Memorandum **May 16, 2011**

Legistar I.D. #22431, #22432, and #22433
Madison College Truax Campus
Conditional Use Requests

Prepared By:
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Planning Division Staff

For consideration at the May 16 Plan Commission meeting, Madison College is requesting three related conditional use approvals for property within the Truax Campus near the intersection of Anderson Street and Wright Street in Aldermanic Districts 15 (Palm) and 17 (Clausius). While not under the purview of the Plan Commission, the proposals involve associated improvements to stormwater infrastructure and streets, including a narrowing of Wright Street planned for 2013, and changes requested by Traffic Engineering staff to Anderson Street. The proposals are consistent with the Truax Campus Master Plan, updates to which were presented to the Plan Commission on April 11, 2011. Staff has recommended approval of all three items for review on May 16, as follows:

Agenda Item #15, Legistar #22431; 1702 Wright Street; New Health Education (Allied Health) Building

Request: Alteration to an existing conditional use in the M1 District for construction of a new three-story Health Education Building on a portion of an existing surface parking lot on the northwest corner of Anderson Street and Wright Street.

Agenda Item #16, Legistar #22432; 3550 Anderson Street /1849 Wright Street; Additions to main building and incorporation of existing surface parking lot

Request: Alteration to an existing conditional use in the M1 District for additions to the Madison College main building at 3550 Anderson Street, and restriping of a large surface parking lot immediately to the north at 1849 Wright Street. Building additions include:

-A "Gateway/Student Achievement Center" addition in front of the existing entrance

-A new "Ingenuity Center" addition onto the northwest corner of the existing building

-Two small additions relatively hidden from view on the eastern half of the building

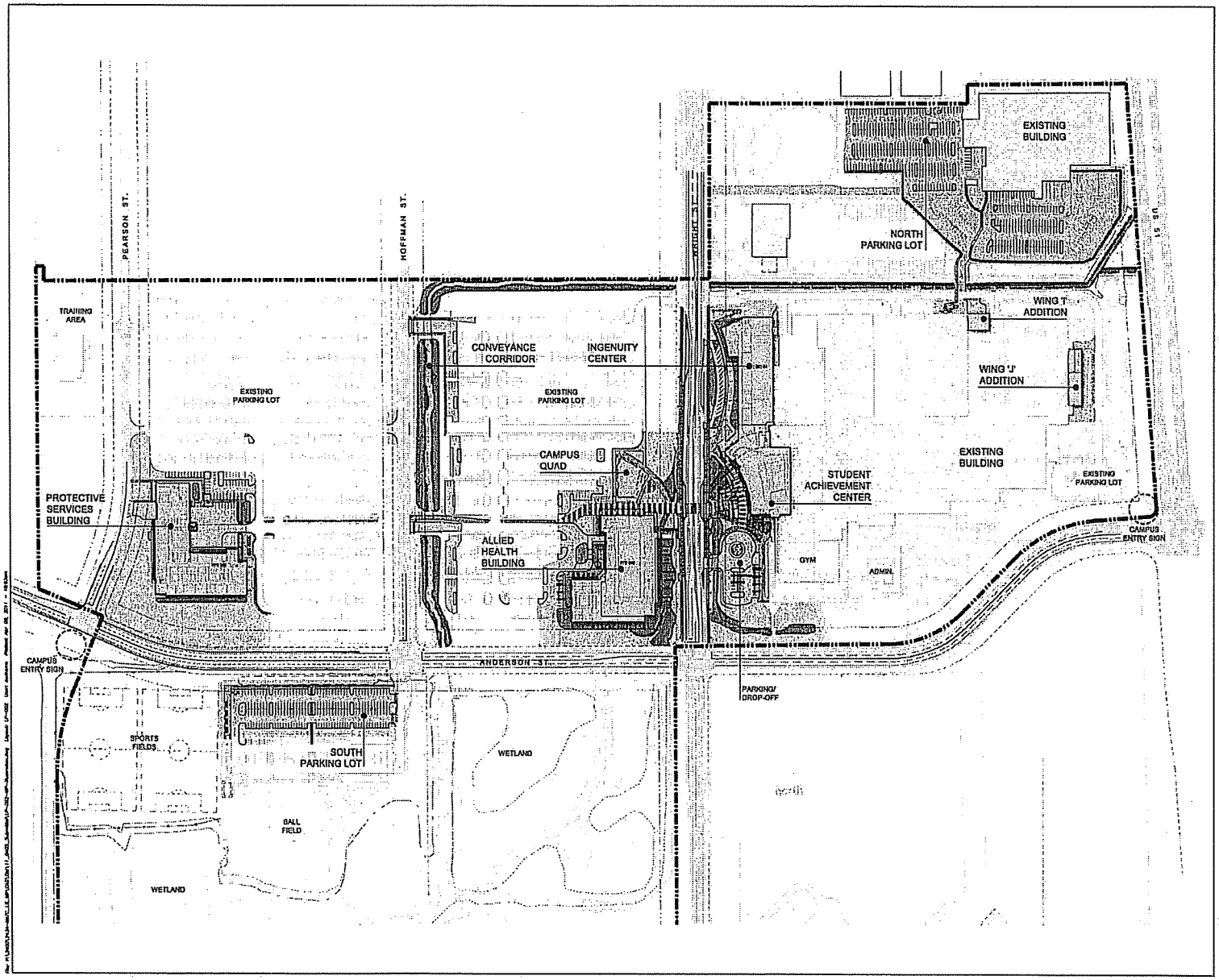
Agenda Item #17, Legistar #22433; 3201 Anderson Street; Expanded parking lot

Request: Conditional use in the M1 District for the expansion of an existing surface parking lot serving athletic facilities to also serve as accessory off-site parking for Madison College properties on the north side of Anderson Street.

A fourth application is expected in the near future for an alteration to an existing conditional use in the M1 District at 1702 Hoffman Street on the western edge of the Truax Campus for a new Protective Services Building. This application should complete the proposals anticipated for Phase 1 of the Truax Campus Master Plan.

Each property requires a separate conditional use review and approval, but in order to frame the proposals and minimize redundancies, common supplementary materials submitted by Madison College are included in the Plan Commission packet immediately following this memorandum:

- Drawing of the Truax Campus, highlighting Phase 1 projects
- Transportation Demand Management Plan dated February 19, 2010
- Madison College Truax Campus Parking Study (Draft) dated April 2011



MADISON AREA TECHNICAL COLLEGE

Project Title

Truax Campus

City of Madison, Wisconsin

Issued For:	Approval
Issue Date:	04/06/2011
SAA Project No.	2434
MC Project No.	-
Bid Pkg No.	B11-026

Revision	Date

SAA DESIGN GROUP

DRAWING

TRUAX CAMPUS MASTER PLAN

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Sheet Number

LP-002

L-51

TRANSPORTATION DEMAND MANAGEMENT PLAN

Madison Area Technical College
Truax Campus
Madison, Wisconsin

Final February 19, 2010

Prepared for
Madison Area Technical College

Prepared by
JJR, LLC

MADISON
AREA | TECHNICAL
COLLEGE

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BACKGROUND

This Transportation Demand Management Plan has been prepared as a section of the Madison Area Technical College Facilities Master Plan, now in draft. The section on the Truax campus has been excerpted to support a request for a change in use for a parking lot located at the southwest corner of Anderson Street and Hoffman Street.

INTRODUCTION

Madison College and the Truax campus facilities master plan seek to maximize the opportunities to reduce the need for students, faculty, and staff to commute to the campus via a single-occupancy vehicle. This section includes a list of Transportation Demand Management (TDM) strategies that are most often successful in educational campus settings, organized by mode. Madison College is already pursuing most TDM strategies; the facilities master plan strengthens existing programs and encourages additional strategies.

As part of the College's Sustainability and Climate Action Plan, the College conducted a greenhouse gas inventory in 2008. The survey demonstrated that the largest component of greenhouse gas emissions was not related to facilities, but rather transportation to and from campus by students, faculty, staff, and fleet (46.2 percent).

Increasing carpooling, transit use, bicycling, and walking will provide the following benefits to Madison College and the City of Madison:

- Decrease traffic congestion
- Decrease air pollution and greenhouse gas emissions, thus implementing the College's Sustainability and Climate Action Plan and demonstrating the College's commitment as a charter signatory to the American College and University Presidents' Climate Commitment
- Decrease transportation costs for students, faculty, and staff
- Increase health benefits for students, faculty, and staff
- Minimize the need for vehicle on-campus parking

TRANSIT: SERVICE

Madison Metro offers multiple bus routes to and from the Truax campus that serve the campus well. Routes 6, 20, and 34 directly serve campus with transit stops on Wright Street at the front door to the main Truax building. Due to very good transit service provided by Madison Metro, Madison College does not provide duplicative shuttle services.

Route 6 links the Truax campus to the West Transfer Point and East Towne Mall, and points in between including the Capitol Square, UW-Madison Campus, and State Street. Service headways vary during the workday, but typically every 30 minutes, running from 5:30 am to midnight weekdays. For Madison College, Route 6 serves as a very good shuttle between the Truax and Downtown campuses, with a nearly direct connection via East Washington.

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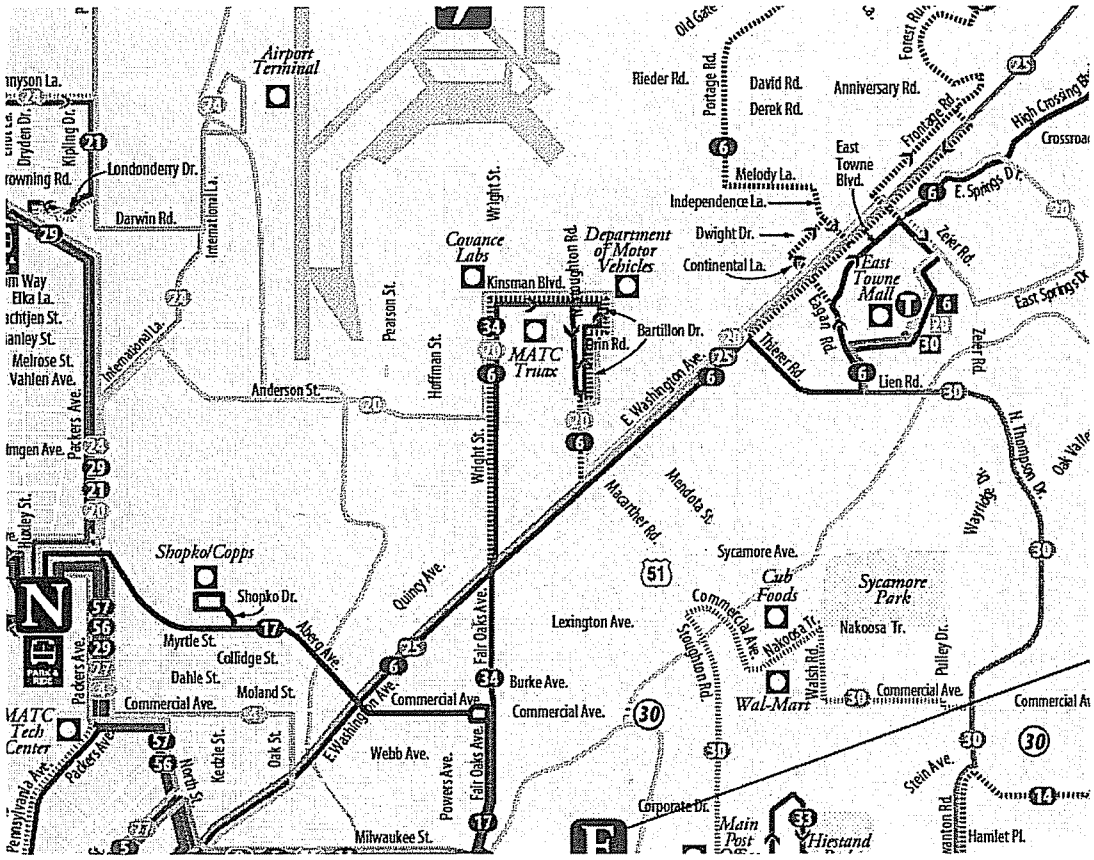
Three Madison Metro routes serve the Truax campus.

(source: Madison Metro System Map, Weekdays)



Route 20 is a very good shuttle between the Truax campus and the Dane County Regional Airport, the North Transfer Point, and the Park & Ride lot adjacent to the North Transfer Point. Route 20 serves the Truax campus every 30 minutes between 6 am and 11 pm, weekdays.

Route 34 is a very good shuttle between the Truax campus and the East Transfer Point, running 30-minute headways in peak hours between 7 am and 6 pm.

Should the demand for improved transit service be shown, it is possible that additional routes could serve the Truax campus and current routes could run more frequently. The Madison College Student Activity Board is now investigating contracting with Madison Metro bus to offer an express bus between the Truax and Downtown campuses. The service would available five days per week, 180 days per year, 9am-3pm, for an annual cost of $75,000. Service start-up is targeted for August 2010. Should this service be effective, the Student Activity Board will consider shuttles to the South (Park Street) and West (Gammon Road) campuses.

Madison College will encourage Madison Metro to further improve transit service, such as providing more Park & Ride facilities, particularly on routes that service

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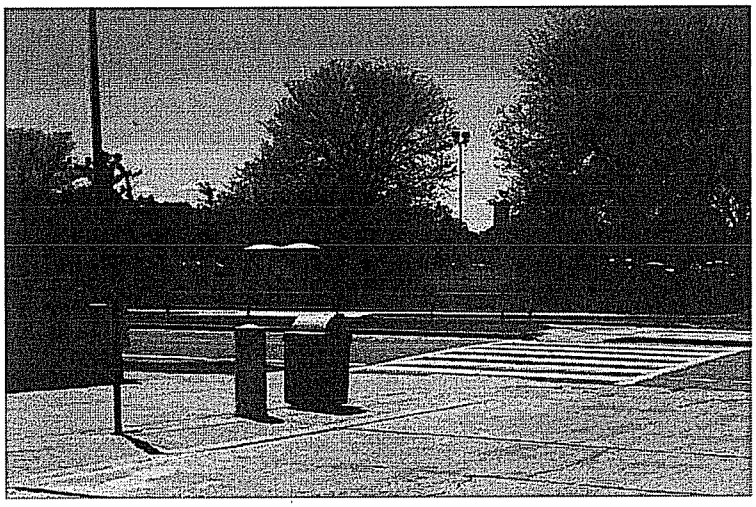
the Truax campus. However, given the financial constraints of Madison Metro and Truax's existing very good service, it is unlikely that transit service will improve in the short term.

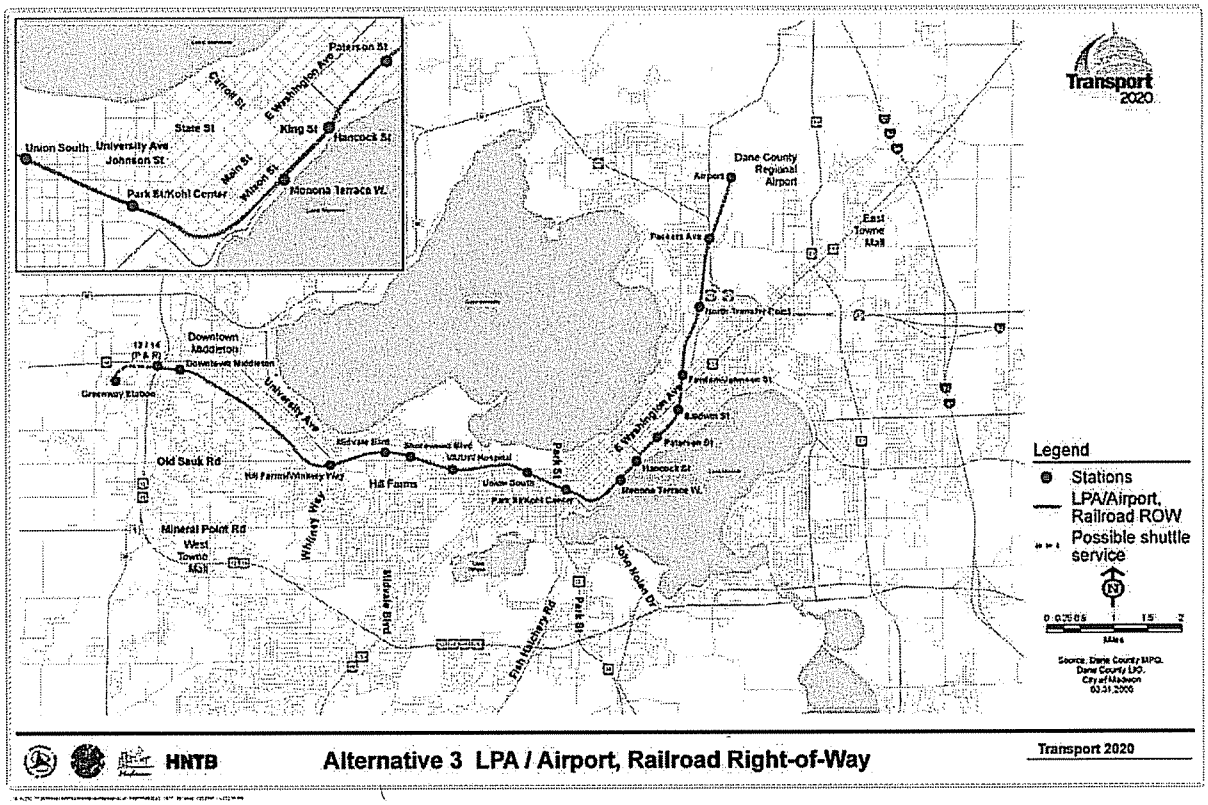
Other potential measures to improve transit service, such as reducing transit vehicle delay with bus lanes and bus-priority traffic signals, are beyond the control of Madison College since the City of Madison controls the design and operation of the city streets and traffic signals that serve the Truax campus.

Truax commuters that have meetings elsewhere during the day, such as full-time faculty, are more likely to be a transit commuter when there is vehicle



Southbound Wright Street includes a covered transit waiting area.

One Transport 2020 Alternative serves the Dane County Regional Airport.



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available for daytime short trips. Community Car, Madison's car-sharing network, has not sited a vehicle on the Truax campus, but Madison College has investigated the opportunity to sponsor a vehicle. Should the need for a shared vehicle be proven, the Truax campus could host a Community Car. For the College to host a car, the College must sponsor a vehicle for three years, with a one-time fee of $13,500 for a conventional vehicle and $22,500 for a hybrid vehicles. In addition, participants must pay for annual memberships and for each hour the vehicle is used. The residents of Truax Apartments could benefit from access to the Community Car during on weekends.

In the medium-term future, the Milwaukee-Madison high-speed rail route will include a station in Watertown and a station in Madison, potentially at the Dane County Regional Airport (over two miles away). Should the airport site be chosen, Madison College will investigate participation in a shuttle program between the Truax campus and the high-speed rail station, possibly an improved Madison Metro Route 20. Given the likely infrequent rail service schedule and limited stations within the Madison College district, it is unlikely that many students or part-time faculty will utilize rail on a consistent basis. However, it could provide a connection to the Watertown campus, should there be a similar shuttle service between the Watertown campus and the proposed Watertown rail station site (nearly a two mile distance).

Also in the medium-term future, Dane County and the City of Madison are considering a commuter rail system, with one alternative including a potential stop at the Dane County Regional Airport. Should the airport site be chosen, Madison College will investigate participating in a station-campus shuttle, possibly an improved Madison Metro Route 20. Full-time faculty and staff may decide to commute to the Truax campus by rail. The same alternative has a stop at the Monona Terrace, a seven block walk from the Downtown Campus. With a limited midday schedule, it is unlikely that commuter rail will provide efficient inter-campus transportation.

In the long-term future, a potential shuttle destination is the new west/south campus recommended in the facilities master plan. A shuttle will be evaluated when that campus is established. The facilities master plan recommends that the new campus site be served by transit.

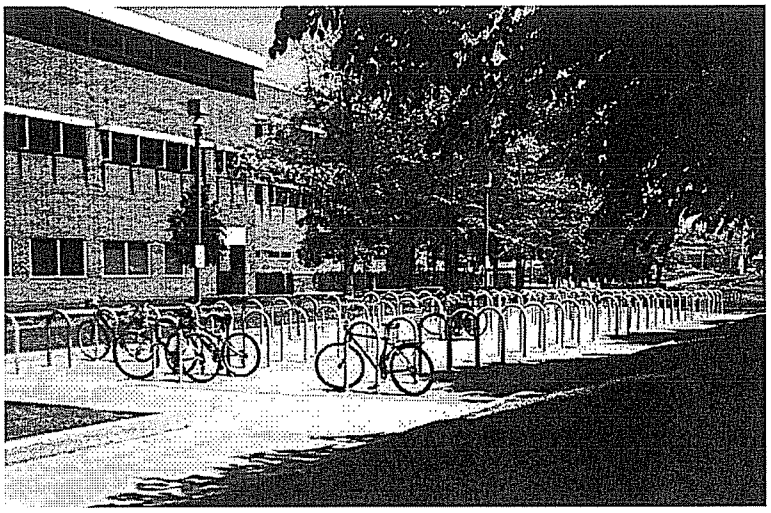
TRANSIT: FARE DISCOUNTS

The College participates in Madison Metro's large institution commuter program. Students have voted to pay a $25 fee each semester to subsidize the Metro Transit bus passes provided free of charge. Nearly 3,400 students in Fall 2009 received bus passes under the program.

TRANSIT: FACILITIES

The Truax campus has standard Madison Metro amenities for high-volume transit stops, including a covered bus stop on southbound Wright Street. However, the number of students using transit often overwhelms these transit stop facilities.

The facilities master plan increases transit user comforts by providing enclosed waiting areas within the ground floors of the Allied Health building and the Health and Wellness Building. Bikes may be transported on Madison Metro vehicles, and the facility master plan recommendations for bike parking facilities are covered later in this chapter.



Bicycle parking is located adjacent to every major building entrance.

BICYCLE: PATHS AND ROUTES

The Truax campus is at the termination of the Starkweather Creek bicycle trail. With the Aberg Avenue overpass (now under construction), this trail will connect to the Capital City trail and the City of Madison's trail network. Anderson Street and Wright Street feature bike lanes or wide shoulders. Bicycles are prohibited or not safe on Highway 30 and Stoughton Road, which creates a barrier for those approaching from the southeast.

Only a small percentage of Madison College students, faculty, and staff are within a comfortable biking distance from the Truax campus, and thus the impact of bicycling to reduce automobile trips is limited. The greatest potential for students biking to campus are those students living in private apartments in the Orin/Onsgard Road area. To encourage biking from this neighborhood, Madison College should request from the Wisconsin Department of Transportation that the Anderson Street/Stoughton Road intersection design and signal operation be changed to be more bicycle-friendly.

BICYCLE: PARKING AND END OF COMMUTE FACILITIES

The Truax campus meets the City's bicycle parking requirements, with large and modern bicycle parking areas located at every major entrance to the Main Building. As additional buildings are built on campus, the facilities master plan indicates the location of additional bicycle parking located directly adjacent to the entrance of every building.

Commuters who bicycle often arrive wet, muddy, or sweaty. Madison College provides students, faculty, and staff with a place to shower, change, and store clothes which encourages bicycle commuting. Shower facilities are located in the gymnasium complex and lockers are available throughout the Main Building.

WALKING: FACILITIES

The Truax campus is located in a primarily light industrial and office neighborhood adjacent to the Dane County Regional Airport, so the number of faculty, staff, and students that walk to the Truax is extremely limited. A handful of students live in the Truax Park Apartments and in the private housing on Orin/Onsgard Road, so Madison College should encourage the City of Madison and the Wisconsin

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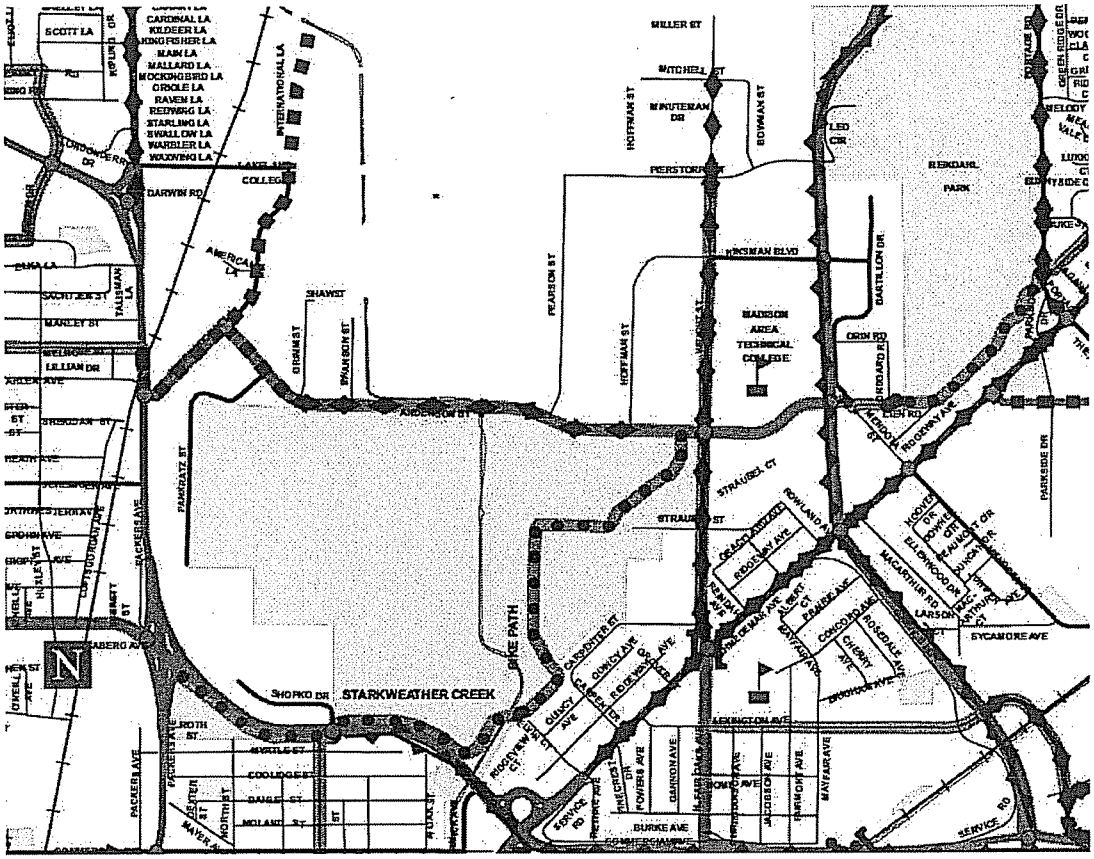
Starkweather Creek Bicycle Trail crosses Madison College land and ends at Anderson Street near Wright Street.

Highways 51 and 30 are barriers for bicyclists.

(source: City of Madison Bicycle Map)



- Local Street
- Through Street Suitable for Most Bicyclists
- Through Street Lacking Accommodations for Most Bicyclists
- Bike Lane Or Paved Shoulder
- Wide Curb Lane
- Rush Hour Parking Restriction
- Bike Path
- Unpaved Bike Path
- Future Bike Path
- Bike Route On Sidewalk
- Bicycling Prohibited or not Recommended
- Bike Route
- Schools
- Traffic Signal
- Railroads
- Overpass or Underpass
- Bus Transfer Point

The Starkweather Creek Bicycle Trail crosses Madison College land and ends at Truax campus south of Anderson Street.

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Department of Transportation to increase the pedestrian-friendliness of the Anderson Street and Stoughton Road crossings.

The facilities master plan recommends completing missing sidewalk connections along Anderson Street and Wright Street. The plan also recommends a new signal and the Hoffman Street/Anderson Street intersection, providing another safe Anderson Street crossing point. The intersection improvement will also enable safe pedestrian access to the athletic fields south of Anderson Street, which is currently nearly impossible for those with accessibility challenges. It will also provide safe emergency vehicle access to the athletic fields.

RIDESHARING

Ridesharing is a viable option for groups that have consistent travel schedules. The variability of arrival and departure for students and part-time faculty mean that full-time faculty and staff are the most likely to rideshare at the Truax campus.

Madison College promotes carpooling by participating in Rideshare Etc., a ridesharing program administered by the Madison Area Transportation Office. The service matches up potential commuters who live in the same ZIP code. Participants in Rideshare Etc. are eligible for the guaranteed ride home program. (The guaranteed ride home program provides commuters who regularly vanpool, carpool, bike, walk, or take transit with a reliable ride home when unexpected emergencies arise. Vouchers are provided for Union Cab rides up to $75 per ride, six rides per year.)

The Student Activity Board will more heavily promote carpooling and ridesharing to the Truax campus, creating an electronic ride board. The College does not provide preferred parking for carpools and vanpools on the Truax campus. Madison College will investigate providing preferred parking for carpools and vanpools.

ENCOURAGEMENT: PARKING PRICING

TDM research shows that raising the cost of parking is often the most effective way to encourage alternative transportation. Madison College charges for all on-campus student parking at the Truax campus. All vehicles parked at the Truax campus must display a valid parking permit or be subject to ticketing and towing without warning. Student parking permits cost $25 per semester. Permits are required for all campus users, including those enrolled in one hour non-credit courses. No parking permits are required for motorcycles, mopeds, and bicycles.

Madison College has been reluctant to raise the parking permit fee to discourage single-occupant vehicles since this will increase the cost of attending college. Past efforts to raise parking fees have resulted in significant student opposition. Seeking to avoid current parking fees, some students park in the lots of businesses adjacent to the Truax campus, and increasing these fees is likely to exacerbate this problem.

The cost of parking is incorporated into the union compensation packages for full-time faculty, part-time faculty, and staff. Therefore, parking appears to be free and

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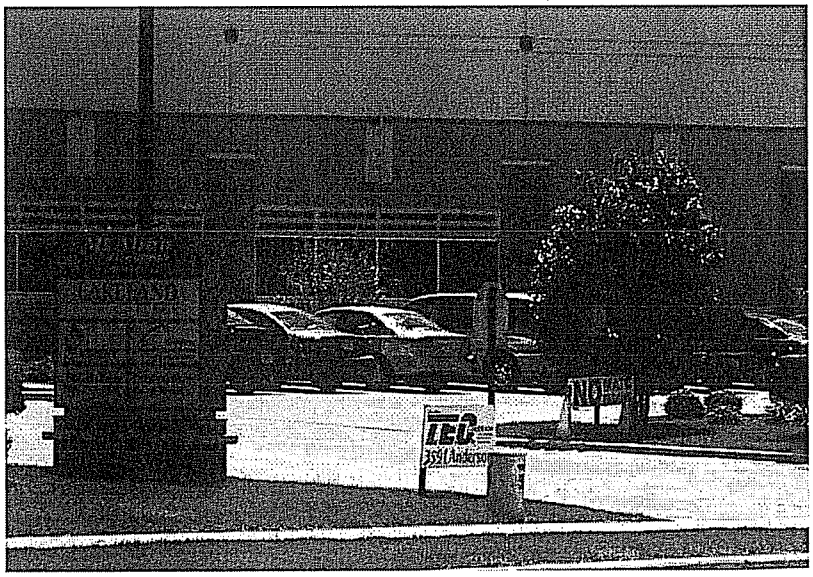

Students often illegally park in adjacent private parking lots.

there is no monetary discouragement of driving to campus. The parking cost could be "unbundled" so that the cost of parking is more apparent for these users ("parking cash out"). Given that compensation packages are negotiated with three unions (full-time faculty, part-time faculty, and staff), it will be difficult to "unbundle" this parking cost.

The facilities master plan recommends the construction of a parking structure. Parking fees will need to increase to cover the cost of the parking structure. As a result of the parking fee increase, a decrease in the number of those parking should be expected. Some studies show commuter parking price elasticity to be 0.3, or a 1 percent increase in price will result in a 0.3 percent decrease in demand. The decrease in parking demand on the Truax campus will be unique.

ENCOURAGEMENT: FLEXIBLE WORK/CLASS SCHEDULES

Unlike many other area employers, Madison College provides flexible work schedules for faculty and students. Flexible work schedules reduce peak-period commute travel and help accommodate ridesharing and transit use.

ENCOURAGEMENT: INFORMATION, MARKETING, PROMOTIONAL CAMPAIGNS

Madison College encourages alternative commuting by providing information and through on-campus education campaigns. The Truax Welcome Center provides transportation alternatives information such as transit maps and schedules, bikes-on-bus information, and Rideshare Etc. information. Real-time electronic interior signage at the west entrances of the Main Building announces the imminent arrival of Madison Metro busses.

The College, and in particular the Madison College Environmental Sustainability Alliance (a student-faculty-staff organization dedicated to sustainability efforts at the College), also sponsors promotional events. The College has hosted a winter bicycling clinic, teaching students, faculty, and staff how to commute by bicycle all year long. The College has sponsored free bike clinics, with volunteer mechanics on hand to grease chains and do minor bike repairs. Madison College also annually supports Bike to Work Week, creating a College team and encouraging new bicycle commuters.

ENCOURAGEMENT: PROGRAMS TO ADDRESS SECURITY CONCERNS OF PEDESTRIANS AND CYCLISTS

Campus commuters are more likely to walk, take transit, and cycle if they feel safe on and around campus. Madison College's Public Safety office provides 24-hour-a-day, seven-day-a-week service on the Truax campus. Public Safety has recently

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installed brighter lighting in parking lots and along the Starkweather Creek trail. Bicycling parking is well-lit, secure, and located adjacent to building entrances. Facilities staff efficiently eliminate litter, garbage, weeds, and graffiti.

Public Safety plans and the facilities master plan seek to further increase pedestrian safety on the Truax grounds. The Wright Street transit waiting areas will be more visible and patrolled as buildings are constructed on the street and indoor spaces are reserved for transit waiting. New structures are placed to face the internal campus open space, creating informal surveillance for those walking between buildings. The campus design guidelines maintain and improve adequate lighting in pedestrian areas and transit centers.

Madison College's TelePresence is the most advanced distance learning technology available.

ELIMINATING TRAVEL: DISTANCE LEARNING

In the Spring 2010 semester, over 12 percent of the offered 9,788 class sections were provided at least in part using distance learning, such as online courses and telecourses. The Academic Plan outlines a student enrollment growth goal of three percent per year, but 33 percent of this growth will be accommodated through distance learning such as internet-based instruction.

Madison College seeks to reduce the number of commuters attending the Truax and other campuses by maximizing distance learning opportunities. Madison College is the nation's first institution to use Cisco TelePresence for educational purposes. The system uses multiple video cameras and high-definition screens at all eight campuses enabling students and educators to see one another at the same time they are viewing shared video and conducting electronic dialogue. In addition to multiple 16-seat units, the College also has two-seat units that allow one-on-one sessions and small group meetings for students and staff. Through TelePresence, Madison College professors in one campus are instructing students on other campuses, reducing the number of students and faculty driving among campuses.

Currently in a pilot phase with only 42 class sessions on TelePresence, Madison College intends to increase the use the TelePresence rooms throughout the day and week. Up to 108 class sessions per week in the TelePresence classrooms will impact 1,152-3,240 students per week. These students will not have to travel to the Truax campus from regional campuses for classes previously offered only in Madison.

The Spring 2010 semester pilot, which is made up of 42 class sessions on TelePresence, produced an unexpected result. Some of the students have switched the location from which they attend the class. Rather than traveling to Truax, the registered location for

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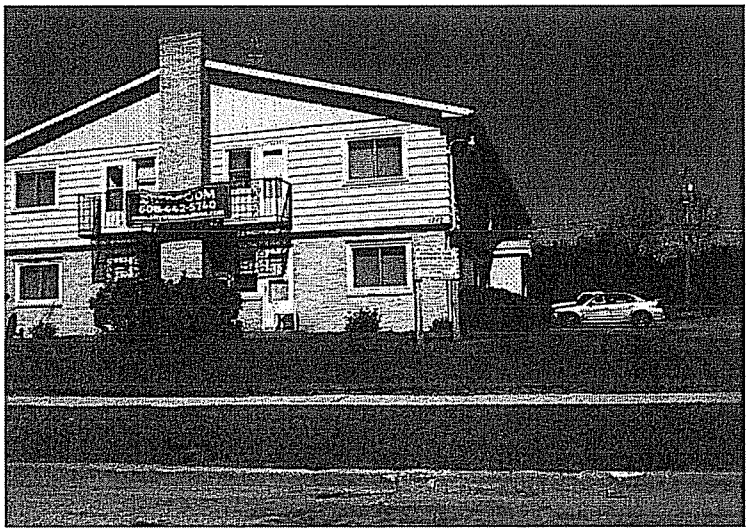


Private apartment landlords on Orin Road and Onsgard Road target Madison College Truax students.

their class, they are choosing to attend by traveling to the connecting location. This results in fewer students at the Truax campus.

ELIMINATING TRAVEL: TELEWORK

Madison College is maximizing opportunities to use communication technology to reduce the number of faculty and staff that have to travel to Truax for meetings. By policy, the TelePresence system is primarily for classroom instruction, comprising 80 percent of scheduled time. The remaining 20 percent can be used for staff and faculty meetings and events. Recognizing this allocation may not be sufficient, Madison College is implementing two additional technology solutions which will result in decreasing the staff and faculty traveling to Truax. These are Cisco's MeetingPlace for web-based meetings and collaboration and Cisco's Unified Video Advantage for conference calls that include video.

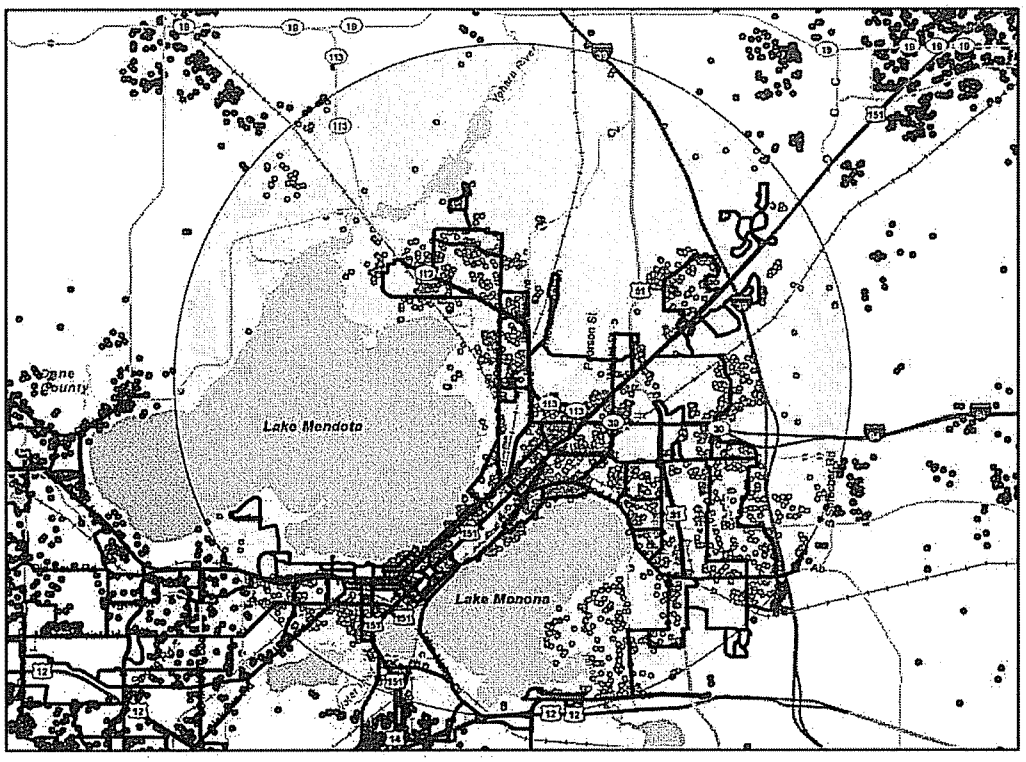
ELIMINATING TRAVEL: ADJACENT AND ON-CAMPUS RESIDENTIAL

Student residential opportunities near the Truax campus enable walking and biking to campus. Private apartment landlords on Orin/Onsgard Road east of Stoughton Road target Truax students. The City of Madison Community Development Authority has begun redeveloping the Truax Apartments with the goal of providing a greater mix of market and subsidized rental options. As the housing project redevelops, more Truax students are likely to choose to live in the neighborhood.

The facilities master plan recommends the construction of student residential structures on-campus near Wright Street and Straubel Street, within easy walking distance of the center of campus. The on-campus residential area will require supportive parking, but those vehicles will not be necessary to circulate on campus, thus reducing the growth of vehicle circulation as enrollment increases.

POTENTIAL POPULATION FOR ALTERNATIVE COMMUTES

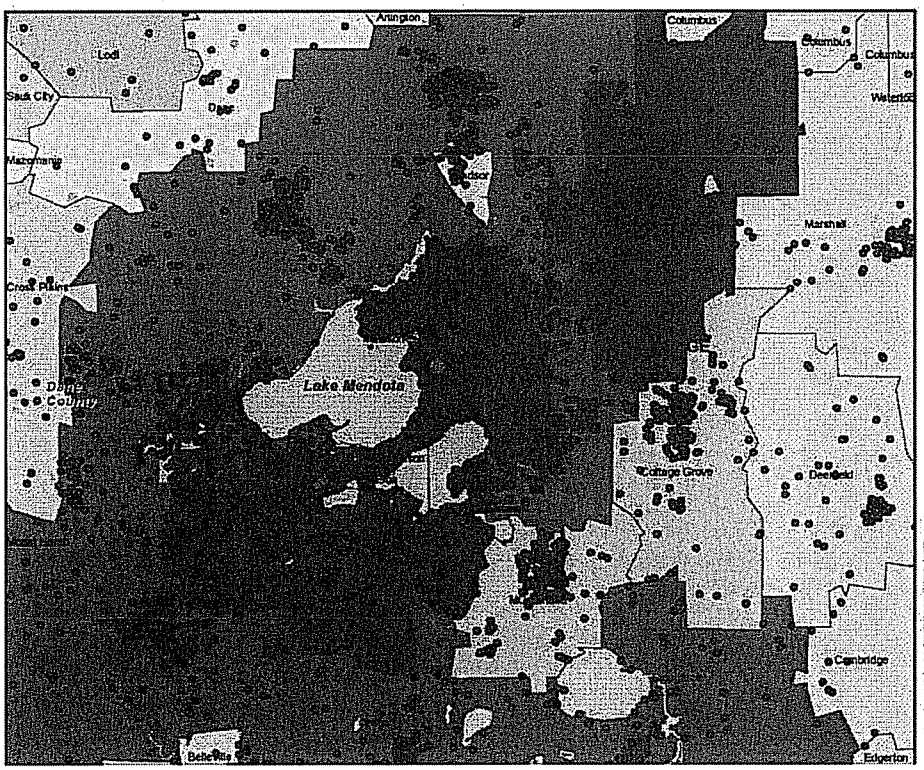
The Truax campus is Madison College's largest campus and offers the greatest number of courses and student support services. The number of full-time equivalent students attending Madison College and the Truax campus has fluctuated over the past two decades, with an overall one percent increase each year. Very recently, Madison College has experienced a significant increase in enrollment, with a 12 percent increase in degree-credit full-time equivalent students between 2009 and 2010. Degree-credit FTE student enrollment has increased from almost 5,900 in 1990 to over 7,100 in 2010. Degree-credit headcounts have grown from over 14,000 in 1990 to just over 17,000 in 2010. In Fall 2009, 13,750 students attended courses on the Truax campus.



Few Truax students live in locations that are within biking and walking distance, In Fall 2009, 3,750 students, or 27% of all Truax students, lived within five miles of campus.

Green dots: Truax student home locations
Black lines: Madison Metro routes
Yellow area: 5-mile radius from Truax campus

(Source: Madison College, Madison Metro)



Many Truax students live in locations that are not served by transit.

Green dots: Truax student home locations
Black lines: Madison Metro routes
Yellow area: 5-mile radius from Truax campus

(Source: Madison College, Madison Metro)

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Madison College, and in particular the Truax Campus, is a commuter college. Unlike UW-Madison, no students, faculty, or staff live on-campus and very few live within walking and biking distance. The top map on the previous page shows the home locations of students attending the Truax campus. The map demonstrates that very few students live within five miles of campus, considered the extent of a comfortable commute distance for most cyclists. In addition, the interstate and Highway 30 are barriers for accessing the Truax site by bicycle.

With students, faculty, and staff commuting from homes throughout the Madison College district, transit commuting is a more viable transportation choice. Transit commuting is convenient for those with simple origin-destination commuting patterns. Unlike a traditional four-year university, Madison College's student population is more than 18-22 year olds taking day-time courses. Working adults attend evening and weekend courses and commute from their workplace, making transit inconvenient. Many Madison College students have off-campus jobs and off-campus intern programs, making transit commuting difficult. Many part-time and full-time faculty also have other employment or teach at multiple campuses.

Since 2000, Madison College has tracked student transit ridership. While transit ridership has fluctuated with student enrollment, transit ridership has grown an average of nine percent each year. In the 2009 calendar year, there were just under half million student transit rides. Assuming 250 business days per year, there are on average 1,000 transit round trips per day by Madison College students.

Transit commuter ridership is limited to those that have access to transit at their origins or from Park & Ride facilities. Of students attending the Truax campus, 75 percent lived in Dane County, and of these 5,100, or 38 percent all Truax students, lived within the City of Madison. The bottom map on the previous page shows the home locations of Truax students, overlaid with the Madison Metro transit routes. Madison Metro provides limited transit service outside the City of Madison, and most Truax students are not served by transit.

One indication of the population of potential transit users (that is transit-accessible students that can conveniently take transit campus each day) is the 3,400 students that have requested free transit passes. These students represent one-quarter of the Truax campus students, and on average each takes 1.5 round-trip transit trips each week throughout the year. This is significantly higher than the 8 percent of Madison residents that commute via public transportation.

Since most Madison College students, faculty, staff, and visitors do not have access to transit at their trip origins and transit commuting is not convenient due to multiple trip destinations for many students, the number of commuters who can chose transit is limited. But of those that have access to convenient transit, a very high percentage currently choose to take transit to the Truax campus, and Madison College seeks to increase this percentage.

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Other commuting options is ridesharing, but past national TDM efforts have shown that ridesharing has limited appeal, particularly on educational commuter campuses. While the class scheduling flexibility and variability decreases peak hour congestion, it also discourages ridesharing. Madison College is maximizing technology to reduce intra-campus commuting, and redevelopment on and off campus will increase nearby residential options.

Bicycling to campus is a commuting option for those that live within a reasonable biking distance from campus. Nearly three quarters of Truax students live further than five miles from campus, with many outside the City of Madison and Dane County. The bicycle commuter population is limited to those with short commutes without multiple destinations. Bicycling is also limited for most cyclists to the non-winter months.

Despite the extensive available alternative commuting options and their promotion at the Truax campus, most students, faculty, and staff will not be able to choose these options. Madison College, and in particular the large Truax campus, will continue to require significant vehicle parking to accommodate students, faculty, and staff that cannot and do not choose to an alternative commute mode.

CONCLUSION

Madison College actively and aggressively promotes commuting to its Truax campus via modes other than single-occupancy vehicles. A very large percentage of students, faculty, and staff with access to convenient transit choose this mode. The transportation demand from future growth will be reduced through the maximized use of distance learning and telework technologies.

While Madison College actively encourages alternative transportation options through programming and campus design, a significant number of Truax students originate in locations where alternative transportation options are not viable. Thus parking lots will continue to be necessary, although the facilities master plan replaces some surface parking with structured parking.

Madison College will continue to encourage transportation alternatives and the facilities master plan improvements will guide the College in its pursuit of its campus sustainability goals.

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SUMMARY OF RECOMMENDATIONS FOR MADISON COLLEGE

This TDM plan describes a series of potential transportation demand management strategies. Each strategy falls into one or more categories:

- Madison College is already pursuing this strategy
- Madison College could further strengthen its efforts in this strategy
- This strategy is not applicable now, but Madison College could pursue it in the future

This is a summary of the TDM strategies that Madison College could strengthen in the near term. See the TDM plan for more description of these strategies, what the College has already accomplished, and potential future strategies.

Transit: Service

- Encourage Madison Metro to increase transit service
- Support shuttle efforts of Student Activity Board
- Investigate hosting a Community Car

Bicycle: Paths and Routes

- Encourage City and DOT to improve the pedestrian/bicycle orientation of the Stoughton Road/Anderson Street intersection

Ridesharing

- Provide preferred parking for carpools and vanpools
- Support Student Activity Board in promoting carpooling

Encouragement: Parking Pricing

- Remove free parking as an employee benefit

Eliminating Travel: Distance Learning

- Maximize use of TelePresence

Eliminating travel: Telework

- Implement MeetingPlace and Unified Video Advantage

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Madison College
Truax Campus Parking Study

April 2011

SAA DESIGN GROUP

DRAFT

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SUMMARY

Parking at the Madison College campus was evaluated to determine existing and future parking needs based on the proposed Master Plan and Phase 1 of construction. Current parking supply was found to be within the norm for similar college campuses and to be adequate for today's parking demand. With the construction of four new buildings as a part of Phase 1 (some within existing parking lot areas), it was determined that there will be a loss of over 650 spaces on a permanent basis and another 200 on a temporary basis during construction. Given these reductions and the projected growth in student population, it is estimated that 700 replacement parking spaces will be needed concurrent with Phase I building construction and 725 additional parking spaces on the campus over the next 5-10 years. Several locations were identified as potential future surface parking that could provide for these parking needs.

BACKGROUND

In 2010, Madison College adopted a Facilities Master Plan for all seven of its' campuses. The focal point of the Master Plan is the expansion of the Truax campus. The plan calls for a number of new buildings, expansion of existing buildings, infrastructure and parking improvements, and improvements to enhance the campus image and function. Currently the campus is divided into three sections by two major streets. Wright Street is a four lane north/south collector street that now divides the parking area from the main campus. Anderson Street is a four lane east/west collector street that separates the main campus and parking area from the recreational area on the south (**see Figure 1**). The northeast section currently houses the academic campus; the northwest section provides the majority of the parking, and the southwest section provides for the recreational needs of the campus and overflow parking. With the proposed master plan improvements, the campus will be expanded to the north through the acquisition of adjacent property. Additional buildings will be constructed in the northwest section eliminating some of the existing parking in that section that will need to be replaced. From a parking perspective, the proposed building improvements will not only eliminate existing parking, they will also require their own dedicated parking areas.

The purpose of the parking study is to determine both the short and long term parking needs of the Truax campus and recommend a phased approach to address those parking needs.

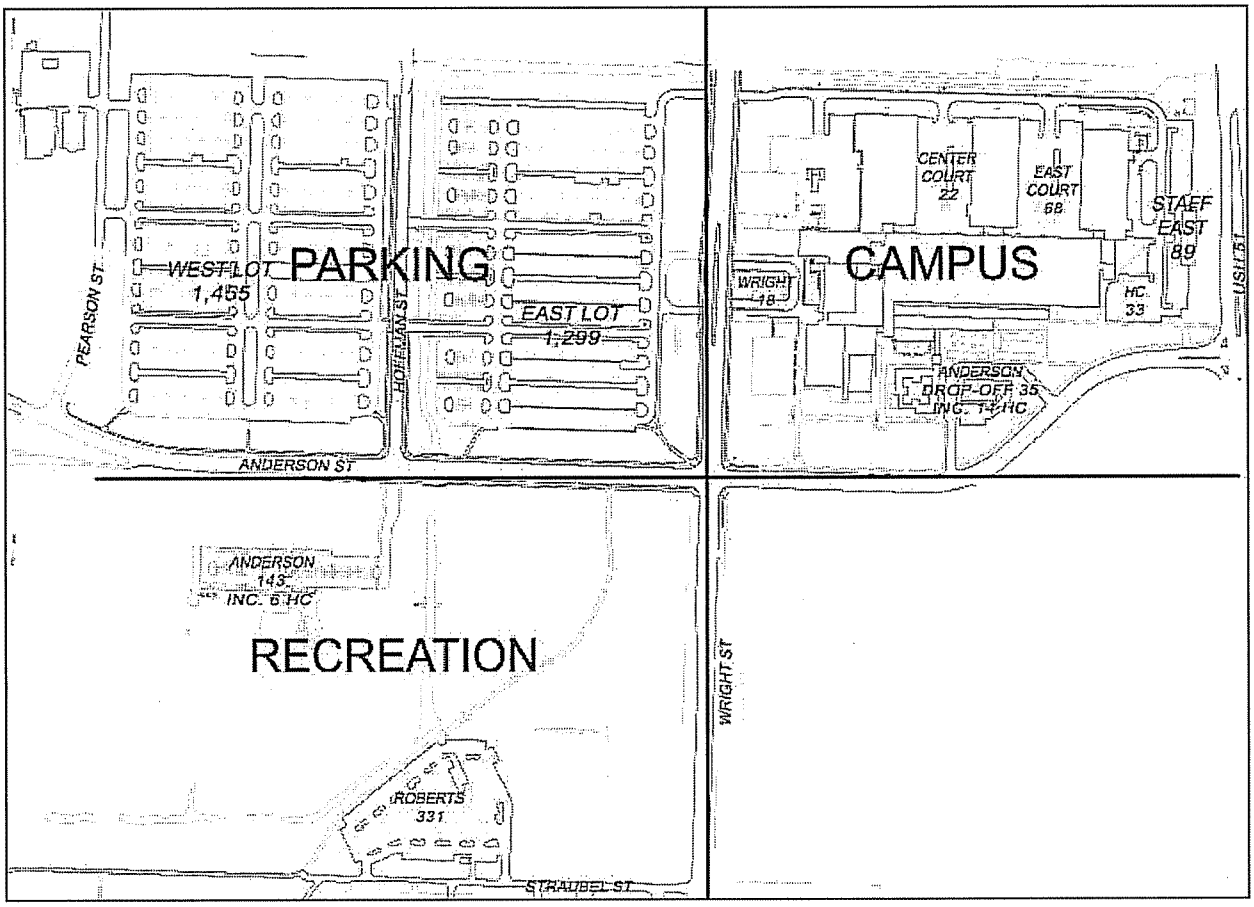

Figure 1: Truax campus parking lot locations

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EXISTING CONDITIONS

The Truax campus currently has 3,493 vehicular parking spaces. These parking spaces are segregated by staff, students, visitors and handicapped. The parking space breakdown is shown in **Table 1.**

Use	Spaces
Students	2,766
Staff/Administration	433
Visitor	133
Handicapped	71
Maintenance/Lab	90
Total	**3,493**

Table 1: Existing Truax campus parking supply breakdown

The parking is distributed throughout the campus on 9 separate parking lots as shown in **Figure 1.** A breakdown of the number of spaces in each lot is shown in **Table 2.** The first five parking lots shown in the table are the main parking areas for campus parking for students, staff and faculty. There are a total of 3,350 spaces in these five lots. In addition to the vehicular parking, there are a total of 230 bike parking spaces at both the Wright and Anderson entrances. The north end of the East Lot also has 113 spaces for motorbikes.

Parking Lot	Spaces
East Lot	**1,299**
West Lot	**1,455**
Anderson	**143**
Roberts	**331**
Staff East	**122**
Center Court	22
East Court	68
Wright Drop Off	18
Anderson Drop Off	35
Total	**3,493**

Table 2: Existing Truax campus parking supply locations

In order to determine the actual parking demand, a parking inventory was conducted on the Truax campus on Monday, February 21 and Tuesday, February 22. The parking demand does fluctuate by semester and day of the week. We understand that in the first week or two of the semester, especially the fall semester, parking demand exceeds supply and students are parking in the grass areas, etc. We also understand that parking is highest at the beginning of the week and tapers off later in the week. The parking inventory included recording the number of spaces that were occupied each hour from 7:00 a.m. until 6:00 p.m. in each of the five main parking areas. The other four lots had virtually no turnover or were specialized (e.g. handicapped) with few spaces available and little parking turnover. The total parking demand is shown in **Figure 2** for all five of the main lots and represents an 11 hour period of time between 7:00 a.m. to 6:00 p.m. Based on this inventory, it was determined that the peak hours of demand for parking are between 10:30 a.m. and 2:00 p.m. during the weekday. The total utilization of spaces is 2,406 at the peak which is 72% of the total 3,350 spaces in the five main lots. A general rule of thumb is that a parking lot demand in excess of 90% is considered full. At the level of demand above 90%, vehicles must spend an inordinate amount of time looking for empty parking spaces.

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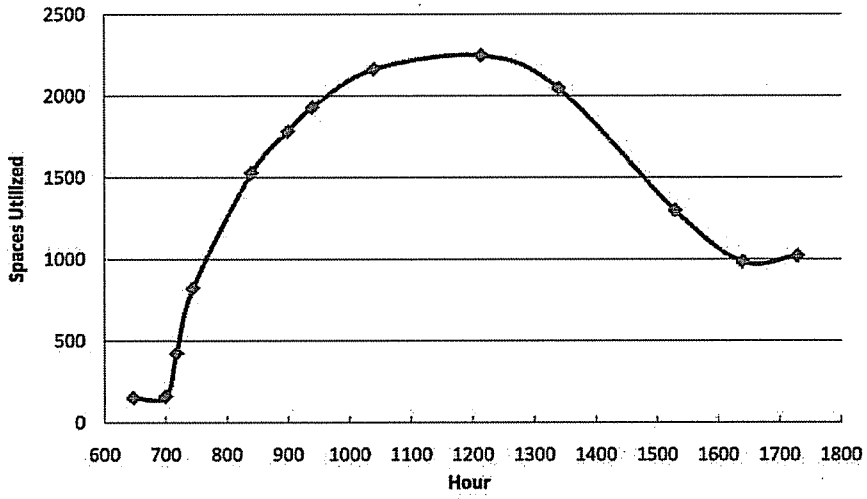
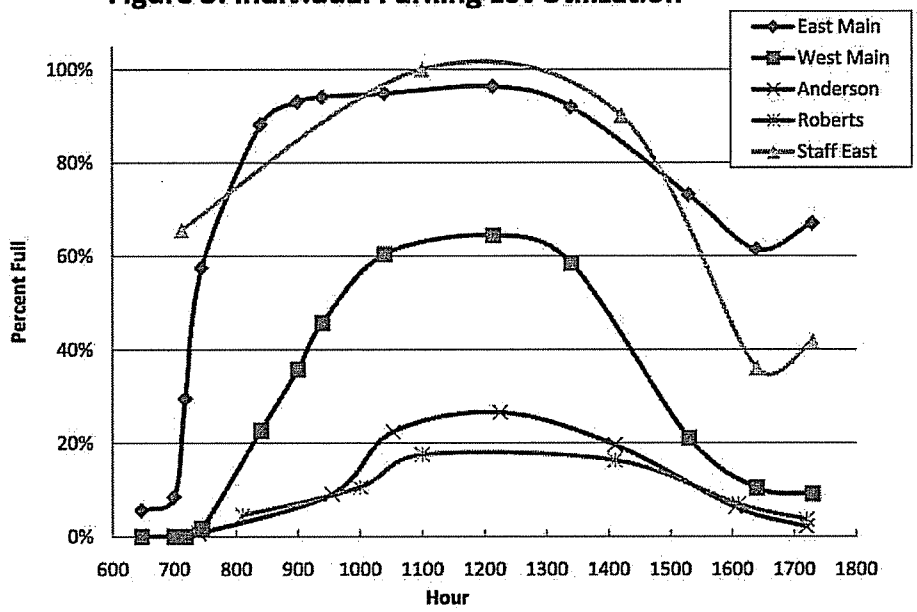
Figure 2: Total Parking Demand



The demand for each of the parking lots varies at a rate that is roughly proportional to the distance from campus. **Figure 3** shows the breakdown of parking lot demand (as percent capacity) for each of the five main parking lots on the campus from 7:00 am to 6:00 p.m. These percentages vary from over 90% for the Staff East and East Main lots (considered full) to 65% for the West lot, 28% for the Anderson lot, and 24% for the Roberts lot.

Figure 3: Individual Parking Lot Utilization



Comparison of parking demand versus supply is based on two factors; first is the amount space relative to demand and the second is the location of parking. In most cases, primary parking supply is considered to be within a ¼ mile walking distance. In that case, two of the parking lots (Staff East and East Main) are within the ¼ mile distance and considered full during the peak hour. The western portion of the West Main and both the Anderson and Roberts lots are beyond the ¼ mile walking distance (but within ½ mile walking distance) and consequently their usage is less. Sixty percent of all parking on campus is within ¼ mile walking distance and

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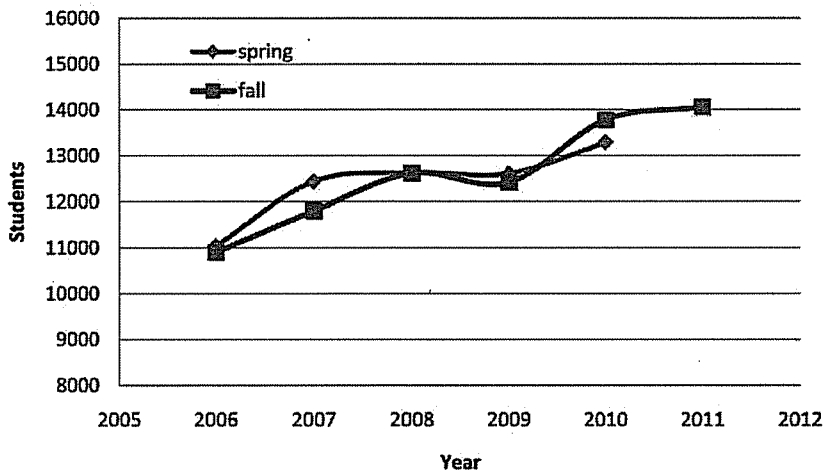
all parking is within ½ mile walking distance currently. Based on our findings, there is adequate parking on campus for the current parking demand (Spring 2011). Based on recent enrollment trends, we know that the spring semester enrollment is 3-6% lower than in the fall semester. Since the parking counts were taken in the spring semester, accounting for this difference would translate to a parking demand increase over what was measured. As a conservative measure, we assumed a difference of 10% (which is higher than the 6% trend). This would drive the overall parking usage to 82% or roughly 2,750 parking spaces. Adding the additional parking spaces (and assuming full usage) in the other four parking lots, brings the total demand to 2,880 spaces. If we assume capacity at 90% of supply, our total parking demand for the campus in 2011 is 3,200 parking spaces. Of the current supply of 3,493 total spaces, 90 are dedicated to college vehicles leaving a net supply of 3,400 spaces. Given the current demand of 3,200 vehicles, this would leave a net surplus of 200 parking spaces on campus.

The upward trend for the college's enrollment over the last five years by semester is shown in **Figure 4.** The college's fall enrollment was 14,056 students and 907 full and part-time faculty and staff. There are no figures on the current spring semester enrollment. For comparative purposes, the total school population (students, faculty and staff) to parking supply ratio for the Truax campus is 0.23 spaces per student. Comparing this nationally with other suburban Junior/Community Colleges based on *Parking Generation 3rd Edition,* published by the Institute of Transportation Engineers, the average parking supply nationally is 0.23 spaces per school population. Similarly the parking demand varies from 0.15 to 0.36 spaces per school population. The average parking demand nationally is 0.21 spaces per school population. Using this comparison and applying it to the Truax campus would result in a parking demand of 0.21 spaces per student population. This indicates that both the existing parking supply and demand of parking is within the national average. The peak hour of demand nationally is 10:00 a.m. This compares with the Truax campus peak hour of demand which is closer to the 12:00 noon hour.

Based on this comparison, the current college parking supply of 3,400 spaces and demand of 3,200 spaces for 14,963 students, faculty, and staff falls within the average norm of other similar institutions nationally.

For another comparison, the city of Madison's zoning code uses a ratio of spaces per student, faculty and staff as a recommendation for college campus off-street parking. Based on this ratio, a total of 3,740 parking spaces would be recommended or 340 more spaces than currently available.

Figure 4: Truax Enrollment Trends



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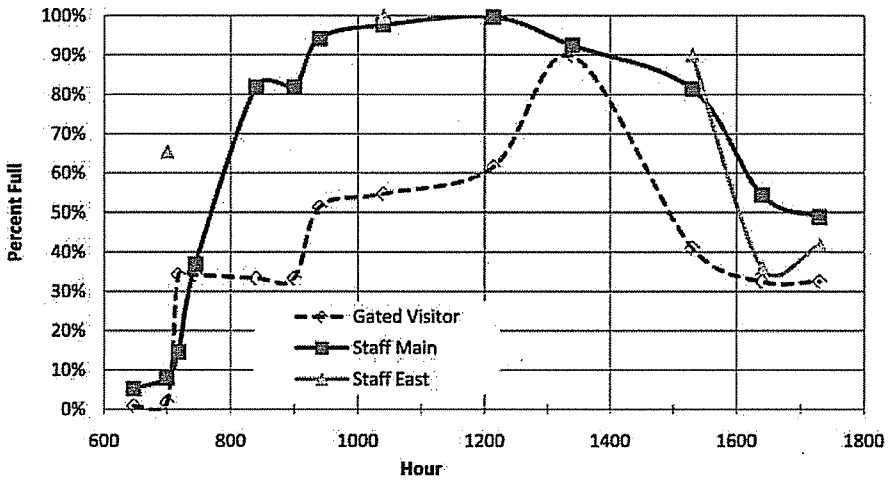
Since staff and visitor parking supply are also an important issue and these uses are separately designated, we did review their demands. **Table 3** shows that the demand for both of these uses is at its capacity.

	Capacity	Peak Count	%
East Lot: Staff Rows	344	343	100%
Staff East (Reserved)	89	89	100%
East Lot: Visitor Row	37	37	100%
East Lot: Visitor Gated	80	74	93%
Anderson Short Term Visitor	16	16	100%

Table 3: Truax campus visitor and staff parking demand and supply

Figure 5: Staff and Visitor Parking



The peak hours for staff and visitor usage are shown in **Figure 5**. Staff usage peaks at 9:00 a.m. through 2:00 p.m. before it starts to fall off. Visitor parking is going to fluctuate from day to day and is much more difficult to define a trend. During the parking study, visitor parking peaked between 1:00 and 2:00 p.m.

Based on our records, the Truax campus employs 575 full-time staff and 332 part-time staff for a total of 907 staff. There are a total of 433 parking spaces which provides a ratio of 0.48 spaces per staff member (full or part-time). There are no national figures on a recommended ratio, but assuming 0.70 spaces per full-time employee and one space for every four part-time employees would require 485 spaces which are approximately 50 spaces short of the number needed to meet present staff parking needs and 150 additional spaces are needed to meet the long term parking demand. There are also a total of 133 existing visitor parking spaces. There are no given ratios for parking supply, but assuming that the college would like to maintain its' current ratio, there would need to be 27 more spaces to meet the long term need.

The demand and usage of the bicycle and motor bike spaces were not counted due to the time of the year and the inclement weather during the counts.

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CAMPUS IMPROVEMENTS

TThe Campus Master Plan projects an increase in enrollment of 20 percent to 16,500 students and an increase in parking to 3,830 surface parking spaces and a 295 space parking ramp. This would increase the current number of spaces from 3,400 to 4,125 future parking spaces. This would closely maintain the current parking supply ratio of 0.23 spaces per school population.

The first phase of building construction will include the four buildings shown in Figure 6: the Student Success Center, Transportation Center, Allied Health and Fire, and Protective Services. It is estimated that the footprint of these buildings will result in the permanent removal of approximately 650 parking spaces and the temporary removal of an additional 100 spaces during construction. In addition, another 100 parking spaces will be removed as a result of improvements to the existing drainage channels. Based on this analysis, the current parking supply of 3,400 spaces will be reduced to 2,750 spaces with the new building construction on a permanent basis and 2,550 spaces temporarily during the construction phase.

On the completion of the Phase I building construction, approximately 1,000 students and faculty currently located at other Madison College facilities will be moving to the Truax campus. At the current student to parking ratio, this will result in the need for an additional 250 parking spaces at the completion of Phase I construction. Assuming that the current parking demand of 3,200 parking spaces increases to 4,125

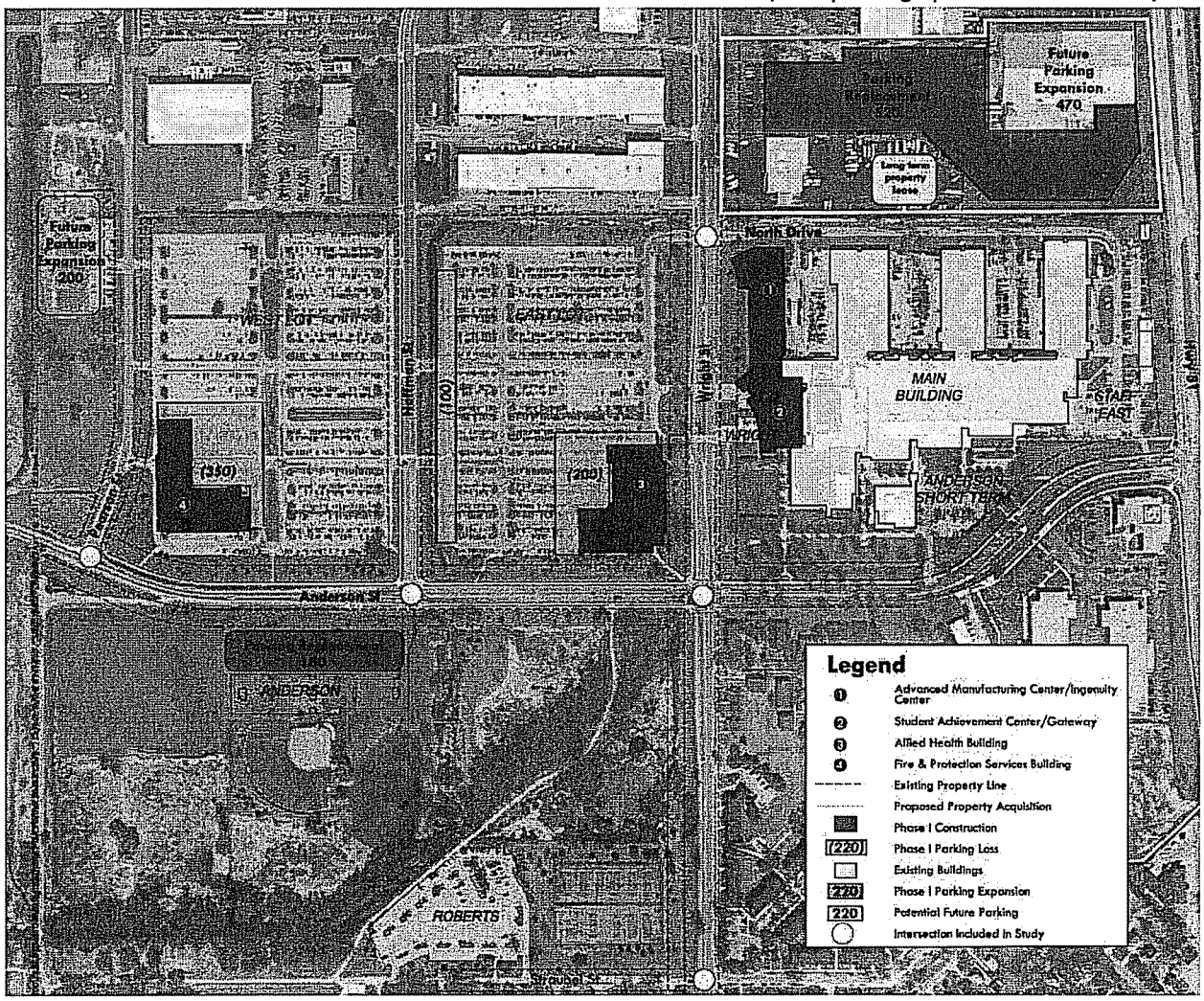

Figure 6: Phase 1 building improvements and parking expansion

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parking spaces as projected in the Campus Master Plan. The breakdown of current and future parking needs is shown in Table 4.

Current Parking Supply	*3,400*
Current Parking Demand	*3,200*
With additional Phase I Program Demand	*3,450*
Future Parking Demand (w/ 20% growth)	*4,125*
Phase 1Temporary Supply Reduction	*850*
Phase 1 Permanent Supply Reduction	*650*
Phase 1 Parking Demand Needs	*700*
Additional Future Parking Demand Needs	*725*

Table 4: Summary of Truax campus existing and future parking demand and supply

Because there is some available supply of parking spaces, the immediate short-term reduction of 850 parking spaces during the construction of the new buildings can be compensated by the construction of an additional 650 replacement spaces. Upon the completion of the Phase 1 construction, the transfer of students from other campuses will result in the need for an additional 250 spaces. However, upon the completion of construction, 200 parking spaces will be added by the removal of construction equipment and the additional parking spaces that are programmed with the buildings. This net result is the need for an additional 700 replacement parking spaces concurrent with the beginning of construction for Phase 1. An additional 725 parking spaces will be need to be programmed in the future to meet the growth projections for the campus.

RECOMMENDATIONS

In order to meet the needs of parking in the short and long term for the Truax campus, the following recommendations need to be implemented:

Phase 1 Short Term

1. Conduct a second round of parking counts the last two weeks of the spring semester (2011) and the first two weeks of the fall semester 2012 to verify peak parking demand.

2. Revise parking requirements as the new building footprints are finalized.

3. Continue to explore options for reducing parking demand during peak hours (adjust class times, alternative class locations, car pool, transit, and other transportation demand management (TDM) measures).

4. As a part of the restriping of the north parcel with 520 spaces; move the existing faculty parking (345 spaces) from the East Main lot to this location plus 50 additional faculty spaces for a total of 395 faculty spaces out of the 520 total spaces.

5. Expand the existing Anderson lot by 180 spaces.

6. Phase the construction of the new parking lot locations to replace the parking that is eliminated as building construction requires.

Long Term

1. Identify locations for an additional 725 spaces for future parking. This could include the parking areas identified in Figure 6 including additional parking north of the campus on property recently purchased and west of Pearson on property currently used for fire training.

2. Explore the possibility of remote parking and shared parking with other uses in the neighborhood that may have complementary parking needs.

3. Continue to promote alternative modes of transportation to reduce parking needs.

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