



Campus Planning Committee

Facilities Planning & Management

March 11, 2021

Agenda

1. Welcome & Introductions

2. Old Business

- a) Approval of Feb. 11, 2021 meeting minutes (*Action*)
- b) Status report on 2021-23 Capital Budget (Rob Cramer)
- c) Status report on 2023-25 Capital Budget Planning (Kip McMahan)

3. New Business

- a) 2021 Sustainability Overview (Missy Nergard)

4. Announcements

5. Adjournment

Status Report – 2021-23 Capital Budget

Governor Evers' Recs; goes next to State Building Commission on March 15-17, 2021

1.	Music Hall Restoration	GFSB	\$ 26.4 M	recommended for approval
2.	Engineering Drive Utilities	GFSB/PRSB	\$ 73.1 M	“ “
3.	College of Engineering Building, Phase I	GFSB/Gifts	\$150.0 M	“ “
4.	L&S Academic Building	GFSB/Gifts	\$ 88.4 M	“ “
5.	South Central Campus Steam Utility – BTF Planning funds only		\$ 4.0 M	not supported by Governor Evers
6.	Art Lofts Addition & Renovation – BTF Planning funds only		\$ 6.8 M	not supported by Governor Evers
•	Land Acquisition	Cash	\$ 11.7 M	moved to All Agency funding
•	All Agency Maintenance funding	GFSB	\$ 150.0 M (this the total UWSA amount)	* Not included in total below – TBD
•	Instruction Space upgrades	GFSB	\$ 31.88 M	(\$0 for MSN supported by UWSA)
•	Minor Facilities Renewal funding	GFSB	\$ 100.43 M (6 projects for MSN supported)	
			TOTAL: \$482.18 M supported (of \$495.18 M req ³ .)	

Status Report – 2023-25 Capital Budget Planning

FP&M staff meetings w/ all Schools, Colleges & Divisions – over 50% **completed**; done end of March
Deadline for prioritized project/issues lists is **June 4, 2021**

Athletics

Campus Libraries

College of Ag & Life Sciences

College of Engineering

College of Letters & Science

Division of Conference Centers

Division of Continuing Studies

Division of Student Affairs, Cabinet

DoIT

FP&M, Transportation Services

FP&M, Utilities

Housing

International Division

Law School

Nelson Institute

Recreation & Wellbeing

Research & Graduate Education

ROTC Units

School of Education

School of Human Ecology

School of Medicine & Public Health

School of Nursing

School of Pharmacy

School of Vet Med

Student Affairs, Dean of Students

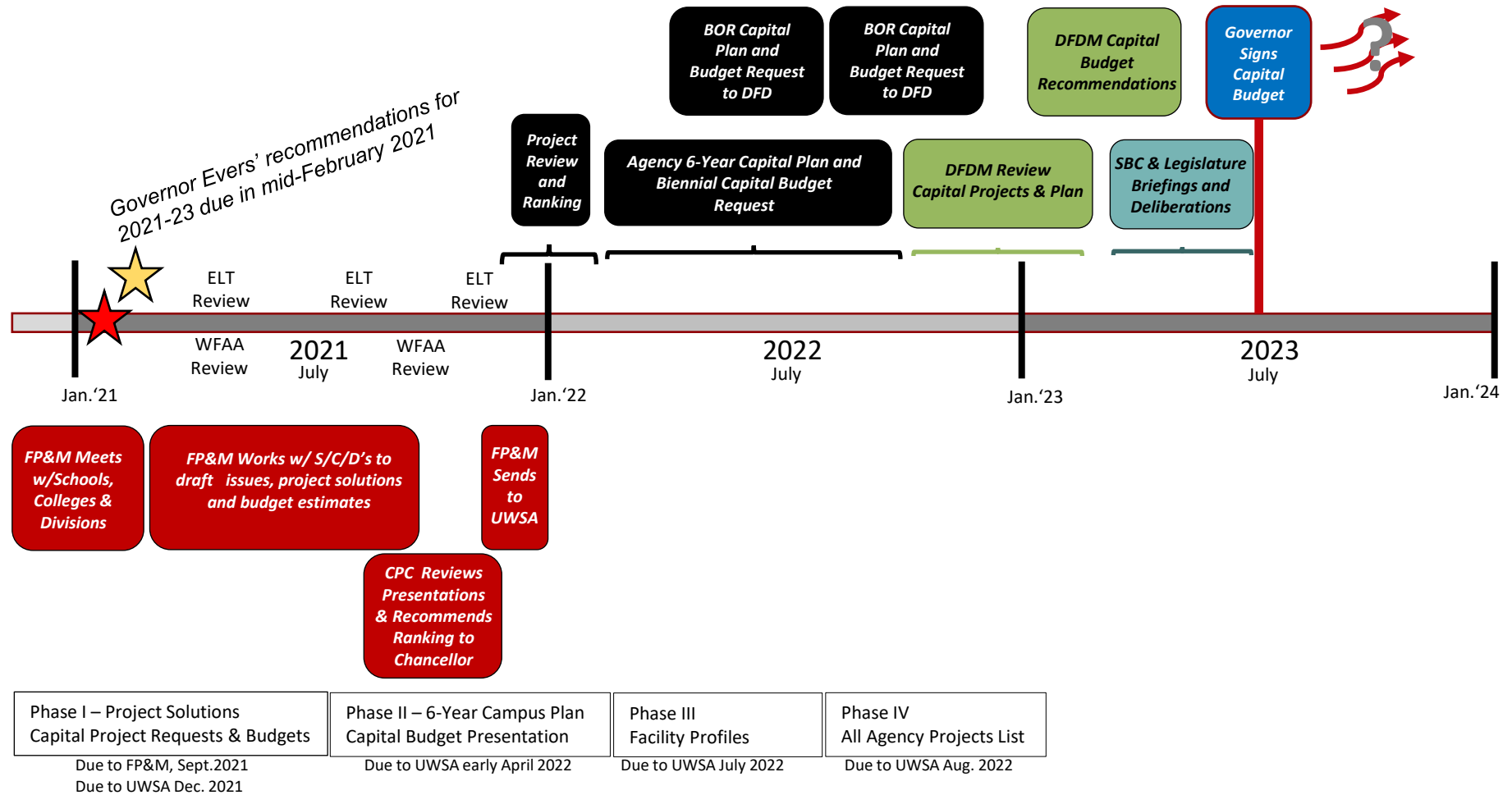
University Health Services

UW Police Department

Wisconsin Public Media

Wisconsin Union

University of Wisconsin System 2023-2025 Capital Budget Timeline





Office of Sustainability
UNIVERSITY OF WISCONSIN-MADISON



Designing for Institutional Sustainability in Higher Education

Agenda

- University Mission & Sustainability
- Connections, Dimensions of a Sustainable Campus
- Designing for Learning, Teaching & Research
- Resilience (Situating the institution for the long-term)
- Goals, Synergies, Opportunities (Leapfrogging)
- Discussion
- Appendix: Facts & Figures for Reference

The primary purpose of the University of Wisconsin–Madison is to
provide a learning environment
in which faculty, staff and students can
discover, examine critically, preserve and transmit the knowledge,
wisdom and values
that will help ensure the
survival of this and future generations
and
improve the quality of life for all.

- University of Wisconsin-Madison Mission Statement

Dimensions of Sustainable Design in Higher Education Campuses

Learning

Research

Economy

Energy

Well-Being

Equitable
Communities

Ecosystems

Change

Resources

Discovery

Integration

Water

Priorities

- Integration & Inclusivity
 - Is every space welcoming, comforting, inspiring, safe, community-building?
- Equity, Health & Wellness
 - How can we help people feel better, physically and mentally?
- Transparency & Visibility
 - What is our impact?
- Opportunities with this framework
 - What do we want to be known for and how can this framework get us there?

- Be ambitious – how can this framework (and forward-thinking) maintain our persistence as a leader over time
- Energy efficiency and renewables are no longer differentiators, they are the expectation
- Roadmap to institutional goals for Resilience, Equity, Carbon, Educational Outcomes...

Learning Outcomes

Wildlife Ecology

- Define and explain basic principles in biological sciences and major concepts in wildlife ecology including, population ecology, organismal biology, plant ecology/taxonomy, and genetics/evolution.
- Explain and discuss principles of wildlife management including natural resource legislation, policy, and applications.
- Explain and apply the scientific methods including designing and conducting experiments and testing hypotheses.
- Explain and demonstrate techniques for collection of data in laboratory and field settings, keep accurate records, and analyze data to address hypotheses.
- Demonstrate a style appropriate for communicating scientific results in written and oral form. Provide opportunity to develop these communication skills.



iSchool

- Students demonstrate understanding of societal, legal, policy or ethical information issues.
- Students apply principles of information organization.
- Students apply appropriate research methodologies for inquiry or decision making.
- Students demonstrate understanding of professional competencies important for management of information organizations.
- Students demonstrate competency with information technologies important to the information professions.
- Students apply theory to professional practice.
- Students demonstrate understanding of issues surrounding marginalized communities and information.

Design for Learning

Desired Outcome: Connections

- Campus as a Living Lab – enabling curricular and research connections with operational and administrative functions
- Utilize research on the environmental conditions that enhance cognition, wellbeing and health to inform campus design standards
- Provide guides and training on how to use the campus for teaching and learning
- Identify the spaces and amenities that contribute to mental wellbeing, and incorporate learning about self-care in the curriculum
- Add an assessment of formal learning spaces in end of semester evaluations

UW-Madison Sustainability Dimensions

- Identify and Incorporate attributes that contribute to the physical and mental states conducive to learning (informed by research)
- Create spaces that enable cultural literacy, and are inclusive and welcoming to all (informed by asking; also includes incorporating diverse academic cultures)



Student Artwork in the College of Letters and Science
Office of the Dean
Campus Art Exchange Program – A Curated Collection

Design for Research

Desired Outcomes-Connections

- Partner with established businesses statewide in collaborative research
- Identify research needs for administrative and operational functions
- Apply research on campus. Make it visible and informative – interactive
- Provide IRB-ready campus data-sets
 - Identify data steward contacts
 - Identify available data sets
 - Identify attributes of available data

UW-Madison Sustainability Dimensions

- Identify means to use the facility and its occupants for research
- Identify and design means to share and publicize research within the building
- Use research to inform future building processes (also “Design for Discovery”)



Parents today are faced with questions and concerns over how much screen time is too much or too little. Professor Rebecca Willett's research aims to help researchers to see the complexities of those questions, and better see families as individuals.

Design for Integration

Desired Outcomes: Connections

- Interdisciplinary
- Innovative
- Intersects with social science & humanities
- Cybersecurity & Social Justice
- Broad array of students, expanded access
- Different forms of instruction
- Collaborative educational and research programs across a vast array of disciplines, from medicine to the arts, veterinary science to education, and the life sciences to engineering.

DFD Sustainability Guidelines

Required:

1. Meeting at the beginning of the project
2. Narrative for each measure



Design for Equitable Communities

Desired Outcomes: Connections

- Scholars who can communicate the influences and possibilities of these new techniques and be cognizant of broader societal impacts.
- Create dynamic cultural environments that attract the best talent.
- Understand the human and environmental connections with technology

Examples of learning outcomes from CDIS degrees

DFD Sustainability Guidelines

- WalkScore
- Engagement
- Transportation Carbon Calculator
- Bike Racks
- Mother's Room
- Wellness Room
- Inclusive seating
- All gender single-user restrooms

Design for Ecology

Desired Outcomes - Connections

- Help students become more aware and connected with ecological systems :
 - How development contributes to societal, economic and environmental problems
 - How can we contribute to solutions
- Build resilience
 - Design for climate change
 - Design for electrification
- Reduce carbon

DFD Sustainability Guidelines

- Dark Sky Compliance
- Tree Survey
- Bird Collision Deterrence
- Reduce Urban Heat Island
- Native Vegetation



Design for Water

Desired Outcomes: Connections

- Incorporate water as inspiration, meditation, art
- Incorporate the technology-water nexus
- Bring in the lakes (metaphorically speaking)



DFD Sustainability Guidelines

- Define project boundary
- Oil & Grease control
- Reduce Total Suspended Solids
- Safe overflow
- Indoor water efficiency
- Peak discharge
- Infiltration and stormwater volume control
- Restrict potable water for permanent irrigation

Design for Economy

Desired Outcomes-Connections

- Economic impacts throughout the state are points of pride
- Opportunities to increase minority business enterprise vendor participation
- Opportunities to focus 'upstream' for rigorous human rights in the supply chain
- Opportunities to focus 'downstream' to support local economy through campus diversion efforts

DFD Sustainability Guidelines

- Register for Focus on Energy
- Estimate GHG emissions reduction over baseline
- Right-size



Design for Energy

Desired Outcomes: Connections

- Smart & Connected Systems
- Carbon accounting
- Sourcing considerations and student desire for renewables



DFD Sustainability Guidelines

- Exceed ANSI/ASHRAE/IESNA Standard 90.1-2016
- ASHRAE 90.1-2016 Compliance
- Window to Wall Ratio (WWR)
- Energy modeling
- Chlorofluorocarbon (CFC)-based refrigerant prohibition
- Metering
- Utility data analysis
- Renewable energy on-site
- Envelope
- On-site energy storage

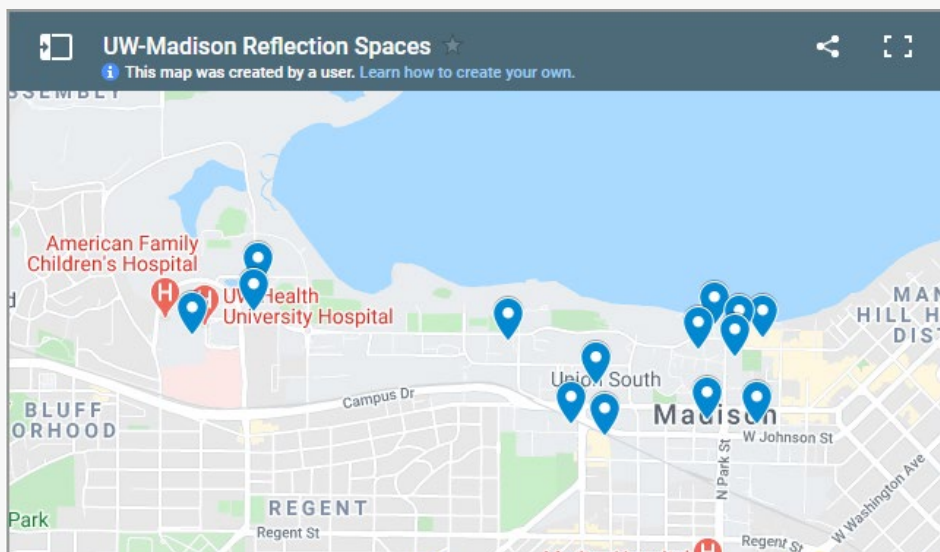
Design for Wellness (and Wellbeing!)

Desired Outcomes: Connections

- Spaces for respite
- Connections to nature
- Inclusivity
- Spaces for collaboration

DFD Sustainability Guidelines

- Mandatory smoke-free
- Biophilic design integration
- Daylighting
- Acoustics* (*also a consideration for voice-responsive technology*)
- Finishes



Design for Resources

Desired Outcomes: Connections

- Impact of materials on human rights, ecosystems and biodiversity
- Prioritize local contractors, particularly MBE
- Prioritize zero-waste initiative in the design, consult the Campus Resource Coordinator and Zero-Waste Committee

DFD Sustainability Guidelines

- Material prohibitions
- Product declarations
- Life Cycle Assessment
- Materials measures (steel, concrete, insulation, wood)
- Prioritize local materials

Design for Change

Desired Outcomes: Connections

- Assess and reassess to inform the next projects and allow for proactive adaptation and responsiveness

DFD Sustainability Guidelines

- Reuse Reporting
- Risk Assessment
- Resilience
- Renewable-Ready
- Interchangeability



Legacy Hall in Grainger

Design for Discovery

Desired Outcomes: Connections

- Enable researchers and educators to incorporate the assets of the campus in their programs
- Open up a vast array of new opportunities for discovery as well as preparation of students for the workforce

DFD Sustainability Guidelines

- Track utilities at intervals for 18 months
- After-Action meeting to learn from and inform future projects
- Pre and Post-occupancy assessments
- Provide training and tours for building owners and maintenance personnel



Build Brand

87%

of university students want their institution to actively promote sustainability

Source: K Rooney, [These are the world's best universities for recycling and sustainability](#), "World Economic Forum, October 30, 2019; [THE Impact Rankings 2020: methodology](#), Times Higher Education, April 17, 2010; KTH Royal Institute of Technology, Stockholm, Sweden; Colorado State University, Fort Collins, CO; EAB interviews and analysis.

How can the impacts of a systems approach be measured?

Assessment of the integrated projects are evaluated in three ways

- 1. Participation in the process – stakeholder participation and degree of involvement throughout the process
- 2. Process outcomes – how do the deliverables advance the institutional mission beyond standard building performance metrics
- 3. Persistence – have the design criteria prioritized by the integrated team remained in the project or been value-engineered (removed)