State Board for Community and Technical Colleges
2019-21 Project Development Guidelines
Project Request Report

When developing the Project Request Report (PRR), the following items should be addressed:

1. **Executive Summary**
   - 1.1. Problem statement/type of project request
   - 1.2. Proposed solution
   - 1.3. Programs addressed by project
   - 1.4. Probable cost summary and comparison to benchmark (reasonableness of cost)
   - 1.5. Project schedule
   - 1.6. Funding (state funds, local funds, COPs)

2. **Problem Statement, Opportunity or Program Requirement**
   - 2.1. Short description of the project and its benefits
   - 2.2. How this project relates to:
     - 2.2.1. Facilities master plan
     - 2.2.2. Strategic plan
     - 2.2.3. Institutional goals
   - 2.3. How this project relates to the SBCTC System Direction goals for Economic Demand, Student Success, and Innovation
   - 2.4. Table showing a summary of program and related space
   - 2.5. Increased Type 1 and Type 2 Full Time Equivalent Students [1] accommodated by this project
   - 2.6. Table of affected existing buildings with their Unique Facility Identifiers, dates built and square footages

3. **Analysis of Alternatives**
   - 3.1. Define the capital problem in terms of building age, condition, functionality, health, safety, code issues, etc.
   - 3.2. Describe the obvious and critical needs that are driving the project. For example:
     - 3.2.1. New space for enrollment demand
     - 3.2.2. Renovation/replacement
       - 3.2.2.1. Program mix changes
       - 3.2.2.2. Simplifying space relationships
     - 3.2.3. Accreditation needs
   - 3.3. Alternatives considered
     - 3.3.1. Programmatic and facility related
     - 3.3.2. Consequences of doing nothing
     - 3.3.3. Cost estimate for each alternative

4. **Project Planning of Preferred Alternative**
   - 4.1. History of building and original funding source, if applicable
   - 4.2. Useful life of proposed facility
   - 4.3. Discussion of sustainability – LEED Silver Standard required
   - 4.4. How this project will impact deferred maintenance and repair backlog
   - 4.5. Acquisition needs
   - 4.6. Mitigation and neighborhood related issues

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[1] To account for online students in space planning we have defined two types of FTES:
Type 1: Day On Campus w/o Online Category 3N – Used for sizing classrooms and labs.
Type 2: Day On Campus plus Online of regardless of time of day – Used for everything else.

4.7. Parking expansion directly related to the project
4.8. Permit issues, variances required
4.9. Utility and other infrastructure needs
4.10. Storm water and other environmental issues
4.11. Roads and traffic signals
4.12. Department of Archaeology and Historic Preservation and tribal reviews
4.13. Provide fall 2016 utilization of classrooms, laboratories and all instructional areas on campus. See Appendix C for guidelines on determining existing utilization.
4.14. New programs; changing mix of programs
4.15. New space and what happens to vacated space – is it renovated or demolished?
4.16. Comparison of existing and new spaces to the capital analysis model in Appendix F.
4.17. Need and availability of surge space
4.18. Flexibility and adaptability of proposed space

5. Project Budget Analysis of Preferred Alternative

5.1. Prediction of overall project cost
5.2. Comparisons of $/FTE to similar Washington community and technical college projects
5.3. Anticipated annual impact on the college's operating and maintenance budget in both Program 090 FTES and M&O cost, including but not limited to:
  5.3.1. Janitorial costs
  5.3.2. Utility costs
  5.3.3. Technology – infrastructure and technician support; voice, data and video communication
  5.3.4. Capital maintenance, general repair and furniture/equipment replacement
  5.3.5. Roads, walks, landscaping and grounds maintenance
  5.3.6. Security
  5.3.7. Administration
  5.3.8. Justification for desired method of construction – Design-Bid-Build, GC/CM, or Design Build

6. Required Attachments

6.3. Cost estimates on OFM C100 form in Excel format
6.4. Completed Project Parameters form
6.5. Minimum and Overarching Criteria form with college responses
6.6. DAHP and Tribal review of proposed project as required under Executive Order 05-05
6.7. Completed LEED checklist
6.8. Estimating documents supporting special needs, mitigation or extenuating circumstances associated with the project
6.9. Site map showing project location
6.10. Preliminary drawings and sketches

7. Appendices (required where cited in proposal)

7.3. Any site-specific materials important to the project – structural engineering report, geotechnical report, traffic studies, etc.
7.4. Selected material from Facility Condition Survey
7.5. Selected material from the master plan and strategic plan that ties directly to the scoring criteria
7.6. Other relevant material where referenced in proposal may be included as appendices

PRR Format and Expectations

- ☐ Narrative should follow headings from this set of guidelines.
- ☐ Length should not exceed 20 pages, single-spaced (excluding project cost, diagrams and sketches, appendices, cover sheet, title page and table of contents); type font should be Times New Roman 12 point and margins should be one inch.
- ☐ Colleges should provide hyper-links between claims and data in the proposal.
- ☐ Colleges should submit proposals in editable electronic formats (PDF, Excel, Word, etc.) to SBCTC Capital Budget Director for distribution to the evaluation team. The project narrative and cost estimates should not be scanned (raster) documents nor should they have a security feature that makes it difficult to copy information from them.
- ☐ SBCTC may forward copies of the Project Request Reports to OFM, WSAC and legislative staff upon completion of the selection process.

Project Parameters

Type of Space	Square Footage	Percent
Renovation of Existing	(S1)	
New Space	(S2)	
Exterior Circulation of Existing. See Appendix H.	(S6)	
Demolished Area	(S3)	
Total Affected Area	**(S4 = S1 + S2)**	
Net Area Change = New – Demo – Circulation	S5 = (S2 – S3 – S6)	

NEW

Costs	Dollars	Percent
Acquisition		
Consultant Services		
Construction Contracts (w/o eligible Infrastructure)	Ca	
Eligible Infrastructure Contracts (from C100)	Cb	
Equipment		
Artwork		
Other Costs		
Project Management		
Total Project Cost (C1)		

Funding	Dollars	Percent
State Appropriation		
Financed – backed by State Appropriation		
Local Funds – Cash (see list of qualifying funds)	Ma	
Financed – backed by Local Funds	Mb	
Total Project Funding	**(F1)**	
Matching	(Ma+Mb)	(Ma+Mb) / F1
Variance = Cost – Funding	(C1 – F1)	

Project Weighting	Equivalent Area	Percent
Matching	(M4 * S4)	M4 = 2 * (Ma+Mb)/F1
Infrastructure	(I4 * S4)	I4 = min(Cb/(Ca+Cb),(1-M4))
Renovation	(R4 * S4)	R4 = (S1 * (1-M4-I4))/(S1+S5+min(S2,S3))
Replacement	(P4 * S4)	P4 = (min(S2,S3) * (1-M4-I4))/(S1+S5+min(S2,S3))
New	(N4 * S4)	N4 = ((S5)*(1-M4-I4))/(S1+S5+min(S2,S3))
Total	**S4**	**M4+R4+P4+N4**

2019-21 Category Weighting

The following values represent a system without any differential category weighting.

Overarching Weighting (O2)	1.00
Matching Fund Weighting (M2)	1.00
Infrastructure Weighting (I2)	1.00
Renovation Weighting (R2)	1.00
Replacement Weighting (P2)	1.00
New Area Weighting (N2)	1.00

2019-21 Minimum and Overarching Criteria Points

Evaluation Criteria	**Scoring Standard**	
College Response	Affected buildings are at a single site.	**Yes / No**
College Response	Project does not include improvements to temporary or portable facilities.	**Yes / No**
College Response	Project is not a gymnasium or recreational facility.	**Yes / No**
College Response	Project is not an exclusive enterprise function such as a bookstore, dormitory or contract food service.	**Yes / No**
College Response	Project is not dependent on another project in the current request.	**Yes / No**
College Response	Project meets LEED Silver Standard requirements.	**Yes / No**
College Response	College has a Greenhouse Gas Emission Reduction plan.	**Yes / No**
College Response	The facility is state-owned or a condominium interest is held (state capital funds cannot be spent on leased space).	**Yes / No**
College Response	Project will take more than one biennium. And, project costs at least $5,000,000 and does not exceed 70,000 gsf without WACTC Capital Budget Committee approval.	**Yes / No**
College Response	If project includes renovation or replacement, then affected buildings have been owned by the college for 20 years at the time of the request.	**Yes / No**
College Response	If project includes renovation, then the project extends the useful life of the affected building at least 20 years.	**Yes / No**
College Response	If project includes renovation, then the cost does not exceed 80% of the current replacement cost.	**Yes / No**
Effective use of existing facilities See Appendix C for guidelines on determining existing utilization.	Fall 2016 space utilization relative to standards and other proposals. Standards are: Classroom seats used 22 hours per week. Laboratory seats used 16 hours per week.	**Up to 9 points**
Ability to enhance state and institution's achievement of goals	*Add up points from each category: (Max 14)* Directly tied to facilities master plan Directly tied to objectives in strategic plan Include clear and succinct description of the relationship between the project and its impact on partnerships with K-12, 4 yrs, business, etc. This may be supported by letters from partners describing how the project will benefit the partnership. Project includes at least seven of the best practices identified in Appendix A to reduce greenhouse gas emissions.	 **4** **4** **4** **2**
	Overarching Subtotal (O1)	
	Overarching Weighting (O2)	
	Overarching Weighted Subtotal (O3 = O1 x O2)	
	Overarching Portion of Project (O4)	
	Overarching Points (O5 = O3 x O4)	

2019-21 Matching Fund Points

(use when project includes non-state resources)

Evaluation Criteria	**Scoring Standard**	
Project clearly benefits students	*Add up points from each category: (Max 12)**	
	Increases program access	**3**
	Increases efficiency	**3**
	Improves service to students	**3**
	Simplifies space relationships	**3**
Demonstrated need	Serves a critical need	**20**
	Enhances program delivery	**10**
	Improves space	**3**
	Not addressed	**0**
Reasonableness of cost See Appendix B for determining expected costs.	Total project cost is less than or equal to the expected cost per square foot for the facility type, escalated to the construction mid-point.	**7**
	Project cost is between 100% and 137% of expected cost.	**3**
	Project cost is more than 137% of expected cost.	**0**
Project completion timeline	All matching funds available at time proposal is submitted.	**10**
	All matching funds will be raised before construction is completed.	**3**
	Matching funds will continue to be raised after construction is completed.	**0**
Project schedule	Project and funding milestones are clearly identified.	**10**
	Project schedule w/o a funding schedule.	**3**
	Schedule is uncertain or not evident.	**0**
Project feasibility	Assessment of the likelihood of success and good local participation	**Up to 18 points**
		Matching Fund Subtotal (M1)
		Matching Fund Weighting (M2)
		Matching Fund Weighted Subtotal (M3 = M1 x M2)
		Matching Fund Portion of Project (M4)
		Matching Fund Points (M5 = M3 x M4)

<u>Qualifying Non-State Resources</u>
Foundation Resources
Cash Donations
Private Grants
Federal Funds awarded for Capital Construction

<u>Non-Qualifying Resources</u>
S & A Balances or Fees
Enterprise Funds
Parking Fees
COP Funds

* Corrected typo in max available 14Mar17.

2019-21 Infrastructure Points

(use when project includes qualified site costs)

Evaluation Criteria	Scoring Standard	
Program need Serves new building area in this proposal or existing college facilities. Existing college need is measured as gross square footage of existing buildings served by infrastructure relative to entire college gross square footage.	Infrastructure serves new building area constructed in this proposal. Or, serves 100% of the existing college.	**20**
	Serves 80% or more, and less than 100% of the existing college.	**15**
	Serves between 40% and 80% of college of the existing college.	**10**
	Serves 40% or less of the existing college.	**0**
Reasonableness of cost Provide a separate C100 for the Infrastructure work. Provide detailed log from previous year(s) with costs for maintenance and repair if replacing existing infrastructure.	Infrastructure costs less than 5% of the total project. Or, infrastructure cost divided by previous average annual costs is twenty, or less.	**30**
	Infrastructure costs 5%, or more, and less than 10% of the total project. Or, infrastructure cost divided by previous average annual costs is greater than twenty and less than fifty.	**15**
	Infrastructure costs 10%, or more, and less than 15% of the total project. Or, infrastructure cost divided by previous average annual costs is fifty, or more, and less than one hundred.	**5**
	Infrastructure costs 15% or more of the total project. Or, infrastructure cost divided by previous average annual costs is one hundred, or more.	**0**
Risk mitigation Age of infrastructure being replaced at the date of the proposal relative to average life of type of infrastructure. See Appendix E for average lives.	Infrastructure serves new area building constructed in this proposal. Or, infrastructure age is at least 200% of the average life.	**12**
	Infrastructure is 100% to 200% of average life.	**6**
	Infrastructure is less than 100% of average life.	**0**
Suitability for long term financing Average life of new or replaced infrastructure. Provide engineer's opinion of average life if not replacing entire infrastructure with new. See Appendix E for calculating average lives.	Average life of new infrastructure is more than 30 years.	**15**
	Average life of new infrastructure is more than 25 years and less than 30 years.	**10**
	Average life or new infrastructure is 20 through 25 years.	**5**
	Average life of new infrastructure is less than 20 years.	**0**
	Infrastructure Subtotal (I1)	
	Infrastructure Weighting (I2)	
	Infrastructure Weighted Subtotal (I3 = I1 x I2)	
	Infrastructure Portion of Project (I4)	
	Infrastructure Points (I5 = I3 x I4)	

Qualifying Infrastructure

Electrical, potable water, sewer, natural gas, storm water, fire protection, emergency access roads, and communication work more than five feet outside of a building's foundation, unless it is connecting to a building with no other work in the project in which case the infrastructure may terminate inside the building.

Non-qualifying Infrastructure

Landscaping that is not disturbed by qualifying infrastructure work, roads (except emergency access), driveways, parking lots and walkways.

2019-21 Renovation Points

(use when project includes renovated space)

Evaluation Criteria	Scoring Standards	
Age of the building or portion of building being renovated	Over 50 41 – 50 36 – 40 31 – 35 26 – 30 20 – 25 < Less than 20 years	**16** **13** **11** **8** **5** **2** **0**
Condition of the building or portion of building being renovated	Greater than 600 526 - 600 476 - 525 451 - 475 351 - 450 276 - 350 0 - 275	**2** **11** **16** **11** **2** **0** **-5**
Reasonableness of cost of the renovated portion of the building See Appendix B for determining expected costs.	Total project cost is less than or equal to the expected cost per square foot for the facility type, escalated to the construction mid-point.	**10**
	Project cost is between 100% and 111% of expected cost.	**8**
	Project cost is between 111% and 137% of expected cost.	**2**
	Project cost is more than 137% of expected cost.	**0**

Program related improvements in the renovated portion of the project	*(Assignable Square Feet)*	*Percentage of total*	*x score*	***Total***
	Classroom, labs		**13**	
	Student Services		**13**	
	Library		**13**	
	Childcare		**11**	
	Faculty offices		**8**	
	Administrative		**5**	
	Maintenance/Central Stores/Student Center		**2**	

Significant health, safety and code issues addressed in the renovation	*Add up points from each category (Max 8)* Seismic issues (documentation by a Structural Engineer is required) Life safety ADA access (provide recent compliance review) Energy code issues	 **2** **2** **2** **2**
Extension to renovated portion of building's life	31 + years 26 – 30 years 20 – 25 years	**8** **5** **2**
Fitness for Use of the renovated portion of the project	To what extent does the proposed renovation address the existing deficiencies and project objectives?	**Up to 6 points ***
	Renovation Subtotal (R1)	
	Renovation Weighting (R2)	
	Renovation Weighted Subtotal (R3 = R1 x R2)	
	Renovation Portion of Project (R4)	
	Renovation Points (R5 = R3 x R4)	

* Corrected typo in max available 11Apr17.

2019-21 Replacement Points

(use when project includes demolition)

Evaluation Criteria	**Scoring Standard**			
Age of the building or portion of building being replaced	Over 50 41 – 50 36 – 40 31 – 35 26 – 30 20 – 25 < Less than 20 years		**14** **12** **9** **7** **5** **2** **0**	
Condition of building or portion of building being replaced	681 – 730 601 – 680 526 – 600 476 – 525 451 – 475 351 – 450 276 – 350 0 – 275		**14** **12** **9** **7** **5** **2** **0** **-5**	
Reasonableness of cost of the replacement portion of the project See Appendix B for determining expected costs.	Total project cost is less than or equal to the expected cost per square foot for the facility type, escalated to the construction mid-point.		**16**	
	Project cost is between 100% and 111% of expected cost.		**12**	
	Project cost is between 111% and 137% of expected cost.		**5**	
	Project cost is more than 137% of expected cost.		**0**	
Program related improvements in the replacement portion of the project	*(Assignable Square Feet)* Classroom, labs Student Services Library Childcare Faculty offices Administrative Maintenance/Central Stores/Student Center	*Percentage of total*	*x score* **12** **12** **12** **9** **7** **5** **2**	***Total***
Significant health, safety and code issues addressed by the replacement portion of the project	*Add up points from each category (Max14)* Seismic issues (documentation required) Life safety ADA access Energy code issues		 **5** **5** **2** **2**	
Fitness for Use of the replacement portion of the project	To what extent does the proposed replacement address the existing deficiencies and project objectives?		**Up to 7 points**	
			Replacement Subtotal (P1)	
			Replacement Weighting (P2)	
			Replacement Weighted Subtotal (P3 = P1 x P2)	
			Replacement Portion of Project (P4)	
			Replacement Points (P5 = P3 x P4)	

2019-21 New Area Points

(use when project has a net increase in area)

Evaluation Criteria	**Scoring Standard**			
Efficient use of space – future utilitzation NEW See Appendix D for guidelines on determining future utilization and Appendix G for guidelines on enrollment projections	If either Lab utilization will be more than 17 or Class utilization will be more than 23.		**18**	
	If Lab utilization will be at least 15 but less than 17 and Class utilization was at least 21 but less than 23		**24**	
	If Lab utilization was at least 12 but less than 15 and Class utilization was at least 19 but less than 21		**12**	
	If either Lab utilization will be less than 12 or Class utilization will be less than 19.		**0**	
Program related improvements in the new area portion of the project NEW	*(Assignable Square Feet)*	*Percentage of total*	*x score*	***Total***
	Classroom, labs		**12**	
	Student Services		**12**	
	Library		**12**	
	Childcare		**9**	
	Faculty offices		**7**	
	Administrative		**5**	
	Maintenance/Central Stores/Student Center		**2**	
Comprehensive project planning for new area	*Add up points from each category:(Max 24)* Space improves program delivery and student support Programs and student support space are identified by usage and square footage Location of project is identified by site Special initiatives beyond participation rates Reasonable cost estimate and building efficiency Expected building life – 50 years or greater		 **Up to 10** **Up to 5** **2** **2** **3** **2**	
Reasonableness of cost of the new area – efficient utilization of funds for building being proposed See Appendix B for determining expected costs.	*Add up points from each category: (Max 17)*			
	Total project cost is less than or equal to the expected cost per square foot for the facility type, escalated to the construction mid-point.		**17**	
	Project cost is between 100% and 111% of expected cost.		**12**	
	Project cost is between 111% and 137% of expected cost.		**5**	
	Project cost is more than 137% of expected cost.		**0**	
			New Area Subtotal (N1)	
			New Area Weighting (N2)	
			New Area Weighted Subtotal (N3 = N1 x N2)	
			New Area Portion of Project (N4)	
			New Area Points (N5 = N3 x N4)	

Appendix A – Best Practices to Reduce Greenhouse Gas Emissions

System / Best Practices	**Included in Project?**
Mechanical	
Solar water heating	
Above code HVAC system efficiency	
Use natural gas instead of electricity for heating	
Geothermal heat pump	
Post occupancy commissioning	
NEW Interconnectivity of room scheduling in 25Live and HVAC controls	
Electrical	
Photovoltaic energy systems	
Time of day and occupancy programming of lighting	
Efficient lighting	
Envelope	
Minimize building surface area for necessary floor area	
Roofing materials with high solar reflectance and reliability	
Green roofs to absorb heat and act as insulators for ceilings	
Site	
Orient building for natural light and reduced heating and cooling loads	
Trees and vegetation planted to directly shade building	
Paving materials with high solar reflectance, enhanced water evaporation, or otherwise designed to remain cooler ore require less lighting than conventional pavements	
Increase transportation choices – drive, walk, bike or public transit	
Total number of these best practices included in project:	

Appendix B – Expected Cost Ranges

EXPECTED PROJECT COSTS IN 2008 DOLLARS

The following data is from the Facilities Financing Study dated December 10, 2008, prepared by Berk & Associates, http://www.ofm.wa.gov/budget/capital/higher_ed_capital_finance_study.pdf. This study was completed in response to Engrossed Substitute House Bill 3329, enacted by the 2008 Legislature. The CTC Libraries data are based on recently completed projects at Washington State's community and technical colleges.

Facility Type	Number of Data Points	Construction Costs / GSF		Total Project Costs / GSF
		Std Dev	Best Fit	Expected Cost
Classrooms	19	$57	$297	$420
Communications buildings	5	$68	$267	$378
Science labs (teaching)	16	$66	$309	$437
Research facilities	12	$61	$440	$623
Administrative buildings	9	$36	$218	$309
Day care facilities	4	$24	$199	$283
CTC Libraries	4	$56	$255	$361

ADJUSTING EXPECTED COSTS TO CONSTRUCTION MID-POINT

The following data is based on the December 2016 Global Insight forecast for state and local government spending and is to be used for adjusting the expected costs from July 1, 2008, to the mid-construction date for comparison to project estimates.

Mid-construction Date	Expected Cost Multiplier	Mid-construction Date	Expected Cost Multiplier
7/1/2008	1.000	5/16/2019	1.287
5/16/2016	1.184	8/15/2019	1.297
8/15/2016	1.187	11/15/2019	1.306
11/15/2016	1.195	2/15/2020	1.315
2/14/2017	1.204	5/16/2020	1.324
5/16/2017	1.214	8/15/2020	1.332
8/15/2017	1.224	11/15/2020	1.341
11/15/2017	1.233	2/14/2021	1.350
2/14/2018	1.242	5/16/2021	1.359
5/16/2018	1.251	8/15/2021	1.368
8/15/2018	1.260	11/15/2021	1.377
11/15/2018	1.269	2/14/2022	1.386
2/14/2019	1.278	5/16/2022	1.395

SAMPLE PROJECT FOR DEMONSTRATION OF EXPECTED COST RANGES

Construction Mid-point:	5/16/2020	
Expected Cost Multiplier:	1.324	from Appendix B
Project GSF:	65,000	S1 + S3 from Project Parameters

Facility Type	**Expected Cost / GSF in 2008$**	**Expected Cost / GSF**	**GSF by Type**	**Expected Cost**	**Point Thresholds**
Classrooms	$420	$556	39,000	$ 21,684,000	
Communications buildings	$378	$500	-	$ -	
Science labs (teaching)	$437	$579	13,000	$ 7,527,000	
Research facilities	$623	$825	-	$ -	
Administrative buildings	$309	$409	13,000	$ 5,317,000	
Day care facilities	$283	$375	-	$ -	
CTC Libraries	$361	$478	-	$ -	
			65,000	**$ 34,528,000**	**100%**
				$ 38,326,080	**111%**
				$ 47,303,360	**137%**

The Project Cost (C1) less the Infrastructure Cost is compared to the Expected Cost for determination of Reasonableness of Cost points. When submitting a proposal with Infrastructure, please provide a separate C100 for the Infrastructure work so the costs can be easily identified.

Expected Cost / GSF = Expected Cost / GSF in 2008$ * Expected Cost Multiplier
GSF by Type = ASF by Type / Sum(All ASF) * GSF

Appendix C – Existing Utilization

Utilization is used to compare the level of use of instructional facilities at different locations. The methodology is based on the 1994 Higher Education Coordinating Board standards for classroom and laboratory facility utilization available here- http://www.wsac.wa.gov/sites/default/files/FacilitiesEvaluationandPlanningGuide.pdf.

The contact hours are totaled for classrooms, laboratories and other facilities used for instruction in the first week of the preceding fall quarter and compared to the capacity of these spaces. The weekly utilization rate is equal to the contact hours divided by room capacity during a forty-five hour week. The college can identify which forty-five hours represent the peak use of their facilities for the calculation. The capacity is generally the number of student seats designed to be available in the space. If another standard is used it should be described in the analysis.

- For example, if there is a room used for classroom instruction with one instructor, the maximum student-to-faculty ratio is twenty-five by contract, or policy, and the room has twenty-eight student seats, then the capacity of the room is limited by the contract, or policy, to twenty-five students.

The capacity of non-traditional classrooms will be the maximum number of students that can be accommodated by the space at a given time. The capacity of these spaces may also be limited by contract, or policy. Here are some examples:

- If there is a space used for hands-on automotive repair instruction, two students can work on an automobile at a time, and the space can hold ten automobiles, then the capacity of this space would be twenty students.

- If there is a space used for instruction of computer controlled machining that is used by a single student cohort that includes sixteen student computer workstations and six computer controlled machines for which two students can work on at a time, then the capacity of this space is limited by the number of machines to twelve students.

The analysis will include a note about why any physical workstations were not included in the analysis and how the college plans to use the space more efficiently in the future.

Colleges can either calculate their facility utilization using the room scheduling software in ctcLink, called 25Live, or with a spreadsheet provided by the State Board. Currently, the standard utilization reports in 25Live do not offer as much flexibility as allowed by the adopted methodology.

The adopted methodology, a spreadsheet that calculates utilization consistent with the adopted methodology, and a spreadsheet with sample data are available here – http://www.sbctc.edu/colleges-staff/programs-services/capital-budget/capital-budget-development.aspx

Appendix D – Future Utilization

The utilization of campus classrooms and laboratories in the future is the projected number of contact hours divided by the future number of workstations. This can be estimated by adding the number of workstations in the proposed project to the existing number of workstations and the net new Type 1 enrollment to the existing Type 1 enrollment.

Start with the existing utilization, as determined in Appendix C, the number of Type 1 FTE in the corresponding fall quarter, and the projected Type 1 FTE as determined in Appendix G.

For example, given the following:

Existing Weekly Utilization Summary Table

	Contact Hours	Workstations	Utilization
Classes	20,344.70	787	25.87
Labs	8,485.20	415	20.47
Campus	28,829.90	1,201.00	24.00

Class Workstations in Project = 350
Lab Workstations in Project = 600
Net New Type 1 FTE = 500

We can convert the Net New FTE into class and lab FTE by recognizing each lab workstation produces one-half the credits per hour as a class workstation does;

Projected Net New Class FTE = (Net New Type 1 FTE) x Class Workstations in Project /
(Class Workstations in Project + (Lab Workstations in Project / 2))
= 500 x 350 / [350 + (600 / 2)] = 269.23

Projected Net New Lab FTE = (Net New Type 1 FTE) x (Lab Workstations in Project / 2) /
(Class Workstations in Project + (Lab Workstations in Project / 2))
= 500 x 600 / 2 / [350 + (600 / 2)] = 230.77

Next converting the FTE to contact hours;

Projected Net New Class Contact Hours = Projected Net New Class FTE x
15 Classroom Contact Hours per FTE
= 269.23 x 15 = 4,038.46

Projected Net New Lab Contact Hours = Projected Net New Lab FTE x
30 Lab Contact Hours per FTE
= 230.77 x 30 = 6,923.08

We get the new numerator for utilization by adding the net new contact hours to the existing contact hours;

Projected Class Contact Hours = Existing Class Contact Hours +
Projected Net New Class Contact Hours
= 20,344.70 + 4,038.46 = 24,383.16

Projected Lab Contact Hours = Existing Lab Contact Hours +
Projected Net New Lab Contact Hours
= 8,485.20 + 6,923.08 = 15,408.28

We get the new denominator for utilization by adding the number of net new workstations to the existing number of workstations;

Future Class Workstations = Existing Class Workstations + Net New Class Workstations
= 787 + 350 = 1,137

Future Lab Workstations = Existing Lab Workstations + Net New Lab Workstations
= 415 + 600 = 1,015

The future utilization can now be estimated as;

Future Class Utilization = Projected Class Contact Hours / Future Class Workstations
= 24,383.16 / 1,137 = 21.45

Future Lab Utilization = Projected Lab Contact Hours / Future Lab Workstations
= 15,408.28 / 1,015 = 15.19

Future Weekly Utilization Summary Table

	Contact Hours	Workstations	Utilization
Classes	24,383.16	1,137	21.45
Labs	15,408.28	1,015	15.19
Campus	39,791.44	2,151.00	18.50

A spreadsheet that calculates utilization consistent with this methodology, and a spreadsheet with sample data, are both available here – http://www.sbctc.edu/colleges-staff/programs-services/capital-budget/capital-budget-development.aspx

Appendix E – Average Useful Life of Infrastructure

The following average useful lives are used in accounting for depreciating assets. Since this is an average, about half of the infrastructure is expected to last longer. Projects involving infrastructure with different average lives shall use a cost weighted average life for scoring relative to the criteria. If replacing existing infrastructure, the proposal will have both the cost weighted average useful life of the existing and proposed infrastructures.

Infrastructure	**Average Useful Life** [1]	**Estimated Cost**	**Cost Weighted Life**
Electrical Service/Distribution – underground	20		
Electrical Utility Pole	20		
Electrical Transformer – pad mounted	5		
Electrical Transformer – in vault	5		
Electrical Generator – free standing	5		
Potable Water – piping	25		
Potable Water – meters	25		
Sewer lines – concrete	50		
Sewer lines – brick	90		
Sewer lines – metal	40		
Storm drains – plastic	25		
Storm drains – cast iron	30		
Storm drains – metal corrugated	30		
Storm drains – concrete	40		
Storm drains – ditch/trench	100		
Telecommunication – fiber optic conductors	5		
Telecommunication networks between buildings[2]	7.5		
Inter building communication infrastructure[3]	25		
Other [4]			
Subtotals		A = sum of Estimated Costs	B = sum of Cost Weighted Lives
Cost Weighted Average Useful Life			**B / A**

Notes:

[1] Average Useful Life in years is from Section 30.50.10 of the State Administrative & Accounting Manual Issued by Office of Financial Management unless otherwise noted.

[2] California State University Capital Asset Guide, April 2012.

[3] University of New Mexico Design Guidelines for Information Technology Infrastructure Facilities.

[4] Provide copy or link to Other data used in analysis.

Appendix F – Capital Asset Model

The following Capital Asset Model was adopted February 7, 2013.

Assignable Square Feet per FTE Student							
		Academic FTE		Vocational FTE		Basic Skills FTE	
Type of Space	**FTE Type**	First 1,000	Additional	First 1,000	Additional	First 1,000	Additional
General Classroom	1	12.4	12.4	7.5	7.5	N/A	N/A
Basic Skills	2	N/A	N/A	N/A	N/A	27.6	27.6
Science Lab	1	6.0	6.0	3.5	3.5	N/A	N/A
Computer Lab (open)	2	3.2	3.2	3.2	3.2	3.2	3.2
Music	2	A one-time allowance of 4,000 asf @ CCs only					
Art	2	A one-time allowance of 6,000 asf @ CCs only					
Drama	2	A one-time allowance of 5,000 asf @ CCs only					
Physical Education **	2	26.0	10.0	N/A	N/A	N/A	N/A
Library	2	16.8	8.5	16.8	8.5	16.8	8.5
Faculty Office	2	8.1	8.1	10.8	10.8	8.1	8.1
Admin/Student Services	2	8.98	5.13	8.98	5.13	8.98	5.13
Student Center & Related	2	13.19	7.97	13.19	7.97	13.19	7.97
Childcare	2	3.4	3.4	3.4	3.4	3.4	3.4
Central Stores/Maintenance	2	7.0	4.0	4.0	4.0	7.0	4.0
Auditorium	2	A one-time, total space of 9,000 asf @ CCs and TCs					
FTE Type 1: Day On Campus w/o Online (Category 3N)							
FTE Type 2: Day On Campus plus Online of same intent regardless of time of day							
* Vocational space will be included in the CAM based on a formal analysis of space needs by program and projected enrollment growth.							
** Calculation based on first 500 FTE.							

Appendix G – Enrollment Forecasting

The State Board staff will provide a ten-year enrollment forecast for each college based on the previous fall quarter enrollment adjusted for expected population changes over the next ten years. There will be a total enrollment projection, a projection for sizing classrooms and labs called "Type 1" FTE, and another for sizing other facilities on a campus called "Type 2" FTE that includes online enrollment.

The State Board projections include enrollment for academic transfer, workforce and basic skills courses. The projections exclude enrollment for continuing education courses and courses taught in prisons.

The Type 1 and Type 2 projections for sizing facilities are based on the peak need for space on the campus so they exclude evening and weekend enrollments.

High school students taking for-credit classes on the campus during the day through the Running Start program are included in the State Board enrollment projections.

In general, the State Board's population-based enrollment projections have been fairly accurate, but individual college projections can be off by large enough amounts to have an impact on capital project scoring.

The projections are for a ten year period to account for the time it can take for a capital project to be funded, designed and constructed. The State Board projections will be provided in early 2017.

If a college would like to provide an alternative ten-year projection for their Type 1 or 2 FTE, then it should be submitted to the State Board's capital budget director before May 2017 so it can be reviewed by State Board staff and a task force from the Research and Planning Council (RPC) by the end of June 2017.

The RPC task force will provide qualitative feedback on the proposed projection relative to the following goals:

- ☐ Consistency with definition of Type 1 or Type 2 FTE
- ☐ Use of strong and non-derivative data sources
- ☐ Having a minimum of 10 years of source data
- ☐ Use of valid statistical approach for building the forecast
- ☐ Inclusion of "what if" scenarios that explain what may affect the projection

Additional guidance on developing enrollment projections will be provided at the capital budget development workshops in early 2017. *

Time permitting; the RPC task force will review multiple iterations of a college's projection.

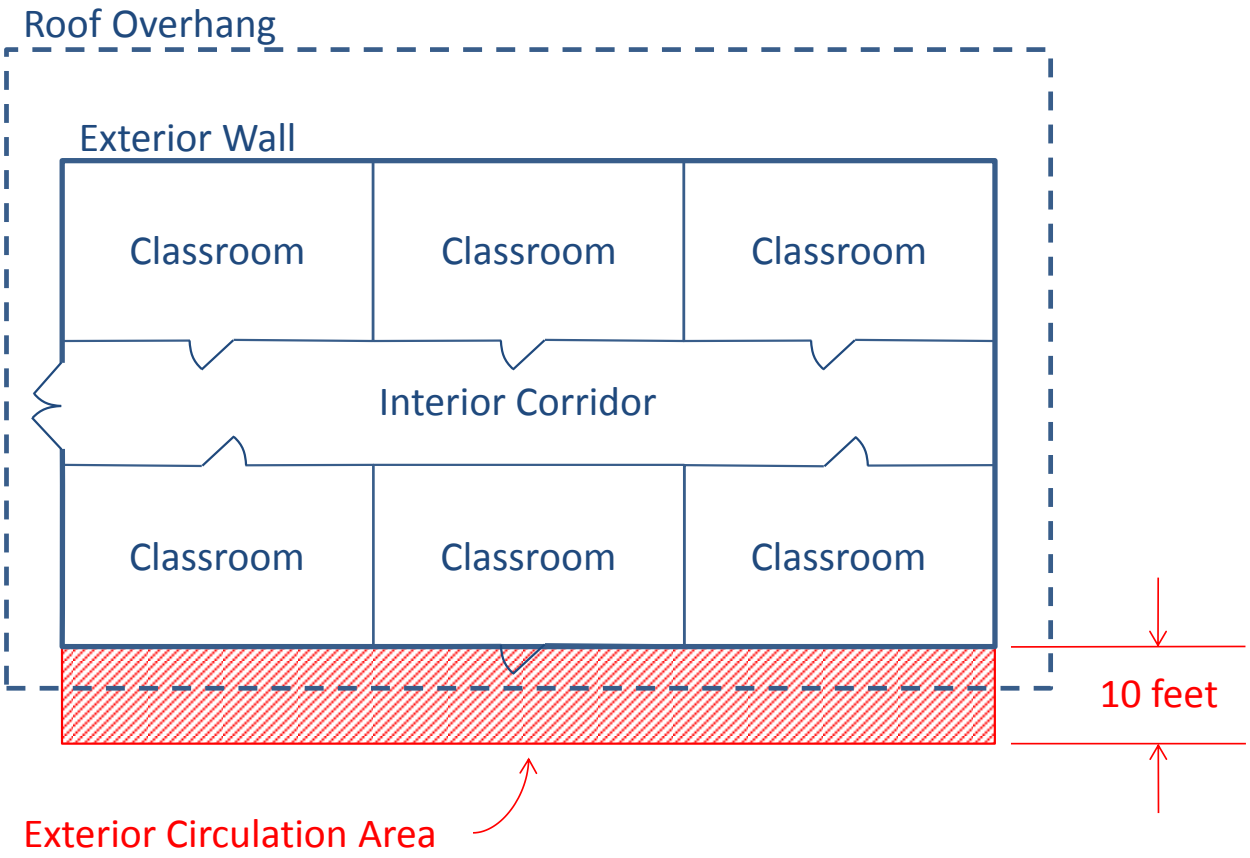
If the college chooses to include the alternative enrollment projection in the PRR, the RPC feedback will be provided to scorers of the major project proposals for their consideration.

* Corrected typo 14Mar17.

NEW

Appendix H – Exterior Circulation Space

The area of a replacement project can be bigger than the building area being replaced by an amount equal to the exterior circulation area of the building being replaced. The exterior circulation area is the length of each exterior wall that has at least one classroom door that is the only student-access to the classroom, time ten-feet. See illustration below.



Appendix I – Allowable Scope Changes after Scoring

Generally, colleges should make every effort to complete the project as proposed.

A college can make changes, for reasons internal to the operation of the college, which are not likely to have changed the project's score by following these steps:

1. Describe the proposed change to the State Board's capital budget director.

2. The State Board's capital budget director will assess the potential impact of the proposed change on the objective and subjective criteria used to score the original proposal.

3. If the change would only impact objective components of the criteria; like facility condition scores, square footage, building age, cost, or utilization; and, if the proposed change is not likely to have reduced the total score of the objective criteria, the proposed change will be allowed. The capital budget director will then report the approved change to WACTC's capital committee at their next regularly scheduled meeting.

4. If the change could impact the more subjective criteria, the State Board's capital budget director will work with the college to provide information to WACTC's capital committee for evaluation of the potential impact on the original proposal's score. If the WACTC capital committee decides the change it not likely to have reduced the score, the proposed change will be allowed.

A college has even more flexibility when the project needs to be changed in response to an external cause.

External causes include, but are not be limited to, construction funding below the requested level, delays in state funding, unforeseeable mitigation requirements from permitting authorities, unforeseeable code changes, and unforeseen archaeological impacts. A college can propose a change due to an external cause by following these steps:

1. Describe the external cause and proposed change to the State Board's capital budget director. This may require some documentation to substantiate the cause.

2. The State Board's capital budget director will work with the college to preserve the scope and cost of the originally proposed project while mitigating the external cause of the change.

3. The capital budget director will then report the approved change to WACTC's capital committee at their next regularly scheduled meeting.

Neither the capital budget director nor WACTC's capital committee can create an obligation for additional state funding for the project. Based on the nature and timing of the change, it may need approval from the Office of Financial Management or the Legislature.