Specialists, Inc.
- (13) 2018 Traffic counts conducted April 10, 2018, Traffic Survey Specialists, Inc.

Appendix 2 Historic Traffic Counts 1990-2018

| VOLUMES AT THE FIVE MAIN DRIVEWAYS ON SAN AMARO DRIVE AND CAMPO SANO AVENUE | | | | | | | | | | | | | | |
|---|--------|--------|--------|-------|----------|-----------|-----------|--------|--------|--------|--------|----------------------------------|--------------------------------|--------------------------------|
| Periods | 1990 | 2000 | 2007 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | | Percent Change 2012-2018 | Percent Change 2017-2018 |
| Three-Hour, Two-Way AM Peak Period Volumes (7 AM to 10 AM) | 2,729 | 3,309 | 2,392 | 2,376 | 1,985 | 1,990 | 1,668 | 1,595 | 1,742 | 1,865 | 1,912 | -29.9% | -3.7% | 2.5% |
| Three-Hour, Two-Way PM Peak Period Volumes (3 PM to 6 PM) | 3,286 | 2,862 | 2,874 | 3,118 | 2,607 | 2,340 | 2,169 | 2,298 | 2,289 | 2,583 | 2,472 | -24.8% | -5.2% | -4.3% |
| Total Six-Hour, Two-Way Peak Period Volumes | 6,015 | 6,171 | 5,266 | 5,494 | 4,592 | 4,330 | 3,837 | 3,893 | 4,031 | 4,448 | 4,384 | -27.1% | -4.5% | -1.4% |
| | | | | C | CAMPUS-V | VIDE ACCE | SS TRAFFI | С | | | | | | |
| Periods | 1990 | 2000 | 2007 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | Percent Change 2007 - 2018 | Percent Change 2012-2018 | Percent Change 2017-2018 |
| Three-Hour, Two-Way AM Peak Period Volumes (7 AM to 10 AM) | 6,279 | 7,546 | 6,539 | n/a | 6,652 | n/a | 5,933 | 5,826 | 6,278 | 6,118 | 5,848 | -10.6% | -12.1% | -4.4% |
| Three-Hour, Two-Way PM Peak Period Volumes (3 PM to 6 PM) | 7,757 | 9,235 | 8,007 | n/a | 9,314 | n/a | 8,020 | 8,371 | 8,438 | 8,510 | 7,831 | -2.2% | -15.9% | -8.0% |
| Total Six-Hour, Two-Way Peak Period Volumes | 14,036 | 16,781 | 14,546 | n/a | 15,966 | n/a | 13,953 | 14,197 | 14,716 | 14,628 | 13,679 | -6.0% | -14.3% | -6.5% |

Note: 1990 did not have traffic counts for Ponce/Dickinson and Campo Sano/Wilder. Not a complete data set for Campus-Wide.

US-1 at Mariposa Court Pedestrian Overpass

Tuesday Feb 13, 2018

| Tuesday Feb 15, 20 | OVERPASS | | | |
|--------------------|----------|-----|-------|------------|
| 7:00-10:00am | E-W | W-E | Total | Peak Hour |
| 7:00-7:15am | 3 | 45 | 48 | T CUR HOUT |
| 7:16-7:30am | 2 | 37 | 39 | |
| 7:31-7:45am | 6 | 27 | 33 | |
| 7:46-8:00am | 7 | 74 | 81 | |
| 8:01-8:15am | 6 | 35 | 41 | |
| | 8 | | | 238 |
| 8:16-8:30am | | 48 | 56 | |
| 8:31-8:45am | 11 | 49 | 60 | |
| 8:46-9:00am | 9 | 40 | 49 | |
| 9:01-9:15am | 6 | 25 | 31 | |
| 9:16-9:30am | 5 | 10 | 15 | |
| 9:31-9:45am | 6 | 14 | 20 | |
| 9:46-10:00am | 8 | 6 | 14 | |
| Totals | 77 | 410 | 487 | |
| 11:30am-1:30pm | OVERPASS | | | |
| | E-W | W-E | Total | Peak Hour |
| 11:30-11:45am | 9 | 10 | 19 | |
| 11:46-12:00pm | 10 | 11 | 21 | |
| 12:01-12:15pm | 11 | 8 | 19 | 80 |
| 12:16-12:30pm | 5 | 9 | 14 | 80 |
| 12:31-12:45pm | 12 | 14 | 26 | |
| 12:46-1:00pm | 12 | 4 | 16 | |
| 1:01-1:15pm | 13 | 8 | 21 | |
| 1:16-1:30pm | 6 | 8 | 14 | |
| Totals | 78 | 72 | 150 | |
| 4.00.6.00 | OVERPASS | | | |
| 4:00-6:00pm | E-W | W-E | Total | Peak Hour |
| 4:00-4:15pm | 99 | 12 | 111 | |
| 4:16-4:30pm | 35 | 14 | 49 | 264 |
| 4:31-4:45pm | 50 | 12 | 62 | 261 |
| 4:46-5:00pm | 28 | 11 | 39 | |
| 5:01-5:15pm | 67 | 15 | 82 | |
| 5:16-5:30pm | 38 | 11 | 49 | |
| 5:31-5:45pm | 48 | 2 | 50 | |
| 5:46-6:00pm | 14 | 7 | 21 | |
| Totals | 379 | 84 | 463 | |
| | | | | |