



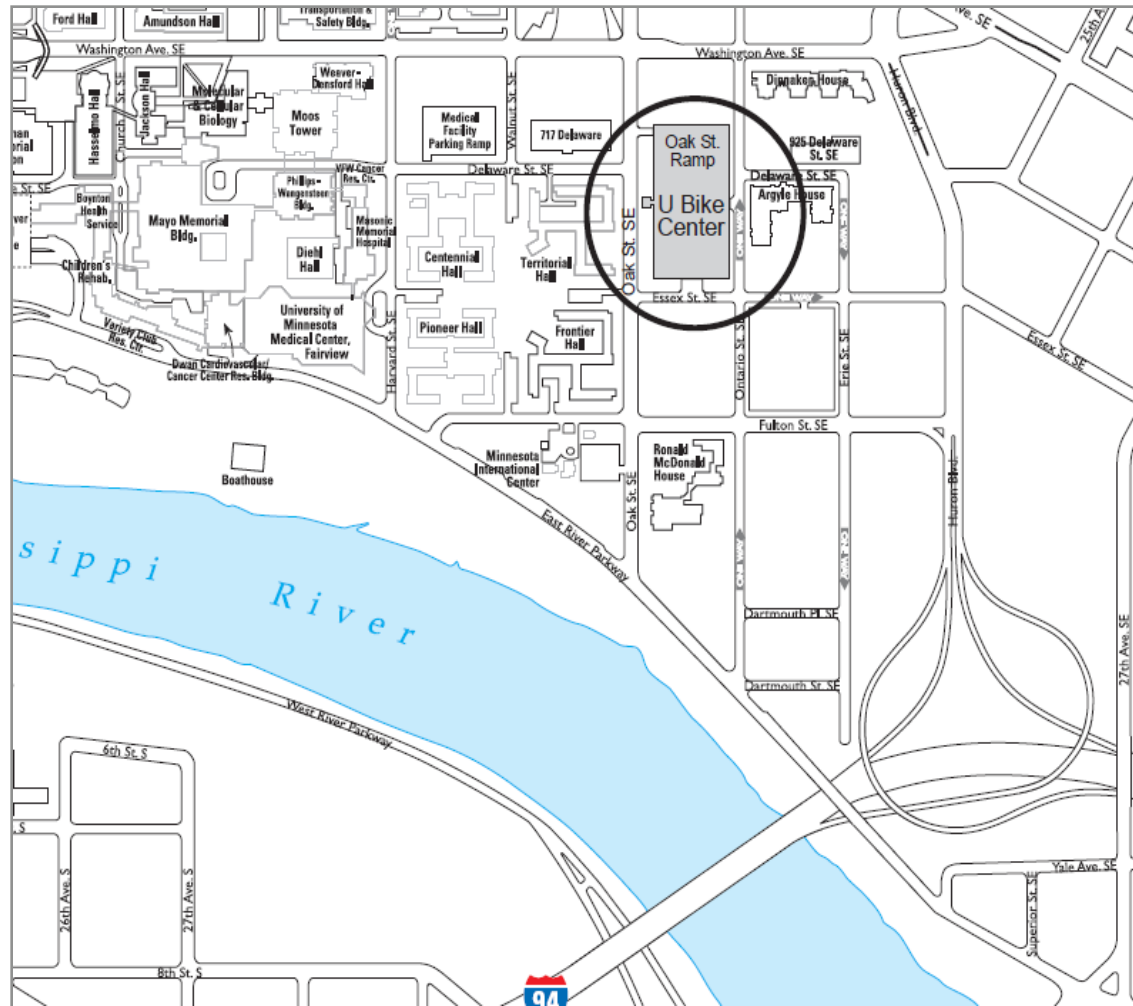
UNIVERSITY OF MINNESOTA

**Oak Street Ramp
Bike Center & Radio Frequency
Identification System**

Twin Cities Campus

Board of Regents Facilities Committee, September 8, 2010

Location Map





Project Description

- University Bike Center Features:
 - Upgraded mechanical systems (1976)
 - 1,800 finished sq. ft. with adjacent 2,800 sq. ft. secure bike storage
 - 252 sheltered secure bike parking
 - Lockers, changing facilities and three showers
 - Gate and doors secured by electronic card access; 24 hour access to members
 - On-site staff during daytime, including a bike mechanic
 - Retail bike parts and accessories
 - Meeting space and information for cyclists including safety, how-to classes, printed literature, maps, electronic information kiosk
 - Nice Ride bike rentals and loaners
- Bike Center Functionality
 - Approximately \$85 annual membership fee
 - Repair services similar to car service station
 - Program resource center for on-site classes and meetings

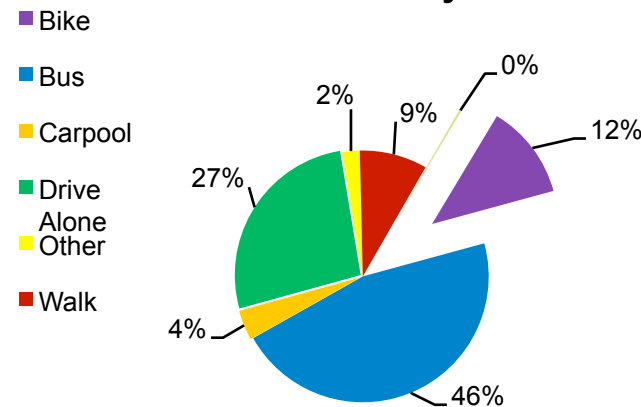
Project Rationale: Campus Master Plan

- Consistent with Movement and Circulation Guiding Principles by
 - Developing integrated transportation systems emphasizing pedestrians and transit
 - Ensuring that campus is environmentally and operationally sustainable
- Co-locating bike storage and service facilities with parking facilities saves resources and offers commuters improved transportation alternatives
- Supply of bike lockers and racks which reflect the overall travel patterns and demand
- Utilizing available space which is safe, visible, well-lit and weather protected

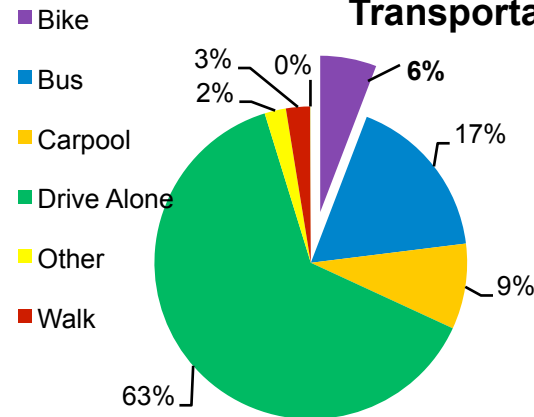
University of Minnesota Bike Share Compared to National, State and Local Shares

- ❑ 5,500 - 6,000 daily
- ❑ Mode Share
 - 12% - Student
 - 6% - Faculty, Staff
- ❑ Area Bike Mode Share
 - 3.8% - City of Minneapolis
 - 1.3% - State of Minnesota
 - 0.5% - National

Student's Primary Mode of Transportation



Staff/Faculty Primary Mode of Transportation





City of Minneapolis Bike Count Statistics

University of Minnesota Campus includes the top three highest bike counts in city:

- ❑ 15th Avenue SE north of 5th Street, with an estimated 3,570 cyclists/day
- ❑ Washington Avenue SE west of Union Street, with an estimated 3,350 cyclists/day
- ❑ Washington Ave Bridge has estimated 6,770 cyclists/day

Also of note:

- ❑ Oak Street has estimated 1,110 cyclists/day



Project Rationale

- University's Twin Cities Campus is home to more than 5,000 bicycles every day

- Oak Street Ramp Bike Center supports the Board of Regents Policy: *Sustainability and Energy Efficiency*
 - Promotes energy conservation
 - Reduces carbon emissions
 - Reduces traffic congestion
 - Encourages healthy life choices

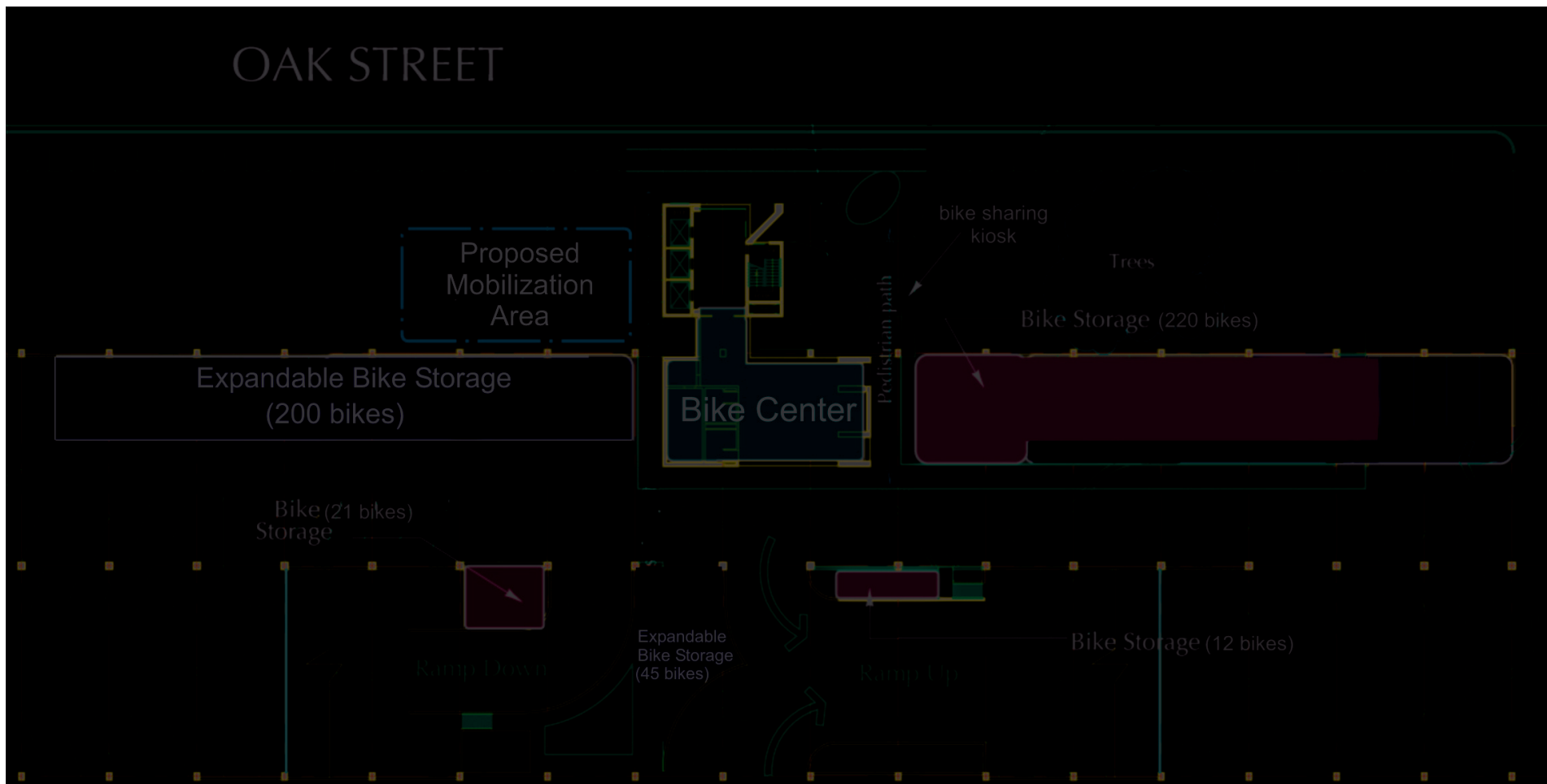
- Effective use of an existing University asset, the decommissioned transit waiting area of the Oak Street Parking Ram



Project Rationale: Capital Plan Metrics

- Ensure student success by:
 - Recruiting, educating, supporting and graduating students
 - Enhancing student satisfaction
- Protecting public assets and investment by:
 - Implementing master plans and advancing sustainability
 - Optimizing the use of existing space
- Recognize current extraordinary financial realities by:
 - Identifying source of revenue
 - Leveraging University resources with Federal funding opportunities

University Bike Center Overview

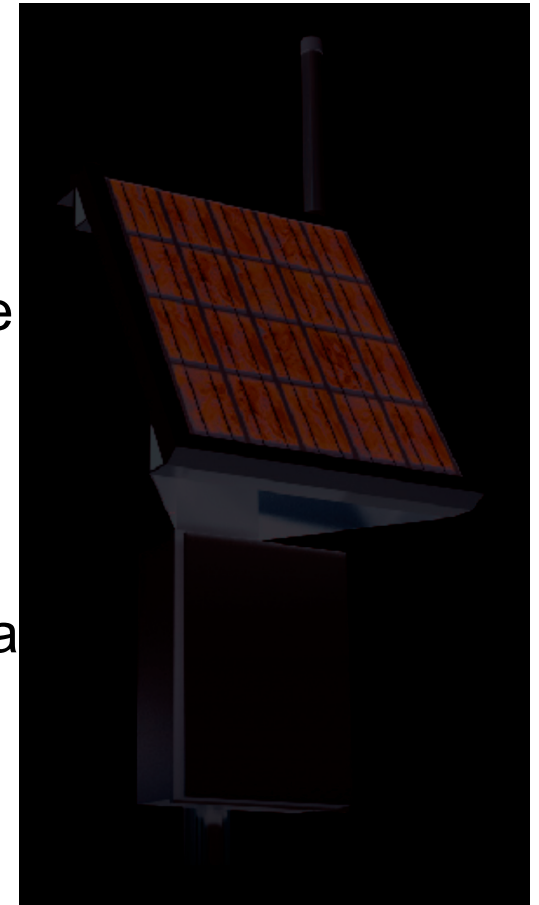


University Bike Center Interior Space



Radio Frequency Identification System

- ❑ Radio Frequency Identification (RFID) is electronic commuter verification system.
 - Bike commuters request an RFID tag that is attached to their bike.
 - Sensors placed throughout campus read the RFID tag and the number of trips taken are stored in a database.
 - Verifies that commuters meet minimum requirements for University/federal benefits, such as Wellness Rewards and commuter tax benefits.
- ❑ RFID provides:
 - Data for research





Research Potential

- ❑ Helps assess the health impacts of bike infrastructure.
- ❑ Grant proposal submitted to study the effects of this project in collaboration with:
 - Civil Engineering
 - Geography
 - Medicine
 - Hubert H. Humphrey Institute of Public Affairs
- ❑ The first-of-its-kind Radio Frequency Identification program measures carbon reduction of bike commuters.



Non-Motorized Transportation Pilot Program

- Initiative by Minnesota Congressman Jim Oberstar to increase rates of bicycling and walking
- The University of Minnesota Twin Cities is part of only four nationwide localities to be selected to participate in program
- Program has awarded the University a \$559,000 grant for this project

Project Costs

Cost Estimate

■ Construction Costs	
■ General Construction	\$ 320,000
■ Mechanical systems and abatement	\$ 155,000
■ A & E/project management	\$ 121,000
■ Radio Frequency Identification/Research Project	\$ 100,000
■ Contingencies	<u>\$ 81,000</u>
■ Total Project Cost	\$ 777,000
■ Project Funding	
■ GRANT: MN/Federal Dept of Transportation Non-Motorized Transportation Pilot Program	\$ 559,000
■ University Parking and Transportation fund	<u>\$ 218,000</u>
■ Total Project Funding	\$ 777,000



Project Costs - continued

- Architect:
 - Carlson Frank Architects, LLC
- Project Delivery Method:
 - Design – Bid – Build, required by Federal Highway Administration
- Contractor - To be determined
- Anticipated Completion – Spring 2011
- Estimated Annual Operating Costs/Utilities: \$12,000
- Operator: Hub Bike Co-Op



Cost Comparison / Analysis

- University Bike Center – Minneapolis, MN
 - Construction cost \$777,000
 - Cost/sq ft. \$168
- Bike Station – Washington D.C.
 - Construction cost \$4,000,000
 - Cost/sq ft. \$2,500
- Midtown Greenway Bike Center – Minneapolis, MN
 - Construction cost \$835,000
 - Cost/sq ft. \$209
- McDonald's Cycle Center – Chicago, IL
 - Construction cost \$3,200,000
 - Cost/sq ft. \$200
- Parking stall cost: \$20,000 – equivalent parking at project cost: 38 spaces

Building Exterior – Oak Street Ramp



**Bike Center Announcement
March 2010
Oak Street Ramp**



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