May 2018

2020 Capital Budget

For Architects & Engineers

What you need to know about the 2020 Capital Budget Process with Minnesota State

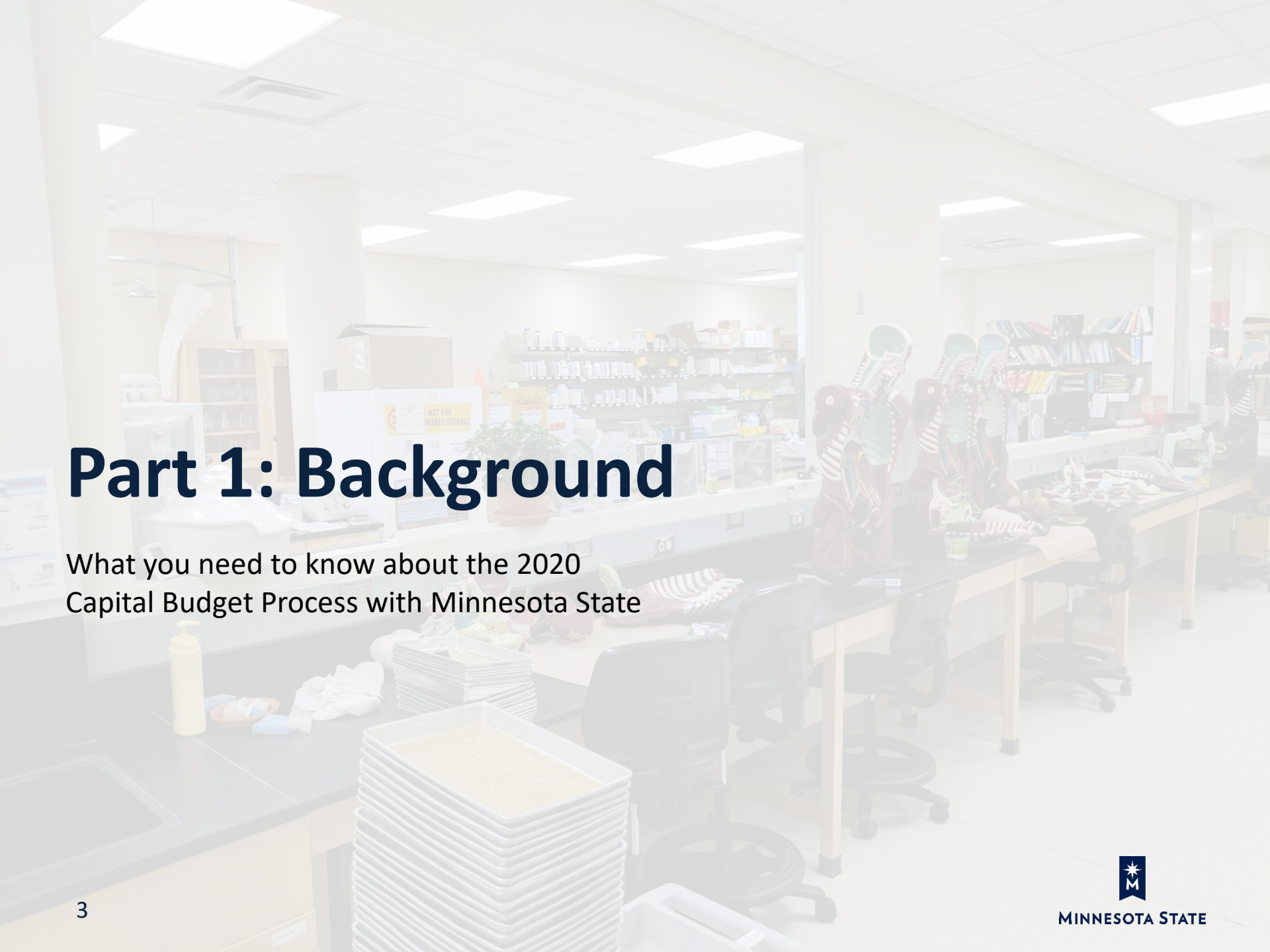
MINNESOTA STATE

Greg Ewig, System Director, Capital Development
(651) 201-1775
Gregory.ewig@minnstate.edu

Michelle Gerner, Senior Planner
(651) 201-1531
Michelle.gerner@minnstate.edu

Agenda

- **Part 1: Background on Minnesota State Capital Budget**
  - What is Minnesota State?
  - Capital Budget history and trends
  - Working with our campuses
- **Part 2: The Essentials**
  - Schedule, guidelines, deliverables, scoring forms
  - Predesign requirements and responsibilities
  - Resources
  - Questions/discussion



Part 1: Background

What you need to know about the 2020
Capital Budget Process with Minnesota State

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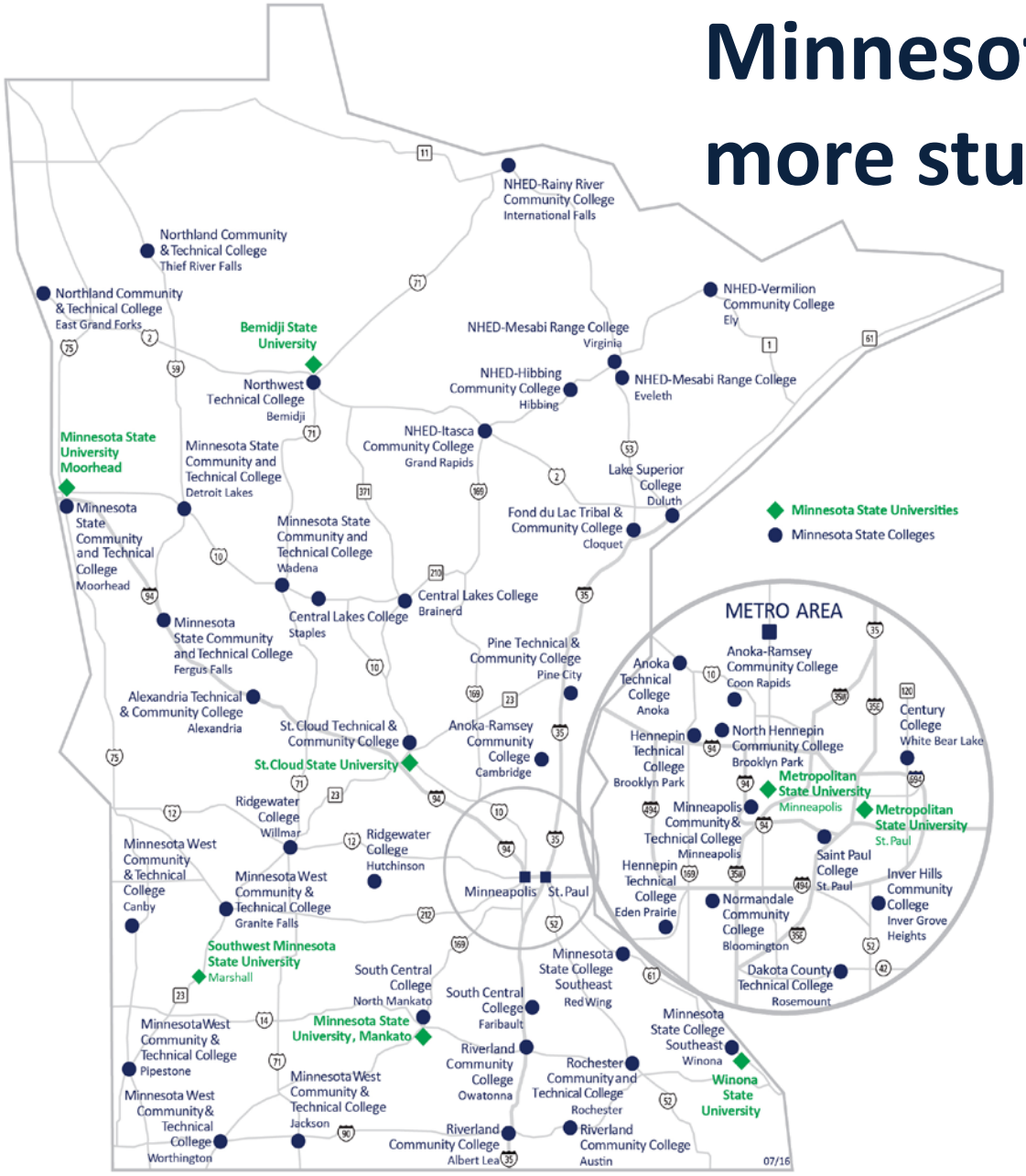
Minnesota State serves more students than UM



375,000+
students served annually

28 million
sq. ft. total

22 million
sq. ft. academic space

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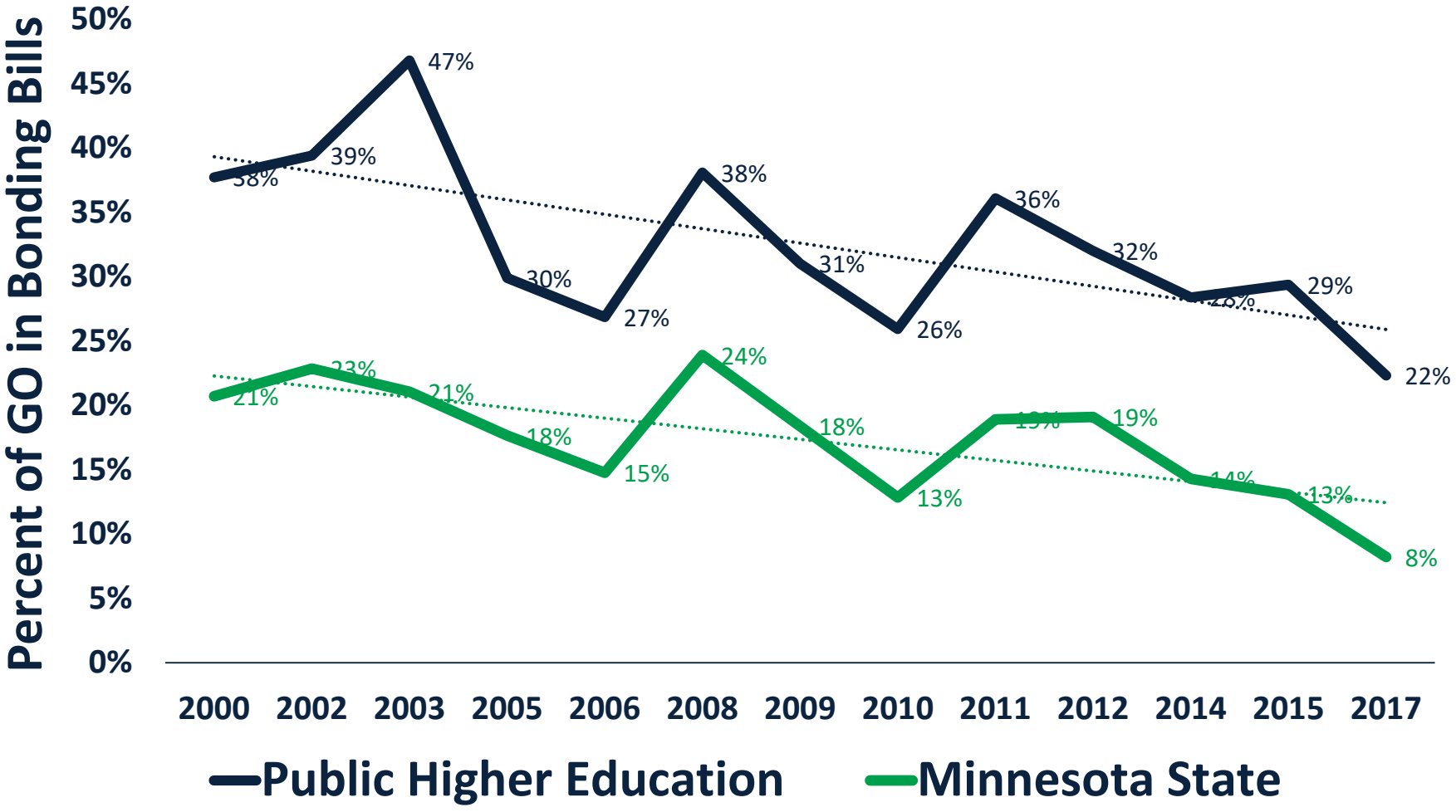
Higher education's share of GO bonding has trended down



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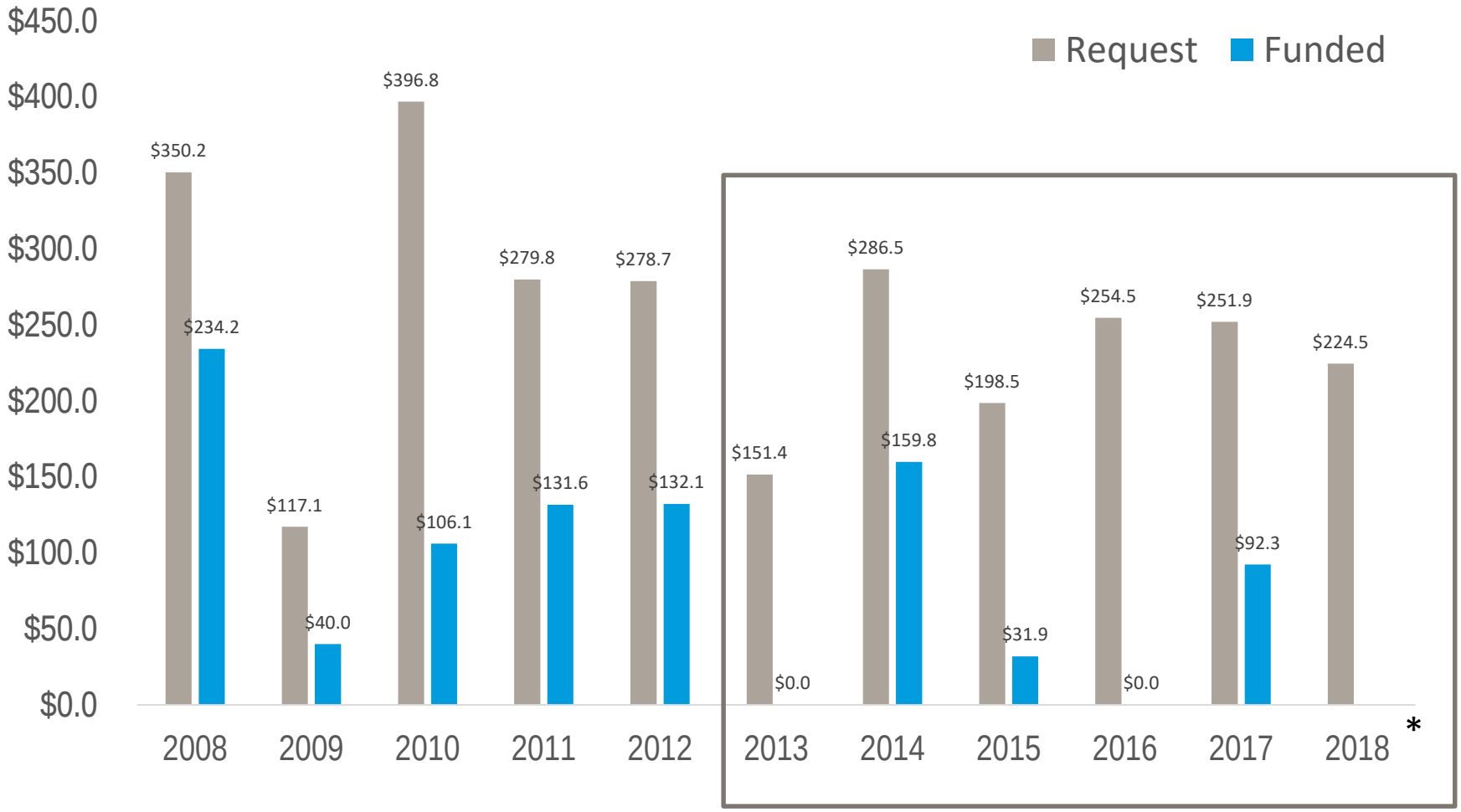
Minnesota State capital funding declines*



* Awaiting the results of 2018 legislative session

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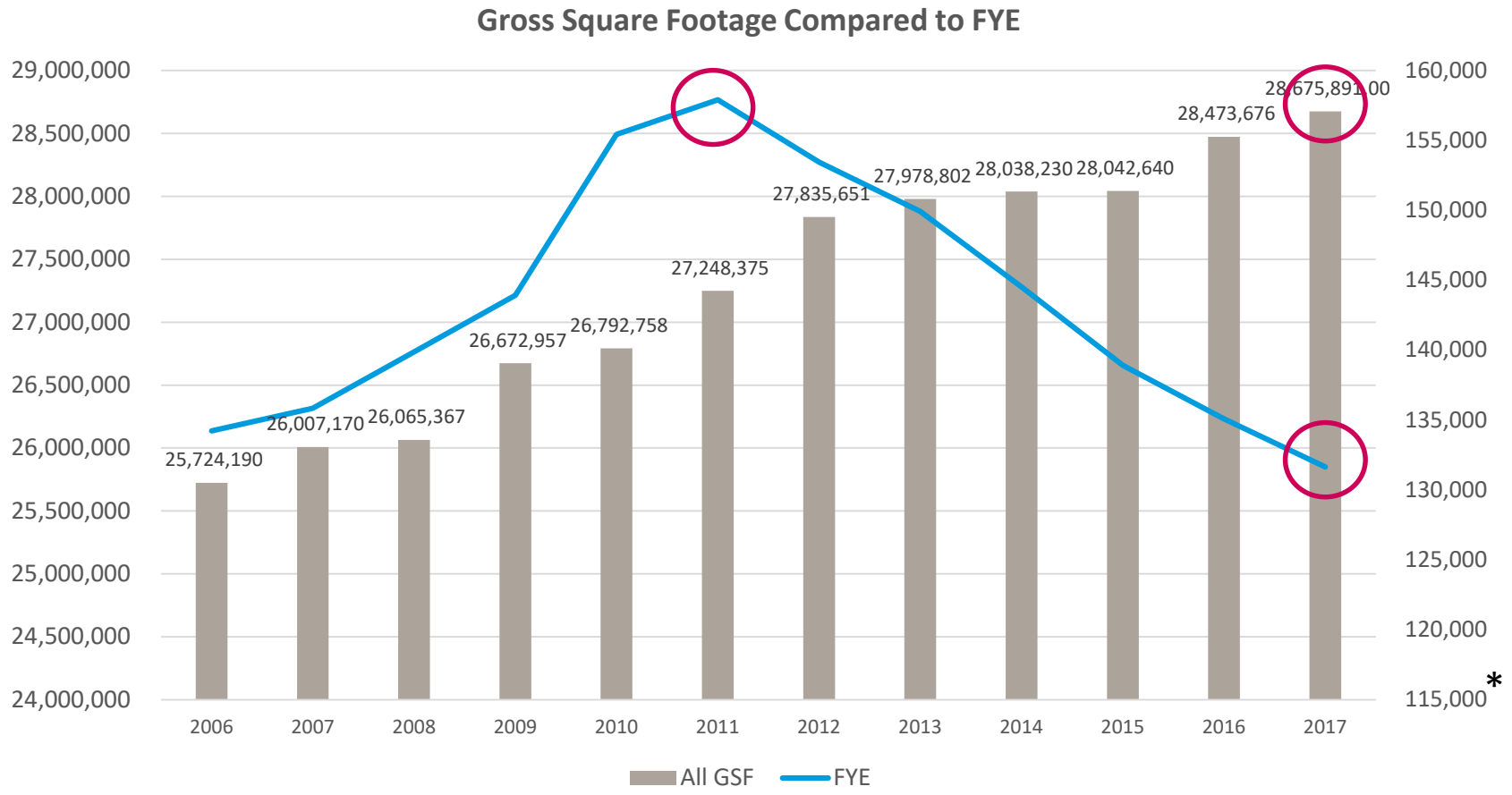
System footprint is bigger, but student enrollment is dropping



*

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2020 Capital Budget Guidelines reflect the trends on campuses

1. Update academic spaces. +
2. Ease barriers to student success. +
3. Prioritize energy efficiency and renewable + energy infrastructure.
4. Limit new square footage.

Part 2: The Essentials

What you need to know about the 2020
Capital Budget Process with Minnesota State

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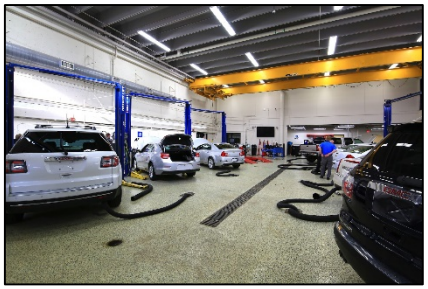
Navigating the Capital Budget Process

- Schedule
- Guidelines
- Campus relations
- Make a Request
- Project Prioritization



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Schedule

What you need to know about the 2020
Capital Budget Process with Minnesota State

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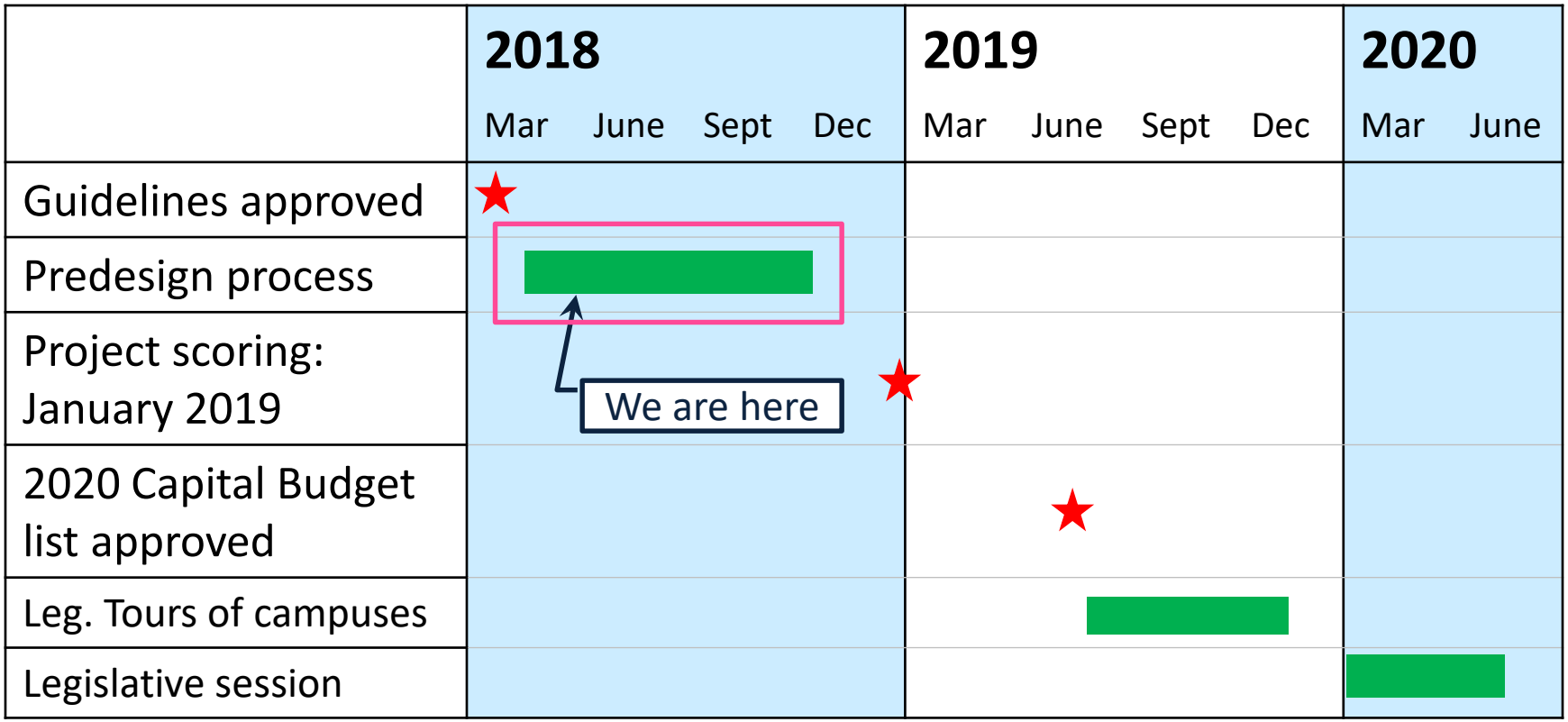
Milestones are similar to past efforts



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Key dates = system office review

	2018									
	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Guidelines approved	★									
Hire predesign consultant										
Collect data										
50% drafts due		August 1, 2018 ★								
95% drafts due				Sept. 21, 2018 ★						
Consult w/ campus constituency										
100% documents due						Nov. 15, 2018 ★				

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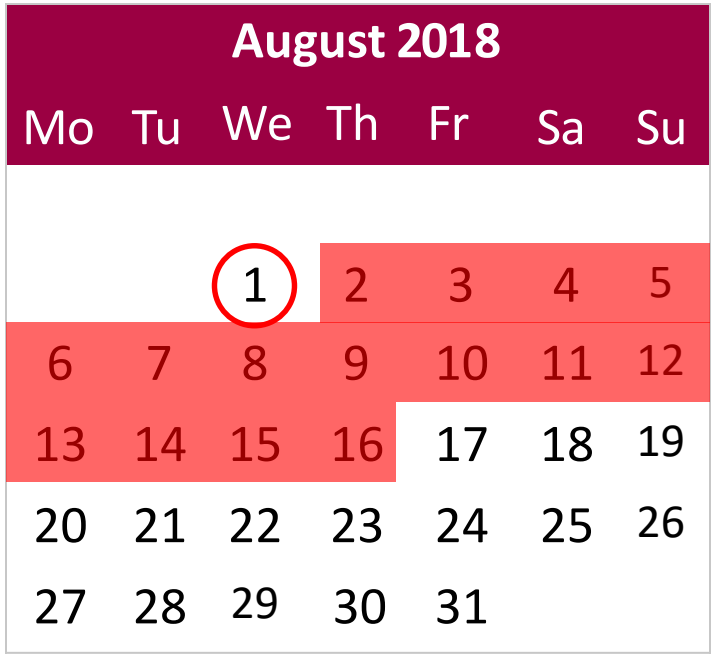
50% draft submittal



System office review

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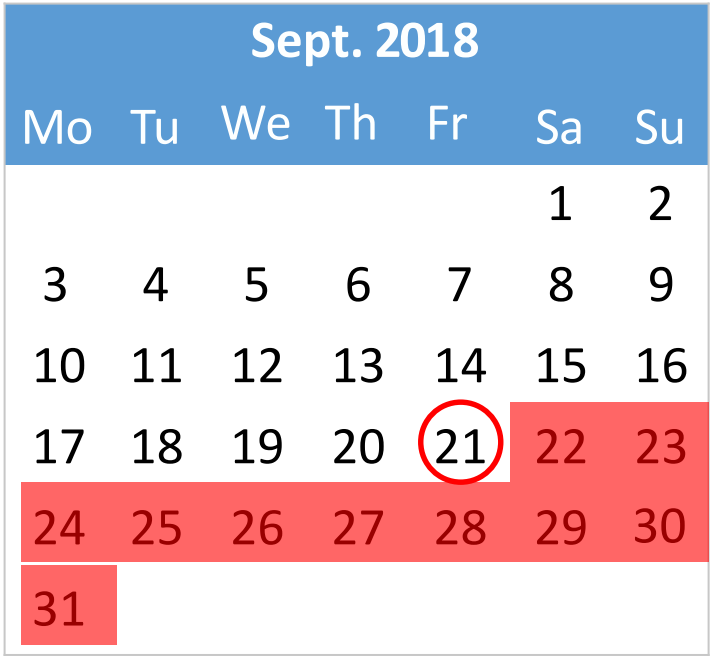
95% draft



System office review

Feedback to campuses

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2020 HEAPR schedule

2019

May: Engage A/E firms to update HEAPR requests

Sept. 30: NEW PROJECT: 50% submittals due

Nov. 22: NEW PROJECT: 100% submittals due

EXISTING PROJECT: Updates due

Dec. 18: Publish 2020 HEAPR list

Managing Campus Expectations

What you need to know about the 2020
Capital Budget Process with Minnesota State

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Managing campus expectations

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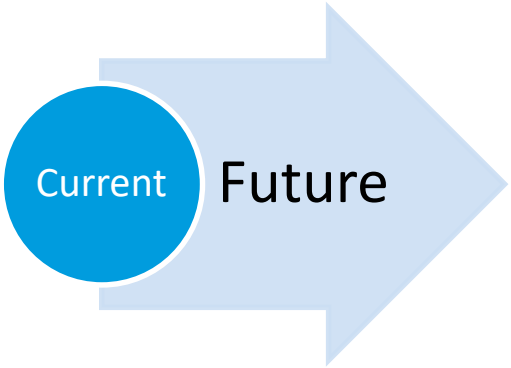
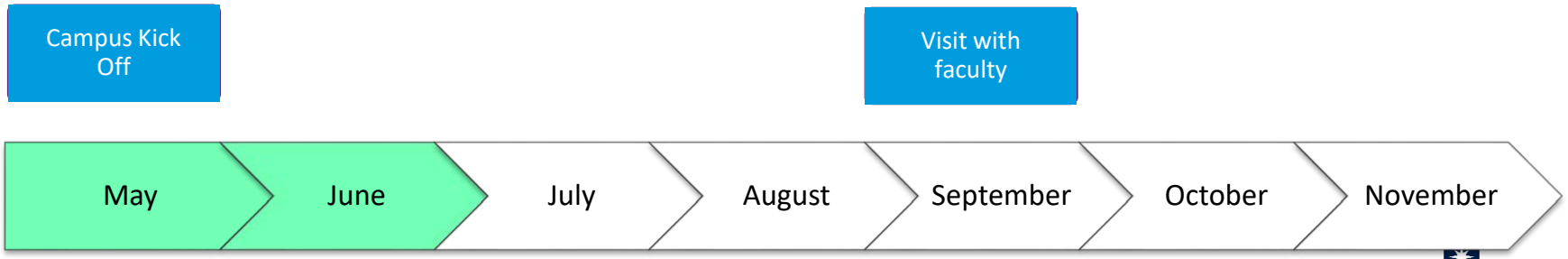
Kick off event before faculty leaves

- Verify scope
- Honor campus governance process
- Guidelines
- Collection of data
- Review of schedule
- Clear division of labor





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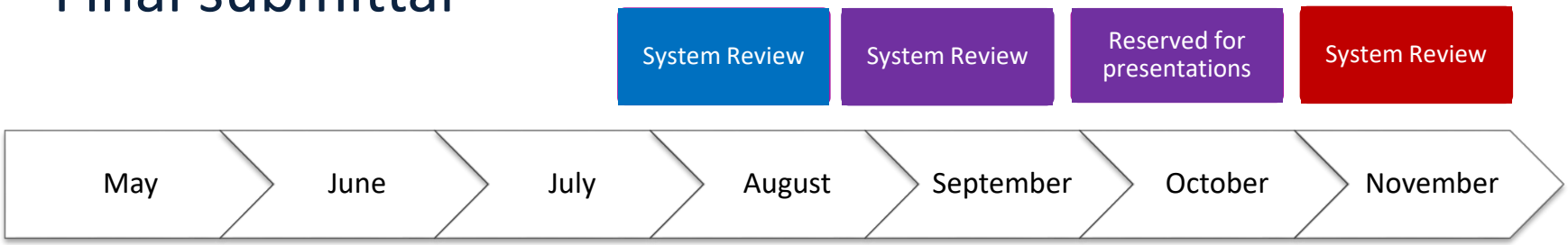
Plan for at least three submittals

- Key dates
- Planning review
- PDF to us
- Electronic feedback
- Presentation – check in
- Final submittal



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What's needed for a 2020 Capital Budget Request

What you need to know about the 2020
Capital Budget Process with Minnesota State

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Keys to a successful project

1. Summarize key terms of the project

2. Explain what problem it solves

3. How does it meet the strategic framework and capital guidelines?

4. How much does it cost?

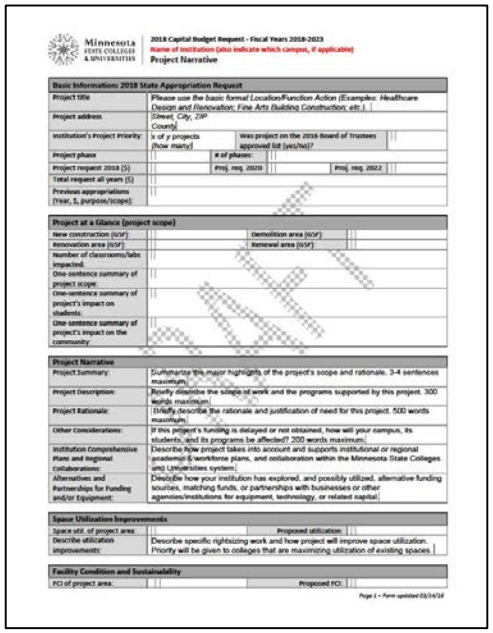
5. How is it being delivered?

Predesign and documentation requirements

	Type of Predesign Required		Additional Documentation Required
Project Type	**Full Predesign**	**Limited Scope Predesign**	
HEAPR Project	Construction cost over $750K	Construction cost $50K-$750K	Narrative and Worksheet
Capital (GO) Project	All projects	n/a	Narrative and Workbook

Assume funding by July 1, 2020.

What's needed for submittals



2018 Capital Budget Request - Fiscal Years 2018-2023
Name of Institution (also indicate which campus, if applicable)
Project Narrative

Basic Information: 2018 State Appropriation Request	
Project title	Please use the basic formal Location/Function Action (Examples: Healthcare Design and Renovation; Fine Arts Building Construction; etc.)
Project address	Street, City, ZIP County
Institution's Project Priority:	x of y projects (how many) / Was project on the 2016 Board of Trustees approved list (yes/no)?
Project phase	# of phases:
Project request 2018 ($)	Proj. req. 2020 / Proj. req. 2022
Total request all years ($)	
Previous appropriations (Year, $, purpose/scope):	

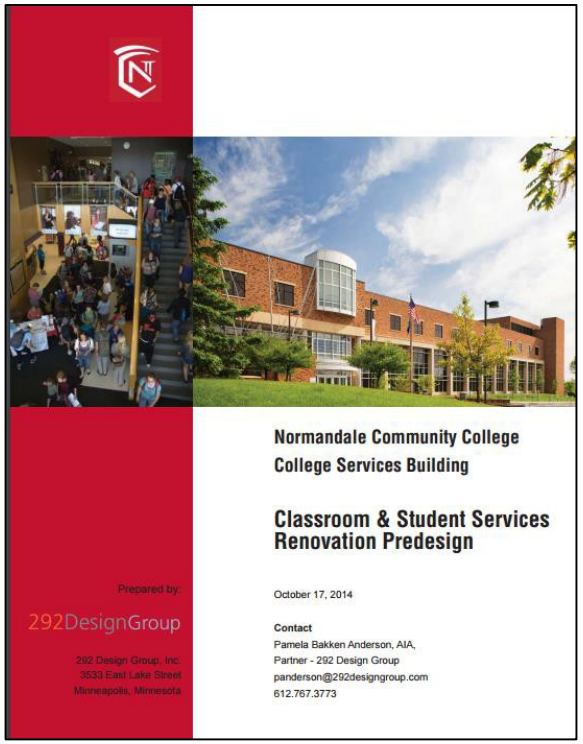
Project at a Glance (project scope)	
New construction (GSF):	Demolition area (GSF):
Renovation area (GSF):	Renewal area (GSF):
Number of classrooms/labs impacted:	
One-sentence summary of project scope:	
One-sentence summary of project's impact on students:	
One-sentence summary of project's impact on the community:	

Project Narrative	
Project Summary:	Summarize the major highlights of the project's scope and rationale. 3-4 sentences maximum.
Project Description:	Briefly describe the scope of work and the programs supported by this project. 300 words maximum.
Project Rationale:	Briefly describe the rationale and justification of need for this project. 500 words maximum.
Other Considerations:	If this project's funding is delayed or not obtained, how will your campus, its students, and its programs be affected? 200 words maximum.
Institution Comprehensive Plans and Regional Collaborations:	Describe how project takes into account and supports institutional or regional academic & workforce plans, and collaboration within the Minnesota State Colleges and Universities system.
Alternatives and Partnerships for Funding and/or Equipment:	Describe how your institution has explored, and possibly utilized, alternative funding sources, matching funds, or partnerships with businesses or other agencies/institutions for equipment, technology, or related capital.

Space Utilization Improvements	
Space util. of project area:	Proposed utilization:
Describe utilization improvements:	Describe specific rightsizing work and how project will improve space utilization. Priority will be given to colleges that are maximizing utilization of existing spaces.

Facility Condition and Sustainability	
FCI of project area:	Proposed FCI:

Project Narrative
(.doc file)



Normandale Community College
College Services Building

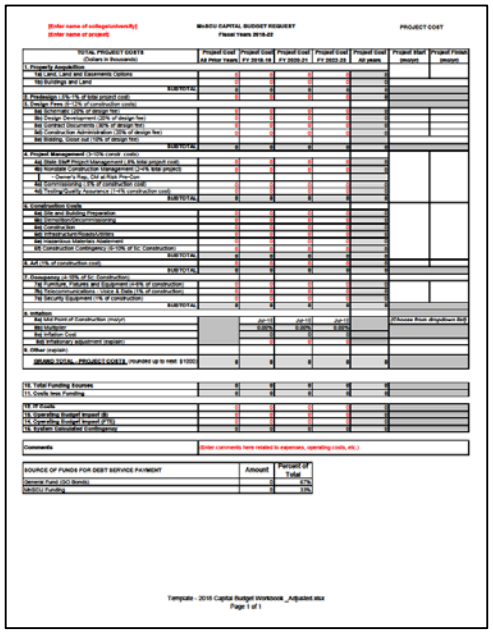
Classroom & Student Services
Renovation Predesign

Prepared by:
292DesignGroup
292 Design Group, Inc.
3533 East Lake Street
Minneapolis, Minnesota

October 17, 2014

Contact
Pamela Bakken Anderson, AIA,
Partner - 292 Design Group
panderson@292designgroup.com
612.767.3773

Predesign Document
(.pdf file)



[Enter name of college/university]
[Enter name of project]
MnSCU CAPITAL BUDGET REQUEST
Fiscal Years 2018-23
PROJECT COST

TOTAL PROJECT COSTS (Dollars in thousands)	Project Cost All Prior Years	Project Cost FY 2018-19	Project Cost FY 2020-21	Project Cost FY 2022-23	Project Cost All years	Project Start (mo/yr)	Project Finish (mo/yr)
1. Property Acquisition							
1a) Land, Land and Easements Options							
1b) Buildings and Land							
SUBTOTAL							
2. Predesign (1%-1% of total project cost)							
3. Design Fees (5%-12% of construction costs)							
3a) Schematic (20% of design fee)							
3b) Design Development (30% of design fee)							
3c) Contract Documents (40% of design fee)							
3d) Construction Administration (10% of design fee)							
3e) Bidding, Const out (10% of design fee)							
SUBTOTAL							
4. Project Management (3-10% constr costs)							
4a) State Staff Project Management (1% total project cost)							
4b) Normale Construction Management (2-4% total project)							
4c) Owner's Rep, CM at Risk Pre-Con							
4d) Commissioning (1% of construction cost)							
4e) Testing/Quality Assurance (1-4% construction cost)							
SUBTOTAL							
5. Construction Costs							
5a) Site and Building Preparation							
5b) Demolition/Decommissioning							
5c) Construction							
5d) Infrastructure/Roads/Utilities							
5e) Hazardous Materials Abatement							
5f) Construction Contingency (0-15% of 5c Construction)							
SUBTOTAL							
6. Art (1% of construction cost)							
SUBTOTAL							
7. Occupancy (4-15% of 5c Construction)							
7a) Furniture, Fixtures and Equipment (4-8% of construction)							
7b) Telecommunications - Voice & Data (1% of construction)							
7c) Security Equipment (1% of construction)							
SUBTOTAL							
8. Inflation							
8a) MAI Point of Construction (mo/yr)		Apr-17	Apr-21	Apr-25		(If Excess then disqualified Bid)	
8b) Multiplier		0.02%	0.08%	0.08%			
8c) Inflation Cost							
8d) Inflationary Adjustment (explain)							
9. Other (explain)							
GRAND TOTAL - PROJECT COSTS (rounded up to next $1000)							

10. Total Funding Sources	
11. Costs less Funding	
12. If Costs	
13. Operating Budget Impact ($)	
14. Operating Budget Impact (FTE)	
15. System Executive Contingency	

Comments	[Enter comments here related to expenses, operating costs, etc.]

SOURCE OF FUNDS FOR DEBT SERVICE PAYMENT	Amount	Percent of Total
General Fund (GO Bonds)		67%
MnSCU Funding		33%

Template - 2018 Capital Budget Workbook _Adjusted.xlsx
Page 1 of 1

Project Workbook
(.xls file)

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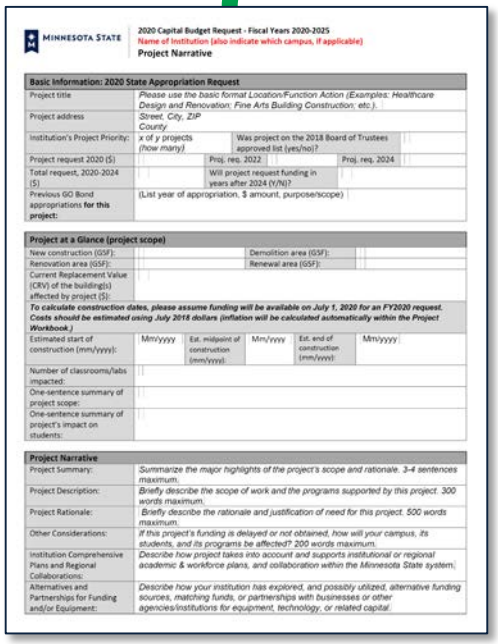
Your project's CBR



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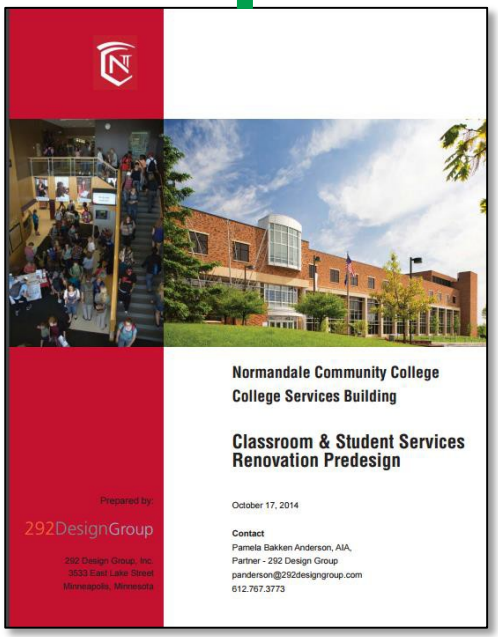
2020 Capital Budget Request - Fiscal Years 2020-2025
Name of Institution (also indicate which campus, if applicable)
Project Narrative

Basic Information: 2020 State Appropriation Request	
Project title	*Please use the basic format Location/Function Action (Examples: Healthcare Design and Renovation; Fine Arts Building Construction; etc.).*
Project address	*Street, City, ZIP County*
Institution's Project Priority:	x of y projects *(how many)* / Was project on the 2018 Board of Trustees approved list (yes/no)?
Project request 2020 ($)	Proj. req. 2022 / Proj. req. 2024
Total request, 2020-2024 ($)	Will project request funding in years after 2024 (Y/N)?
Previous GO Bond appropriations **for this project:**	(List year of appropriation, $ amount, purpose/scope)

Project at a Glance (project scope)					
New construction (GSF):		Demolition area (GSF):			
Renovation area (GSF):		Renewal area (GSF):			
Current Replacement Value (CRV) of the building(s) affected by project ($):					
To calculate construction dates, please assume funding will be available on July 1, 2020 for an FY2020 request. Costs should be estimated using July 2018 dollars (inflation will be calculated automatically within the Project Workbook.)					
Estimated start of construction (mm/yyyy):	Mm/yyyy	Est. *midpoint* of construction (mm/yyyy):	Mm/yyyy	Est. end of construction (mm/yyyy):	Mm/yyyy
Number of classrooms/labs impacted:					
One-sentence summary of project scope:					
One-sentence summary of project's impact on students:					

Project Narrative	
Project Summary:	*Summarize the major highlights of the project's scope and rationale. 3-4 sentences maximum.*
Project Description:	*Briefly describe the scope of work and the programs supported by this project. 300 words maximum.*
Project Rationale:	*Briefly describe the rationale and justification of need for this project. 500 words maximum.*
Other Considerations:	*If this project's funding is delayed or not obtained, how will your campus, its students, and its programs be affected? 200 words maximum.*
Institution Comprehensive Plans and Regional Collaborations:	*Describe how project takes into account and supports institutional or regional academic & workforce plans, and collaboration within the Minnesota State system;*
Alternatives and Partnerships for Funding and/or Equipment:	*Describe how your institution has explored, and possibly utilized, alternative funding sources, matching funds, or partnerships with businesses or other agencies/institutions for equipment, technology, or related capital.*



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Normandale Community College
College Services Building

Classroom & Student Services Renovation Predesign

October 17, 2014

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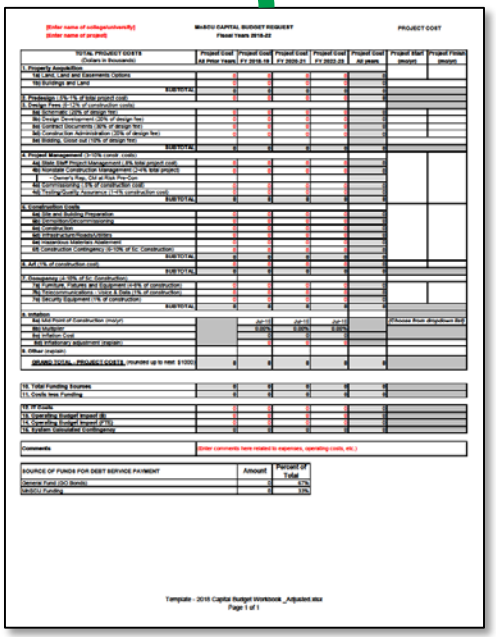

[Enter name of college/university]
[Enter name of project]

MnSCU CAPITAL BUDGET REQUEST
Fiscal Years 2018-22

PROJECT COST

TOTAL PROJECT COSTS (Dollars in Thousands)	Project Cost All Prior Years	Project Cost FY 2018-19	Project Cost FY 2020-21	Project Cost FY 2022-23	Project Cost All years	Project Start (mo/yr)	Project Finish (mo/yr)
1. Property Acquisition							
1a) Land, Land and Easements Options							
1b) Buildings and Land							
SUBTOTAL	0	0	0	0	0		
2. Predesign (1%-1% of total project cost)							
3. Design Fees (5-12% of construction costs)							
3a) Schematic (25% of design fee)							
3b) Design Development (30% of design fee)							
3c) Contract Documents (40% of design fee)							
3d) Construction Administration (5% of design fee)							
3e) Bidding, Close out (10% of design fee)							
SUBTOTAL	0	0	0	0	0		
4. Project Management (3-10% const. costs)							
4a) State Staff Project Management (4% total project cost)							
4b) Nonstate Construction Management (2-4% total project)							
4c) Owner's Rep, CM at Risk Pre-Con							
4d) Commissioning (1% of construction cost)							
4e) Testing/Quality Assurance (1-4% construction cost)							
SUBTOTAL	0	0	0	0	0		
5. Construction Costs							
5a) Site and Building Preparation							
5b) Demolition/Decommissioning							
5c) Construction							
5d) Infrastructure/Roads/Utilities							
5e) Hazardous Materials Abatement							
5f) Construction Contingency (5-10% of Ec Construction)							
SUBTOTAL	0	0	0	0	0		
6. Art (1% of construction cost)							
SUBTOTAL	0	0	0	0	0		
7. Occupancy (4-10% of Ec Construction)							
7a) Furniture, Fixtures and Equipment (4-6% of construction)							
7b) Telecommunications - Voice & Data (1% of construction)							
7d) Security Equipment (1% of construction)							
SUBTOTAL	0	0	0	0	0		
8. Inflation							
8a) Mid Point of Construction (mo/yr)		Apr-19	Apr-21	Apr-23			(Access Book drop-down list)
8b) Multiplier		2.00%	6.08%	9.94%			
8c) Inflation Cost		0	0	0	0		
8d) Inflationary adjustment (explain)							
9. Other (explain)							
GRAND TOTAL - PROJECT COSTS (ROUND up to next $1000)	0	0	0	0	0		

10. Total Funding Sources	0	0	0	0	0
11. Funds less Funding	0	0	0	0	0
12. O&M Costs					
13. Operating Budget Impact ($)					
14. Operating Budget Impact (FTE)					
15. System Calculated Contingency					

Comments	Enter comments here related to expenses, operating costs, etc.)

SOURCE OF FUNDS FOR DEBT SERVICE PAYMENT	Amount	Percent of Total
General Fund (GO Bonds)	0	67%
MnSCU Funding	0	33%

Template - 2018 Capital Budget Workbook _Adjusted.xlsx
Page 1 of 1

MINNESOTA STATE

Who sees what?

	Scoring teams	Dept. of Admin.
Narrative	●	
Workbook	●	●
Predesign	●	●

Predesigns for previously submitted projects

- Each predesign must be an all-new, complete document – no “updates”
- Update predesign to reflect ***Predesign Guidelines*** and Minnesota statutes
- Update cost estimates and schedule

Predesign Guidelines

Contents

SECTION	PAGE	TITLE
—	i	CONTEXT FOR PREDESIGN
	ii	CAPITAL PROJECT FUNDING PATHWAYS
—	v	WHEN IS A PREDESIGN REQUIRED?
—	vi	DEVELOPING A PREDESIGN
PREDESIGN DOCUMENT SECTIONS		
—	1	OVERVIEW/FRONT MATTER
1	2	SUMMARY
	3	EXAMPLE GRAPHICS
2	5	PROJECT BACKGROUND NARRATIVE
	7	EXAMPLE GRAPHICS
3	13	PROJECT DESCRIPTION
	15	EXAMPLE GRAPHICS
4	20	SUSTAINABILITY AND ENERGY
	22	EXAMPLE GRAPHICS
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	28	EXAMPLE GRAPHICS
7	29	SCHEDULE
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8	31	TECHNOLOGY PLAN/BUDGET
	32	EXAMPLE GRAPHICS
9	33	APPENDIX
HEAPR PROJECT PREDESIGNS		
	34	ELIGIBLE PROJECTS/PRIORITIZATION
	35	HEAPR PREDESIGNS: OVERVIEW/FRONT MATTER
	36	SECTIONS 1 AND 2 CHECKLISTS
	37	SECTION 3 CHECKLIST
	38	SECTIONS 4 AND 5 CHECKLISTS
	39	SECTIONS 6, 7, 8, AND 9 CHECKLISTS
—	40	DEFINITIONS
—	44	APPLICABILITY OF STATUTES
—	45	FORM TEMPLATES

MINNESOTA STATE PREDESIGN GUIDELINES

MINNESOTA STATE

HEAPR Predesign and documentation requirements

	Type of Predesign Required		Additional Documentation Required
Project Type	**Full Predesign**	**Limited Scope Predesign**	
HEAPR Project	Construction cost over $750K	Construction cost $50K-$750K	Narrative and Worksheet
Capital (GO) Project	All projects	n/a	Narrative and Workbook

Assume funding by July 1, 2020.

NEW HEAPR project:

Documents you'll submit

HEAPR Narrative (NEW!) (.doc file)

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2020 HEAPR Project Request - Fiscal Years 2020-2025
Name of Institution (also indicate which campus, if applicable)
Project Narrative

Basic Information: 2020 HEAPR Request			
Project title	*Please use the basic format Location/Function Action (Examples: Healthcare Design and Renovation; Fine Arts Building Construction; etc.).*		
Project **simple** title	*Please use the basic format Location/Function Action (Examples: Healthcare Design and Renovation; Fine Arts Building Construction; etc.).*		
Project address	*Street, City, ZIP*	Project Location (building name/section)	
Institution's Project Priority:	*x of y projects (how many)*	Category (roof; life/health/safety; exteriors; HVAC; electrical; underground; interiors	
Project request 2020 ($)		Proj. req. 2022	Proj. req. 2024
Total request, 2020-2024 ($)		Will project request funding in years after 2024 (Y/N)?	
Previous HEAPR appropriations **for this project** (List year, $, purpose/scope):		Is this project listed in the institution's most recent Comp. Facilities Plan/Master Plan?	

Project at a Glance (project scope)					
To calculate construction dates, please assume funding will be available on July 1, 2020 for an FY2020 request.					
Estimated start of construction (mm/yyyy):	Mm/yyyy	Est. midpoint of construction (mm/yyyy):	Mm/yyyy	Est. end of construction (mm/yyyy):	Mm/yyyy
Project Description:	*Briefly describe the scope of work and the programs supported by this project. 300 words maximum.*				
Does this project impact or support any academic programs (for example, improving HVAC for the welding program, or improving air quality in a main classroom building)?					

Facility Condition and Sustainability			
FCI of project area:		Proposed FCI:	
Backlog ($) removed			
Renewable energy system included in project?	(y/n)	If yes, what type of system?	
Describe sustainability improvements:	*Describe specific energy efficiency enhancements and sustainability features within the project and estimated impact on overall costs and energy consumption.*		

Project Contact
Contact person, Title Street Address City, State ZIP Phone # Email

Predesign Document (.pdf file)

MINNESOTA STATE UNIVERSITY MOORHEAD

West Campus
HVAC Upgrades

PREDESIGN REPORT

MINNESOTA STATE UNIVERSITY MOORHEAD

ISSUED DECEMBER 31, 2015
UPDATED JANUARY 20, 2017

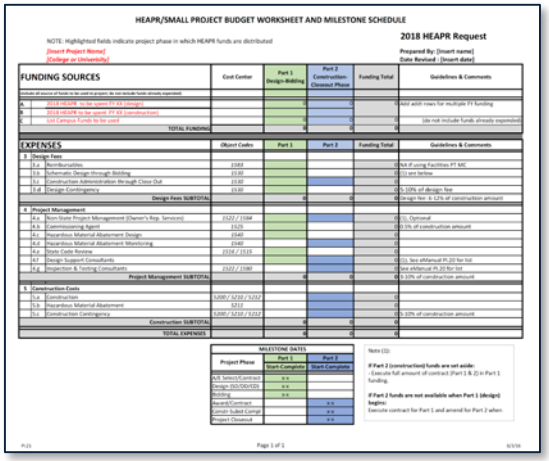
R H R A
ARCHITECTS

BRIAN DURGIN
Principal Architect

112 N University Dr
Suite 110
Fargo, ND 58102
701-232-1998
fax: 701-239-4502

bdurgin@RHRArch.com
www.RHRArch.com

HEAPR Budget Worksheet (.xls file)



HEAPR/SMALL PROJECT BUDGET WORKSHEET AND MILESTONE SCHEDULE

2018 HEAPR Request

FUNDING SOURCES	Cost Center	Part 1 Design-Bidding	Part 2 Construction-Closeout Phase	Funding Total	Guidelines & Comments
A 2018 HEAPR (to be spent FY 19 Design)					Add addl rows for multiple FY funding
B 2018 HEAPR (to be spent FY 19 Construction)					
C List Campus Funds to be used					(do not include funds already expended)
TOTAL FUNDING					

EXPENSES	Object Codes	Part 1	Part 2	Funding Total	Guidelines & Comments
3 Design Fees					
3.a Reimbursables	3389				N/A if using Facilities PT MC
3.b Schematic Design through Bidding	3130				see below
3.c Construction Administration through Close Out	3130				
3.d Design Contingency	3130				10% of design fee
Design Fees SUBTOTAL		0	0	0	design fee & 12% of construction amount
4 Project Management					
4.a Non-State Project Management (Owner's Rep. Services)	2527 / 3584				Optional
4.b Commissioning Agent	2529				1% of construction amount
4.c Hazardous Material Abatement Design	3540				
4.d Hazardous Material Abatement Monitoring	3540				
4.e State Code Review	2318 / 3515				
4.f Design Support Consultants					See eManual Pt 20 for list
4.g Inspection & Testing Consultants	2527 / 3580				See eManual Pt 20 for list
Project Management SUBTOTAL		0	0	0	1% of construction amount
5 Construction Costs					
5.a Construction	5200 / 5210 / 5212				
5.b Hazardous Material Abatement	5210				
5.c Construction Contingency	5200 / 5210 / 5212				10% of construction amount
Construction SUBTOTAL		0	0	0	
TOTAL EXPENSES		0	0	0	

MILESTONE DATES		
Project Phase	Part 1 Start-Complete	Part 2 Start-Complete
A/E Select/Contract	x-x	
Design (SD/DD/CD)	x-x	
Bidding	x-x	
Award/Contract		x-x
Constr Subst Compl		x-x
Project Closeout		x-x

Note (1):

If Part 2 (construction) funds are set aside:
- Execute full amount of contract (Part 1 & 2) in Part 1 funding.

If Part 2 funds are not available when Part 1 (design) begins:
Execute contract for Part 1 and amend for Part 2 when

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EXISTING HEAPR project: Documents you'll submit

HEAPR Narrative (NEW!) (.doc file)

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2020 HEAPR Project Request - Fiscal Years 2020-2025
Name of Institution (also indicate which campus, if applicable)
Project Narrative

Basic Information: 2020 HEAPR Request			
Project title	*Please use the basic format Location/Function Action (Examples: Healthcare Design and Renovation; Fine Arts Building Construction; etc.).*		
Project **simple** title	*Please use the basic format Location/Function Action (Examples: Healthcare Design and Renovation; Fine Arts Building Construction; etc.).*		
Project address	*Street, City, ZIP*	Project Location (building name/section)	
Institution's Project Priority:	*x of y projects (how many)*	Category (roof; life/health/safety; exteriors; HVAC; electrical; underground; interiors	
Project request 2020 ($)		Proj. req. 2022	Proj. req. 2024
Total request, 2020-2024 ($)		Will project request funding in years after 2024 (Y/N)?	
Previous HEAPR appropriations **for this project** (List year, $, purpose/scope):		Is this project listed in the institution's most recent Comp. Facilities Plan/Master Plan?	

Project at a Glance (project scope)					
To calculate construction dates, please assume funding will be available on July 1, 2020 for an FY2020 request.					
Estimated start of construction (mm/yyyy):	Mm/yyyy	Est. midpoint of construction (mm/yyyy):	Mm/yyyy	Est. end of construction (mm/yyyy):	Mm/yyyy
Project Description:	*Briefly describe the scope of work and the programs supported by this project. 300 words maximum.*				
Does this project impact or support any academic programs (for example, improving HVAC for the welding program, or improving air quality in a main classroom building)?					

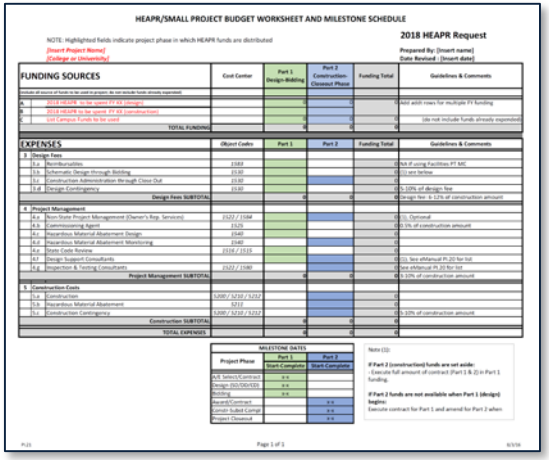
Facility Condition and Sustainability			
FCI of project area:		Proposed FCI:	
Backlog ($) removed			
Renewable energy system included in project?	(y/n)	If yes, what type of system?	
Describe sustainability improvements:	*Describe specific energy efficiency enhancements and sustainability features within the project and estimated impact on overall costs and energy consumption.*		

Project Contact
Contact person, Title Street Address City, State ZIP Phone # Email

1-page update (.pdf file)

Predesign Update

Updated HEAPR Budget Worksheet (.xls file)



HEAPR/SMALL PROJECT BUDGET WORKSHEET AND MILESTONE SCHEDULE

NOTE: Highlighted fields indicate project phase in which HEAPR funds are distributed
[Insert Project Name]
[College or University]

2018 HEAPR Request
Prepared By: [Insert name]
Date Revised : [Insert date]

FUNDING SOURCES	Cost Center	Part 1 Design-Bidding	Part 2 Construction-Closeout Phase	Funding Total	Guidelines & Comments
[illegible]					
A 2018 HEAPR to be spent FY XX (design)		0	0	0	Add add rows for multiple FY funding
B 2018 HEAPR to be spent FY XX (construction)					
C List Campus Funds to be used				0	(do not include funds already expended)
TOTAL FUNDING		0	0	0	

EXPENSES	Object Codes	Part 1	Part 2	Funding Total	Guidelines & Comments
3 Design Fees					
3.a Reimbursables	1583			0	Not if using Facilities PT MC
3.b Schematic Design through Bidding	1530			0	(1) see below
3.c Construction Administration through Close Out	1530			0	
3.d Design Contingency	1530			0	5-10% of design fee
Design Fees SUBTOTAL		0	0	0	Design fee: 6-12% of construction amount
4 Project Management					
4.a Non-State Project Management (Owner's Rep. Services)	1527 / 1584			0	(1) Optional
4.b Commissioning Agent	1525			0	0.5% of construction amount
4.c Hazardous Material Abatement Design	1540			0	
4.d Hazardous Material Abatement Monitoring	1540			0	
4.e State Code Review	1516 / 1515			0	
4.f Design Support Consultants				0	(1) See eManual PL20 for list
4.g Inspection & Testing Consultants	1522 / 1580			0	See eManual PL20 for list
Project Management SUBTOTAL		0	0	0	5-10% of construction amount
5 Construction Costs					
5.a Construction	5200 / 5210 / 5212			0	
5.b Hazardous Material Abatement	5210			0	
5.c Construction Contingency	5200 / 5210 / 5212			0	5-10% of construction amount
Construction SUBTOTAL		0	0	0	
TOTAL EXPENSES		0	0	0	

MILESTONE DATES		
Project Phase	Part 1 Start Complete	Part 2 Start Complete
A/E Select/Contract	x x	
Design (SD/DD/CD)	x x	
Bidding	x x	
Award/Contract		x x
Constr Subst Compl		x x
Project Closeout		x x

Note (1):
If Part 2 (construction) funds are set aside:
- Execute full amount of contract (Part 1 & 2) in Part 1 funding.

If Part 2 funds are not available when Part 1 (design) begins:
Execute contract for Part 1 and amend for Part 2 when

PL21 Page 1 of 1 6/3/16

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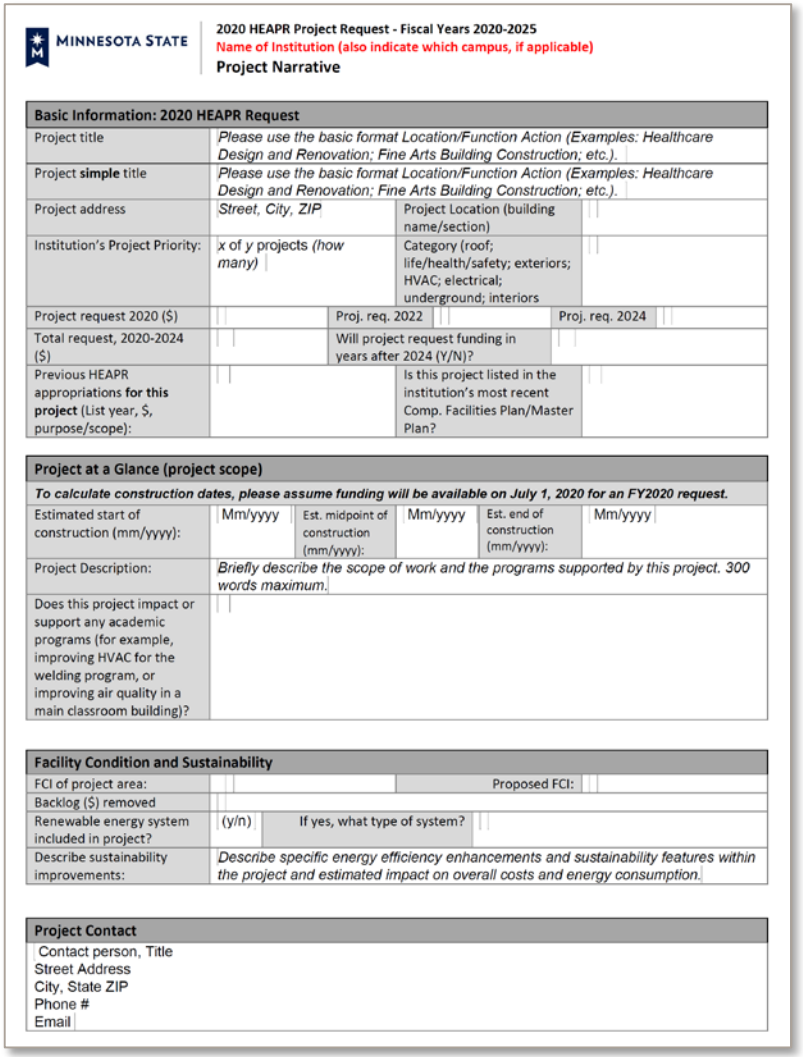
HEAPR Narrative: New!



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2020 HEAPR Project Request - Fiscal Years 2020-2025
Name of Institution (also indicate which campus, if applicable)
Project Narrative

Basic Information: 2020 HEAPR Request					
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Project **simple** title	*Please use the basic format Location/Function Action (Examples: Healthcare Design and Renovation; Fine Arts Building Construction; etc.).*				
Project address	*Street, City, ZIP*		Project Location (building name/section)		
Institution's Project Priority:	*x* of *y* projects *(how many)*		Category (roof; life/health/safety; exteriors; HVAC; electrical; underground; interiors		
Project request 2020 ($)		Proj. req. 2022		Proj. req. 2024	
Total request, 2020-2024 ($)		Will project request funding in years after 2024 (Y/N)?			
Previous HEAPR appropriations **for this project** (List year, $, purpose/scope):			Is this project listed in the institution's most recent Comp. Facilities Plan/Master Plan?		

Project at a Glance (project scope)					
To calculate construction dates, please assume funding will be available on July 1, 2020 for an FY2020 request.					
Estimated start of construction (mm/yyyy):	Mm/yyyy	Est. midpoint of construction (mm/yyyy):	Mm/yyyy	Est. end of construction (mm/yyyy):	Mm/yyyy
Project Description:	*Briefly describe the scope of work and the programs supported by this project. 300 words maximum.*				
Does this project impact or support any academic programs (for example, improving HVAC for the welding program, or improving air quality in a main classroom building)?					

Facility Condition and Sustainability			
FCI of project area:		Proposed FCI:	
Backlog ($) removed			
Renewable energy system included in project?	(y/n)	If yes, what type of system?	
Describe sustainability improvements:	*Describe specific energy efficiency enhancements and sustainability features within the project and estimated impact on overall costs and energy consumption.*		

Project Contact
Contact person, Title Street Address City, State ZIP Phone # Email

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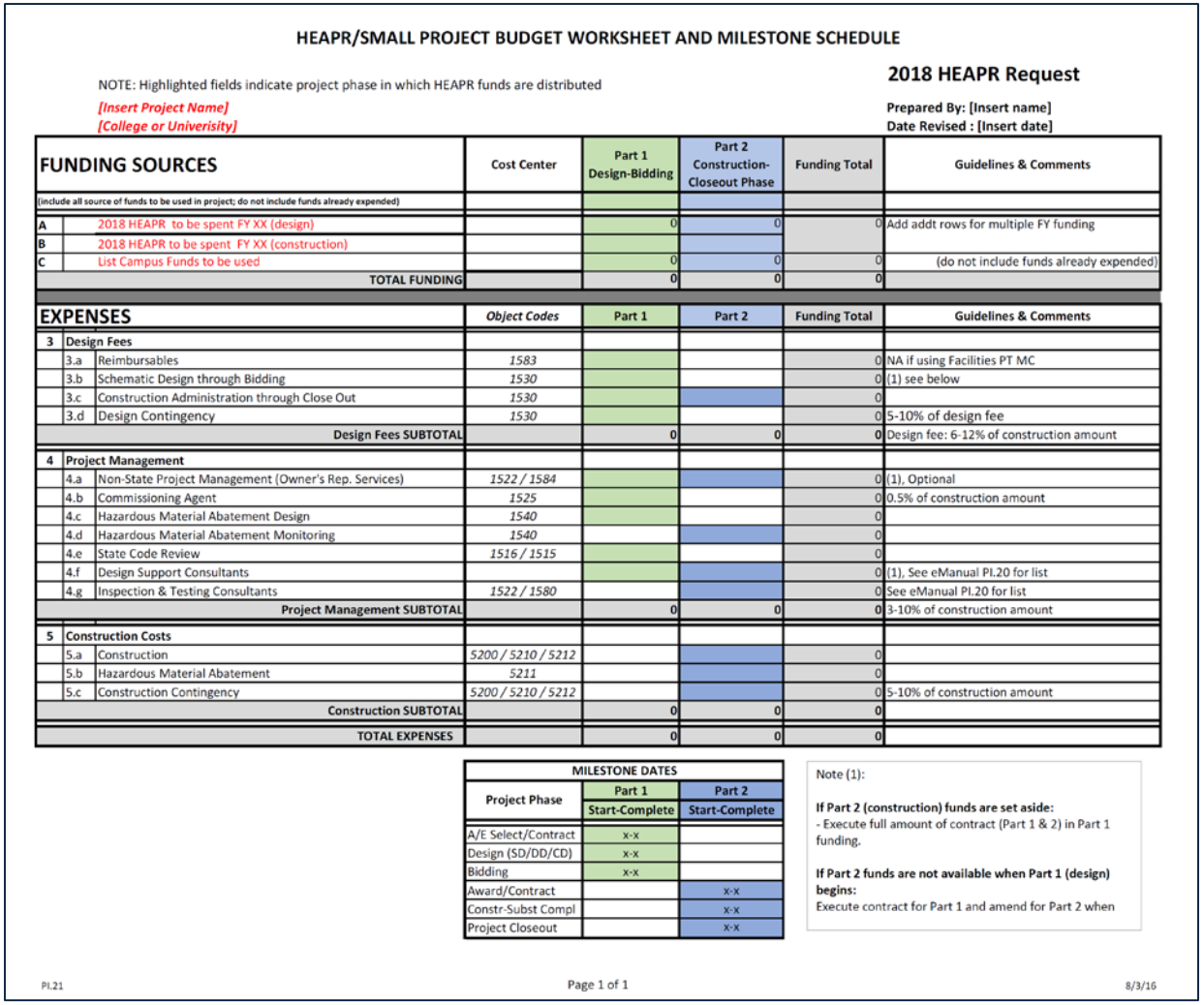
HEAPR Narrative: Navigating the form

Project at a Glance (project scope)					
To calculate construction dates, please assume funding will be available on July 1, 2020 for an FY2020 request.					
Estimated start of construction (mm/yyyy):	Mm/yyyy	Est. midpoint of construction (mm/yyyy):	Mm/yyyy	Est. end of construction (mm/yyyy):	Mm/yyyy
Project Description:	*Briefly describe the scope of work and the programs supported by this project. 300 words maximum.*				
Does this project impact or support any academic programs (for example, improving HVAC for the welding program, or improving air quality in a main classroom building)?					

Facility Condition and Sustainability			
FCI of project area:		Proposed FCI:	
Backlog ($) removed			
Renewable energy system included in project?	(y/n)	If yes, what type of system?	
Describe sustainability improvements:	*Describe specific energy efficiency enhancements and sustainability features within the project and estimated impact on overall costs and energy consumption.*		

HEAPR Budget Worksheet



HEAPR/SMALL PROJECT BUDGET WORKSHEET AND MILESTONE SCHEDULE

NOTE: Highlighted fields indicate project phase in which HEAPR funds are distributed

2018 HEAPR Request

[Insert Project Name]
[College or Univerisity]

Prepared By: [Insert name]
Date Revised : [Insert date]

FUNDING SOURCES (include all source of funds to be used in project; do not include funds already expended)		Cost Center	Part 1 Design-Bidding	Part 2 Construction-Closeout Phase	Funding Total	Guidelines & Comments
A	2018 HEAPR to be spent FY XX (design)		0	0	0	Add addt rows for multiple FY funding
B	2018 HEAPR to be spent FY XX (construction)					
C	List Campus Funds to be used		0	0	0	(do not include funds already expended)
	TOTAL FUNDING		0	0	0	

EXPENSES		Object Codes	Part 1	Part 2	Funding Total	Guidelines & Comments
3	Design Fees					
3.a	Reimbursables	1583			0	NA if using Facilities PT MC
3.b	Schematic Design through Bidding	1530			0	(1) see below
3.c	Construction Administration through Close Out	1530			0	
3.d	Design Contingency	1530			0	5-10% of design fee
	Design Fees SUBTOTAL		0	0	0	Design fee: 6-12% of construction amount
4	Project Management					
4.a	Non-State Project Management (Owner's Rep. Services)	1522 / 1584			0	(1), Optional
4.b	Commissioning Agent	1525			0	0.5% of construction amount
4.c	Hazardous Material Abatement Design	1540			0	
4.d	Hazardous Material Abatement Monitoring	1540			0	
4.e	State Code Review	1516 / 1515			0	
4.f	Design Support Consultants				0	(1), See eManual PI.20 for list
4.g	Inspection & Testing Consultants	1522 / 1580			0	See eManual PI.20 for list
	Project Management SUBTOTAL		0	0	0	3-10% of construction amount
5	Construction Costs					
5.a	Construction	5200 / 5210 / 5212			0	
5.b	Hazardous Material Abatement	5211			0	
5.c	Construction Contingency	5200 / 5210 / 5212			0	5-10% of construction amount
	Construction SUBTOTAL		0	0	0	
	TOTAL EXPENSES		0	0	0	

MILESTONE DATES		
Project Phase	Part 1 Start-Complete	Part 2 Start-Complete
A/E Select/Contract	x-x	
Design (SD/DD/CD)	x-x	
Bidding	x-x	
Award/Contract		x-x
Constr-Subst Compl		x-x
Project Closeout		x-x

Note (1):

If Part 2 (construction) funds are set aside:
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If Part 2 funds are not available when Part 1 (design) begins:
Execute contract for Part 1 and amend for Part 2 when

PI.21 Page 1 of 1 8/3/16

MINNESOTA STATE

Predesign: Areas of emphasis

Academic program impacts

Sustainability, B3, and renewable energy

Cost estimating

[Enter name of college/university]
[Enter name of project]

MnSCU CAPITAL BUDGET REQUEST
Fiscal Years 2018-22

TOTAL PROJECT COSTS (Dollars in thousands)	Project Cost All Prior Years	Project Cost FY 2018-19	Project Co FY 2020-2
1. Property Acquisition			
1a) Land, Land and Easements Options	0	0	
1b) Buildings and Land	0	0	
SUBTOTAL	0	0	
2. Predesign (.5%-1% of total project cost)	0	0	
3. Design Fees (6-12% of construction costs)			
3a) Schematic (20% of design fee)	0	0	
3b) Design Development (20% of design fee)	0	0	
3c) Contract Documents (30% of design fee)	0	0	
3d) Construction Administration (20% of design fee)	0	0	
3e) Bidding, Close out (10% of design fee)			
SUBTOTAL	0	0	
4. Project Management (3-10% constr. costs)			
4a) State Staff Project Management (.8% total project cost)	0	0	
4b) Nonstate Construction Management (2-4% total project)	0	0	
- Owner's Rep, CM at Risk Pre-Con			
4c) Commissioning (.5% of construction cost)	0	0	
4d) Testing/Quality Assurance (1-4% construction cost)	0	0	
SUBTOTAL	0	0	
5. Construction Costs			

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Academic Programs

Pictured: Century College Maker Space

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Renewables

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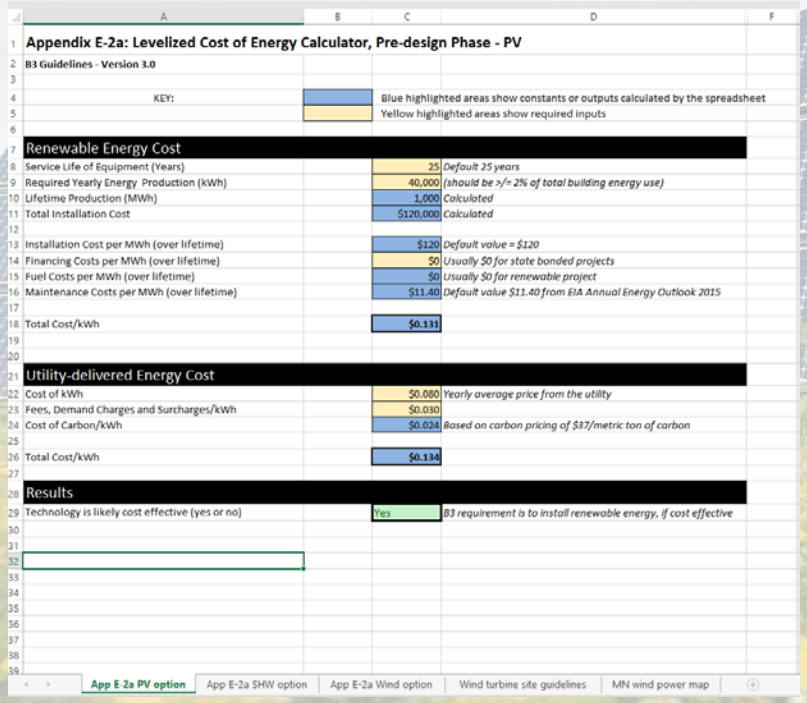
Predesign: Renewable energy analysis

Pictured: sample Summary of Renewable Energy options

Table 1
Summary of Renewable Energy Summary

Type of System	Wind	Solar PV	Solar DHW*
Capacity	5 kW	12.5 kW-dc	53.4 MMBtu
Annual Avoided Energy	12 MWh	12 MWh	24.2 MMBtu
% - Annual Load	2%	2%	1%
Annual Avoided Expense	$1,260	$1,250	$218
Construction Cost	$5,000 to $10,000	$46,000	$16,000
Payback Period, years	8	37	73

Pictured: B3, v. 3.0 - Appendix E-2b: Levelized Cost of Energy Calculator, Predesign Phase



Appendix E-2a: Levelized Cost of Energy Calculator, Pre-design Phase - PV

B3 Guidelines - Version 3.0

KEY: Blue highlighted areas show constants or outputs calculated by the spreadsheet
Yellow highlighted areas show required inputs

Renewable Energy Cost		
Service Life of Equipment (Years)	25	*Default 25 years*
Required Yearly Energy Production (kWh)	40,000	*(should be >/= 2% of total building energy use)*
Lifetime Production (MWh)	1,000	*Calculated*
Total Installation Cost	$120,000	*Calculated*
Installation Cost per MWh (over lifetime)	$120	*Default value = $120*
Financing Costs per MWh (over lifetime)	$0	*Usually $0 for state bonded projects*
Fuel Costs per MWh (over lifetime)	$0	*Usually $0 for renewable project*
Maintenance Costs per MWh (over lifetime)	$11.40	*Default value $11.40 from EIA Annual Energy Outlook 2015*
Total Cost/kWh	$0.131	

Utility-delivered Energy Cost		
Cost of kWh	$0.080	*Yearly average price from the utility*
Fees, Demand Charges and Surcharges/kWh	$0.030	
Cost of Carbon/kWh	$0.024	*Based on carbon pricing of $37/metric ton of carbon*
Total Cost/kWh	$0.134	

Results		
Technology is likely cost effective (yes or no)	Yes	*B3 requirement is to install renewable energy, if cost effective*

App E-2a PV option | App E-2a SHW option | App E-2a Wind option | Wind turbine site guidelines | MN wind power map

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Capital Project Costs

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Core Assumptions for costs

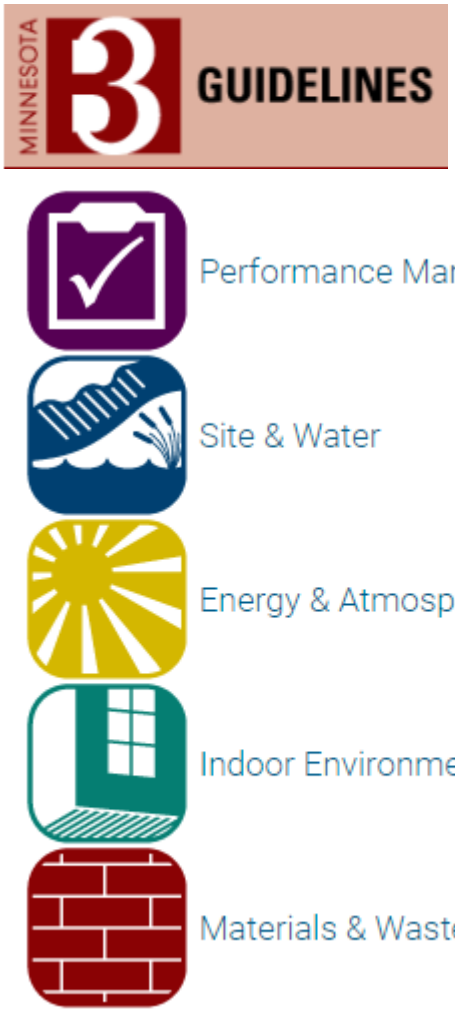
Capital Projects

- Costs as of July 2018
- July 1, 2020 funding
- Subject to B3 v 3.0 – compliance is not optional
- Factor in operational requirements (B3)

HEAPR

- Costs as of July 2018
- State does not allow inflation of HEAPR projects
- July 1, 2020 funding
- Consider phasing – give campuses options

Account for B3 Compliance cost in predesign



Predesign Submittal requirements (listed in v. 3.0)

- Owner's Project Requirements*
- Commissioning scope and budget
- Safety risk assessment
- Comprehensive planning workshop
- Programming workshop
- Construction contingency 0.25% to meet 2030 Energy Standards Ops*
- Critical site information
- Stormwater management incl contaminant load*
- Predesign LCOE calculator documenting two systems evaluated (including at least one PV) for meeting 2% of annual energy demand.

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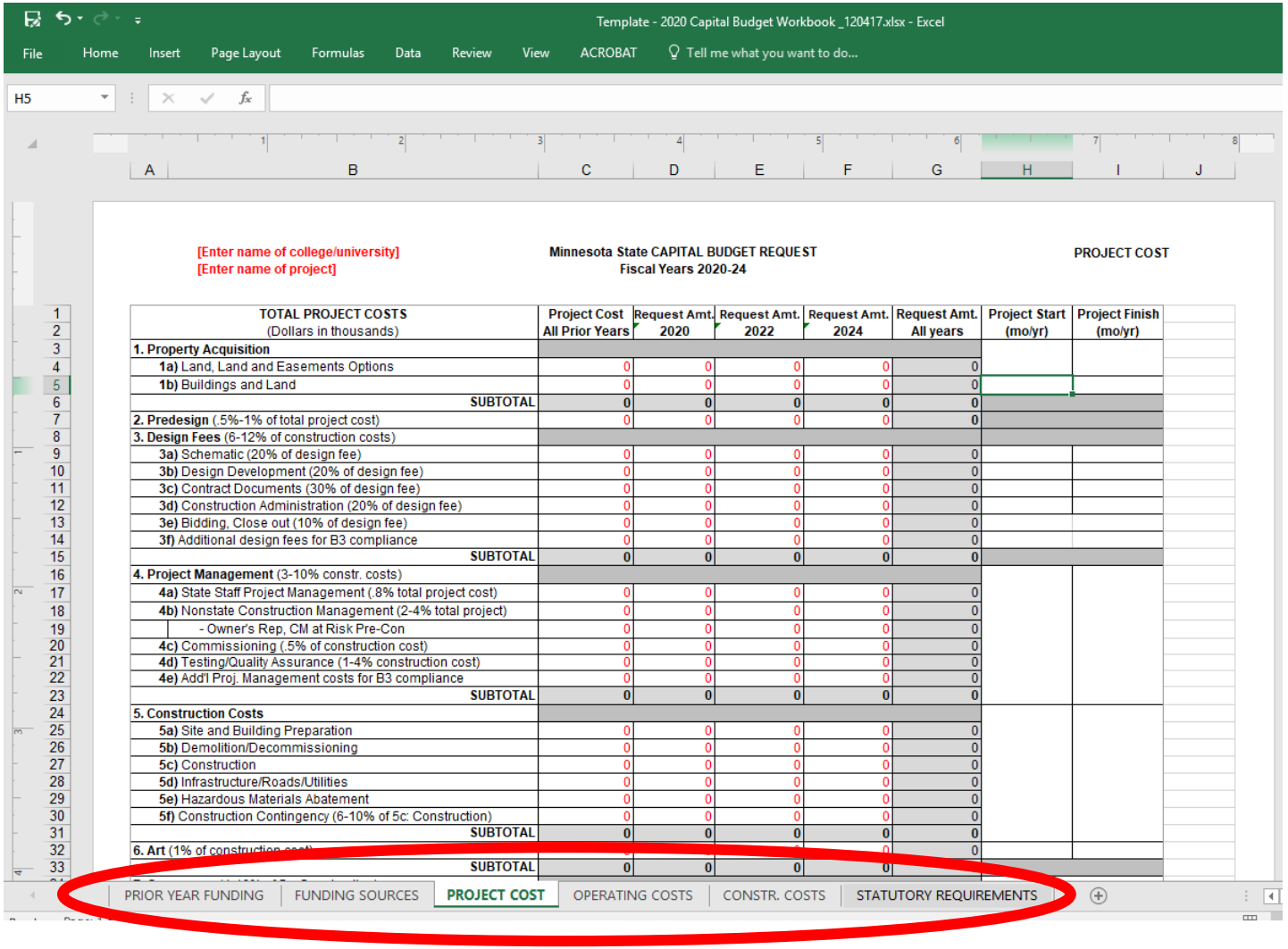
Other possible B3 impacts in predesign

- Establish water efficiency goals
- Calculate glazing percentage
- Ecological assessment
- Infrastructure assessment to increase density
- Comparative evaluation against at least two alternate sites
- Consult with local jurisdiction regarding brownfield redevelopment and proposed remediation plan
- Identify areas for dedicated transportation amenities (bike racks, shower facilities, alternative fuel stations)
- Onsite Fire suppression system
- Identification of product types used in project

Project Workbook: Navigating the form



TOTAL PROJECT COSTS (Dollars in thousands)	Project Cost All Prior Years	Request Amt. 2020	Request Amt. 2022	Request Amt. 2024	Request Amt. All years	Project Start (mo/yr)	Project Finish (mo/yr)
1. Property Acquisition							
1a) Land, Land and Easements Options	0	0	0	0	0		
1b) Buildings and Land	0	0	0	0	0		
SUBTOTAL	0	0	0	0	0		
2. Predesign (.5%-1% of total project cost)	0	0	0	0	0		
3. Design Fees (6-12% of construction costs)							
3a) Schematic (20% of design fee)	0	0	0	0	0		
3b) Design Development (20% of design fee)	0	0	0	0	0		
3c) Contract Documents (30% of design fee)	0	0	0	0	0		
3d) Construction Administration (20% of design fee)	0	0	0	0	0		
3e) Bidding, Close out (10% of design fee)	0	0	0	0	0		
3f) Additional design fees for B3 compliance	0	0	0	0	0		
SUBTOTAL	0	0	0	0	0		
4. Project Management (3-10% constr. costs)							
4a) State Staff Project Management (.8% total project cost)	0	0	0	0	0		
4b) Nonstate Construction Management (2-4% total project)	0	0	0	0	0		
- Owner's Rep, CM at Risk Pre-Con	0	0	0	0	0		
4c) Commissioning (.5% of construction cost)	0	0	0	0	0		
4d) Testing/Quality Assurance (1-4% construction cost)	0	0	0	0	0		
4e) Add'l Proj. Management costs for B3 compliance	0	0	0	0	0		
SUBTOTAL	0	0	0	0	0		
5. Construction Costs							
5a) Site and Building Preparation	0	0	0	0	0		
5b) Demolition/Decommissioning	0	0	0	0	0		
5c) Construction	0	0	0	0	0		
5d) Infrastructure/Roads/Utilities	0	0	0	0	0		
5e) Hazardous Materials Abatement	0	0	0	0	0		
5f) Construction Contingency (6-10% of 5c: Construction)	0	0	0	0	0		
SUBTOTAL	0	0	0	0	0		
6. Art (1% of construction cost)					0		
SUBTOTAL	0	0	0	0			

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Project Workbook: B3 Fees

7	**2. Predesign** (.5%-1% of total project cost)	0
8	**3. Design Fees** (6-12% of construction costs)	
9	**3a)** Schematic (20% of design fee)	0
10	**3b)** Design Development (20% of design fee)	0
11	**3c)** Contract Documents (30% of design fee)	0
12	**3d)** Construction Administration (20% of design fee)	0
13	**3e)** Bidding, Close-out (10% of design fee)	0
14	**3f)** Additional design fees for B3 compliance	0
15	**SUBTOTAL**	**0**
16	**4. Project Management** (3-10% constr. costs)	
17	**4a)** State Staff Project Management (.8% total project cost)	0
18	**4b)** Nonstate Construction Management (2-4% total project)	0
19	- Owner's Rep, CM at Risk Pre-Con	0
20	**4c)** Commissioning (.5% of construction cost)	0
21	**4d)** Testing/Quality Assurance (1-4% construction cost)	0
22	**4e)** Add'l Proj. Management costs for B3 compliance	0
23	**SUBTOTAL**	**0**
24	**5. Construction Costs**	

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Project Workbook: Debt Service

SOURCE OF FUNDS FOR DEBT SERVICE PAYMENT	Amount
General Fund (GO Bonds) - 2/3 of Grand Total project costs	0
System Financing - 1/6 of Grand Total project costs	0
Campus Financing - 1/6 of Grand Total project costs	0

Capital Project Scoring

What you need to know about the 2020
Capital Budget Process with Minnesota State

MINNESOTA STATE

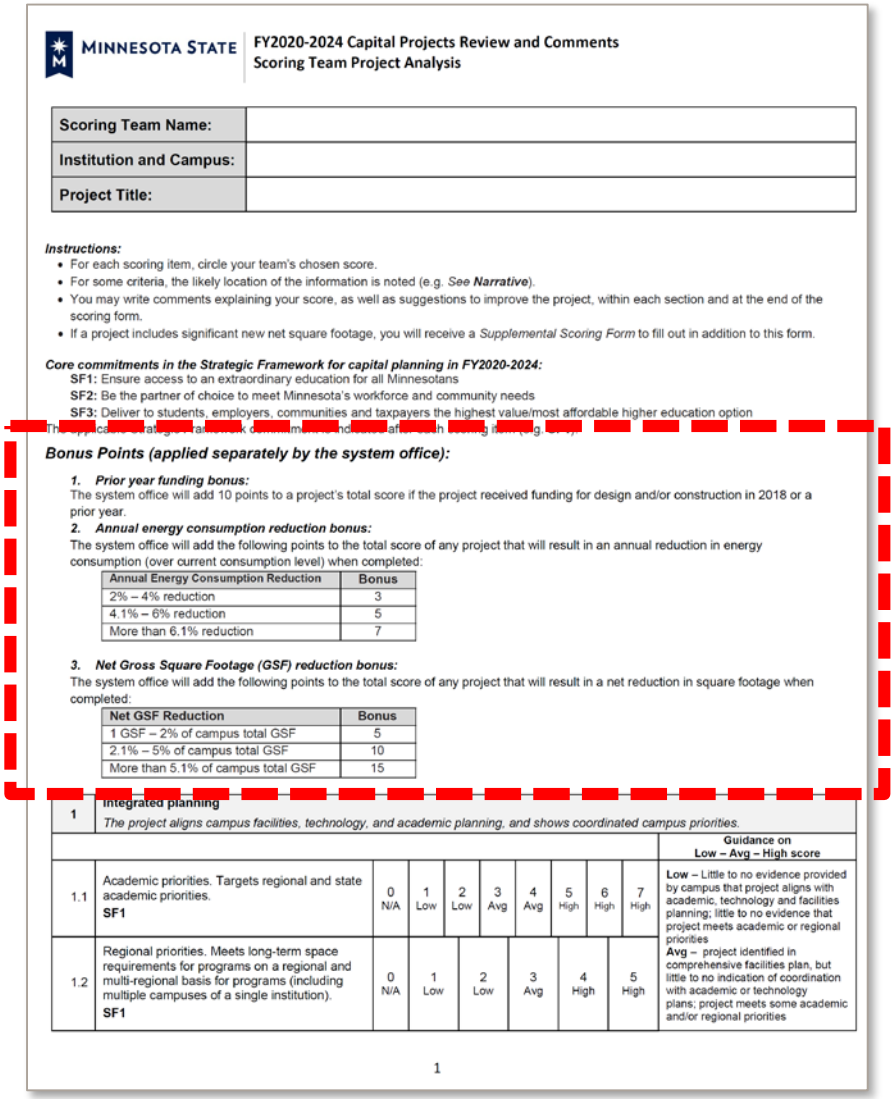
The Strategic Framework

1. Ensuring **access to an extraordinary education** for all Minnesotans

2. Being the **partner of choice** to meet Minnesota's workforce and community needs

3. Delivering to students, employers, communities, and taxpayers the **highest value/most affordable option**

Primary scoring form



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FY2020-2024 Capital Projects Review and Comments
Scoring Team Project Analysis

Scoring Team Name:	
Institution and Campus:	
Project Title:	

Instructions:

- For each scoring item, circle your team's chosen score.
- For some criteria, the likely location of the information is noted (e.g. *See **Narrative***).
- You may write comments explaining your score, as well as suggestions to improve the project, within each section and at the end of the scoring form.
- If a project includes significant new net square footage, you will receive a *Supplemental Scoring Form* to fill out in addition to this form.

Core commitments in the Strategic Framework for capital planning in FY2020-2024:

SF1: Ensure access to an extraordinary education for all Minnesotans
SF2: Be the partner of choice to meet Minnesota's workforce and community needs
SF3: Deliver to students, employers, communities and taxpayers the highest value/most affordable higher education option

The applicable strategic framework commitment is indicated after each scoring item (e.g. SF1).

Bonus Points (applied separately by the system office):

1. ***Prior year funding bonus:***
The system office will add 10 points to a project's total score if the project received funding for design and/or construction in 2018 or a prior year.
2. ***Annual energy consumption reduction bonus:***
The system office will add the following points to the total score of any project that will result in an annual reduction in energy consumption (over current consumption level) when completed:

Annual Energy Consumption Reduction	Bonus
2% – 4% reduction	3
4.1% – 6% reduction	5
More than 6.1% reduction	7

3. ***Net Gross Square Footage (GSF) reduction bonus:***
The system office will add the following points to the total score of any project that will result in a net reduction in square footage when completed:

Net GSF Reduction	Bonus
1 GSF – 2% of campus total GSF	5
2.1% – 5% of campus total GSF	10
More than 5.1% of campus total GSF	15

1	**Integrated planning** *The project aligns campus facilities, technology, and academic planning, and shows coordinated campus priorities.*									
										Guidance on Low – Avg – High score
1.1	Academic priorities. Targets regional and state academic priorities. **SF1**	0 N/A	1 Low	2 Low	3 Avg	4 Avg	5 High	6 High	7 High	**Low** – Little to no evidence provided by campus that project aligns with academic, technology and facilities planning; little to no evidence that project meets academic or regional priorities **Avg** – project identified in comprehensive facilities plan, but little to no indication of coordination with academic or technology plans; project meets some academic and/or regional priorities
1.2	Regional priorities. Meets long-term space requirements for programs on a regional and multi-regional basis for programs (including multiple campuses of a single institution). **SF1**	0 N/A	1 Low	2 Low	3 Avg	4 High	5 High			

1

- Newly reorganized
- Some scoring criteria revised or eliminated
- Some new criteria

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Primary scoring form: New bonus points

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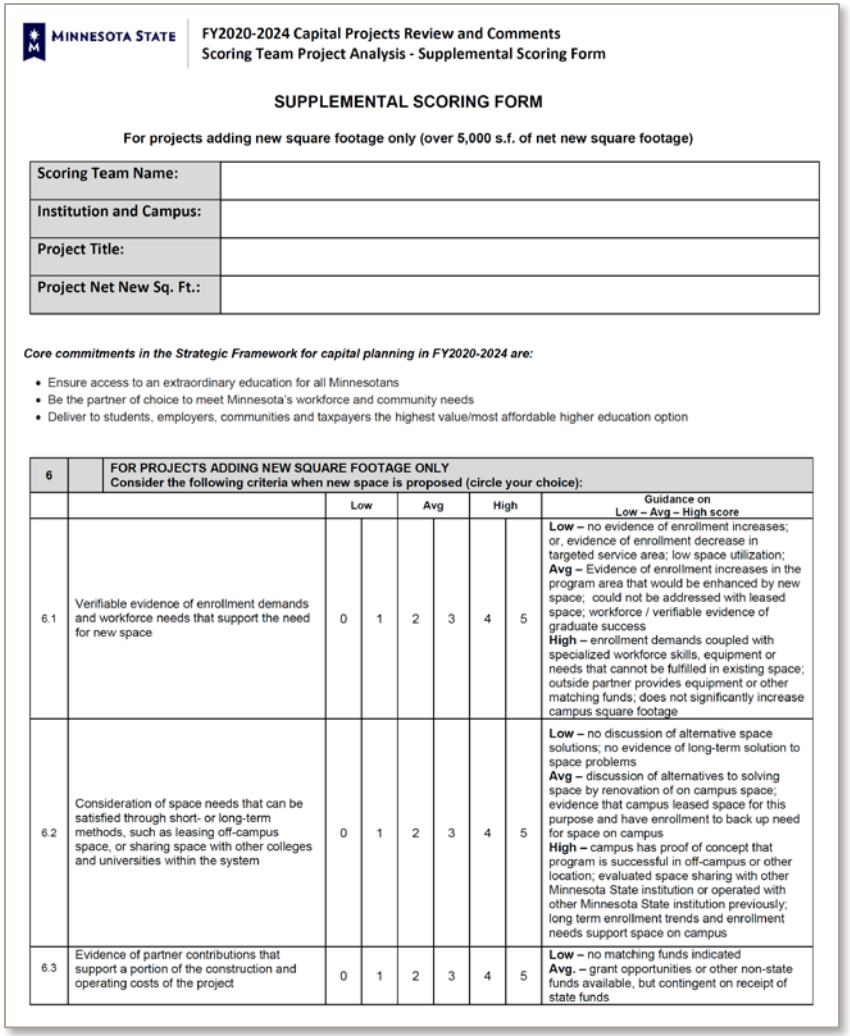
Scoring form - new net square footage

- Over 5,000 new net sq. ft.
- In addition to primary scoring form
- Max. 35 points



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FY2020-2024 Capital Projects Review and Comments
Scoring Team Project Analysis - Supplemental Scoring Form

SUPPLEMENTAL SCORING FORM

For projects adding new square footage only (over 5,000 s.f. of net new square footage)

Scoring Team Name:	
Institution and Campus:	
Project Title:	
Project Net New Sq. Ft.:	

Core commitments in the Strategic Framework for capital planning in FY2020-2024 are:

- Ensure access to an extraordinary education for all Minnesotans
- Be the partner of choice to meet Minnesota's workforce and community needs
- Deliver to students, employers, communities and taxpayers the highest value/most affordable higher education option

6		FOR PROJECTS ADDING NEW SQUARE FOOTAGE ONLY Consider the following criteria when new space is proposed (circle your choice):						
		Low		Avg		High		Guidance on Low – Avg – High score
6.1	Verifiable evidence of enrollment demands and workforce needs that support the need for new space	0	1	2	3	4	5	**Low –** no evidence of enrollment increases; or, evidence of enrollment decrease in targeted service area; low space utilization; **Avg –** Evidence of enrollment increases in the program area that would be enhanced by new space; could not be addressed with leased space; workforce / verifiable evidence of graduate success **High –** enrollment demands coupled with specialized workforce skills, equipment or needs that cannot be fulfilled in existing space; outside partner provides equipment or other matching funds; does not significantly increase campus square footage
6.2	Consideration of space needs that can be satisfied through short- or long-term methods, such as leasing off-campus space, or sharing space with other colleges and universities within the system	0	1	2	3	4	5	**Low –** no discussion of alternative space solutions; no evidence of long-term solution to space problems **Avg –** discussion of alternatives to solving space by renovation of on campus space; evidence that campus leased space for this purpose and have enrollment to back up need for space on campus **High –** campus has proof of concept that program is successful in off-campus or other location; evaluated space sharing with other Minnesota State institution or operated with other Minnesota State institution previously; long term enrollment trends and enrollment needs support space on campus
6.3	Evidence of partner contributions that support a portion of the construction and operating costs of the project	0	1	2	3	4	5	**Low –** no matching funds indicated **Avg. –** grant opportunities or other non-state funds available, but contingent on receipt of state funds

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2020 Capital Budget Guidelines reflect the trends on campuses

1. Update academic spaces. +
2. Ease barriers to student success. +
3. Prioritize energy efficiency and renewable + energy infrastructure.
4. Limit new square footage.

Resources/Websites

- **Facilities website**
- **Vendor opportunities**
- **Key capital budget information:**
  - Capital Budget web page
  - Schedule
  - Capital Budget Instructions
  - Minnesota State Predesign Guidelines

Who to contact for questions

Greg Ewig, System Director, Capital Development
(651) 201-1775
Gregory.ewig@minnstate.edu

Michelle Gerner, Senior Planner
(651) 201-1531
Michelle.gerner@minnstate.edu

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THANK YOU

30 East 7th Street
St. Paul, MN 55101

651-201-1800
888-667-2848

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