



CENTRAL OREGON
community college

CENTRAL OREGON
COMMUNITY COLLEGE
Board of Directors' Meeting – AGENDA
Wednesday, February 9, 2011 – 6:00 PM
Christiansen Board Room,
Boyle Education Center

TIME**	ITEM	ENC.*	ACTION	PRESENTER
6:00 pm	I. Call to Order			Miller
6:05 pm	II. Introduction of Guests			
6:10 pm	III. Agenda Changes			
6:10 pm	IV. Public Hearing and Testimony			
	A.			
6:15 pm	V. Consent Agenda***			
	A. Minutes			
	1. Regular Meeting-January 12, 2011	5.a1	X	Smith
	2. Special Conf. Call Mtg.-February 3, 2011	5.a2	X	
	B. Personnel			
	1. New Hire Report (January 2011)	5.b1	X	Buckles ^A
6:20 pm	VI. Information Items			
	A. Financial Statements (December 2010)	6.a		Bloyer ^A
	B. Solar Power Purchase Agreement - Feasibility Study	6.b		McCoy ^P
	C. Small Business Management Program			Moorehead ^P
7:00 pm	VII. Old Business			
	A. Accreditation Report-Chapter One	7.a		Middleton ^P /Hilgersom
7:10 pm	VIII. New Business			
	A. Math Redesign Project			Naffziger/Nelson ^P
	B. 1 st Reading:	8.b		Lee/Miller ^P
	EL4: Financial Condition;			
	EL5: Asset Protection			
	EL6: Compensation and Benefits			
	C. 1 st Reading: Board Priorities	8.c		
	D. 1 st Reading: Vision Concept Paper	8.d		
	E. Legislative and Governor's Budget-Update			Middleton ^P
	F. Prineville Facility Agreement	8.f	X	McCoy ^P
7:55 pm	IX. Board of Directors' Operations			Miller
	A. Board Member Activities			
8:10 pm	X. President's Report			
	A. Updates			Middleton ^P
	XI. Dates			
	A. March 4-5, 2011 – the COCC Foundation's "Taste of Town" and "Meal of the Year" Location: Mazama Gymnasium			
	B. March 9, 2011 – Budget Meeting & Regular Board of Directors Meeting			
8:25 pm	XII. ADJOURN			

* Material to be distributed at the meeting (as necessary). ** Times listed on the agenda are approximate to assist the Chair of the Board.

*** Confirmation of Consent Agenda items submitted by the President. Any item may be moved from the Consent Agenda to Old/New Business by a Board Member asking the Chair to consider the item separately. P = indicates a Presentation will be provided. A = indicates the presenter is Available for background information if requested.



CENTRAL OREGON COMMUNITY COLLEGE
Board of Directors' Meeting – MINUTES
Wednesday, January 12, 2011 – 6:00 PM
Christensen Board Room, Boyle Education Center

PRESENT: Charley Miller, John Overbay, Connie Lee, Dr. Joyce Garrett, David Ford, Anthony Dorsch, Ed Fitch-Board Attorney, Dr. James Middleton-President, Julie Smith-Board Executive Assistant.

ABSENT: Donald Reeder

INTRODUCTION OF GUESTS: Larry Nelson-of Kerkoch Katter & Nelson LLP, Matt McCoy, Karin Hilgersom, Kevin Kimball, Carol Moorehead, Ron Paradis, Michael Holtzclaw, Amy Harper, David Dona, Dan Cecchini, Lisa Bloyer, Gene Zinkgraf, Alicia Moore, Eric Buckles, Joe Viola, Diana Glenn, Mary Jeanne Kuhar, Ed Sea, Jim Weaver, Julie Downing-Faculty Forum President, Ron Munkers, Sheila Miller-The Bulletin and others.

PUBLIC HEARING AND TESTIMONY: None

REPORTS:

2010 Audit Report – Handout: 4.a to

Revenue and Expenditure Forecast – Handout: 4.b

Mr. Larry Nelson from Kerkoch Katter & Nelson LLP Certified Public Accountants reviewed the highlights of the “2010 Audit.” He reported that the auditors met with the newly formed Board “Audit and Finance” committee on January 6, “the meeting turned out to be a great venue for questions from the board regarding budget, finance and the audit.”

The auditors gave the college a “Clean Opinion” report which means that COCC’s financial condition, position, and operations are fairly presented in the financial statements. A “Clean Opinion” is the best type of report to receive from an external auditing firm.

President Middleton and the Board of Directors’ thanked and complimented

- Kevin Kimball-Chief Financial Officer
- David Dona-Associate Chief Financial Officer
- Lisa Bloyer-Accounting Manager
- Lori Ortiz-Payroll, and
- Jan Fisher-Accounts Payable

and the entire fiscal services staff (accounts payable, payroll and financial aid) for their good work.

Revenue and Expenditure Forecast – Handout: 4.b

President Middleton reviewed that the Revenue and Expenditure Forecast – is a complex interplay of 21 separate assumptions. He noted that a “key assumption” from the Fall 2010 Board Retreat was

a \$5. tuition increase and appropriate staff designated to support opening of the new college campuses in the district. He reviewed several key elements that remain under resourced –

- Campus security w/expanding enrollment
- Capital maintenance and funds for future projects
- Capital equipment for replacement, expansion and emerging programs
- Redmond Campus – instructional positions
- IT security and user support
- Leadership development and succession planning
- Tutoring and proctoring salaries
- Academic advising and student success support
- Academic computing support and online courses
- Institutional sustainability initiative
- Accounting and Disability services
- Admissions staffing
- Information office w/bilingual capacity
- Grant development staff.

Mr. Kevin Kimball-Chief Financial Officer, reviewed the “current year budget update” and the “financial forecast (ref: fl)” – he also showed (via PowerPoint) the workings of a new “live” budget, within which key budget assumptions can be modified and multi-year impacts would be immediately visible. This tool will facilitate the Board, Budget Committee and internal staff for review of budget realities.

Mr. David Dona-Associate Chief Financial Officer reviewed the key assumptions for 2010-15;

Revenue Assumptions:

- State Aid Appropriation of \$416 M for 2009/11, and \$400M for 2011/13 & \$420M for 2013/15
- State Aid is pursuant to adopted distribution formula w/future enrollment growth equal to state average
- Current Year Property Tax reflect imposed growth rates of -.5% for 2010/11, +0% for 11/12 +1% for 12/13 +2% for 13/15 w/net collections rates of 91% for all periods
- Prior Year Property Taxes increase of + 8% for all future years
- Tuition increases of +\$.5 for 2011/13 and +\$.4 for 13/15 for in-district, +6% for all other residency categories
- Projected enrollment increases of +8.4% for 2010/11; +3% for 12/13 and +1% for future years
- Current year tuition +11.3% Fall, +7% Winter, +7%, +7% Spring, +8.4% annualized
- ABE program and grant transferred to Auxiliary Fund for accounting purposes in fiscal year 2006/07
- PERS reserve transfer-in of \$250K in next two years, and \$350K in following two years; Summer Term transfer-in of \$750K 2010/11 and \$500K all future years
- Fees increasing +9% 2010/11, +6% 11/12, +5% 12/13 and +4% for future periods.

Expenditure Assumptions:

- Salary increase for faculty +3% 2010/13, +2% 13/15; for non-faculty +2% 10/15
- Staffing levels increases 10.5% 2010/11, +3% 11/12 and +1% for future years
- Health insurance projected increases at 8% 2010/11, +10% 11/13 & +6% 13/15
- PERS 13% 2009/11, 20% (+7%) 11/13 biennium & 24% (+4%) 13/15 biennium

- Minimal increases in Materials and Supplies, Outside Services and Administrative and professional travel and insurance, utilities
- Line 18 Transfers-out to Capital Projects and non-general fund programs 2006/07 (\$2.5M), 08/09 (\$2.2M), 09/10 (\$2M)
- Underutilization (budget savings) projected at 2% of operating expenditures net of transfers and operating contingency for future years
- Materials & Services totals excludes \$800K budgeted operating contingency for all years
- Estimated occupancy costs for new facilities (Health Careers, Madras Ctr., Prineville Ctr., Culinary, \$135K in 2011/12) (Science Bid, Technology Bid, \$115K in 12/13).

CONSENT AGENDA:

Mr. John Overbay moved to approve the Consent Agenda. Dr. Joyce Garrett seconded. MCU. Approved. MI/11:1

BE IT RESOLVED that the Board of Directors' reviewed and approved the Regular Meeting Minutes of December 8, 2010 (Exhibits: 5.a1);

BE IT RESOLVED that the Board of Directors' reviewed and approved the December 2010 New Hire Report (Exhibit: 5.b1);

BE IT RESOLVED that the Board of Directors' approved the employment contracts for Elsberry and Fritz (Exhibits: 5.b2 & 5.b3);

BE IT RESOLVED that the Board of Directors' approved the Mileage and Meal Per-diem rate changes (Exhibit: 5.c);

BE IT RESOLVED that the Board of Directors' were apprised of the May 17, 2011 Board Elections (Exhibit: 5.d);

BE IT RESOLVED that the Board of Directors' approved the contract to SunGard for purchase and maintenance of Banner Flexible Registration (Exhibit: 5.e).

INFORMATION ITEMS:

Financial Statements – (Exhibit: 6.a)

The Board of Directors' were apprised of the November 2010 Financial Statements.

Institutional Effectiveness-University Partners (Exhibit: 6.b)

Mr. Matt McCoy-Vice President for Administration reviewed that COCC supports the OSU-Cascades partnership by sharing resources and developing opportunities for students to transfer smoothly. The College partners with several additional colleges and universities with the goal of providing students a seamless transfer among institutions, as well as other higher education opportunities.

Season of Non-Violence (Exhibit: 6.c)

The Board of Directors' were apprised of the Nancy R. Chandler Visiting Scholar Program; the COCC Office of Multicultural Activities; COCC Diversity Committee and OSU—Cascades activities; along with the assistance of many campus and community partners, who are sponsoring the third annual “Season of Non-Violence” campaign during the months of January and February 2011.

OLD BUSINESS:

2nd Reading – EL3: Budgeting (Exhibit: 7.a)

Mr. David Ford moved to approve the Second Reading revisions for EL 3: Budgeting.
Dr. Joyce Garrett seconded. MCU. Approved. 1/11:2

Accreditation Report – Chapter/Standard One (Exhibit: 7.b)

President Middleton reviewed the Chapter/Standard One – Year One Report which will be submitted to the Northwest Commission on Colleges and Universities (NWCCU). He reported that the “Year One Report” represents an overview and analysis of Central Oregon Community College’s Mission, Core Themes and college-wide expectations of mission fulfillment as approved by the COCC Board of Directors.

Along with President Middleton, Dr. Karin Hilgersom-Vice President for Instruction and Dr. Amy Harper-Associate Professor of Anthropology and “Report Editor” of the accreditation report - gave a PowerPoint presentation reviewing the ‘required structure’ and ‘issues and challenges’ of the report which includes four core themes:

- Transfer & Articulation
- Workforce Development
- Basic Skills
- Lifelong Learning

President Middleton and Dr. Hilgersom indicated that identifying detailed indicators for mission fulfillment is one of the greatest challenges to COCC and other colleges under the new guidelines.

Dr. Hilgersom concluded that the bottom line is “continuous quality improvement.” President Middleton and Dr. Hilgersom thanked Dr. Amy Harper for her good work on the report.

The PowerPoint presentation will be emailed to Board members for their input on any issues, questions or suggestions they may have regarding the Chapter/Standard One-Year One Report.

NEW BUSINESS:

Redmond Technology Education Center (Tentative Academic Programming)-(Exhibit: 8.a)

President Middleton and VP Hilgersom gave a PowerPoint presentation reviewing recommendations for “Instructional Program Focus” for the Redmond Technology Education Center. Vice President Hilgersom introduced Dean Carol Moorehead who talked about the process which included key involvement of Redmond economic development representatives

- Community and industry representatives who are vested in our community -
 - Aviation

- Manufacturing
 - Graphic Art/media
 - Information Technology/Marketing
 - Sustainability
- Staff synthesized the feedback and did additional research including career opportunities for graduates, anticipated enrollment, staffing requirements, program costs, alignment w/mission of college
 - Developed program recommendations and provided opportunity for industry response.

Vice President Hilgersom reported that Dean Carol Moorehead “did a wonderful job with facilitation” of the ‘process.’

Ms. Diana Glenn-Instructional Dean, reported on the original tentative consideration of Aviation Maintenance which evolved into a new focus of FAA Certified Programs.

The program focus recommendations -

- Non-Destructive Testing (NDT)
- Non-Destructive Inspection (NDI)

The programs focus rationale:

- Insufficient anticipated local jobs in the aviation maintenance field
- Issue of competition w/existing Lane and Portland community college programs
- Comparatively stronger job opportunity in NDT/NDI and an,
- Opportunity for statewide distinctive program.

Dean Glenn also discussed “Manufacturing” reporting that the recommendation is to include selected advanced manufacturing labs in the new Technology education Center – Computer Numerical Control (CNC) and related labs, SolidWorks and CAD labs. She noted that this will allow for expansion of traditional skill sets in the MATC and facilitate linking advanced skills with NDT/NDI.

Dr. Mary Jeanne Kuhar-Instructional Dean reported on the ‘Computer Graphics/Graphic Design’ Program recommendations to focus on enhancement of the current non-credit programming as a bridge to potential future credit programs.

Mr. Michael Holtzclaw-Instructional Dean reported on “Sustainability” with the recommendation of waiting until the industry becomes more mature and certain, and focuses on a more generalized curricula – w/statewide green technical certificate and a dual track general sustainability degree.

- General Sustainability technician degree
- Articulate w/OSU-Cascades Sustainability Engineering Management (higher level math and science)

Sustainability specific jobs are emerging slowly and there is a danger of premature over specification. More broadly prepared graduates will have broader employment opportunities

BOARD OF DIRECTORS' OPERATIONS:

Board Member Activities

Ms. Lee Audit & Finance Committee Meeting
Oregon Business Leadership Conference – met with Legislators Group

- Mr. Ford Met with Kevin Kimball-CFO and David Dona-Associate CFO
Re: Capital Projects Fund
- Dr. Garrett Oregon Leadership Summit in Portland
Audit & Finance Committee Meeting
Conversations w/constituents in Prineville re: the new Prineville Campus
- Mr. Dorsch Conversation w/Ron Munkers and Matt McCoy
- Mr. Miller OSU capacity planning task force meeting
Met with Kevin Kimball-CFO and David Dona-Associate CFO
Re: Capital Projects Fund
Audit and Finance Committee Meeting

PRESIDENT'S REPORT:

Enrollment: President Middleton reported that winter enrollment numbers are running at 10.7% ahead of last year. Additional tuition and fee revenues will help with this year's end balance giving the college opportunity to make needed purchases this year.

Culinary Head Chef Hiring: President Middleton reported that **Chef Gene Fritz** will be on board in three weeks.

Bend Chamber of Commerce Board: President Middleton will be serving on the Bend Chamber Board of Directors starting January 28.

Prineville Ground Breaking – January 24, 2011.

ADJOURN: 8:20 PM

APPROVED;

ATTEST TO;

Mr. Charley Miller-Board Chair

Dr. James E. Middleton, President



CENTRAL OREGON
community college

Exhibit: 5.a2
February 9, 2011

CENTRAL OREGON COMMUNITY COLLEGE
'SPECIAL'
Board of Directors' Meeting
MINUTES

Thursday, February 3, 2011 – 4:30 PM
Christiansen Board Room
Boyle Education Center

4:32pm - Call to Order by Chair Charley Miller

PRESENT – IN PERSON: Connie Lee, John Overbay, Dr. James Middleton-President

PRESENT – BY PHONE: David Ford, Joyce Garrett, Charley Miller, Donald Reeder

ABSENT: Anthony Dorsch

Also present:

Rich Brecke, Matt McCoy, Ron Paradis, Jennifer Peters-Recording Secretary, and Gene Zinkgraf.

A. **Award Bid #1353-10 for Construction of the Madras Education Center Building**

Dr. Joyce Garrett moved to accept the base bid and award the contract to Kirby Nagelhout Construction Company for \$2,048,000.00. Mr. Donald Reeder seconded the motion.

Call for the Vote:

Yes: Ford, Garrett, Lee, Miller, Overbay, Reeder

MC. Approved.

ADJOURN: 4:40 PM

APPROVED;

ATTEST TO;

Charley Miller-Board Chair

James E. Middleton, President

Central Oregon Community College
Board of Directors
NEW HIRE REPORT – February 9, 2011

Name	Date Hired	Job Title
Classified Full-Time		
Fain, Jared	1/3/2011	Maintenance Spec. - HVAC
Handschuh, Constance	1/24/2011	Admin Support Specialist
Part-Time Faculty		
Bainbridge, Christina	1/17/2011	Part-Time Faculty
Bingham, Robert	1/3/2011	Part-Time Faculty
Bray, Thomas	1/8/2011	Part-Time Faculty
Falcon, Lancelot	1/4/2011	Part-Time Faculty
Goetz-Bouknight, Lisa	1/4/2011	Part-Time Faculty
Kent, Patricia	1/3/2011	Part-Time Faculty
Martin, Margaret	1/3/2011	Part-Time Faculty
Pade, Leslie	1/4/2011	Part-Time Faculty
Pepper, Linda	1/3/2011	Part-Time Faculty
Sears, Malcolm	1/3/2011	Part-Time Faculty
St. Germain, Daniel	1/4/2011	Part-Time Faculty
Weidinger, Alois	1/3/2011	Part-Time Faculty

Central Oregon Community College
Monthly Budget Status
Highlights of December 2010 Financial Statements

Cash and Investments

The College's operating cash balances are currently \$27 million. The December average yield for the Local Government Investment Pool remains unchanged at .50 percent.

The investments of \$32.9 million represent proceeds from the sale of the general obligation bonds, which will yield an average of .55% over the 18-month period. \$8.9 million of bond proceeds are invested in the Local Government Investment Pool. The bond proceeds held in cash and investments total \$41.8 million as of the end of November.

General Fund Revenues

The College received \$1.1 million in property tax collections for December, bringing the total collection to \$10.8 million.

General Fund Expenses

The expenses include all approved inter-fund transfers for the fiscal year.

Budget Compliance

All appropriation categories are within budget.

Central Oregon Community College

Exh. 6.a
9-Feb-11

Cash and Investments Report
As of December 31, 2010

College Portfolio

Cash in State Investment Pool

Pool account 4089	\$26,401,168.85
Pool account 5482	\$332,382.93
Pool account 3624	\$390,081.76
Pool account 3707	\$1,321.86
Pool account 3816	\$8,904,191.42

December Average Yield .50%

Cash in USNB \$651,649.72

Cash on hand \$3,900.00

Total Cash \$36,684,696.54

Investments

Fannie Mae:

Yield .4048%, due 4-28-11	\$2,520,825.00
Yield .4271%, due 5-16-11	\$1,494,190.00
Yield .5062%, due 8-15-11	\$3,107,910.00

Federal Farm Credit Bank:

Yield .4500%, due 7-18-11	\$2,843,532.00
Yield .5381%, due 9-30-11	\$4,000,600.00
Yield .5587%, due 10-28-11	\$4,000,600.00

Federal Home Loan Bank:

Yield .4698%, due 6-22-11	\$3,001,200.00
Yield .6397%, due 11-21-11	\$3,505,460.00
Yield .6752%, due 12-1-11	\$5,009,000.00

General Electric

Yield .6600%, due 3-15-11	<u>\$3,482,675.00</u>
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Total Investments \$32,965,992.00

Total Cash and Investments \$69,650,688.54

Central Oregon Community College
Monthly Budget Status
December 2010

Exh. 6.a
09-Feb-11

<u>General Fund</u>	<u>Adopted Budget</u>	<u>Year to Date Activity</u>	<u>Variance Favorable (Unfavorable)</u>	<u>Percent of Budget</u>	<u>Percent of Prior Year Budget</u>
Revenues					
District Property Taxes:					
Current Taxes	\$ 11,751,000	\$ 10,252,650	\$ (1,498,350)	87.25%	76.76%
Prior Taxes	766,000	554,237	(211,763)	72.35%	75.40%
Tuition and fees	16,038,000	10,697,751	(5,340,249)	66.70%	69.22%
State Aid	4,236,000	1,460,571	(2,775,429)	34.48%	54.55%
Interest & Misc. Income	125,000	29,295	(95,705)	23.44%	4.76%
Transfer-In	350,000	350,000	-	100.00%	44.09%
Total Revenues	\$ 33,266,000	\$ 23,344,504	\$ (9,921,496)		
Expenses by Function					
Instruction	\$ 15,377,975	\$ 6,106,621	\$ 9,271,354	39.71%	21.85%
Academic Support	2,773,829	1,018,931	1,754,898	36.73%	29.86%
Student Services	3,576,270	1,508,700	2,067,570	42.19%	29.59%
College Support	4,165,525	2,168,193	1,997,332	52.05%	34.31%
Plant Operations and Maintenance	3,122,200	1,370,038	1,752,162	43.88%	34.68%
Information Technology	2,417,639	1,148,738	1,268,901	47.51%	35.77%
Financial Aid	11,954	2,910	9,044	24.34%	20.62%
Contingency	800,000	-	800,000	0.00%	0.00%
Transfers Out	2,727,952	2,727,952	-	100.00%	100.00%
Total Expenses	\$ 34,973,344	\$ 16,052,083	\$ 18,921,261		
Revenues Over/(Under) Expenses	\$ (1,707,344)	\$ 7,292,421	\$ 8,999,765		

Central Oregon Community College
Monthly Budget Status
December 2010

9-Feb-11

<u>Other funds:</u>	<u>Adopted Budget</u>	<u>Year to Date Activity</u>	<u>Variance Favorable (Unfavorable)</u>	<u>Percent of Budget</u>	<u>Percent of Prior Year Budget</u>
Debt Service Fund					
Revenues	\$ 4,047,839	\$ 3,188,195	\$ (859,644)	78.76%	65.71%
Expenses	3,978,617	1,828,581	2,150,036	45.96%	54.40%
Revenues Over/(Under) Expenses	\$ 69,222	\$ 1,359,614	\$ 1,290,392		
Grants and Contracts Fund					
Revenues	\$ 2,011,315	\$ 541,499	\$ (1,469,816)	26.92%	16.18%
Expenses	2,110,055	614,889	1,495,166	29.14%	23.09%
Revenues Over/(Under) Expenses	\$ (98,740)	\$ (73,390)	\$ 25,350		
Capital Projects Fund					
Revenues	\$ 28,007,480	\$ 6,021,773	\$ (21,985,707)	21.50%	54.82%
Expenses	54,468,396	11,504,829	42,963,567	21.12%	36.18%
Revenues Over/(Under) Expenses	\$ (26,460,916)	\$ (5,483,056)	\$ 20,977,860		
Enterprise Fund					
Revenues	\$ 5,487,767	\$ 2,457,852	\$ (3,029,915)	44.79%	39.10%
Expenses	5,157,091	2,536,154	2,620,937	49.18%	44.29%
Revenues Over/(Under) Expenses	\$ 330,676	\$ (78,302)	\$ (408,978)		
Auxiliary Fund					
Revenues	\$ 6,877,702	\$ 4,725,300	\$ (2,152,402)	68.70%	51.72%
Expenses	6,458,307	3,139,600	3,318,707	48.61%	48.68%
Revenues Over/(Under) Expenses	\$ 419,395	\$ 1,585,700	\$ 1,166,305		
Reserve Fund					
Revenues	\$ 39,028	\$ -	\$ (39,028)	0.00%	0.00%
Expenses	175,000	69,535	105,465	39.73%	42.75%
Revenues Over/(Under) Expenses	\$ (135,972)	\$ (69,535)	\$ 66,437		
Financial Aid Fund					
Revenues	\$ 19,595,901	\$ 6,830,697	\$ (12,765,204)	34.86%	48.39%
Expenses	19,636,398	7,053,390	12,583,008	35.92%	51.91%
Revenues Over/(Under) Expenses	\$ (40,497)	\$ (222,693)	\$ (182,196)		
Internal Service Fund					
Revenues	\$ 426,890	\$ 152,051	\$ (274,839)	35.62%	36.12%
Expenses	390,047	139,029	251,018	35.64%	28.13%
Revenues Over/(Under) Expenses	\$ 36,843	\$ 13,022	\$ (23,821)		
Trust and Agency Fund					
Revenues	\$ 5,925	\$ 990	\$ (4,935)	16.71%	16.54%
Expenses	17,500	3,543	13,957	20.25%	0.00%
Revenues Over/(Under) Expenses	\$ (11,575)	\$ (2,553)	\$ 9,022		



CENTRAL OREGON COMMUNITY COLLEGE:
BEND, REDMOND, & MADRAS CAMPUSES
SOLAR FEASIBILITY STUDY

PROJECT NO. 100-078

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1 EXECUTIVE SUMMARY

Central Oregon Community College (COCC) is currently considering many energy efficient upgrades on a campus-wide basis. Consistent with these efforts, COCC wants to learn about the solar potential on their campuses. Based on experience and an understanding of the financial viability of installing a solar photovoltaic (PV) system, COCC is interested in pursuing third-party ownership and install of these PV systems through a Power Purchase Agreement (PPA). In addition, the *1.5% for Solar Technology in Public Buildings* law requires public projects above a certain cost to invest 1.5% of their project budget in passive and active solar technologies. COCC is interested in using PPA-financed solar PV installations to meet this 1.5% requirement for current and future buildings in construction as well as provide solar PV on additional areas of their campuses.

Consistent with this effort, this report aims to define feasible areas on the three campuses for solar PV. The areas identified herein are consistent with the long-term strategic plans for the campuses and with conversations with COCC facilities and construction personnel. Through analysis of information gathered through this study, 4.1 MW of solar potential has been identified. It should be noted that 3.6 MW of this potential is located at the Redmond and Madras Campuses while only 540 kW of potential is located on the Bend campus as illustrated in Figure 1. This relatively low potential is primarily due to a high level of shading from the large, plentiful trees throughout the campus. By contrast, it is unusual for an organization to have such large parcels of land that are not planned for future development as with the Madras and Redmond campuses which should allow COCC to reap the benefits of solar PV economies of scale.

Based on the results of this study, COCC may issue an RFP to solicit PPA providers for their campuses. Based on previous experience and due to economies of scale, it is recommended that COCC solicit arrays a minimum of 100 kW in size, with smaller arrays utilized only when mandated by the 1.5% requirement. This study will be crucial in attracting large PPA providers to the table and arriving at a solution that is both technically and financially feasible to the College.

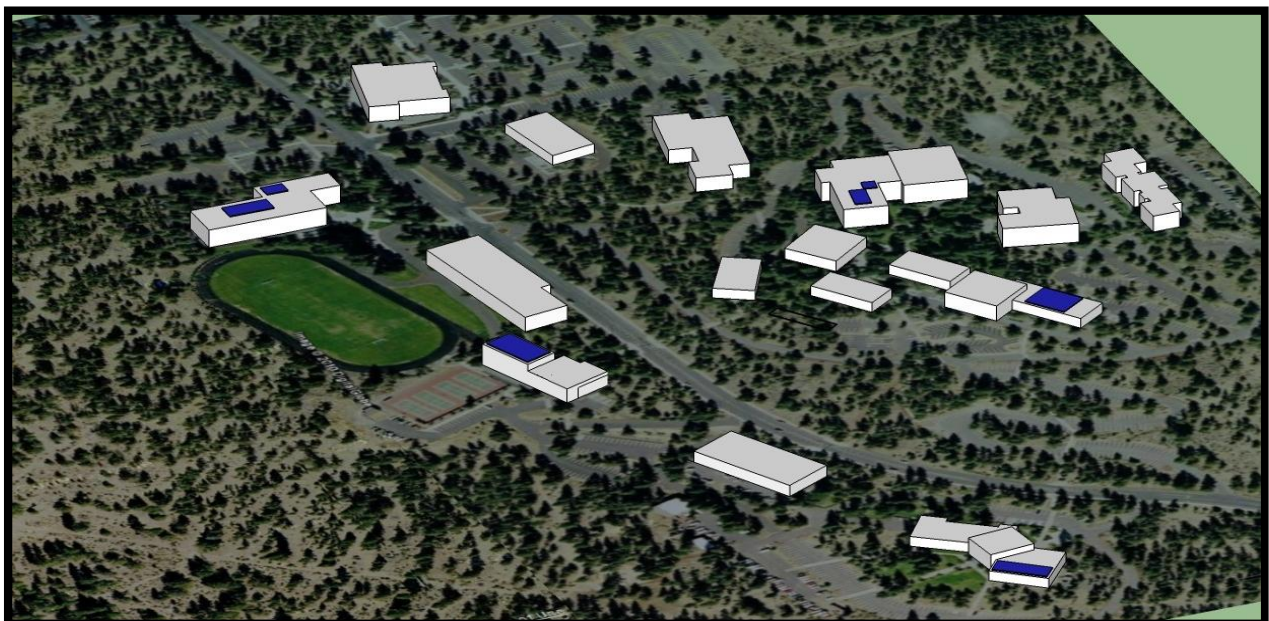


Figure 1- Aerial View of Current COCC Bend Campus

2 SITE SELECTION

This document pertains to the COCC Bend, Redmond, and Madras Campuses. The primary consideration for any solar based project is determining where the particular solar technology is to be mounted. The most common area to mount solar panels is on rooftops, but other possibilities include empty parcels of land, parking canopies, and other miscellaneous structures. In choosing a mounting location, there are three primary factors that determine its feasibility – orientation, shading, and proximity to load.

2.1 Background

2.1.1 Orientation

Since solar panels are dependent on the sun, one must ensure that they receive the maximum amount on a daily basis throughout the year. The orientation of the panels can be divided into two categories, azimuth and altitude, as seen in Figure 2. Azimuth (α) describes the angle, on the horizontal plane, between the direction an object faces and due south¹. Altitude (ϕ) describes the vertical angle between the horizon and a point in the sky.

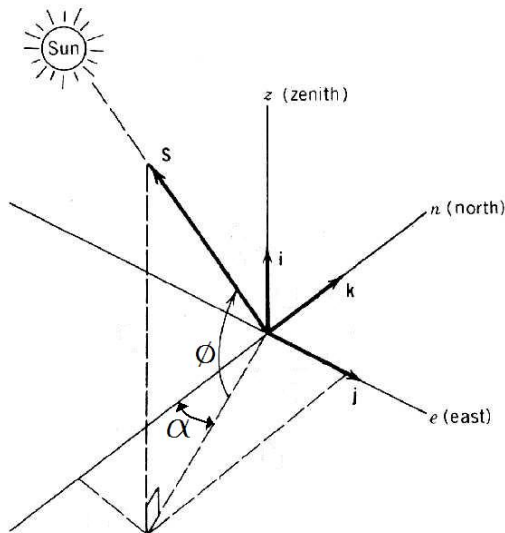


Figure 2 - Sun Angles Diagram

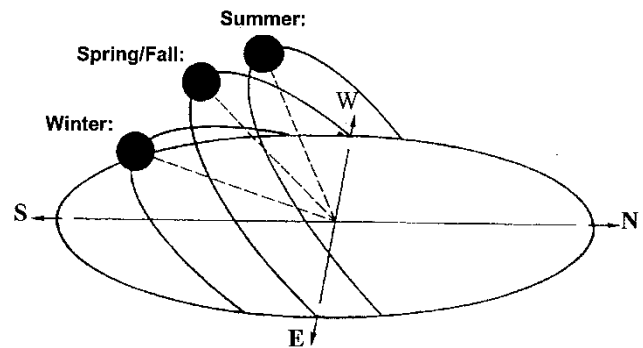


Figure 3 - Seasonal Path of the Sun

Solar panels perform best when oblique to the incident solar radiation; in other words, when they directly face the sun. In some cases, it is effective to utilize a dynamic single or dual axis tracking system to keep the solar panel actively oblique to the sun throughout the day; however, such a system is often cost prohibitive. Without a tracking system, a fixed system with static azimuth and altitude would be used and it will be necessary to determine the optimal fixed orientation to maximize overall system performance.

In order to determine the optimal orientation, it is first necessary to understand the seasonal and daily path of the sun. On a daily basis the sun traverses the southern sky, rising in the east and setting in the west. As seasons change, the altitude of the sun fluctuates tremendously between the two extremes – winter and summer solstice. The azimuth at which the sun rises and sets also varies with seasons, as is evident in

¹ It is traditional in Navigation and celestial mathematics to measure azimuth from due North (i.e. South = 180° azimuth); however, the solar industry in the northern hemisphere has since adopted measuring azimuth from due south (i.e. North = 180°). Azimuth is always measured clockwise.

Figure 3. The Sun Chart, in Appendix B, shows the seasonal path of the sun throughout the year. When orienting solar panels for maximum performance, a number of important factors come into play.

The industry standard 'rule of thumb' is to orient the solar panel with an azimuth of 0° (due south) and an altitude equal to the local latitude.² The optimal azimuth is chosen as 0° because over 80% of the daily ground incident solar radiation is delivered between 9am and 3pm; therefore, it is preferable to achieve optimal angle of incidence during this time period.³ An altitude equal to latitude is chosen because it is typically an optimal average between winter and summer sun altitudes.⁴ Though the 'rule of thumb' is historically effective, in practice, many factors may affect the final and optimal orientation a solar panel. First and foremost is cost.

The cost of achieving a *perfect* orientation over just *good enough* often outweighs the incremental energy production benefits. With cost of construction and aesthetics in mind, an owner may chose to mount solar panels flush to the existing roof in lieu of erecting a structure to achieve optimal orientation. If the existing roof pitch is, for example, 4:12 pitch (18° altitude) with a SE orientation (-45° azimuth), the owner would lose approximately 5% of solar performance based on Figure 4 which is well within practical bounds.

In addition to construction costs, overall savings provided by the system may play an important factor and are determined based on the avoided cost. Many electric utilities employ time-of-use energy rates, in which case, it is more cost effective for the owner to skew maximum solar production into the afternoon when the electricity being offset is at a higher rate. In this type of situation, an owner may favor a slightly positive (0°-30° or westerly) azimuth.

Local weather patterns also play an important factor in solar production. If, for example, dense fog was typical in winter until early afternoon, it would be preferable to skew maximum solar production into the afternoon and into the summer where there was more available solar resource. In this type of situation, an owner may favor a slightly positive (0°-15°) azimuth and an altitude approximately 10° in excess of latitude. Figure 4 shows how orientation factor varies based on orientation and roof pitch. Although Figure 4 is specific to Southern California, it clearly highlights the need to consider both orientation and roof pitch when choosing where to install a solar system.

	0° Flat	18° 4:12	30° 7:12	45° 12:12	60° 21:12	90° Vertical
0° (South)	0.89	0.97	1.00	0.97	0.89	0.58
23° (SSE, SSW)	0.89	0.97	0.99	0.96	0.88	0.59
45° (SE, SW)	0.89	0.95	0.96	0.93	0.85	0.60
68° (ESE, WSW)	0.89	0.92	0.91	0.87	0.79	0.57
90° (E, W)	0.89	0.88	0.84	0.78	0.70	0.52

Figure 4 - Orientation Factors⁵

² All orientations and analysis described herein are applicable only to the northern hemisphere.

³ Between 9am and 3pm, the sun's azimuth traverses from approximately -40° to +40° in the winter and -75° to +75° in the summer. Refer to Appendix B.

⁴ Throughout the year, the sun's altitude traverses from approximately 10° in the winter to approximately 77° in the summer. Refer to Appendix B.

⁵ This particular table, courtesy of the California Energy Commission's June 2001 report, *A GUIDE TO PHOTOVOLTAIC (PV) SYSTEM DESIGN AND INSTALLATION*, is specifically tailored for a latitude of approximately 33°.

2.1.2 Shading

The most common cause of poor system performance is shade. Different technologies are more susceptible than others but the importance of shading analysis cannot be overstated. Photovoltaic systems can suffer significant reductions in performance (and even temporary system shut-down) when the effects of shading are not avoided or planned for. This weakness is inherent in the construction of many solar panels, in which individual solar cells are often wired in series. A single shading object, such as a street lamp, may cast a slender shadow across a PV array and though it may only shade a small portion of the overall solar area, it has the potential to shut down the entire system.

When performing shading analysis, it is essential to utilize a solar pathfinder or sun-eye⁶ to eliminate the possibility of common shading errors. A common error stems from a visual survey done in the summer, where there may be little to no shading while the winter sun (with up to 50° less altitude) can cast long shadows across the proposed array area thereby limiting solar performance in winter.

For initial analysis however, the industry standard is to provide a 4:1 clearance/height ratio for all potential shade objects south of a proposed array as can be seen in Figure 5.

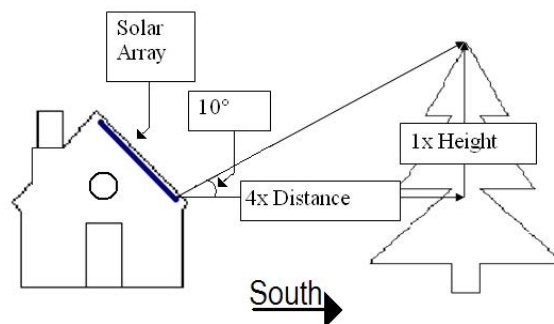


Figure 5 - Shading Ratio⁷

2.1.3 Proximity to Load

Another factor in selecting a solar site is the proximity to the load. The financial feasibility of small solar systems is highly dependent on low installed costs. Remote installations may incur additional costs due to trenching and additional materials, reduction in performance (increase in losses), and in some cases can infringe on existing code required conditions.

2.1.4 Installed Surface

Two types of systems were examined in this analysis: roof and ground-mount systems. Although roof-mount systems are ideal due to proximity to load, there are inherent drawbacks of roof-mount systems. These include lack of roof space due to and shading from equipment on the roof, the fact that a given roof must be able to support the additional load from a solar installation and the projected life of the roof itself. Ground-mount systems are ideal from an energy output perspective; however, the main drawback of ground-mount systems is that they may hinder COCC's ability to develop their site in the future. Likewise, a ground mount site would need to connect into an existing electrical service that may or may not be used close to where the ground-mount system is located.

⁶ A *Solar Pathfinder* is a device used to determine exactly when (Month and time of day) a shade object will shade a point. A *Sun-eye* is a device which measures and digitally displays site specific solar access and shading data.

⁷ Courtesy of EMCOR Energy Services Aug 17, 2007, report *CSI Inspection Protocol*.

2.2 Recommendations: Solar Site Availability and Next Steps

All three COCC campuses were examined with a Solar Pathfinder to determine the available roof space for a solar installation and the shading on that roof space. Additionally, various ground sites which did not have future development planned were also examined for their solar resource.

Generally speaking, southern roof exposures are prime locations for a solar array because their pitch often allows for direct mounting with little impact on system performance. Eastern and western roof exposures, though not optimal, may be feasible based on the load profile and avoided cost characteristics of the building. Inherently, a solar array installed on the eastern and western roof exposures would suffer an approximately 12% reduction in output. All buildings on campus and their potential for solar installation are summarized in Figure 6. All buildings that did not have a specified roof or building life were assumed to have a roof life of 15 years or less and a building life greater than 15 years.

Appendix C summarizes all of the sites and buildings examined on the three campuses and quantifies the available roof area and available insolation⁸ for each site or building listed.⁹ Based on the available insolation, roof area and campus master plans, a determination of what, if any, solar system could be installed for a given site or building was made. Figure 6 summarizes only the viable solar sites ranked by their respective priorities. Any identified sites were given high priority if the array size was 100 kW or greater or the array is required for compliance with the 1.5% for solar law. Arrays were given low priority if the array size was less than 100 kW or the roof life was less than 15 years.

⁸ Insolation refers to the amount of solar radiation incident upon a given surface.

⁹ Data in appendix C is based on the following assumptions. Roof and building life estimates are based on conversations with COCC staff. Where building roof and life was not known factors of >15 and <15 were used respectively. Available roof area is based on the amount of roof area available for a solar installation and available solar insolation refers to the percentage of sun light available on that roof area.

Facility Name/Designation	Area Available for PV (sq/ft)	Estimated Solar Array Size (kW)	Available Insolation for Array Area	Expected Annual PV Array Output (kWh)	Estimated 1st Year Electricity Savings	Building Life Greater Than 15 years	Anticipated Roof Life (years)	Solar Potential (Solar PV, or None)	Project Priority
Bend									
Science	6,000	60	80-85%	67,000	\$4,000	X	>15	Roof Mount PV	High
Health Careers	3,200	30	80%	35,000	\$2,100	X	>15	Roof Mount PV	High
Future Residence Halls Expansion	10,000	100	75%	100,000	\$6,000	X	>15	Roof Mount PV	High
Library	4,300	40	85%	49,000	\$2,900	X	10 to 15	Roof Mount PV	Low
Parking Q	1,500	10	80 to 85%	10,000	\$600	N/A	N/A	Ground Mount PV	Low
Parking Q2	5,200	30	75-85%	3,000	\$200	N/A	N/A	Ground Mount PV	Low
Mazama Gym	5,800	60	95%	75,000	\$4,500	X	<15	Roof Mount PV	Low
Boyle education	3,700	40	90%	43,000	\$2,600	X	<15	Roof Mount PV	Low
Parking N	5,500	50	80%	60,000	\$3,600	N/A	N/A	Ground Mount PV	Low
Ochoco	2,100	20	85-95%	25,000	\$1,500	X	<15	Roof Mount PV	Low
Center for the Arts	5,200	50	85-90%	64,000	\$3,800	X	<15	Roof Mount PV	Low
Parking Lot Z	5,000	50	80-85%	56,000	\$3,400	N/A	N/A	Ground Mount PV	Low
Total - High Priority (Bend)	19,200	190		202,000	\$12,100				
Total - Low Priority (Bend)	38,300	350		385,000	\$23,100				
Total (Bend)	58,000	500		587,000	\$35,000				
Redmond									
North Portion of Redmond Campus - Parking Easement	138,000	800	95-100%	1,130,000	\$78,000	N/A	N/A	Ground Mount PV	High
North Portion of Redmond Campus	249,800	1,600	95-100%	2,123,600	\$146,600	N/A	N/A	Ground Mount PV	High
New Technology Center	3,400	30	80-90%	40,000	\$2,800	X	>15	Roof Mount PV	High
Parking East of Northernmost Bldg.	1,500	10	80%	10,000	\$700	N/A	N/A	Ground Mount PV	Low

Facility Name/Designation	Area Available for PV (sq/ft)	Estimated Solar Array Size (kW)	Available Insolation for Array Area	Expected Annual PV Array Output (kWh)	Estimated 1st Year Electricity Savings	Building Life Greater Than 15 years	Anticipated Roof Life (years)	Solar Potential (Solar PV, or None)	Project Priority
Total - High Priority (Redmond)	391,200	2,430		3,293,600	\$227,400				
Total - Low Priority (Redmond)	1,500	10		10,000	\$700				
Total (Redmond)	393,000	2,400		3,303,600	\$228,000				
Madras									
Ground Mount PV - Parcel I	164,000	1,000	95-100%	1,270,000	\$87,600	X	N/A	Ground Mount PV	High
Parcel II parking lot	16,400	100	95-100%	110,900	\$7,700	X	N/A	Ground Mount PV	High
Parcel I Facility	2,000	20	95-100%	25,000	\$1,700	X	>15	Roof Mount PV	High
Parcel II Facility	2,000	20	95-100%	25,000	\$1,700	X	>15	Roof Mount PV	High
Parcel III Facility	2,000	20	95-100%	25,000	\$1,700	X	>15	Roof Mount PV	High
Total - High Priority (Madras)	186,400	1,160		1,455,900	\$100,400				
Total - Low Priority (Madras)	0	0		0	\$0				
Total (Madras)	186,000	1,200		1,456,000	\$100,000				

	Maximum Area Available for PV (sq/ft)	Maximum Estimated Solar Array Size (kW)		Maximum Estimated Annual PV Array Output (kWh)	Maximum 1st Year Electricity Savings
COCC Total - High	596,800	3,780		4,951,500	\$339,900
COCC Total - Low	39,800	360		395,000	\$23,800
COCC Total	637,000	4,100		5,346,600	\$363,000

Figure 6 - Identified Solar Sites

2.2.1 COCC Main Campus (Bend, OR)

COCC's Main campus is located in a densely wooded area in Bend, Oregon. These large trees create an amazing setting and give the campus a unique character. Throughout the expansion of the main campus, significant effort was given to retaining as many trees as possible. As a result, many facilities were constructed in close proximity to surrounding trees and are shaded.

While these trees are one of the most notable characteristics of the COCC campus, they do not complement PV installations. Due to the height of these trees, slope of the terrain and orientation of facilities, significant shading was observed. This shading seriously affected the total solar resource fraction (TSRF) that is available on site. However, a modest amount of area on site was found to meet the criteria for future solar installations.¹⁰

Figure 7 is a graphical representation of the facility massing for the Bend Campus.¹¹ This high level analysis allows rough modeling of where solar PV could be placed throughout the campus. White buildings in Figure 7 designate existing facilities whereas dark grey buildings are either planned (e.g. Health Careers) or future expansion locations (e.g. future dorm expansion west of the track). The dark blue areas are places that have been identified for potential roof-mount PV whereas the transparent blue shows areas for potential ground mount arrays. A more detailed site plan and associated analysis can be found in Appendices A and C, respectively.

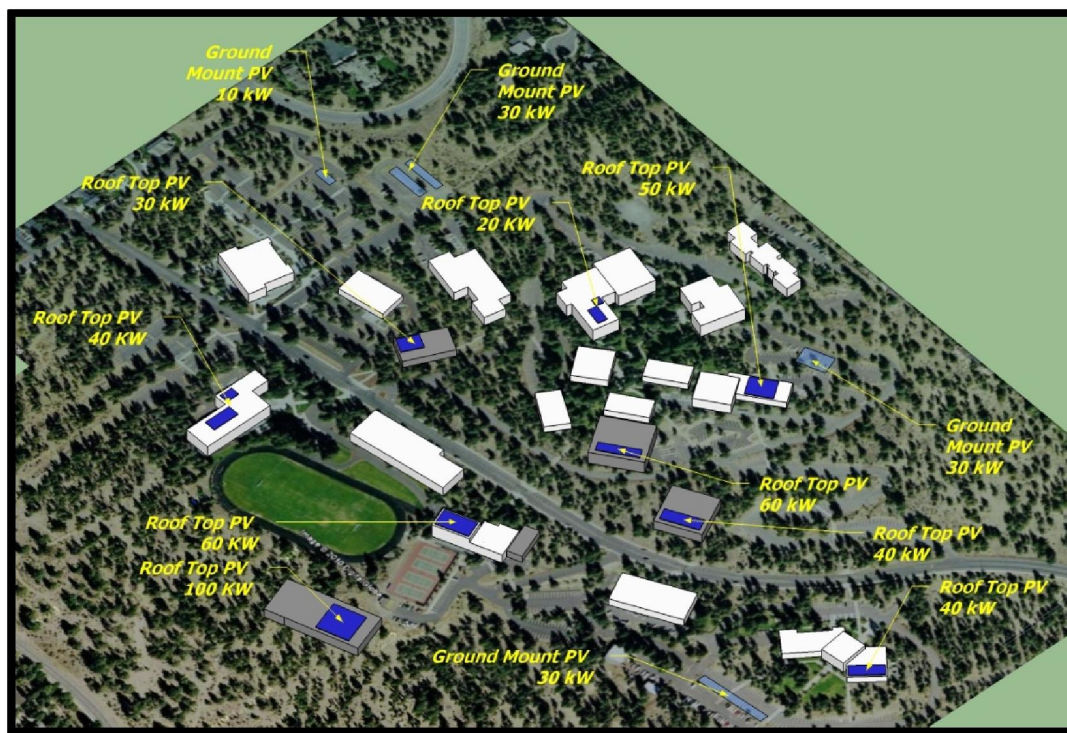


Figure 7 - Areas Identified for Potential PV Installation - Bend Campus

¹⁰ A Total Solar Resource Fraction (TSRF) ≥ 75 was used to determine feasibility of solar sites. While panels could be installed on site with a TSRF of < 75 , in Oregon, incentive payments cannot be received unless the sites has a TSRF of ≥ 75 .

¹¹ Please note that while the model is scaled within a foot, the facilities depicted below are only for graphical representation only

2.2.2 COCC Redmond Campus

The COCC Redmond campus currently has three existing facilities with a technology center included in the master plan, located on the southern most portion of campus. Consistent with Figure 7, future building expansion is shown as the dark grey facility where as the white buildings are existing facilities on site. The dark blue areas are places that have been identified for potential roof-mount PV whereas the transparent blue shows areas for potential ground mount arrays.

Because the northernmost portion of this campus is located in the Airport Land Use Plan, very limited uses can be employed here. Currently COCC has a parking easement from Redmond Municipal Airport for the northern most portion of the campus below. This easement allows for limited use of this property to parking uses. The City of Redmond should be approached as to the feasibility of such a project. Additionally, a 1,600 kW array is feasible on the northern portion of the campus that is not currently planned for development.

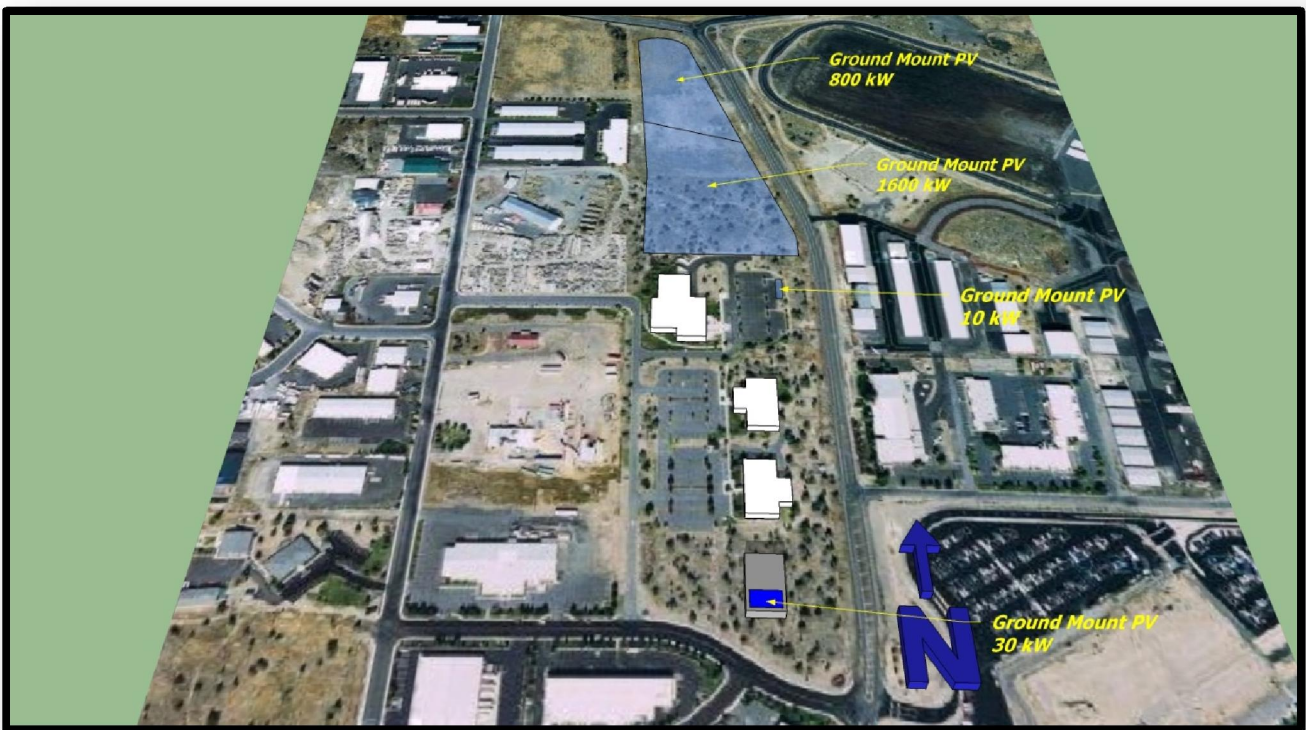


Figure 8 - Areas Identified for Potential PV Installation - Redmond Campus

2.2.3 COCC Madras Campus

The Madras Campus is a new campus, currently with no facilities on site. Once this campus is built out, three or more separate facilities may exist on site. A facility on parcel one is currently in construction which presents an opportunity for solar development. One megawatt (MW) of solar PV potential has been identified for potential installation on parcel I. This area was chosen because the slope is conducive to solar exposure, no facilities are planned for this portion of property, and visual impact to the surrounding homes should be minimal due to the abrupt change in elevation.



Figure 9 - Areas Identified for Potential PV Installation - Madras Campus

2.3 Next Steps

COCC has already expressed interest in pursuing a PPA for solar due to inherent advantages to the College of this financing mechanism. Moving forward, an RFP will need to be developed to solicit PPA providers. Due to economies of scale, in general, solar PV installations less than 100 kW should only be pursued in order to meet state 1.5% requirements. Due to the high level of shading present throughout the Bend Campus, only 100 kW or smaller solar sites were identified. However, a great opportunity exists at the Redmond and Madras Campus locations for large ground mount PV arrays. COCC is unique in that land area available for solar installation is quite abundant which should enable the College to obtain more financially attractive PPA rates due to these economies of scale.

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3 UTILITIES AND FINANCES

3.1 Background

3.1.1 Tariffs

Life cycle costs are often the principal concern when determining the feasibility of a solar system. The first item to consider is the avoided costs, which depend on the utility structure. The first step is to identify what type of rate is being paid to the electric utility. Different utilities have different methods for determining the cost of electricity, measured in dollar per kilowatt hour (\$/kWh). For smaller electrical demands, many utilities offer a flat rate which does not vary based on time of day or season. For larger electrical loads, most utilities employ a time-of-use (TOU) rate, in which the cost of electricity fluctuates based on season and time of day. Rates are separated into *On-Peak* (P), *Mid-Peak* (MP), and *Off-Peak* (OP) times with *Off-Peak* being the least expensive and *On Peak* being the most expensive, sometimes as much as double the *Off-Peak* rate. Figure 10 illustrates that a photovoltaic system produces a majority of its power at *On-Peak* and *Mid-Peak* times, meaning that the energy produced by the system offsets electricity at a higher avoided cost¹², resulting in a more favorable life-cycle cost for installations within a TOU rate structure. All three of COCC campuses are served by PacifiCorp; however, only the Bend Campus schedule is on a TOU rate schedule. The Bend campus is on PacifiCorp schedule 48 whereas Redmond campus is primarily on schedule 28 with one facility on schedule 23.¹³ Based on conversations with facility personnel, it is reasonable to assume that the Madras electric rate schedule will be the same as Redmond. These schedules were used to calculate the avoided cost of solar for a selected site.¹⁴ Detailed price summaries of each schedule can be found in Appendix D.

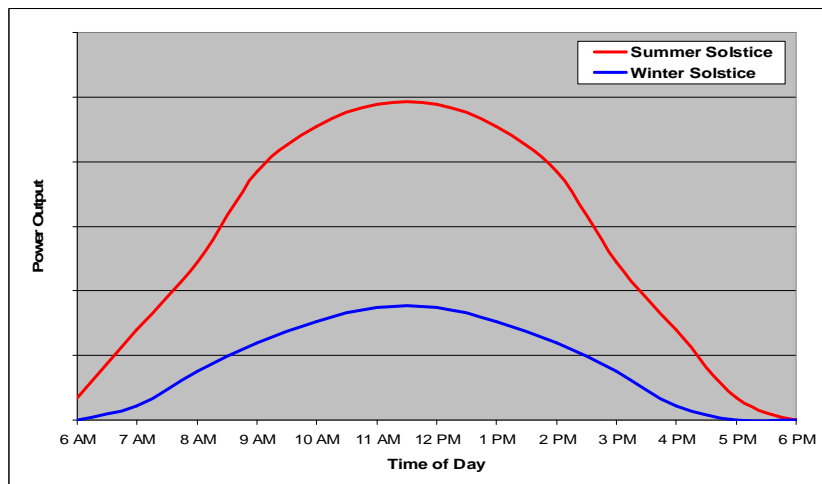


Figure 10 - Photovoltaic Power Production

¹² Approximately 65% of the power output from a typical photovoltaic system is produced at *On Peak* and *Partial Peak* times.

¹³ Pacific Power – Oregon Price Summary:

http://www.pacificpower.net/content/dam/pacific_power/doc/About_Us/Rates_Regulation/Oregon/Approved_Tariffs/Oregon_Price_Summary.pdf

¹⁴ Please see Appendix C for a complete list of identified solar sites with their associated avoided cost

Within an electric rate tariff (or within a specified period of a TOU tariff), the costs can be distributed into four categories: delivery, generation, demand, and fixed costs. Delivery charges, sometimes referred to as transmission charges, are charged by the local utility on a per kWh¹⁵ basis and support the utility infrastructure (wires, transformers, etc.). Generation charges, sometimes referred to as commodity charges, are charged by the party who actually generates the electricity on a per kWh basis. Typically, this is the local utility, but in some cases a third party electricity provider can be involved. Demand charges are being collected by the local utility based on the maximum power consumed in any 15 minute interval within the billing month and are charged per kW.¹⁶ Lastly are the fixed costs charged by all parties. These fixed costs can include everything from monthly utility surcharges to legislative taxes and are charged, mostly, without any tie to electric consumption. When performing financial analysis of a proposed system, it is imperative to properly calculate the avoided cost. Delivery and Generation charges are offset by the energy being produced by the photovoltaic system; however, the fixed charges are not avoided. In theory, demand charges would be reduced by the PV system production; however, in practice demand charges should not be considered avoidable because a single 15 minute dip in performance (based on weather, maintenance, etc) would produce a maximum power consumption value, and the local utility will charge based on that maximum value thereby eliminating any avoidance of the demand charge.

3.1.2 Net Metering & Buyback

In a time-of-use PV system (described below), energy production in excess of a building's consumption will flow back into the grid. This energy is not 'wasted', but its value may be diminished based on constraints imposed by the local utility.

Some utilities offer *Net Metering* which bases overall electric cost on *net* consumption. For example, let's assume that on a daily basis, a building consumes 30 kWh of electricity during daylight hours. If a photovoltaic system produces 70 kWh during daylight hours, the building will operate wholly from the PV system and 40kWh of 'extra' energy will flow into the utility grid. However, during nighttime hours (when the PV array is off), let's assume that the building consumes 50 kWh more. When the utility calculates your consumption, they will only charge you for the net consumption of 10 kWh¹⁷. This allows the benefits of PV to extend into the nighttime hours; however, great care should be taken in sizing a system. If the system is oversized and your *net* consumption is negative, few local utilities will compensate for this energy, and, as a result, the energy does not add value to the system.

3.1.3 Incentives and Tax Credits

Solar technologies, especially PV, have yet to reach a point where their economics are feasible without some kind of financial incentive. Currently, the federal government, state government, and multiple municipalities offer a vast array of financial incentives meant to promote the use of renewable energies and to jump start the growing industry. In Deschutes County, there are both state and federal incentives.

The state incentives are sponsored by the Oregon Department of Energy (ODOE) which provides cash incentives for both photovoltaic and solar thermal systems through the Business Energy Tax Credit (BETC) program. The BETC money is based on the installed cost of the system. This BETC money can also be passed through at a lower rate by a nonprofit or government entity so that such organizations can receive money for their sustainable endeavors.¹⁸ For PV installations, Energy Trust of Oregon (ETO) incentives are based on the utility serving the campus and the installed wattage. Additionally, accelerated state

¹⁵ The kilowatt-hour (kWh) is the typical unit used to measure a quantity or *volume of* electrical energy.

¹⁶ The kilowatt is the typical unit used to measure instantaneous electrical power.

¹⁷ Net consumption = power taken from the grid – power given to the grid = (50+30) – (70) = 10 kWh

¹⁸ The BETC has allocations for renewable energy systems based on system size. Given that the supply is greater than the demand, the ability to get and procure BETC money is increasingly difficult. In addition, the BETC is currently set to sunset on June 30, 2012.

depreciation is available for solar installs which allows for the system cost to be depreciated in 5 years.¹⁹ In order to be eligible for Energy Trust incentives, a site must have at least 75% TRSF¹⁹ available insolation or total solar resource fraction (TSRF). As a result, only sites which meet these criteria were examined in further detail.

Federal incentives are based on tax credits and allowed tax deductible depreciation.²⁰ The IRS allows the Modified Accelerated Cost Recovery System (MACRS) depreciation method to be used when depreciating renewable assets. This allows an owner to depreciate the asset in as little as 5 years. More significantly, the IRS currently provides a 30% Tax Credit for the installed cost of the system. Previously, this credit was only available to private corporations with adequate tax liability; however, this credit is also available as a grant through 2011 for private corporations based on the provisions of the American Recovery and Reinvestment Act of 2009.

3.1.4 Renewable Energy Credits (REC's)

Renewable Energy Credits (REC's) are environmental attributes which represent the "greenness" of an energy source. For instance, an owner can purchase REC's for a fee and offset their energy usage with clean energy even if they are not producing this energy on-site.²¹ As a result, the "greenness" of energy should be considered in addition to energy savings on the utility bill. In order to receive incentives from ETO, an owner retains the REC's for the first five years of a project and ETO retains REC's for the following 15 years. Ownership of these REC's and the ability to market the "greenness" of solar energy can and should be considered as part of PPA pricing and solar PV payback.

3.2 Financing and Payment Structures

For owners without adequate tax liability to take advantage of federal tax incentives, the financial feasibility of a capital project is often unreasonable; therefore, it is often necessary to finance the system through a third party. The IRS has stringent requirements in regards to the responsibilities of a third party financier, ranging from performance guarantees to the warranty term, but these type of structures are increasingly common in the solar industry.

An example of third party financing, for photovoltaic systems, is a Power Purchasing Agreement (PPA) in which a majority of the risk is shifted to the provider. A typical PPA requires no capital outlay from the owner. A third party finances, installs, and maintains the PV system for a typical contract term of 20 years. The owner then purchases the power produced by the PV system at a rate typically comparable to the avoided electric utility rate. This payment structure puts the responsibility of system performance and maintenance into the hands of the third party and although the details of a PPA may vary between vendors, it is typically the low risk, low cost, means to provide on-site renewable energy to a facility or campus.

3.3 Recommendations

Since COCC is a tax exempt entity, they are unable to directly take advantage of the available tax credits. In order to provide a financially feasible PV system, a PPA is the recommended financial structure. Based on conversations with COCC staff, solar projects not required by law will likely only be pursued under a PPA model.

¹⁹ TRSF refers to Total Solar Resource Fraction. TRSF is a measure of the insolation available at a given site on a scale of 0 to 100 with 100 being maximum insolation and 0 being a site in total shade.

²⁰ All Federal Tax credits and state and federal depreciation methods are only viable for owners with adequate tax liability to satisfy the conditions of the program.

²¹ PacifiCorp's Blue Sky Program allows owners to purchase REC's directly from the utility to offset energy usage.

4 PHOTOVOLTAICS

Photovoltaic panels convert sun energy (photo) to electricity (voltaic). There are various types of PV technologies and systems, as described below.

4.1 Background

4.1.1 The Technologies

4.1.1.1 Rigid Panels

Rigid photovoltaic panels are grouped into two main categories - Monocrystalline and Polycrystalline Silicon.²² These types of panels require a rigid mounting frame and currently dominate the industry. The difference between monocrystalline and polycrystalline silicon stems from the manufacturing of the panel. Polycrystalline silicon is cut from a *less pure* crystal structure which often contains impurities. Monocrystalline silicon is cut from a single silicon crystal and is more costly to manufacture; however, the single contiguous crystal structure yields increases in efficiencies by as much as 5% over polycrystalline panels. Throughout their life, both monocrystalline and polycrystalline panels experience an annual performance degradation of approximately 0.5%.

4.1.1.2 Flexible Photovoltaics

Flexible PV, the most common of which is Amorphous Silicon, are vastly different to rigid panels. The crystal impurities and thin deposit of silicon inherent to their manufacturing techniques reduce overall efficiency and product life. Nonetheless, Amorphous silicon panels are beginning to be used more readily in the solar industry. Their flexibility allows them to be easily mounted to any existing surface and their dramatic cost differential makes them a viable choice for many installations. In some cases, amorphous silicon panels are even used as an overall building façade. However, amorphous silicon solar panels degrade much more quickly than the conventional rigid panel as can be seen in Figure 11.

Panel Type ²³	Panel Efficiency	Panel Cost ²⁴ (\$ / W _p)	20 Year Output Degradation ²⁵
Monocrystalline	15-18%	4.35	10%
Polycrystalline	12-14%	4.29	10%
Amorphous Silicon	5-8%	3.74	15-30%

Figure 11 - Photovoltaic Panel Types²⁶

4.1.2 Systems: Load, Integration, and Interconnection

Photovoltaic panels produce Direct Current (DC) electricity, similar to the type produced by a battery, which is not directly compatible with the American standard 120V Alternating Current (AC). In typical residential

²² Other substrates exist besides silicon but are used primarily for high efficiency applications, i.e. satellites and stand-alone systems.

²³ Source: <http://www.energtech.com/Information/>. W_p = Peak DC Wattage

²⁴ Source: <http://www.solarbuzz.com/>.

²⁵ Source: <http://www.solarbuzz.com/Technologies.htm>.

²⁶ Source: http://www.mtpc.org/cleanenergy/solar_info/types.htm.

and commercial applications, this electricity must be converted to usable electricity by use of an Inverter. Throughout the conversion process, it is typical to see an overall system efficiency of between 65% and 80%, depending on overall system configuration.²⁷ System configurations can be separated into two main categories.²⁸

4.1.2.1 System Type - Time of Use

In a time of use system, power is produced and fed directly into the building. The advantage of this type of system is lower installed cost and an overall increase in efficiency. Typically, the AC output side of the inverter would be tied directly to an existing electrical switchboard and the power would be used as it was being produced (Refer to 3.1.2, Net Metering & Buyback, for more information).

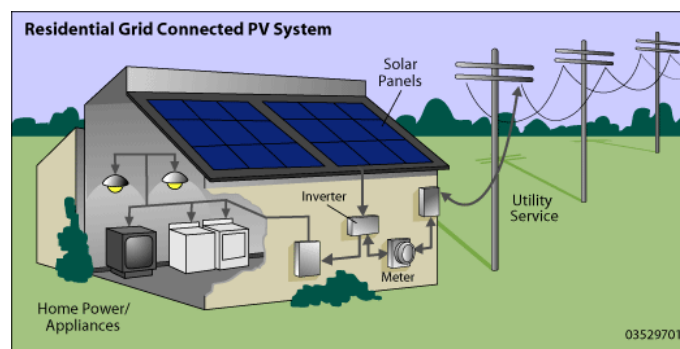


Figure 12 - Typical Grid-Tied System

4.1.2.2 System Type - Energy Storage

In an Energy Storage system, energy is stored on site for use when photovoltaic energy production is low. Typically, a charge controller connected to the panels continually charges a large bank of batteries. This bank of batteries delivers energy, through an inverter, as needed. This type of system has significantly higher installed cost, increased maintenance costs, and inherently lower efficiencies. The batteries for this type of system are not only expensive, heavy, and space consuming, but require continual maintenance and, if not installed properly, can be a safety risk. This type of system is most often used when utility power is undependable or if complete grid independence is preferred.

4.1.3 Special Considerations

4.1.3.1 Local Codes and Requirements

Currently, few authorities have readily adopted PV. Within Oregon however, the Oregon Electrical Specialty Code addresses net metering of PV systems as well as the basic requirements of the system. The National Fire Protection Agency 70, section 450.6 also address' system requirements.

The code issue that most readily affects the feasibility of a photovoltaic system is the location of the AC disconnect at which the PV system electrically connects to the building. Though a lockable disconnect is a typical requirement, some authorities having jurisdiction (AHJ) mandate that this disconnect must be within sight of the main building service. Depending on the location of the PV array and the

²⁷ Overall system efficiency is a result of the losses between the DC power produced by the solar panel, and the AC power ultimately consumed at the load. Losses also stem from inefficiencies inherent in the inverter and copper losses inherent in transmission.

²⁸ This document only addresses grid-tied systems.

location/definition of the main service entrance, this can be a significant cost-add to a project, especially in retrofit applications. That being said, some AHJ are beginning to allow interconnection at downstream distribution panels, which significantly reduces installed costs.

4.1.3.2 Auxiliary Equipment

In addition to photovoltaic panels and peripheral devices, an inverter will need to be mounted as close to the solar panels as possible. For example, a 100kW inverter weighs approximately 3000 lbs and has the approximate dimensions of: 6'H x 6'W x 4'D. Though other equipment is involved in a solar installation, the inverter is commonly the most difficult to find a location for.

4.2 Load Profile

Due to the relative size of the proposed systems, the load profile is insignificant given that all energy produced will be able to be consumed on site due to high site energy use.

4.3 Recommendations

A Time-of-Use, grid tied system is the recommended system configuration. The output of the photovoltaic system is constrained by the space available for panels and will never exceed the electrical load present on the load side of the electrical utility service; therefore there is no need for energy storage. Each PV array will be interconnected to the main building distribution panel or to the closest electrical service.²⁹ Due to the inherent size and cost of inverters in excess of 6kW, where necessary each building or site array may be separated into multiple arrays of approximately 4-5kW. This configuration would allow inverters to be located as close to the array as possible and reduce infrastructure costs associated with remotely locating the inverter.

²⁹In regards to electrical interconnection points, there are differing interpretations of applicable codes as well as additional requirements imposed by some AHJ. In some cases, a photovoltaic array may interconnect to the closest properly sized distribution panel. In other cases, the photovoltaic array must interconnect adjacent to the main building service entrance or the complex service entrance. The additional costs associated with establishing an interconnection point at the main service entrance may be significant therefore it is imperative to verify these requirements with the AHJ prior to design and installation.

5 CONCLUSION

It is recommended that PV technologies be considered for various sites on the COCC campuses through the financing mechanism of a Power Purchase Agreement. Based on campus shading, multiple sites are possible for solar. However, unless a facility is including rooftop solar in order to meet 1.5% cost requirements, only arrays 100kW or larger should be pursued.

When determining which sites and system types to pursue, the owner should consider the following key points:

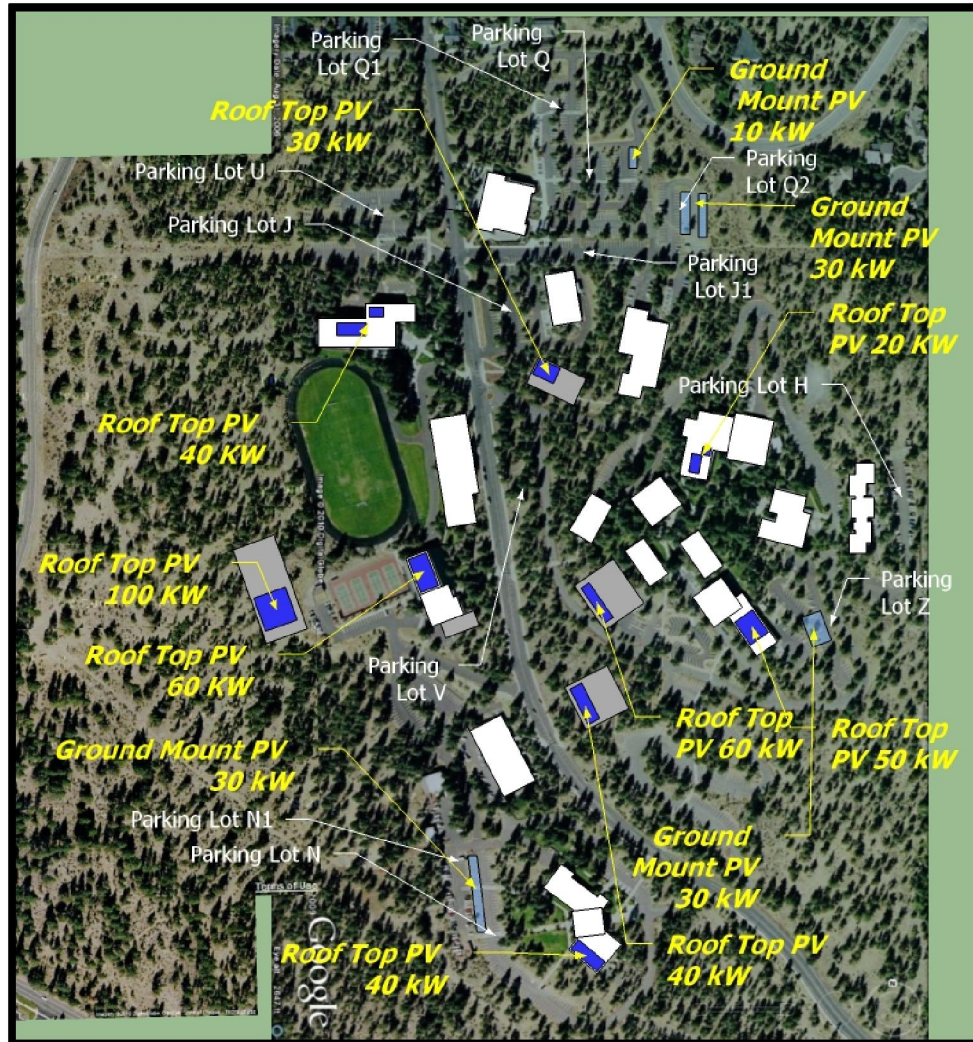
Economies of Scale: If a single system type was chosen, designers and contractors are able to utilize economies of scale, thereby reducing relative overhead, and lowering overall project costs. It should be noted that COCC auxiliary campuses are have large potential areas of undeveloped land that have the potential of over 3 MW of solar photovoltaic capacity.

Pricing: Electricity prices may fluctuate at drastically different rates over the next 20 years than projected. Installation of onsite power generation or agreement to long term PPA's would help to insulate COCC from this price volatility.

Environmental Impact & Carbon Footprint: Solar photovoltaic panels have the potential to offset a large amount of greenhouse gas emissions associated with electricity. The "greenness" of this electricity is technically associated with Renewable Energy Credits (REC's) that are associated with 1MWh of renewable electricity production. Ownership of these REC's and the ability to market the "greenness" of solar energy can and should be considered as part of PPA pricing and solar PV payback.

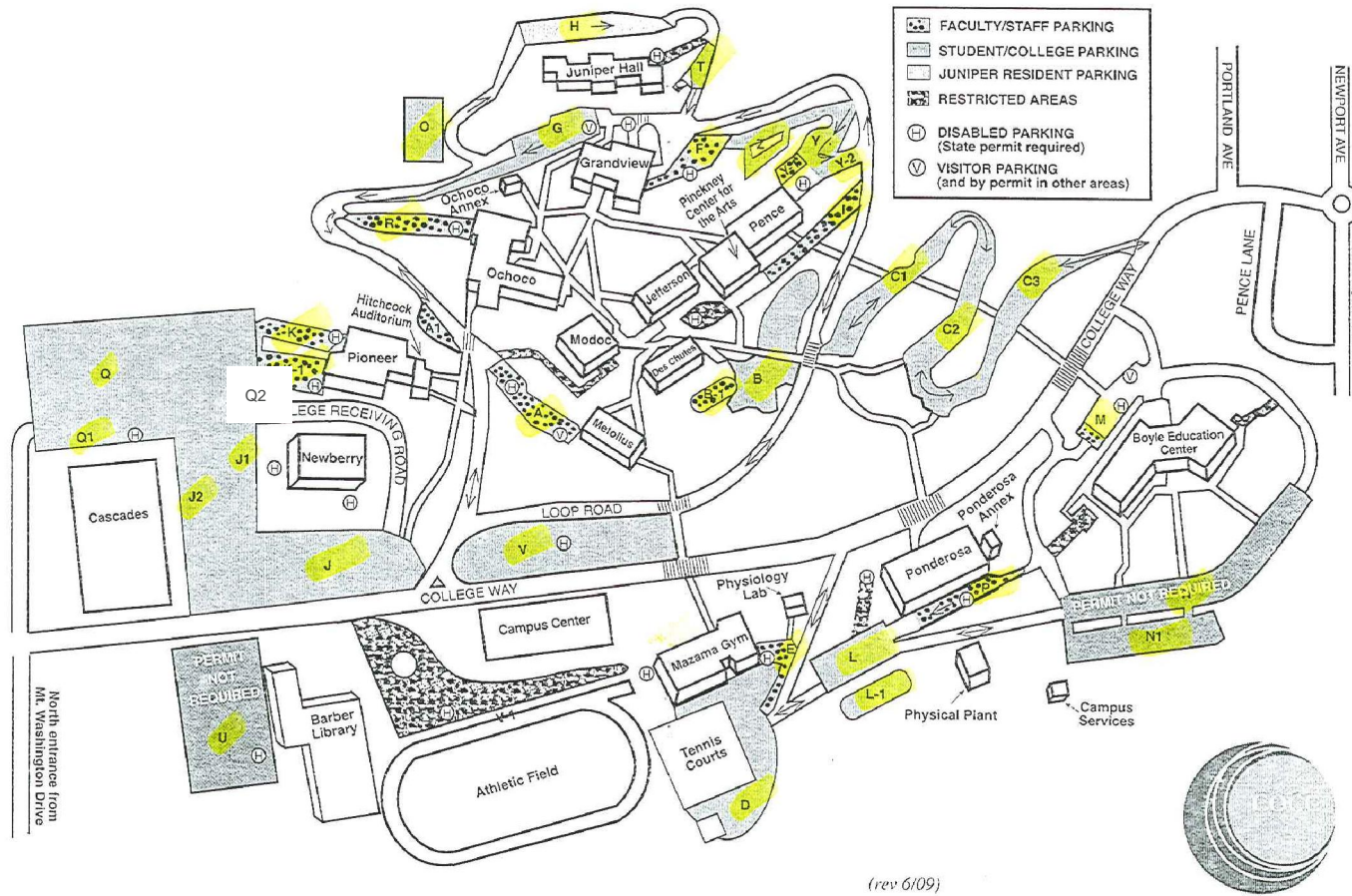
6 APPENDICES

6.1 Appendix A: Site Plans

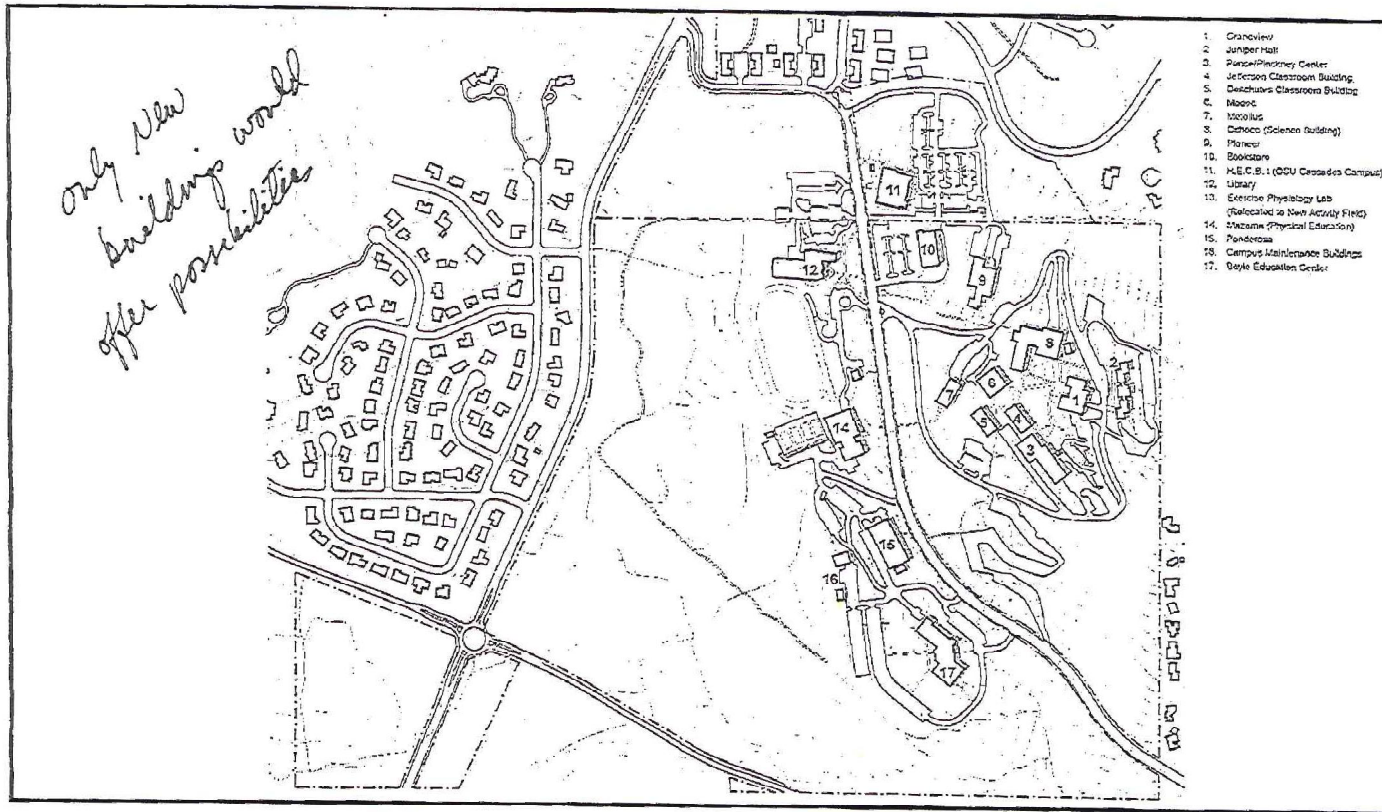


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(rev 6/09)



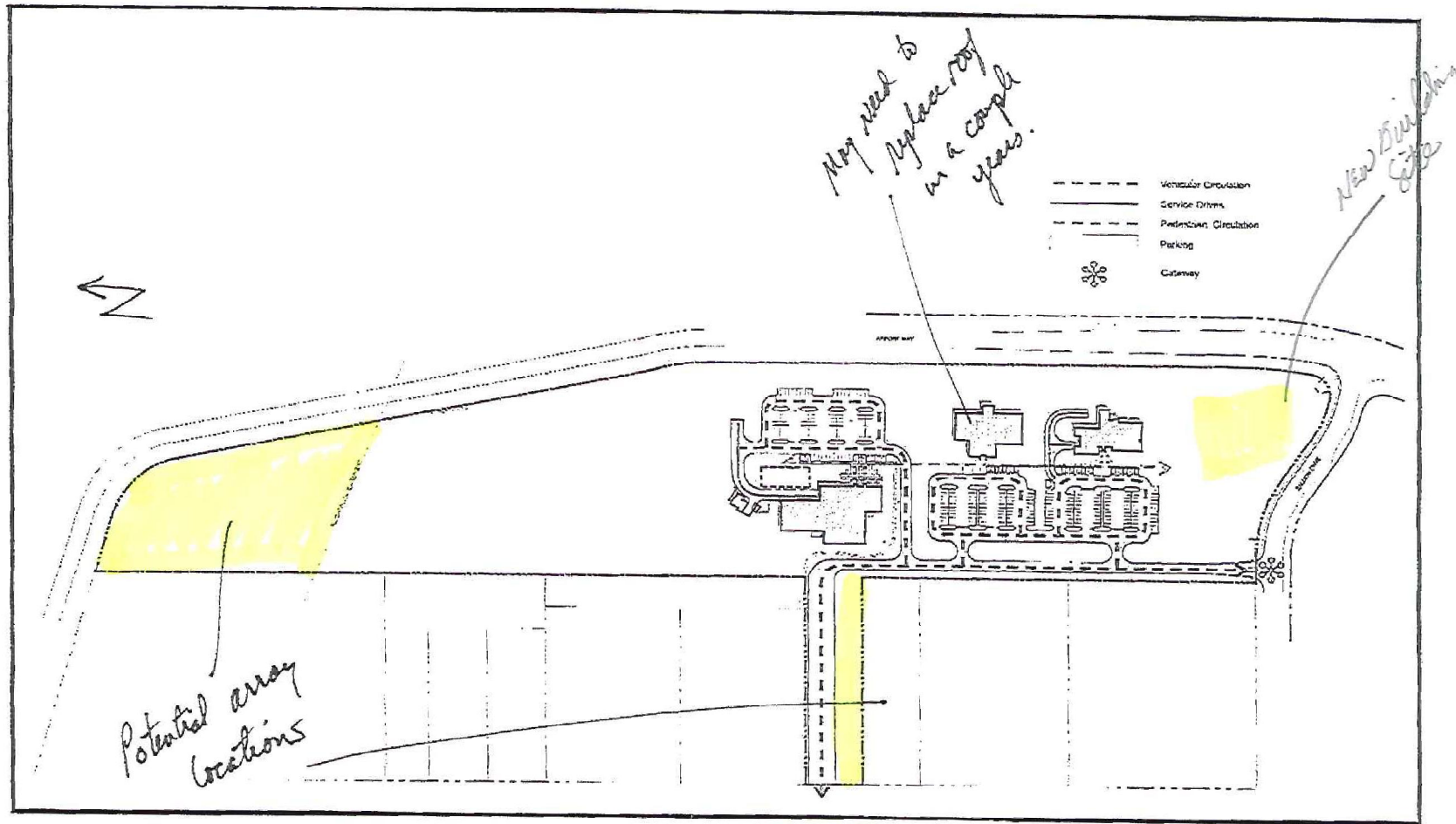
COCC MASTERPLAN 2002-2012

Masterplan- Existing Facilities Plan:
Aubrey Buhe Campus

PLATE #8

WEGROUP

Main Campus



COCC MASTERPLAN 2002-2012

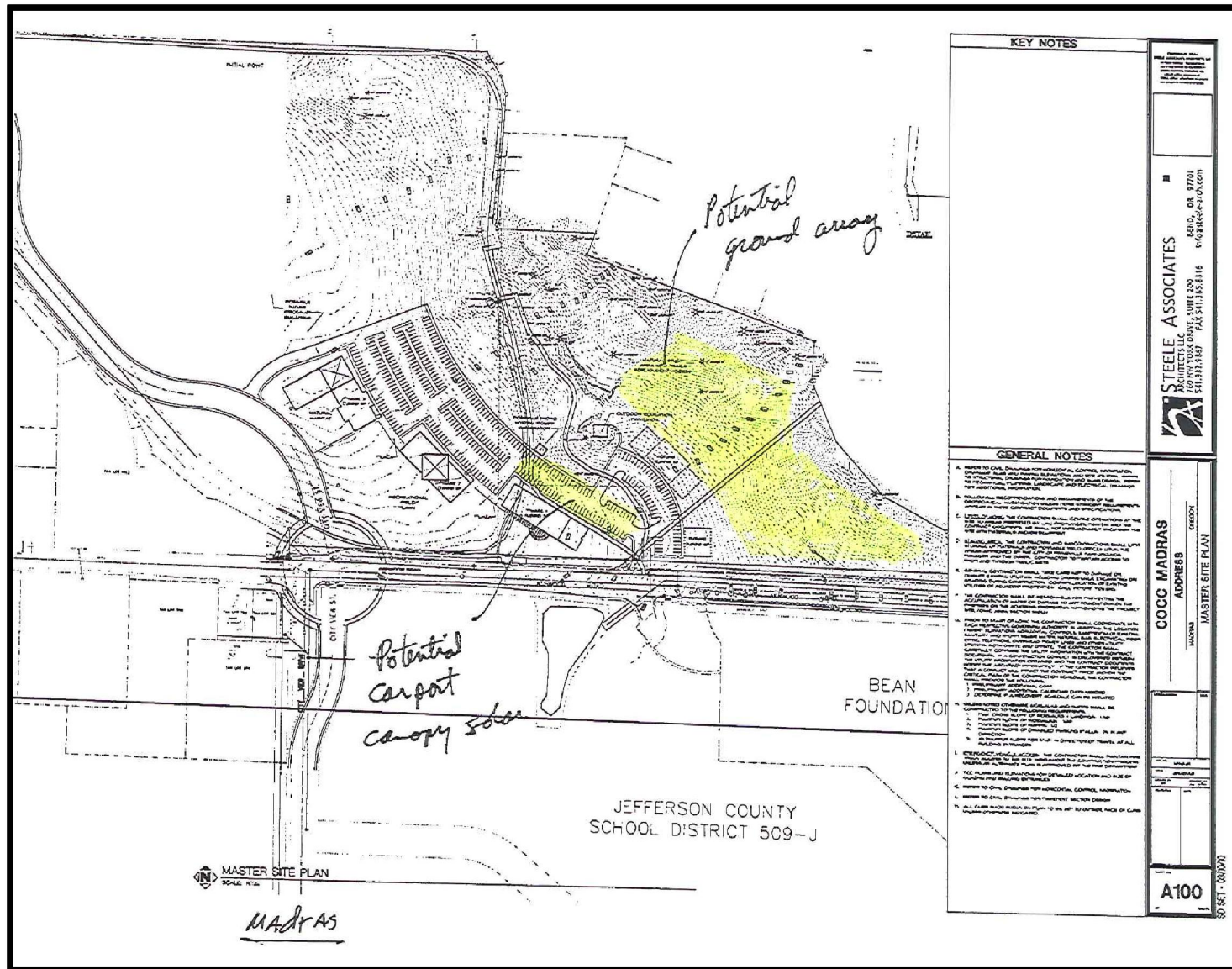
redmond

Masterplan - Parking/Circulation/Gateways Plan
Redmond Campus

PLATE #16

WEGROUP





KEY NOTES

GENERAL NOTES

1. REFER TO ALL OTHER DRAWINGS FOR DIMENSIONS, ELEVATIONS, AND NOTES. THIS DRAWING IS TO BE USED IN CONJUNCTION WITH THE OTHER DRAWINGS IN THIS SET.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES.
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 ADDRESS: _____
 CITY: _____
 STATE: _____
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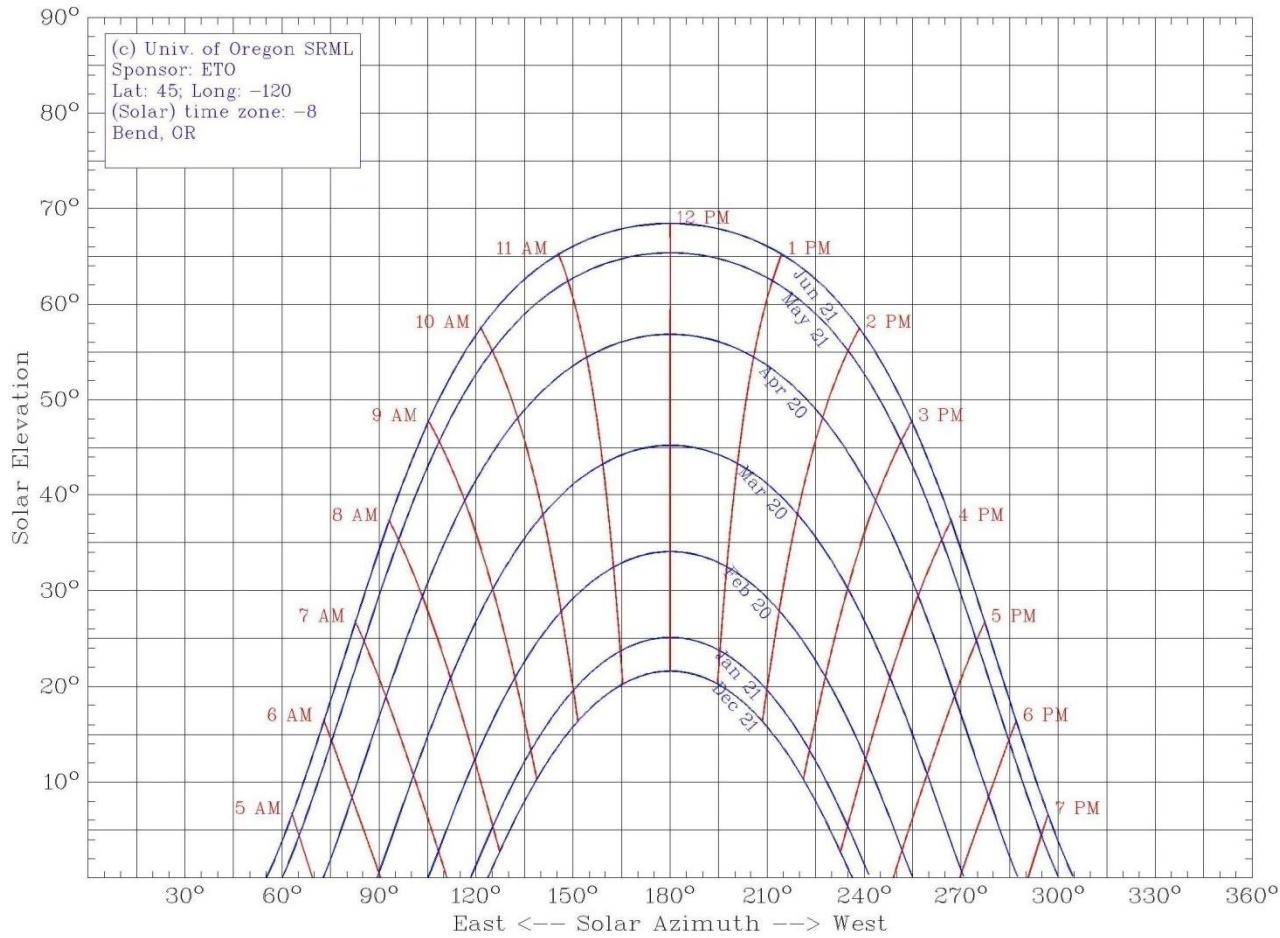
MASTER SITE PLAN

A100

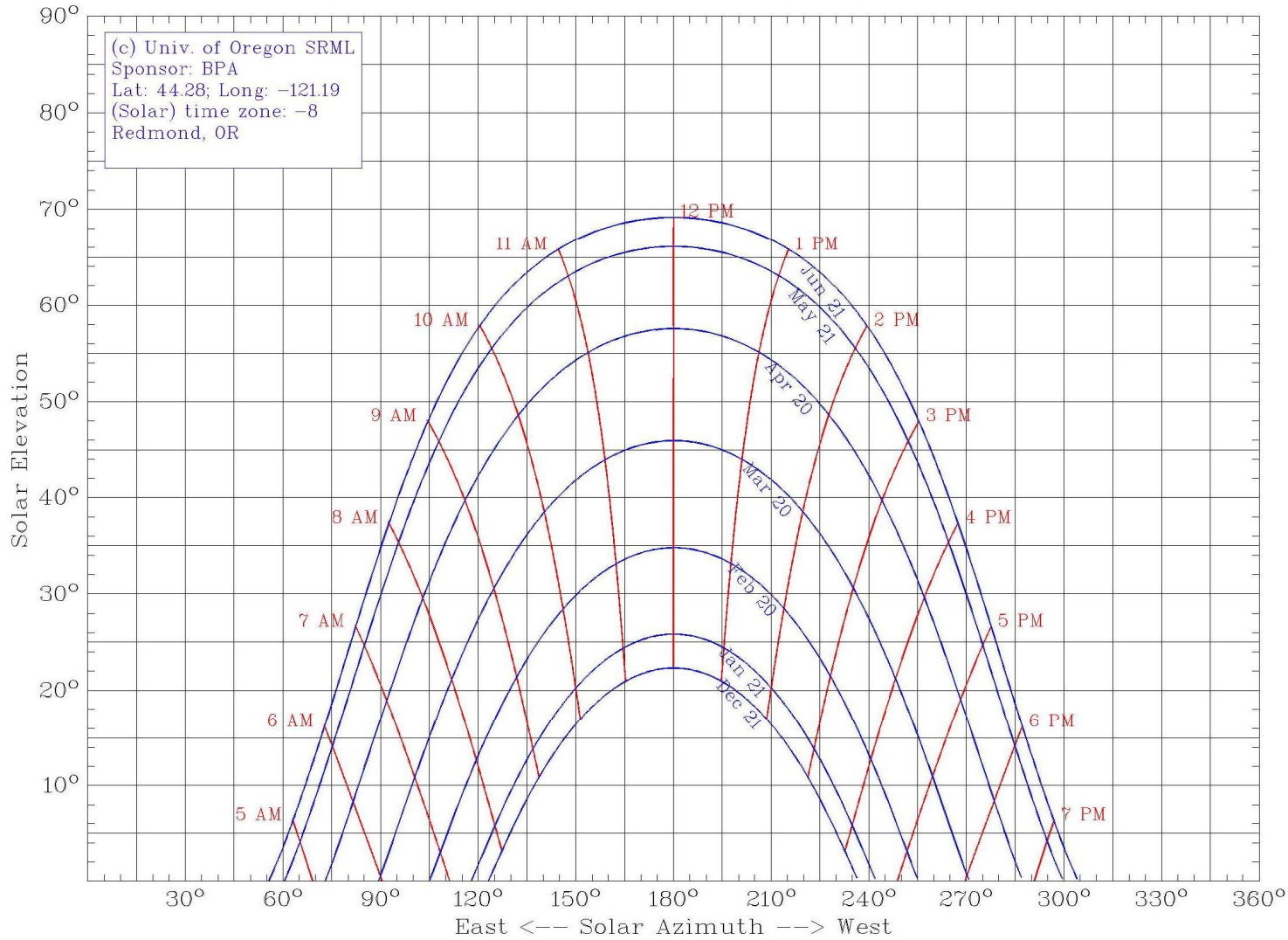
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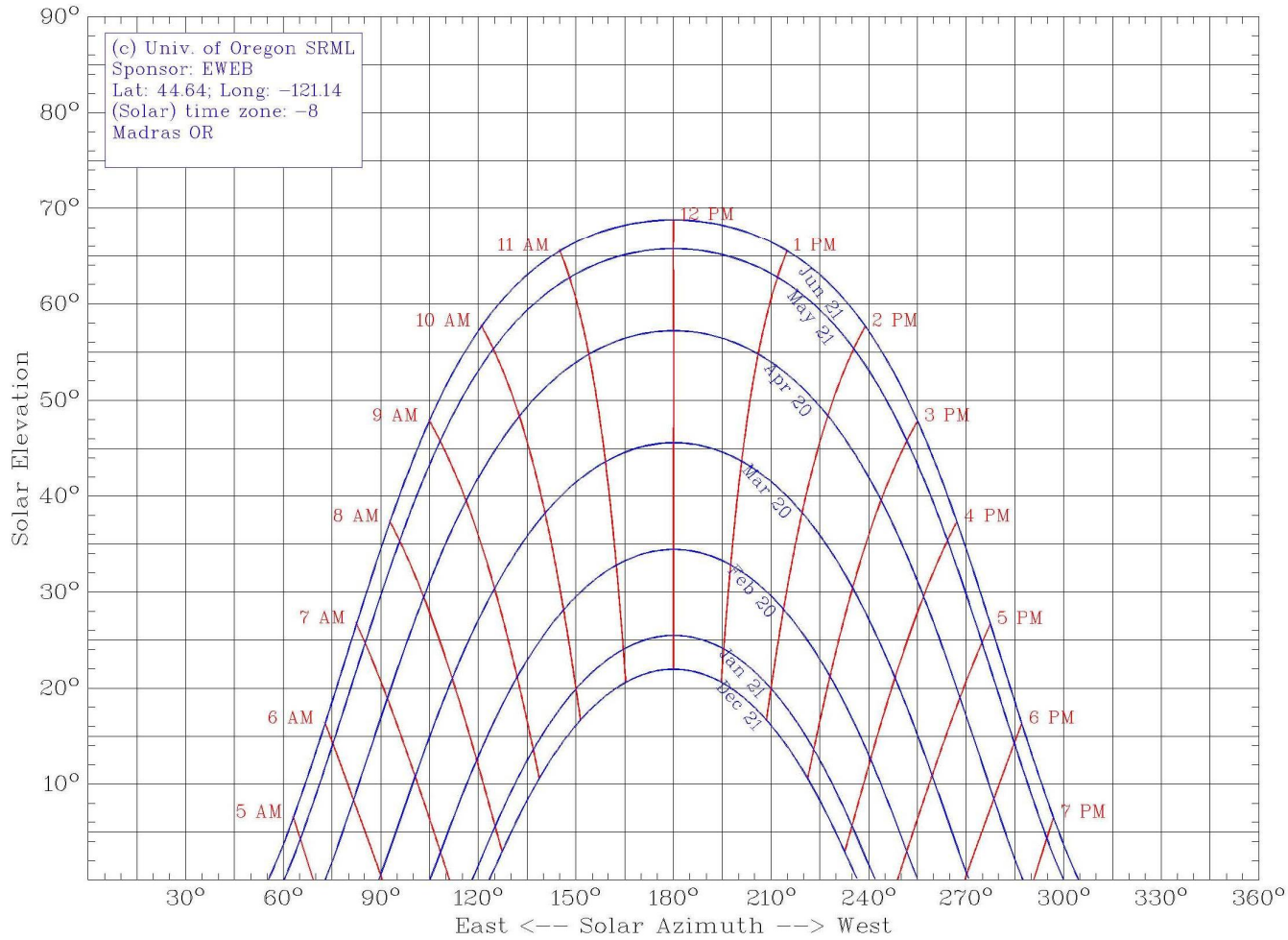


6.2 Appendix B: Sun Chart³⁰



³⁰ Sun data from University of Oregon Solar Radiation Monitoring Laboratory. <http://solardat.uoregon.edu/SunChartProgram.html>, Retrieved November 1, 2010.





6.3 Appendix C: Solar Site Survey Data³¹

Facility Name/Designation	Analysis	Comments/Notes	Area Available for PV (sq/ft)	Estimated Solar Array Size (kW)	Available Insolation for Array Area	Expected Annual PV Array Output (kWh)	Estimated 1st Year Electricity Savings	Building Life Greater Than 15 years	Anticipated Roof Life (years)	Solar Potential (Solar PV, or None)	Project Priority
Bend											
Science	Must meet 1.5% for solar	2,800 sf array currently shown on design documents	6,000	60	80-85%	67,000	\$4,000	X	>15	Roof Mount PV	High
Health Careers	Place PV on northwest portion only, south side shading from trees, must meet 1.5% for solar	3,300 sf array currently shown on construction documents. Consider new placement of PV panels on NW portion of building only	3,200	30	80%	35,000	\$2,100	X	>15	Roof Mount PV	High
Future Residence Halls Expansion		The size of this residence hall is not yet established; however it was estimated that the facility would have rough foot print of 37,000 sq and 2-3 stories tall	10,000	100	75%	100,000	\$6,000	X	>15	Roof Mount PV	High
Library	Selected areas have a high TSRF		4,300	40	85%	49,000	\$2,900	X	10 to 15	Roof Mount PV	Low

³¹The above data is based on the following assumptions. Roof and building life estimates come from the COCC Facilities Department. If an estimate of a buildings life or roof life was not available a standard of >15 years and <15 years was used respectively. Available area is based on the amount of area available for a solar installation and available solar insolation refers to the TSRF for that \ area.

Facility Name/Designation	Analysis	Comments/Notes	Area Available for PV (sq/ft)	Estimated Solar Array Size (kW)	Available Insolation for Array Area	Expected Annual PV Array Output (kWh)	Estimated 1st Year Electricity Savings	Building Life Greater Than 15 years	Anticipated Roof Life (years)	Solar Potential (Solar PV, or None)	Project Priority
Parking Q	Potential for canopy over parking spaces		1,500	10	80 to 85%	10,000	\$600	N/A	N/A	Ground Mount PV	Low
Parking Q2	Good Opportunity for Canopy solar, Cascading up from lower lot g to the east	Strategic removal of 1-2 trees would be necessary to maximize solar access	5,200	30	75-85%	3,000	\$200	N/A	N/A	Ground Mount PV	Low
Mazama Gym	Roof is old and has been recently patched. Best opportunity after roof replacement		5,800	60	95%	75,000	\$4,500	X	<15	Roof Mount PV	Low
Boyle education	SW corner great exposure		3,700	40	90%	43,000	\$2,600	X	<15	Roof Mount PV	Low
Parking N	Strategic removal of 1 volunteer tree to increase solar access on the north east portion	Only the northern half of the lot	5,500	50	80%	60,000	\$3,600	N/A	N/A	Ground Mount PV	Low
Ochoco	SW portion of building only	2 arrays possible 25'x20' & 35'x30'	2,100	20	85-95%	25,000	\$1,500	X	<15	Roof Mount PV	Low
Center for the Arts	Uncongested roof on lower level with a relatively high TSPF	Attached Multistory facility is congested with mechanical equip and additional cellular antennas which great reduces the available roof area	5,200	50	85-90%	64,000	\$3,800	X	<15	Roof Mount PV	Low

Facility Name/Designation	Analysis	Comments/Notes	Area Available for PV (sq/ft)	Estimated Solar Array Size (kW)	Available Insolation for Array Area	Expected Annual PV Array Output (kWh)	Estimated 1st Year Electricity Savings	Building Life Greater Than 15 years	Anticipated Roof Life (years)	Solar Potential (Solar PV, or None)	Project Priority
Parking Lot Z	South of Grandview; construction of small parking structure assumed	These arrays would be similar to those that would be installed over ground parking spaces, only this would be mounted on the 2nd floor of the structure	5,000	50	80-85%	56,000	\$3,400	N/A	N/A	Ground Mount PV	Low
Parking A	Many dispersed trees greatly reduce solar access	Parking directly across Campus Center			70%			N/A	N/A	None	
Parking B	Consistent shading from trees, TSRF below 75%				60%						
Parking C	Consistent shading from trees, TSRF below 75%				60%						
Pioneer	Many dispersed trees greatly reduce solar access				60-70%			X	<15	None	
Parking Lot G	Many dispersed trees greatly reduce solar access, strategic removal not an option				50%					None	

Facility Name/Designation	Analysis	Comments/Notes	Area Available for PV (sq/ft)	Estimated Solar Array Size (kW)	Available Insolation for Array Area	Expected Annual PV Array Output (kWh)	Estimated 1st Year Electricity Savings	Building Life Greater Than 15 years	Anticipated Roof Life (years)	Solar Potential (Solar PV, or None)	Project Priority
Parking Lot J	Many dispersed trees greatly reduce solar access, strategic removal not an option	Library Parking Lot								None	
south serpentine loop Parking	Elevation change coupled with dispersed trees create little opportunity in this area									None	
Jefferson and Deschutes	These facilities are planned to be replaced with COCC facility master plan; do not pursue for PV at this time	If these to facilities are demoed and one large facility is constructed high level of solar exposure would be created			70-90%					None	
Newberry	Heavily shaded, small roof				65%			X	<15	None	
Modoc	Heavily shaded				70%			X	<15	None	
Metolious	Heavily shaded				60%			X	<15	None	
Grandview	Roof to congested				75%			X	<15	None	
Dormitory	Heavily shaded				65%			X	>15	None	
Total - High Priority (Bend)			19,200	190		202,000	\$12,100				
Total - Low Priority (Bend)			38,300	350		385,000	\$23,100				
Total (Bend)			58,000	500		587,000	\$35,000				

Facility Name/Designation	Analysis	Comments/Notes	Area Available for PV (sq/ft)	Estimated Solar Array Size (kW)	Available Insolation for Array Area	Expected Annual PV Array Output (kWh)	Estimated 1st Year Electricity Savings	Building Life Greater Than 15 years	Anticipated Roof Life (years)	Solar Potential (Solar PV, or None)	Project Priority
Redmond											
North Portion of Redmond Campus - Parking Easement	Parking Easement granted to COCC by the Redmond Municipal Airport. This area also falls in the Runway Protection Zone of the Air field	It is expected that the City of Redmond would approve of a solar array in the 2.21 acre parking easement area. However, engagement of the city should happen early on in the planning process in order to keep an open line of communication	138,000	800						Ground Mount PV	High
North Portion of Redmond Campus			249,800	1,600	95-100%	2,123,600	\$146,600	N/A	N/A	Ground Mount PV	High
New Technology Center	Dispersed trees but scattered, must meet 1.5% for solar	Estimated available roof area	3,400	30	80-90%	40,000	\$2,800	X	>15	Roof Mount PV	High
Parking East of Northernmost Building	Parking spaces closest to airport way		1,500	10	80%	10,000	\$700	N/A	N/A	Ground Mount PV	Low
Total - High Priority (Redmond)			391,200	2,430		3,293,600	\$227,400				
Total - Low Priority (Redmond)			1,500	10		10,000	\$700				
Total (Redmond)			393,000	2,400		3,303,600	\$228,000				

Facility Name/Designation	Analysis	Comments/Notes	Area Available for PV (sq/ft)	Estimated Solar Array Size (kW)	Available Insolation for Array Area	Expected Annual PV Array Output (kWh)	Estimated 1st Year Electricity Savings	Building Life Greater Than 15 years	Anticipated Roof Life (years)	Solar Potential (Solar PV, or None)	Project Priority
Madras											
Ground Mount PV - Parcel I	The slope of the north east portion of parcel creates a great opportunity for Ground Mount PV	Utilize slope of property to mask solar appearance	164,000	1,000	95-100%	1,270,000	\$87,600	X	N/A	Ground Mount PV	High
Parcel II parking lot	Only a small portion of the fully built out campus parking lot has a high enough TSRF for ground mount PV above parking stalls	Assuming a peak height of 32 ft of the 3 new buildings to be constructed most of the parking lot directly adjusted to the facilities would not have enough solar exposure for PV. Only a small northern portion has enough exposure for PV installation	16,400	100	95-100%	110,900	\$7,700	X	N/A	Ground Mount PV	High
Parcel I Facility	Must meet OR solar law for new construction	1st facility to be constructed;	2,000	20	95-100%	25,000	\$1,700	X	>15	Roof Mount PV	High
Parcel II Facility	Must meet OR solar law for new construction	2nd facility to be constructed	2,000	20	95-100%	25,000	\$1,700	X	>15	Roof Mount PV	High
Parcel III Facility	Must meet OR solar law for new construction	3rd facility to be constructed	2,000	20	95-100%	25,000	\$1,700	X	>15	Roof Mount PV	High
Total - High Priority (Madras)			186,400	1,160		1,455,900	\$100,400				
Total - Low Priority (Madras)			0	0		0	\$0				
Total (Madras)			186,000	1,200		1,456,000	\$100,000				

	Maximum Area Available for PV (sq/ft)	Maximum Estimated Solar Array Size (kW)		Maximum Estimated Annual PV Array Output (kWh)	Maximum 1st Year Electricity Savings
COCC Total - High	596,800	3,780		4,951,500	\$339,900
COCC Total - Low	39,800	360		395,000	\$23,800
COCC Total	637,000	4,100		5,346,600	\$363,000

6.4 Appendix D: Pacific Power-Tariff Schedules 28 & 48

**Pacific Power - Oregon Price Summary
In Effect as of August 1, 2010**

Tariff Schedules ¹	Delivery Service								Supply Service					Delivery & Supply Subtotal	Tax Adj 102	Combined Effective Rate ²	Public Purpose 290	Klam Dam Rem JCB 199	Klam Dam Rem C/IG 199	Energy Conserv. 297 ³	BPA Credit 98 ⁴		
	Base Rate	92	93	96	97	194	195	299	Total Delivery	Base Supply 200	Cost-Based 201	Adj. Schedules 202	203									Total Supply	
Schedule 28 Secondary																							
Basic Charge																							
Load Size <= 50 kW	\$14.00							\$14.00							\$14.00		\$14.00 /month		3%				
Load Size 51-100 kW	\$26.00							\$26.00							\$26.00		\$26.00 /month		3%				
Load Size 101-300 kW	\$62.00							\$62.00							\$62.00		\$62.00 /month		3%				
Load Size > 300 kW	\$89.00							\$89.00							\$89.00		\$89.00 /month		3%				
Load Size Charge																							
Load Size <= 50 kW	\$0.90							\$0.90							\$0.90		\$0.90 /kW		3%				
Load Size 51-100 kW	\$0.70							\$0.70							\$0.70		\$0.70 /kW		3%				
Load Size 101-300 kW	\$0.40							\$0.40							\$0.40		\$0.40 /kW		3%				
Load Size > 300 kW	\$0.30							\$0.30							\$0.30		\$0.30 /kW		3%				
Demand Charge (minimum of 15 kW)	\$3.86							\$3.86							\$3.86		\$3.86 /kW		3%				
Energy Charge																							
1st 20,000 kWh	0.300	0.000	0.007	0.000	0.000	0.016	0.003	0.321	0.647	2.644	1.984	0.000	0.051	4.679	5.326	0.031	5.357 ¢/kWh	3%	0.033	0.097	0.177	-0.469	
All Additional kWh	0.300	0.000	0.007	0.000	0.000	0.016	0.003	0.321	0.647	2.573	1.930	0.000	0.051	4.554	5.201	0.031	5.232 ¢/kWh	3%	0.033	0.097	0.177	-0.469	
Reactive Power	\$0.65							\$0.65							\$0.65		\$0.65 /kVar		3%				
Schedule 28 Primary																							
Basic Charge																							
Load Size <= 50 kW	\$17.00							\$17.00							\$17.00		\$17.00 /month		3%				
Load Size 51-100 kW	\$30.00							\$30.00							\$30.00		\$30.00 /month		3%				
Load Size 101-300 kW	\$71.00							\$71.00							\$71.00		\$71.00 /month		3%				
Load Size > 300 kW	\$102.00							\$102.00							\$102.00		\$102.00 /month		3%				
Load Size Charge																							
Load Size <= 50 kW	\$1.00							\$1.00							\$1.00		\$1.00 /kW		3%				
Load Size 51-100 kW	\$0.80							\$0.80							\$0.80		\$0.80 /kW		3%				
Load Size 101-300 kW	\$0.45							\$0.45							\$0.45		\$0.45 /kW		3%				
Load Size > 300 kW	\$0.25							\$0.25							\$0.25		\$0.25 /kW		3%				
Demand Charge (minimum of 15 kW)	\$4.28							\$4.28							\$4.28		\$4.28 /kW		3%				
Energy Charge																							
1st 20,000 kWh	0.039	0.000	0.007	0.000	0.000	0.016	0.003	0.321	0.386	2.568	1.927	0.000	0.051	4.546	4.932	0.031	4.963 ¢/kWh	3%	0.033	0.097	0.177	-0.469	
All Additional kWh	0.039	0.000	0.007	0.000	0.000	0.016	0.003	0.321	0.386	2.499	1.875	0.000	0.051	4.423	4.811	0.031	4.842 ¢/kWh	3%	0.033	0.097	0.177	-0.469	
Reactive Power	\$0.60							\$0.60							\$0.60		\$0.60 /kVar		3%				

¹ See Tariff for application and special conditions.

² Delivery Service plus Supply Service plus Income Tax Adjustment. Prior to Public Purpose Charge, Energy Conservation Charge and BPA Credit. Also, does not include the effect of Low-Income Assistance Schedule 91; for Schedule 4 customers add \$0.50 per meter per month; all other schedules add 0.050 cents per kWh per meter which is capped at \$500 or a maximum usage of 1,000,000 kWh.

³ Consumers over 1aMW (8,760 MWh annually) and consumers certified for public purpose Self Direction by the Oregon Office of Energy are exempted from this charge.

⁴ Cents per qualifying kWh. Applicable to residential and small farm consumers only. Consumer eligibility for this credit is as provided by the Pacific Northwest Electric Power Planning and Conservation Act, Public Law 96-501.

**Pacific Power - Oregon Price Summary
In Effect as of August 1, 2010**

Tariff Schedules ¹	Delivery Service								Supply Service				Delivery & Supply Subtotal	Tax Adj 102	Combined Effective Rate ²	Public Purpose 290	Klam Dam Rem JCB 199	Klam Dam Rem C/IG 199	Energy Conserv. 297 ³	BPA Credit 98 ⁴
	Base Rate	92	93	Adjustment Schedules 96 97		194	195	299	Total Delivery	Base Supply 200	Cost-Based 201	Adj. Schedules 202 203								
Schedule 48 Secondary																				
Basic Charge																				
Facility Capacity ≤ 4,000 kW	\$320.00							\$320.00						\$1.00	\$320.00		\$320.00 /month	3%		
Facility Capacity > 4,000 kW	\$600.00							\$600.00						\$1.00	\$600.00		\$600.00 /month	3%		
Facility Capacity Charge																				
Facility Capacity ≤ 4,000 kW	\$1.30							\$1.30						\$1.00	\$1.30		\$1.30 /kW	3%		
Facility Capacity > 4,000 kW	\$1.20							\$1.20						\$1.00	\$1.20		\$1.20 /kW	3%		
On-Peak Demand Charge ⁵	\$3.39							\$3.39	\$1.00					\$1.00	\$4.39		\$4.39 /kW	3%		
Energy Charge - All On-Peak kWh ⁵	0.000	0.000	0.007	0.000	0.000	0.016	0.003	-0.326	-0.300	2.337	1.956	0.000	0.046	4.339	4.039	0.031	4.070 ¢/kWh	3%	0.026 0.079 0.131 -0.469	
Energy Charge - All Off-Peak kWh ⁵	0.000	0.000	0.007	0.000	0.000	0.016	0.003	-0.326	-0.300	2.287	1.906	0.000	0.046	4.239	3.939	0.031	3.970 ¢/kWh	3%	0.026 0.079 0.131 -0.469	
Reactive Power	\$0.65							\$0.65							\$0.65		\$0.65 /kVar	3%		
Schedule 48 Primary																				
Basic Charge																				
Facility Capacity ≤ 4,000 kW	\$330.00							\$330.00						\$1.00	\$330.00		\$330.00 /month	3%		
Facility Capacity > 4,000 kW	\$590.00							\$590.00						\$1.00	\$590.00		\$590.00 /month	3%		
Facility Capacity Charge																				
Facility Capacity ≤ 4,000 kW	\$0.70							\$0.70						\$1.00	\$0.70		\$0.70 /kW	3%		
Facility Capacity > 4,000 kW	\$0.65							\$0.65						\$1.00	\$0.65		\$0.65 /kW	3%		
On-Peak Demand Charge ⁵	\$3.65							\$3.65	\$1.00					\$1.00	\$4.65		\$4.65 /kW	3%		
Energy Charge - All On-Peak kWh ⁵	0.000	0.000	0.007	0.000	0.000	0.016	0.003	-0.326	-0.300	2.268	1.869	0.000	0.046	4.183	3.883	0.031	3.914 ¢/kWh	3%	0.026 0.079 0.131 -0.469	
Energy Charge - All Off-Peak kWh ⁵	0.000	0.000	0.007	0.000	0.000	0.016	0.003	-0.326	-0.300	2.218	1.819	0.000	0.046	4.083	3.783	0.031	3.814 ¢/kWh	3%	0.026 0.079 0.131 -0.469	
Reactive Power	\$0.60							\$0.60							\$0.60		\$0.60 /kVar	3%		
Schedule 48 Transmission																				
Basic Charge																				
Facility Capacity ≤ 4,000 kW	\$440.00							\$440.00						\$1.00	\$440.00		\$440.00 /month	3%		
Facility Capacity > 4,000 kW	\$810.00							\$810.00						\$1.00	\$810.00		\$810.00 /month	3%		
Facility Capacity Charge																				
Facility Capacity ≤ 4,000 kW	\$0.60							\$0.60						\$1.00	\$0.60		\$0.60 /kW	3%		
Facility Capacity > 4,000 kW	\$0.60							\$0.60						\$1.00	\$0.60		\$0.60 /kW	3%		
On-Peak Demand Charge ⁵	\$3.32							\$3.32	\$1.00					\$1.00	\$4.32		\$4.32 /kW	3%		
Energy Charge - All On-Peak kWh ⁵	0.000	0.000	0.007	0.000	0.000	0.016	0.003	-0.326	-0.300	2.220	1.785	0.000	0.046	4.051	3.751	0.031	3.782 ¢/kWh	3%	0.026 0.079 0.131 -0.469	
Energy Charge - All Off-Peak kWh ⁵	0.000	0.000	0.007	0.000	0.000	0.016	0.003	-0.326	-0.300	2.170	1.735	0.000	0.046	3.951	3.651	0.031	3.682 ¢/kWh	3%	0.026 0.079 0.131 -0.469	
Reactive Power	\$0.55							\$0.55							\$0.55		\$0.55 /kVar	3%		

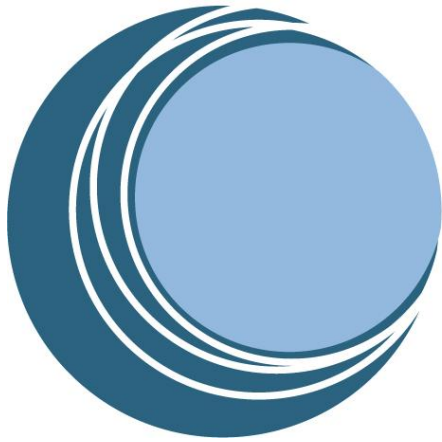
¹ See Tariff for application and special conditions.

² Delivery Service plus Supply Service plus Income Tax Adjustment. Prior to Public Purpose Charge, Energy Conservation Charge and BPA Credit. Also, does not include the effect of Low-Income Assistance Schedule 91; for Schedule 4 customers add \$0.50 per meter per month; all other schedules add 0.050 cents per kWh per meter which is capped at \$500 or a maximum usage of 1,000,000 kWh.

³ Consumers over 1MW (8,760 MWh annually) and consumers certified for public purpose Self Direction by the Oregon Office of Energy are exempted from this charge.

⁴ Cents per qualifying kWh. Applicable to residential and small farm consumers only. Consumer eligibility for this credit is as provided by the Pacific Northwest Electric Power Planning and Conservation Act, Public Law 96-501.

⁵ On-Peak hours are from 6:00 a.m. to 10:00 p.m. Monday through Saturday excluding NERC holidays. Off-Peak hours are remaining hours.



CENTRAL OREGON
community college

YEAR ONE SELF-EVALUATION REPORT

Submitted: February 2011

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Central Oregon Community College Year One Report

Introduction

In accordance with the revised accreditation process and standards of the Northwest Commission on Colleges and Universities (NWCCU), this Year One Report represents an overview and analysis of Central Oregon Community College's (COCC) mission, core themes, and college-wide expectations of mission fulfillment as approved by the COCC Board of Directors.

COCC's mission and vision statements are reviewed by the Board of Directors on a biennial basis. The mission, vision and goals are the drivers of the [Vision Concept Paper](#) (revised in 2005 with review and minor revisions anticipated in March 2011) and the 2007 Strategic Plan organized around the 2007 – 2009 Board Priorities. Elements of the 2007 -2009 Strategic Plan are in the process of being updated and reformatted to provide a foundation for an institutional scorecard. Currently, the 2009-11 Board Priorities drive institutional initiatives and outcome assessment. Board Priorities for 2011-2013 are scheduled for approval in March 2011. This mission-vision-goals-priorities process results in a consistently affirmed commitment to COCC mission fulfillment. Each of the clarifying documents expands on key characteristics and expectations essential for mission fulfillment and provides the college community with guidelines on meeting the essential elements of our mission.

In response to the changes to the NWCCU Standards for Accreditation, the College formed the Accreditation Coordinating Team (ACT). ACT members include representatives from Instruction, Student Services, Community Learning, and Administration. ACT has four primary objectives: 1) aid in disseminating the core themes, as approved by the Board of Directors, to the wider campus communities, 2) identify appropriate objectives and indicators for each core theme, 3) help guide various campus communities in developing and implementing appropriate means of assessing campus wide articulation to the core themes, and 4) to guide and support writing the accreditation reports.

On December 9th, 2009, the COCC Board of Directors approved the core themes of *Transfer and Articulation*, *Workforce Development*, *Basic Skills*, and *Lifelong Learning*. In reviewing the core themes, the Board found them to be consistent with the comprehensive Community College Mission and with the Board's mission, vision, and goals. Since that time, ACT has worked to disseminate that information throughout all the college communities and to encourage college wide engagement with the newly identified core themes. Representatives of ACT have presented the core themes to Chairmoot (the committee comprised of all academic department chairs, the vice president for instruction and instructional deans), the Deans and Directors, the Student Services Division, and the full campus community at the fall 2010 College Retreat. This process has helped to quickly disseminate the new accreditation standards and to provide a means for feedback from a broad sampling of the college community.

The Year One report was written by the following members of the college community:

President: Dr. James Middleton

Vice President for Instruction: Dr. Karin Hilgersom

Vice President for Instruction, Retired: Dr. Kathy Walsh

Associate Professor, Anthropology: Dr. Amy Harper

Institutional Context

Founded in 1949, Central Oregon Community College is the longest-standing community college in Oregon. The Central Oregon Community College District covers a 10,000-square-mile area, making it larger than eight U.S. states. It includes all of Crook, Deschutes and Jefferson Counties, as well as the southern part of Wasco County and the northern portions of Klamath and Lake Counties. A seven-member board of directors, elected from geographic zones, governs the College.

COCC's main campus is located in Bend and covers approximately 200 acres. The campus includes 23 buildings with a total of 453,982 square feet under roof. The newest building, the Campus Center, opened in the fall of 2009. On the 25-acre Redmond Campus, there are three buildings, housing College administration and student support services, classrooms, a computer lab and the Manufacturing and Applied Technology Center. The Redmond Campus also includes a partnership with the Redmond Workforce Connection, supporting residents needing education and training opportunities.

COCC has 110 full-time faculty members, 46 adjunct faculty and approximately 200 part-time instructors. Full-time faculty members serve as academic advisors to individual students, assisting them in planning academic programs and schedules. All COCC faculty are required to have at least a master's degree or equivalent training with a strong emphasis on practical workplace skills. Within the institution, there is strong motivation for continuing professional improvement by all faculty, administrators, and support staff. About 40 percent of the full-time faculty have doctorates in their disciplines or terminal degree/licensure in their field, a very high percentage for a community college.

More than 10,000 students enrolled in credit classes at COCC during the 2009-2010 academic year. Each quarter, over 2,300 full-time and 4,200 part-time students enrolled. In 2009-2010, an additional 7,724 individuals took a broad range of non-credit courses. While half of the students are under the age of 25, another quarter is 33 and older. About 32 percent of the credit students declare a career and technical education major, 41 percent a transfer major, 17% are not seeking a certificate/degree and 10% are exploratory/undecided.

Over the past four years, the College has experienced unprecedented growth. Initially, this growth may have been a reflection of a re-design of the institutional marketing efforts, a significant increase in scholarship opportunities due to a large donation from a friend of the College, and a shift in the College's recruitment efforts. While these factors may have potentially contributed to early enrollment growth, the downturn in the nation's economy has been a clear driver of enrollment growth. We anticipate that COCC will end the 2010-11 academic year by credit enrollment growing more than 108% since 2006-07, non-credit student activity during this time period was able to maintain and even increase around 10% matching national trends. While this growth has served the College tremendously well in terms of budgetary impacts, it has challenged faculty and staff, all of whom have risen to the occasion and continue to serve students at an incredibly high level.

In addition to the growth in students, the College is experiencing growth in its physical plant. College district voters approved a \$41 million construction bond, allowing the College to move forward with a health sciences center, science building, Bend campus renovations, a technology center in Redmond and two smaller branch campuses in Madras and Prineville. Additionally, thanks in part to the generosity of local donors, the College has begun construction on a Culinary Arts facility. And finally, the COCC Board of Directors will likely consider approval of new student housing during the spring 2011 term. All said, this new construction is estimated to add 160,000 square feet of much needed instructional and student space.

Preface

Since the April 2009 Focused Interim Evaluation, Central Oregon Community College has seen continuing explosion in enrollment without, up to this point, a corresponding growth in staff. This unprecedented enrollment growth created challenges for staff and at the same time underscored the value of effective data retrieval and mission clarity as we determine where to grow. The College is currently in various stages of planning and construction of new facilities and programs on the Bend Campus and outlying centers as well as developing new academic programs and refining teaching/learning strategies to strengthen outcomes and improve fiscal efficiency.

The April 2009 Focused Interim Evaluation Report concluded that the College made significant progress on the April 2007 recommendation related to COCC’s assessment of student learning outcomes. The 2009 Evaluation gave the College three commendations (with no recommendations) related to the administration’s support of faculty assessment activities and the development of a comprehensive, reoccurring assessment of COCC’s General Education Outcomes. As the College broadens institution-wide assessment of the college mission and core themes, we plan to build on the model used in the commended instructional assessment projects. That is, identifying the success outcome, then the assessment project to measure performance on that outcome, then analyzing data, then closing the loop.

Institution-wide Assessment of College Mission and Core Themes COCC Assessment Project Template

Program Outcome: What do you expect to achieve?				
Where: Activity or process to achieve outcome	Measurement: what tool will be used to assess?	Results: summarize the data	Analysis of results: what did the team see in the data?	Closing the loop: what action will the team take?
Timeline:	When ready?	When available?	When to be analyzed?	When to be implemented?

This new approach has formed the framework for COCC’s system of institutional effectiveness assessment as the College synthesizes our assessment activities across the core themes. At this point, one year into the final adoption of new standards by NWCCU, and less than one year after COCC’s Board adopted the core themes, the College is beginning a process of re-orienting our outcomes and indicators to align with core themes. The College is confident that the emerging holistic orientation of measures will lead to a significant and meaningful analysis of a number of data points over time.

Chapter One – Mission, Core Themes, and Expectations

Section 1: Mission

Mission Statement

COCC has a widely published statement of mission, vision, and goals. The statements are published both on the web (<http://visitors.cocc.edu/About/Mission/default.aspx>) and in the Catalog (located on p. 2 of the 2009 -1010 catalogue). The COCC Board of Directors reviews these statements on a biennial basis. The mission, vision statement, and goals clearly articulate a broad commitment to the educational and workforce development of Central Oregon community members. The larger community of Central Oregon is represented in the process of reviewing and renewing the COCC mission, vision statement and goals as each of the Board Directors is elected from regions across the COCC district and represents the interest of their communities. In 2005, the Board of Directors revised and reaffirmed the Vision Concept Paper which provides guidelines for the direction of the management of COCC and its relations to others. At its fall 2010 Board Retreat, the Board again reaffirmed the COCC Mission, Vision Statement, and Goals. The Board also modified and reaffirmed the 2009-11 Board Priorities. The Board Priorities provide a detailed framework for the direction and success in the management of COCC vision and goals. The priorities and reports can be accessed at: <http://visitors.cocc.edu/About/Mission/Priorities/Default.aspx>

Mission

Central Oregon Community College will be a leader in regionally and globally responsive adult, lifelong, postsecondary education for Central Oregon.

Vision Statement

Because of COCC, Central Oregonians will . . .

- be a district wide community that holds and promotes lifelong postsecondary education and ongoing professional growth and personal development for adults as values;
- be able to connect actively with other communities, the state, the nation and the world in order to attain both locally strong and globally responsible perspectives;
- view education as integral to a sense of well-being, security and responsibility; and
- look to COCC to lead the region in the achievement of these ends.

Definition of Fulfillment of Mission:

Success in achieving the Board goals (which contain both core themes and key values) represents our definition of mission fulfillment. Fulfilling our mission would result in a community with an adult population that: 1) has the proficiencies and learning skills necessary for lifelong employment at a family-wage level; 2) has the academic achievements and learning skills necessary to successfully pursue education at and beyond the community college level; 3) works collaboratively to achieve shared purposes; 4) has wide-ranging opportunities to enhance learning, wellness, quality of life, and cultural appreciation; 5) supports diversity and interacts effectively with state, regional, national and global communities.

Acceptable Threshold or Extent of Mission Fulfillment:

COCC recognizes that stating a mission, having a vision and setting goals are insufficient on their own. The College must assess the extent to which it is fulfilling its mission and make continuing adjustments relative to achievement and gaps. COCC's system for considering mission fulfillment is achieved through consideration of four mechanisms: (1) the Vision Concept Paper, (2) bimonthly Institutional Effectiveness Reports, (3) community responses that inform planning and internal evaluation process, and (4) the Institutional Scorecard currently in development with pilot testing planned for 2011/12.

The [Vision Concept Paper](#) (2003, revised 2005, reviewed 2010, with the next review and revision scheduled for March 2011) is a narrative statement of expected institutional, community and student outcomes if the college is achieving its mission. While helpful in making the mission statement more "real" it is predominantly a statement of aspiration rather than outcome.

The Institutional Effectiveness Reports are provided every other month to the Board with the purpose of communicating the College's progress in the established Board priority areas. The reports provide specific indicators, baseline and longitudinal data, lists of current initiatives, and highlight statements relative to institutional achievements in the examined area. Importantly, the Institutional Effectiveness Reports include two future-focused components: a statement of "What Needs to Be Done" and "Factors Affecting Results/Progress." These components outline potential future actions related to achieving the goal or improving the assessment tool used for the item under review, and lists internal and external environmental factors that impact mission fulfillment, may shape future strategies, or may justify modification of the priorities themselves.

Finally, the College leadership is working on developing an Institutional Scorecard that would move to an even deeper level of outcomes assessment. This scorecard would identify various elements from the Strategic Priorities, the Strategic Enrollment Management Plan, and the Instructional Plan (all three of which are administrative or departmental plans for implementing and achieving college mission and goals) and cross-reference them to core themes and to areas of institutional organization (instruction, human resources, facilities, etc.). On-going periodic outcomes for individual elements will be listed with dates of the outcome assessments. Finally, progress and achievement relative to each element will be ranked with a "plus, check or minus" scale. While many of the achievement assessments are subjective, continuing attention will be given to identifying the most appropriate objective data for assessing each element. The "plus, check, minus" ranking will provide an immediate means for reviewing overall progress and more specific progress relative to narrower initiatives. Additionally, this database will be able to be filtered to provide individual units (such as HR) with a quick overview of progress of all institutional priorities relative to their area of responsibility and will provide similar filtering of progress on priorities relative to specific core themes. We expect to pilot test the Institutional Scorecard over the 2011-2012 academic year.

Section II: Core Themes

As reiterated in the Vision Concept Paper (under the heading: “General Considerations Guiding COCC’s Development in the Next Ten Years”) the College is dedicated to “serving students by providing opportunities for individual learners to grow. The College will continue its primary focus on serving adult learners in its traditional community college programs: associate degree and transfer programs; applied degrees and certificates; adult basic and developmental education; and a wide range of community education offerings on a cost recovery basis.”

In accordance with these considerations, the Board adopted four core themes at the Board Retreat on December 9th, 2009 and recently reaffirmed its commitment to those core themes at the fall 2010 Board Retreat. These themes manifest the essential elements of COCC’s mission as articulated in the Board Goals. The Core themes are:

1. Transfer and Articulation
2. Workforce Development
3. Basic Skills
4. Lifelong Learning

Core Theme 1: Transfer and Articulation

Theme Description

The Transfer and Articulation Core Theme directly addresses the Board goal that COCC will promote an “adult population with the academic achievements necessary to successfully pursue education beyond the community college level.” A solid foundation in general education is central to successful transfer. As a result of general educational experience at COCC, students will acquire knowledge of diverse disciplinary and cultural perspectives, as well as college-level skills in composition, oral communication, critical thinking and mathematics.

Many of COCC’s student support programs also support this theme. This includes the Career, Academic and Personal Counseling (CAP) Center, Tutoring and Testing Center, COCC Foundation Scholarships, and Disability Services, to name a few.

The aspect of articulation in this theme also draws on the goal to “work collaboratively to achieve shared purposes.” The College’s work on this theme manifests itself in a variety of settings, including but not limited to partnership with Oregon State University – Cascades campus, participation in the statewide Joint Boards Articulation Committee’s development of statewide AAOT outcomes and related initiatives such as participation in Linn Benton Community College’s radiologic technology articulated program, and the coordination of COCC’s multi-college Pharmacy Technician Program. Working toward the expansion of transfer opportunities in Central Oregon is also a key COCC activity associated with this theme. COCC actively participates in regional initiatives to strengthen the university branch presence.

In reviewing 2009-10 academic year data, 8,282 students attended COCC as a certificate- or degree-seeking (CDS) student. Of this 4,058 students (49% of CDS population) declared a transfer major. To aid

in achieving this goal, the majority of transfer students are directed to the Associate of Arts – Oregon Transfer (AAOT) degree.

The AAOT is the primary transfer degree offered in Oregon and at COCC, although students may also transfer under the Associate of Science (AS) degree or the Oregon Transfer Module (OTM). Degree requirements for the AAOT, AS, and OTM are published in the College catalog and are available on the COCC Website, and a full description of degrees will be provided in Standard 2.

In 2002, the Faculty Assessment Team (FAT) was charged with the responsibility of articulating COCC's General Education Outcomes, which were completed in 2005. During 2005-06, members of FAT visited every instructional department on campus with the draft of the General Education Outcomes. Faculty members were asked to determine whether or not their courses addressed the outcomes, and the results confirmed that all of the outcomes were addressed across the curriculum. The Academic Affairs Committee oversaw the FAT's continued development and mapping of the General Education Outcomes. The purpose of the mapping was to determine the degree to which the faculty have wide ownership of the outcomes. Following this process, Academic Affairs formally approved the General Education Outcomes in Fall 2006. These outcomes are published in the catalog (p.33 of the 2009/2010 catalog) and on our website (<http://assessment.cocc.edu/instr/GenEd/default.aspx>). The General Education Outcomes are as follows:

1. **Aesthetic Engagement:** Students will engage in informed discussion of the meaning and value of aesthetic expression.
2. **Communication:** Students will speak, read, write, and listen effectively.
3. **Critical Thinking:** Students will analyze, interpret, and synthesize ideas and information.
4. **Cultural Awareness:** Students will explain how cultural context shapes human perceptions and values.
5. **Health Choices:** Students will identify responsible health and safety procedures.
6. **Quantitative Reasoning:** Students will apply appropriate mathematics to analyze and solve problems.
7. **Scientific Reasoning:** Students will apply scientific inquiry to arrive at informed conclusions.
8. **Technology and Information Literacy:** Students will use computer technology to gather, process, and communicate information.
9. **Values and Ethics:** Students will evaluate the ethical dimensions of arguments and the consequences of decisions.

Theme Objectives and Indicators.

Objective 1: Student admissions, registration, placement, pre-term advising processes are conducive to academic readiness in courses leading to eventual transfer. The College recognizes that if a student is to engage successfully in any given learning environment they must be prepared to meet basic expectations. This objective therefore addresses the necessity of student readiness in order to meet the goals of successful transfer. Indicators that will enable us to assess and improve student readiness include indirect indicators such as student evaluative opinion at intake, midpoint, and graduation, as well as faculty and staff evaluative opinion at intake, midpoint, and graduation. These evaluations will provide the College with information on the perception of successful practices and policies that enable students to be successful in their academic endeavors. These evaluative data will be articulated with a sampling of course completion rates and grades linked to placement recommendations as a means of providing quantitative context for interpreting the evaluative indicators.

Objective 2: Students will have timely access to necessary transfer courses with course schedules sequences available to students. Curriculum leading to eventual transfer will be rigorous and outcomes for each course will be equivalent to similar courses at Oregon's baccalaureate granting institutions. One of the challenges facing COCC in the past few years has been our unprecedented enrollment growth. This growth requires that the College pay close attention to a student's ability to access courses and course sequences necessary for timely completion and transfer. Indicators for this object revolve around ongoing analysis and evaluation of waitlists with particular attention to gateway courses. This objective also recognizes that access to courses is meaningless unless those courses provide the academic content and skills that foster student success as they continue with their academic goals. To this end, the College has established a Curriculum Committee Review Processes and Procedures. The College also engages in specific articulations with individual higher education partners such as OSU-Cascades and in statewide outcomes and articulation initiatives.

Objective 3: General Education and course level outcomes are clearly defined, well assessed and promoted among students in order to establish student knowledge of and skill attainment in the defined outcome areas. As evidenced in the 2009 Focused Interim Evaluation Report, COCC has developed a strong culture of ongoing and systematic assessment at the course, program, and general education levels. Indicators for the ongoing and systematic assessment of learning outcomes include the development of rubrics for each general education outcomes, which are then used to generate college wide data on integration of outcomes within individual courses and student success at meeting these outcomes. The effectiveness of the general education rubrics is analyzed on a regular and systemic basis. Illustrations of rubrics and assessment results are collected in a databank for review (the goal is to eventually develop a portal that will ease sharing of rubrics and assessment strategies). This databank was recently developed and deployed Winter 2011. Faculty will begin loading results at the end of Winter 2011.

Objective 4: Faculty are supported, and incentives provided, in the ongoing quest to guide and sustain their practice; practice that includes their teaching pedagogy, content expertise, and service to the College and the community. The College recognizes that a successful learning environment for students requires a faculty that is supported in continuing academic excellence and pedagogical engagement. Continuous quality improvements to the Core Theme of Transfer are supported by an organizational culture that promotes innovative pedagogy and curricula. Indicators for this objective include a system of promotions and sabbatical directly and rigorously linked to effectiveness in primary assignment, professional development, service to the College and service to the community. The submission of Annual Reports of Activities submitted by faculty are linked with goal setting and faculty Professional Improvement Plans (PIPs). Additionally, professional development and professional travel are encouraged and funded. Innovations for improving transfer completion and success and are encouraged and funded.

Objective 5: Students have the support they need beyond the context of a course to be well prepared to transfer. This includes, but not limited to, library services, internet and computing support, academic and career advising, faculty availability and readily available high quality tutoring services. This objective recognizes the important role that the entire College community provides to furthering student success. A successful experience for transfer students includes opportunities to engage deeply in the college community beyond the context of a specific class, and thus enhance their ability to contribute effectively to their academic communities. Indicators of this objective include: The assessment of library space and materials, teaching lab space and materials, and access to digital resources support the goal of transfer; ongoing analysis of the college's capacity for internet use and computing that meets evolving student needs; regular and systematic evaluation of tutoring services, with particular emphasis

on pre-college writing and math and college-level science education. Finally, opportunities for students to be actively engaged in their college community are apparent and significant.

Core Theme 2: Workforce Development

Theme Description

The Workforce Development Theme addresses the Board goal to achieve an “adult population with the proficiencies and learning skills necessary for lifelong employment at a family wage level.” In reviewing 2009-10 academic year data, 3,180 students (38% of certificate and degree-seeking students) declared a Career and Technical Education (CTE) major. COCC offers Certificates of Completion and Associates of Applied Science degrees (AAS) in 59 programs. A listing of all certificate and AAS programs is published on pages 35- 49 of the 2010-11 Catalog. All degree programs and certificates of one year or more include related instruction in communications, math, health, human relations, and computer basic skills, and nine credits of courses that meet COCC’s discipline studies requirements. In addition, each program defines specific student learning outcomes specific to the skills and knowledge necessary for professional practice in the field.

Theme Objectives and Indicators.

Objective 1: Student admissions (including competitive admissions requirements), registration, placement, pre-term advising processes are conducive to academic readiness in Career and Technical Education (CTE) programs. This objective recognizes that importance of student readiness in order to provide a successful experience within the coursework and incorporation into the workforce. As with Transfer and Articulation, indirect indicators such as student, faculty, and staff evaluative opinion at intake, midpoint, and graduation will provide data on practices and policies that enable students to be successful in their training and preparation for specific career development. These data will be correlated with CTE completion rates and post-graduation job placement success to provide a broad picture assessment of student readiness.

Objective 2: Students can access pre-requisite courses, and CTE courses required in the program of study, that lead to timely completion of a CTE certificate and/or degree. Students will have timely access to necessary CTE courses with scheduled course sequences available to students. This objective is particularly relevant given the current climate of rapid enrollment. Indicators include analysis of waitlists with particular attention to pre-requisite and required CTE courses, as well as analysis of completion rates to demonstrate that students are able to progress in their goals in a timely manner.

Objective 3: Curriculum leading to program level outcomes and family wage careers are based upon COCC General Education Outcomes, industry standards, input from advisory boards, and the professional experience and judgment of faculty who have solid experience in the field. This outcome recognizes that we must be responsive to various constituencies in order to provide our students with the skills, knowledge, and flexibility to contribute to the local and global workforce demands. Indicators that we are succeeding in achieving the standards and balancing the input and expertise of various invested groups in the student learning environment include:

- The alignment of Curriculum Committee Review Processes and Procedures, course syllabi and Community Colleges and Workforce Development (CCWD) program approval standards

- The ongoing and systematic analysis of the effectiveness of general education rubrics applied to CTE students
- Program and Advisory Boards provide regular program level reviews and formal industry specific recommendations are integrated into the curricula in a timely manner
- Regular reviews of field-specific licensure and examination success rates will guide planning and program improvements

Objective 4: Faculty are supported, and incentives provided, in the ongoing quest to guide and sustain their practice; practice that includes their teaching pedagogy, their content expertise, and their service to the college and the community. We foster an organizational culture that supports innovative pedagogy and curricula resulting in continuous quality improvements to the Core Theme of Workforce. Indicators for this objective include an evaluation of the Annual Reports of Activities submitted by faculty and linked with Professional Improvement Planning and goal setting development. The funding and fostering of program changes and ongoing faculty professional development, travel, and innovation continuously improve program completion and success. Finally, our systems of promotions and sabbatical are directly and rigorously linked to effectiveness in primary assignment, professional development, service to the College and service to the community.

Objective 5: Students have the support they need beyond the context of a course to be well prepared to succeed as career professionals. This includes, but is not limited to, library services, internet and computing support, academic and career advising, faculty availability and readily available high quality tutoring services. On the basis of this objective students will have opportunities to engage deeply in the college community beyond the context of a specific class, and thus enhance their ability to contribute effectively to their academic communities. Indicators of this objective include: The assessment of library space and materials, teaching lab space and materials, and access to digital resources support the goal of Career and Technical Education; ongoing analysis of the college's capacity for internet use and computing that meets evolving student needs; regular and systematic evaluation of tutoring services, with particular emphasis on CTE academic trouble spots. Finally, opportunities for students to be actively engaged in their college community are apparent and significant.

Objective 6: COCC will continue to be a lead partner in regional economic development. As the sole community college in Central Oregon, COCC's workforce preparation programs can attract, retain, and assist in the expansion of industry. The College is a primary collaborator with economic development partners and agencies (Economic Development for Central Oregon, the Bend Chamber, OSU-Cascades) both in credit and non-credit workforce development offerings. Indicators for this objective include the regular and systematic review and evaluation of CTE program viability. This review will also include strategic and ongoing planning efforts to reinvent or invent relevant CTE programs in response to industry needs. This ongoing and responsive evaluation will also apply to non-credit program creation. Further indicators include the ongoing role of appropriate faculty and administrative staff who are viewed as industry experts and called upon to assist with Central Oregon's economic development efforts in specific industry clusters.

Core Theme 3: Basic Skills

Theme Description

The Theme of Basic Skills addresses the Board goal to achieve an “adult population *with the proficiencies and learning skills* necessary for lifelong employment at a family wage level.” As an open door institution in a diverse community, the College cannot ignore the many students who seek higher education but are lacking in one or more of the vital skills that will allow them to succeed. Addressing this theme includes providing classes for English Language Learners (ELL); Adult Basic Education (ABE); High School Completion (HSC); GED Preparation; pre-college coursework in reading, writing, math and computer skills; and student success/human development courses such as Test Taking, Introduction to College Life, and Time Management. In the last few years, the College has sought to bring these programs, courses, and services into greater alignment. In particular, the various offerings and services are now presented in one place in our catalog and other publications, referred to as “Transitional Studies.” Faculty and staff associated with and interested in these programs came together in 2009-10 to determine program-wide student learning outcomes, indicators of progress, and analyze preliminary data. Faculty from each credit course area (developmental writing and math, and HD/Study skills), staff from ABE/GED, and Student Services worked along with instructional administration in this yearlong project. Those efforts have resulted in a series of steps to improve alignment of programs and success of students.

Theme Objectives and Indicators.

Objective 1: Student admissions, registration, placement, pre-term advising processes are conducive to progression and persistence in Basic Skills. Students can access courses leading to completion of basic skills milestones. The evaluative opinion of students, faculty, and staff at intake, midpoint, and graduation will once again be used to provide input to ensure students have access to basic skills instruction at appropriate skill levels that allow them to move forward in their academic and career goals. In addition, a sampling of course completion rates and grades linked to placement recommendations will provide further indication of the success of this objective.

Objective 2: Students will progress through basic skill courses designed to increase reading levels, advance writing skills, basic computer skills, and pre-college level math. Students will demonstrate effective learning strategies and these strategies will improve during progression to college level studies. Indicators for this objective include:

- The systematic review and assessment of basic skills milestones
- Evaluation of student success rates in related post-basic skills courses
- The development and application of metrics that test the effectiveness of innovative teaching and learning models designed to improve learning strategies.

Objective 3: Faculty are supported, and incentives provided, in the ongoing quest to guide and sustain their practice; practice that includes their teaching pedagogy, their content expertise, and their service to the college and the community. We foster an organizational culture that supports innovative pedagogy and curricula resulting in continuous quality improvements to the Core Theme of Basic Skills. Indicators of this objective will again include an evaluation of the Annual Reports of Activities submitted by faculty and linked with Professional Improvement Planning and goal setting development, the funding and fostering of ongoing faculty professional development, travel, and innovation that improve program

completion and success. Finally, our systems of promotions and sabbatical are directly and rigorously linked to effectiveness in primary assignment, professional development, service to the college and service to the community.

Objective 4: Students have the support they need beyond the context of a course to be well prepared to progress to credit courses and improve their employment opportunities. This includes, but is not limited to, library services, internet and computing support, faculty availability and readily available high quality tutoring services. Indicators for meeting this objective include: The assessment of library space and materials, teaching lab space and materials, and access to digital resources that support the goal of basic skills education; ongoing analysis of the college's capacity for internet use and computing that meets evolving student needs; regular and systematic evaluation of tutoring services, with particular emphasis on addressing basic skills trouble spots.

Core Theme 4: Lifelong Learning

Theme Description

The Lifelong Learning Core Theme correlates with the College's vision (according to the Board goals) of promoting "wide ranging opportunities to enhance learning, wellness, quality of life, and cultural appreciation" within the communities of Central Oregon. As a comprehensive community college, COCC offers adult learners in its service district the opportunity to pursue interests and learn skills for fun, business, health or personal enrichment. Non-credit courses are offered over a wide spectrum of times, locations, and formats to meet the varied needs of our geographically widespread service area. Additionally, through a broad range of events, services, and opportunities, the College promotes cultural enrichment and access to academic resources for all Central Oregonians.

Theme Objectives and Indicators.

Objective 1: Early Outreach—COCC will provide early outreach to youth to build interest, attitude, and skills to energize them to be lifelong learners. COCC is committed to fostering the value of higher education across age groups and diverse populations. To maintain an environment of lifelong learning we are committed to providing educational opportunities and events to the youth of our Central Oregon community. Indicators of achieving this objective include an analysis of the systems and events in place that reach diverse populations and generations. Other indicators that provide meaningful information as to achieving this goal include the analysis of courses available for high school concurrent enrollments. To strengthen the bridge between high school and college, COCC has expanded high school dual credit offerings significantly over the past few years. The College has also recently implemented alternative certification for high school based instructors who teach college level classes.

Objective 2: Students will improve basic skills in reading, writing, and math and learn to speak, read, and write English to participate in post-secondary education, the workforce, and the community. This objective provides the basic knowledge necessary for members of the Central Oregon community to be able to engage with the community at various levels. Indicators include: Student success rates in transitioning to post-secondary education, student success rates in earning a GED, Student success rates in getting a job. Each of these indicators identifies a particular goal students may have in achieving basic skills necessary for community involvement. The success rates in each of these areas provides the college with meaningful measures of our achievement in enabling Central Oregonians to improve their ability to engage with the community.

Objective 3: Provide a variety of cultural enrichment and avocation learning opportunities. As part of our mission statement, COCC is committed to providing Central Oregonians with the means to attain both locally strong and globally responsible perspectives. To this end we recognize the importance of providing our community with opportunities to expand their horizons. Indicators of this objective include an analysis of the variety of events and classes provided for the community, participation rates as an indicator of community involvement and satisfaction, and evaluations that consistently recognize the high quality of instruction.

Objective 4: Design learning opportunities that are accessible through the broad geographic district. COCC has the largest district of all the community colleges in Oregon, this district is economically, politically, and culturally diverse. In order to maintain our ability to meet the needs of our broad geographic district, which includes Deschutes, Crook and Jefferson counties, and portions of Wasco, Lake and Klamath counties, COCC must provide opportunities that engage with these diverse populations in ways that are accessible to the most remote areas of our district. Indicators of our ability to do so include an analysis of our online opportunities and participation rates that correlate with population density. The construction, expansion, and utilization of outreach centers (such as the expansions in Redmond, and the new facilities in Madras and Prineville) provide further indicators of the College's ability to meet the needs of our widely dispersed community.

Conclusion

COCC's Year One Report describes the College's institutional purpose by reaffirming our mission statement and identifying our core themes, objectives, and associated indicators. Together these elements clearly articulate COCC's broad commitment to the educational and workforce development of Central Oregon community members. The information provided in this report includes a framework for the systematic assessment of institutional effectiveness. The commitment to systematic and authentic assessment has been an ongoing process for over a decade and is evident in the commendations from previous accreditation evaluation reports. The New Accreditation Standards for the NWCCU provide further guidance in connecting the many meaningful assessment activities in progress across the institution and encourage the College to work toward a common objective. As a result of the new standards the COCC Board reaffirmed our mission statement and approved the four core themes of *Transfer and Articulation, Workforce Development, Basic Skills, and Lifelong Learning*. These core themes help the institution guide our decision making to provide the most effective environment to meet our mission goals. The core theme objectives and indicators in collaboration with the four-pronged assessment of mission fulfillment (Vision Concept paper review, Institutional Effectiveness Reports, community response, Institutional Scorecard), provide a multidimensional measure of mission fulfillment. These mechanisms include both process and outcomes across the full scope of the institution.

**CENTRAL OREGON COMMUNITY COLLEGE
BOARD OF DIRECTORS**

NEW BUSINESS

Prepared by: Connie Lee, Charley Miller and Anthony Dorsch / Policy Review Committee

A. Issue

First Reading on revision of Board Policy

- EL 4: Financial Condition
- EL 5: Asset Protection
- EL 6: Compensation and Benefits

B. Discussion/History/Changes

The Policy Review Committee with input from President Middleton and Kevin Kimball-CFO, have reviewed EL4, EL5 and EL6 for modifications and recommends the following modifications as a first reading.

EL 4: Financial Condition

Approved: June 9, 1993; June 9, 2004; February 9, 2011

With respect to the actual, ongoing condition of the organization's financial health, the president may not cause or allow the development of fiscal jeopardy or a material deviation of actual expenditures from board priorities established in Ends policies.

Accordingly, he or she may not:

1. Expend more funds than have been budgeted and appropriated for in the fiscal year to date.
2. Indebt the organization in an amount greater than can be repaid by certain, otherwise unencumbered revenues within 60 days, except board-approved debt service and/or certificates of participation.
3. Use any Long-Term Reserves that are not budgeted and appropriated for expenditure.
4. Conduct inter-fund shifting in amounts greater than can be restored to a condition of discrete fund balances by certain, otherwise unencumbered revenues within 90 days. Allow deficit fund balances at the end of any fiscal year without a plan to eliminate those deficit balances.
5. Allow cash to drop below the amount needed to settle payroll and debts in a timely manner.

6. Allow tax payments or other government-ordered payments or filings to be overdue or inaccurately filed.
7. Allow actual allocations to deviate materially **budget appropriations**, from board priorities in ~~Ends policies~~ **goals**.
8. Contract with the College's independent auditors for nonaudit services without prior approval of the Board.
9. Fail to provide the following certifications to the Board upon the completion of an audit:
 - 1) He/she has reviewed the annual audit report;
 - 2) Based on his/her knowledge, the annual audit report does not contain any untrue statement of a material fact or omission of a material fact necessary in order to make the statements misleading;
 - 3) Based on his/her knowledge, the financial statements present in all material respects, the financial condition and results of operations.

In addition, the President may not operate without the following certifications from the ~~Vice President~~ & CFO, Director of Fiscal Services and Accounting Manager:

- 1) He/she has reviewed the annual audit report;
 - 2) Based on his/her knowledge, the annual audit report does not contain any untrue statement of a material fact or omission of a material fact necessary in order to make the statement misleading;
 - 3) Based on his/her knowledge, the financial statements present in all material respects, the financial condition and results of operations.
10. Operate without establishing and maintaining an adequate internal control structure and procedures for financial reporting.

EL 5: Asset Protection

Approved: June 9, 1993 Revised: June 9, 2004; January 12, 2005; March 9, 2005; July 17, 2007; **February 9, 2011**

The president will not allow material, fiscal or human resource assets to be unprotected, inadequately maintained, nor unnecessarily risked.

Accordingly, he/she will not:

1. Fail to inform the board of misalignment among fiscal resources, staffing, and programmatic commitments for implementing college vision, mission and ends.
2. **Fail to insure responsibly** against theft and casualty losses to at least 80 percent replacement value and against liability losses to board members, staff or the organization itself in an amount greater than the average for comparable organizations.
3. Allow personnel access to material amounts of funds without purchasing a fidelity bond or providing equivalent coverage.
4. **Allow** ~~Subject~~ maintenance schedule to go unreviewed at least annually.
5. **Allow** Unnecessarily expose the organization, its board or staff to claims of liability.

6. Make any purchase or commit the organization to any expenditure of greater than \$100,000.
7. Make any material purchase without complying with the Central Oregon Community College Rules of Procurement (CCRP) or the Oregon Revised Statutes and Oregon Administrative Rules (OAR). ~~Make any purchases over the minimum threshold as described in the CCRP without obtaining three written quotes as outlined in the CCRP to ensure competitive prices and quality. Make any purchase wherein normally prudent protection has not been given against conflict of interest.~~ (The purchasing guidelines will automatically change with changes in CCRP,ORS and OAR purchasing statutes.)
8. Receive, process or disburse funds under controls which are insufficient to meet the board-appointed auditor's standards.
9. Invest or hold operating capital in investments in violations of Oregon law.
10. Acquire, encumber or dispose of real property.

EL 6: Compensation and Benefits

Revised: July 13, 1994; **February 9, 2011**

With respect to employment, compensation and benefits to employees, consultants, contract workers and volunteers, the president may not cause or allow jeopardy to fiscal integrity, public image, or program quality.

Accordingly, he or she may not:

1. Change his or her own compensation and benefits.
2. Promise or imply permanent or guaranteed employment.
3. Establish current compensation and benefits which:
 - A. Deviate materially from the geographic or professional market for the skills employed nor become uncompetitive **on a total compensation basis** (i.e. fall below the upper 1/3 of local, regional, or national salary/benefit ranges as appropriate to the position **as determined by the College**).
 - B. Create obligations over a ~~longer~~ term **longer** than ~~revenues~~ can be **covered by safely conservatively** projected **revenues**, in no event longer than one year or the terms of board-approved collective bargaining contract, and in all events subject to losses of revenue.
 - C. Are instituted without prior monitoring of these provisions.
4. Establish deferred or long term compensation and benefits which:
 - A. Cause unfunded liabilities to occur or in any way commit the organization to benefits which incur unpredictable future costs.
 - B. Provide less than some basic level of benefits to all **eligible** full time employees, though differential benefits to encourage ~~longevity in~~ **retention of** key employees are not prohibited.
 - C. Allow any employee to lose benefits already accrued from any foregoing plan.
 - D. Are instituted without prior monitoring of these provisions.

C. Options

1. Accept the recommendations as a first reading.
2. Do Not accept the recommendation as a first reading.
3. Propose other modified content as a first reading.

**CENTRAL OREGON COMMUNITY COLLEGE
BOARD OF DIRECTORS**

NEW BUSINESS

Prepared by: Connie Lee, Charley Miller and Anthony Dorsch / Policy Review Committee

A. Issue

First Reading on revision of Board Priorities 2011-13

- Access and Success
- Facility Development
- Assessment
- Institutional Viability
- Respond to regional student and business needs

B. Discussion/History/Changes

Access and Success

Strengthen student and community access to educational opportunity and success.

- By expanding access in outlying communities including strategies for educational services in geographic areas which may be underserved **including long-term strategies for La Pine and Sisters regions.**
- By expanding strategies which respond to students' scheduling challenges and diverse learning styles
- By refining and implementing a Strategic Enrollment Management plan with data driven enrollment targets
- By supporting enrollment of student groups that have been traditionally underserved
- By minimizing financial barriers **to enrollment** to the extent possible **and assist students so they have manageable debt loads**
- **By balancing initiatives to support access with initiatives to measure and improve the success rate of students in achieving their stated educational objectives.**

To achieve targeted progress with access and success, the Board believes that strategic partnerships will be increasingly important. Therefore, the Board expects continuing progress in partnerships with:

- K-12 partners
- University partners - improve partnerships and articulation with OSU-Cascades and explore appropriate partnerships with other universities

- Regional employers
- Regional organizations, State agencies and the Oregon CC system

Design and implement systems for tracking and strengthening student retention and achievement of academic goals

Facility Development

Expand and improve institutional facilities to support enrollment growth, enable innovative programming in response to community/student needs, strengthen sense of campus community and link with the broader community.

- Finalize bond construction project plans and ~~implement~~ **complete** construction of Health and Science Centers, Technology Education Center, Madras and Prineville campuses, and renovations for expanding general purpose classrooms - including appropriate project staff to ensure project success and long-term cost-effectiveness.
- Finalize plans and construct Culinary Center and the related Campus Village project.
- Evaluate options for improved and expanded student housing and establish and implement a construction plan if the Board endorses the project.
- Design and construct sustainable institutional facilities and establish third-party sustainability certification as appropriate.
- Assess and implement as appropriate partnerships to support facility initiatives.
- Attract alternative financial contributions to support priority facility initiatives.
- **Maintain and enhance the present and future physical plant so as to reasonably minimize deferred maintenance.**

Assessment

Develop and implement comprehensive planning and assessment systems that define institutional direction, assess student learning, and modify programs, systems and activity based on that assessment.

- Integrate planning and assessment into accreditation activities and potential **grant submissions**. ~~programs sponsored under pending Federal legislative support for community colleges. Articulate Core Themes~~ and develop the broad objectives and indicators for measuring performance as consistent with new NWCCU standards, **Coordinate future priorities, initiatives, and outcomes analysis with COCC Core Themes: Transfer and Articulation, Basic Skills, Workforce Development, and Lifelong Learning.**

Institutional Viability

- Develop and implement sustainable systems which balance comprehensive quality programs and services with appropriate tuition and fee levels
- Develop alternative revenue streams for the college

- Ensure efficient and cost-effective operations
- Work to maximize to the extent possible fiscal and other support from the State
- Assess institutional wide impacts of recent rapid enrollment expansion and implement responses to ensure institutional viability and quality.

Respond to regional student and business needs.

Maintain open communication with various community groups and businesses,

- Define potential new or modified programs and services
- Assess the operational and fiscal viability of such programs and services
- Implement as possible within fiscal and operational capacity
- Link college staff and initiatives to the community through support and leadership roles in organizations and community activities
- Explore and implement as appropriate partnership strategies to provide bachelor degree options for students in COCC career and technical programs.

C. Options

1. Accept the recommendations as a first reading.
2. Do Not accept the recommendations as a first reading.
3. Propose other modified content as a first reading.

**CENTRAL OREGON COMMUNITY COLLEGE
BOARD OF DIRECTORS**

NEW BUSINESS

Prepared by: Connie Lee, Charley Miller and Anthony Dorsch / Policy Review Committee

A. Issue

First Reading on revision of Vision Concept Paper

- Vision Concept Paper
- General Considerations Guiding COCC's Development in the Next Ten Years
- Service
- Community Relationships
- Community Diversity and Well-Being
- The College Community Environment
- Funding Growth

B. Discussion/History/Changes

Vision Concept Paper

The Vision Concept Paper was developed in November 2003 and substantially revised in May 2005. Most recently, it was reviewed at the fall 2010 Board Retreat where several minor revisions were proposed. The substance of these proposal is included in the first reading.

The Vision Concept Paper embodies institutional aspirations and seeks to answer the question, "What would COCC look like if the college were able to achieve Board End Goals and priorities."

The Vision Concept Paper developed by the Board of Directors, complements and supports Central Oregon Community College's [Mission and Vision](#) Statement with broad guidelines that direct the management of COCC and its relations with others.

This document is not intended as a promise or guarantee, but a summary of what the College hopes to achieve.

General Considerations Guiding COCC's Development in the Next Ten Years

Central Oregon Community College is dedicated to serving students by providing opportunities for individual learners to grow. The College will continue its primary focus on serving adult learners in its traditional community college programs: associate degree and transfer programs; applied degrees and certificates; adult basic and developmental education; and a wide range of community education offerings on a cost recovery basis. Since the needs of businesses, public sector organizations and the workforce are changing more rapidly than ever, COCC will respond with expanded programs for business and service sector training and workforce development. The global nature of business, issues and events provides an obligation for the College to develop an international perspective. Further, COCC will closely monitor changing conditions and growth in the communities it serves, and remain well-informed regarding their evolving educational needs. All College operations will demonstrate a continuing commitment to listening and reflecting the views of citizens within its service district.

COCC is committed to focusing on clear goals, to assessing evidence of progress toward achieving those goals, and adjusting programs and services based on documented outcomes.

Service

COCC will be a hub for lifelong learning and professional development in Central Oregon. It will maintain and enhance its position by taking an active role in attending to students' educational needs and striving constantly to promote students' success.

All COCC programs will aim to expand the reach of lifelong learning opportunities throughout the district, and promote universal access to education based on an open-door admissions policy. Programs will assist students in developing the skill levels needed to succeed in an international labor marketplace.

Recognizing that educational progress will differ for each individual learner, COCC remains committed to providing educational opportunities for adult learners at all levels of skill and knowledge, according to the individual's ability to benefit from instruction. Adult basic education and other remedial and developmental services for adults will remain important parts of COCC programs.

In support of its emphasis on training for family wage jobs, a major part of new COCC programs will involve developing training programs for businesses and other entities. These training activities will support regional business efforts to remain on the leading edge of their industries through better educated employees who are equipped to meet their employment and career goals.

To support delivery of programs, COCC will make innovative use of distance education technologies; provide referrals to others' programs; and broker programs more appropriately provided by others. The College will create linkages and partnerships at multiple levels, including: local, state, regional, national and international.

COCC is committed to long-range progress to broaden opportunities for learning and

economic development throughout the District. In the next five years, the College will expand learning opportunities beyond Bend, where significant growth in demand for education is anticipated. The College will use a combination of online instruction, new facility construction and facilities shared with community partners, staffing, and coordinated scheduling of programs and services to maximize opportunity and efficiency. Progress in specific communities will be shaped by (a) cost effectiveness of potential initiatives, (b) focused grants, financial contributions, and community partner support for construction and operational expenses, and (c) demand and opportunities for programs and services targeted to meet specific localized needs.

Community Relationships

COCC will participate fully in open, inclusive communication and collaboration efforts throughout the district. This includes creating high levels of awareness and visibility for COCC programs and services. It also means creating meaningful and effective working relationships with business, government and education partners, and keeping information and ideas flowing between COCC, the media, legislators and community leaders.

COCC will develop effective college-business partnerships for workforce training and participate with many partners in other economic development efforts, as we work together toward making Central Oregon an effective competitor in the global economy.

The College recognizes that education beyond high school is increasingly important for the personal and economic vitality of individuals and communities. Accordingly, the College will collaborate with regional school districts to inspire high aspirations in students, to provide options for achieving college credit for students while in high school, to develop articulated instructional programming and assessment that facilitates student's transition to college education, and to support positive working relations between college and school faculty and staff.

COCC will constructively participate in, encourage, and support inter-institutional cooperation to expand higher education offerings in Central Oregon. To this end, the college will encourage the efforts of higher education providers [Oregon State University – Cascades Campus](#), to deliver a broad array of degrees. COCC will serve as an advocate for expanding higher education opportunities throughout Central Oregon.

~~With the goal of ensuring that Central Oregon students have a local opportunity to continue their education beyond COCC, COCC is committed to close articulation of our courses, programs and service with Central Oregon's emerging university institution~~ **with Oregon State University – Cascades and with other institutions which may bring complementary bachelor degree opportunities to COCC students** ~~with the goal of ensuring that Central Oregon students have a local opportunity to continue their education beyond COCC.~~

Community Diversity and Well-Being

COCC's focus on students and educational programs provides unique opportunities for the College to be an important social, cultural and leadership resource in the communities it serves. COCC embraces these opportunities – on its own and in partnership with others.

COCC will reduce or remove barriers which might limit educational opportunities for any group of individuals within our service district. The community college will actively move toward diversity. In order to implement this commitment, COCC will: increase its understanding of the challenges and opportunities involved in serving a diverse population; handle diversity issues with sensitivity and awareness of local/district interests and attitudes; model awareness and appreciation of diversity within our organization; and encourage dialogue and collaboration across all lines of difference within our communities. Through its own programs and through partnering with other community groups, COCC will contribute to the well-being of the community through its efforts to promote community-wide health and wellness; to provide, support and encourage cultural programming events, including fine arts and the performing arts; assist in the conservation of Central Oregon's natural resources; assist in the development of global perspectives; and prepare students to be educated, effective participants in the democratic process.

The College Community Environment

While academic development remains the primary focus on the institution, COCC recognizes that broader elements contribute to a positive learning environment. Therefore, COCC is committed to developing a vital campus environment which welcomes and supports students. Specifically, COCC will develop a campus center to strengthen campus services and student activities. Additionally, the college will explore options to expand cost effective student housing opportunities to serve district students, out-of-district Oregon students, and out-of-state students. Expanded campus housing can be a strategic investment to support the college fiscally, create a more vibrant campus environment, and expand the diversity of the college.

Funding and Growth

~~The demand for adult education services in Central Oregon is growing rapidly and evolving in its most basic characteristics. In such a context, there exists significant risk and uncertainty regarding future funding levels. COCC's financial future is affected substantially by its relationship with the State of Oregon and, as a result, is increasingly determined by statewide political and statewide financial considerations. It is likely that State General Fund support for COCC will diminish significantly as the State seeks to counterbalance COCC's relatively higher income from local property taxes. It is possible in six to eight years that the college may be receiving no State General Fund allocation.~~ **The impact of State funding to COCC has shifted significantly from a decade ago when the State provided one-third or more of COCC's revenue. As of 2010-11, the State is providing approximately ten to twelve percent of COCC's revenue. Additionally, funding for enrollment growth is likely to be curtailed over at least the next two to four years. COCC must recognize that, in most cases, fiscally viable future growth may depend heavily on tuition, fees and alternative funding. The college must carefully weigh the competing demands of (1) sufficient revenue to continue expanding educational access with (2) the desire to keep education affordable for students, (3) the resources required to provide a quality educational experience. Therefore, maintaining quality and supporting program growth will increasingly require advocacy to maintain responsible public funding, entrepreneurially-generated resources,**

and differential fees for those benefitting from specific programs and services. To support its mission and goals, the College will diversify and expand its resource base by identifying and developing alternative funding sources.

In addition, COCC will demonstrate its effective stewardship of public funds and its awareness of resource limits, by making deliberate choices among alternatives that support COCC's mission, matching funding levels to demonstrated program needs and emphasizing program evaluations based on demonstrated service levels to students.

C. Options

1. Accept the recommendations as a first reading.
2. Do Not accept the recommendations as a first reading.
3. Propose other modified content as a first reading.

February 9, 2011

JOINT TENANCY AGREEMENT

DATE: February __, 2011

PARTIES: Central Oregon Community College "COCC"
2600 NW College Way
Bend OR 97701

Crook County, a Political Subdivision of the State of Oregon "County"
Crook County Courthouse
300 NE Third Street
Prineville OR 97754

RECITALS

WHEREAS, County is in the process of constructing a building at the Crook County Fairgrounds in Crook County, Oregon;

WHEREAS, the parties agree that this building will be owned jointly by the County and COCC for the purposes of establishing a computer and education center for the benefit of the residents of Crook County and the COCC district;

WHEREAS, the parties wish to set forth the terms and conditions of their agreement regarding ownership of the facility;

WHEREAS, the parties have also entered into an agreement regarding the operation of the building, which agreement is entitled "Agreement for Joint Operation and Management for the Crook County/COCC Computer and Education Center";

NOW, THEREFORE, in consideration of the foregoing, the parties agree as follows:

AGREEMENT

SECTION 1. JOINT OWNERSHIP

In consideration of the sum of one million dollars (\$1,000,000) paid to Crook County by COCC, Crook County hereby agrees to transfer an undivided fifty percent (50%) ownership interest in the building known as the Crook County/COCC Computer and Education Center in Prineville, Oregon (the "Building"). The purchase price shall be paid over time in the form of reimbursement payments to Crook County based upon approved payment requests from CS Construction. A description of

the building location and layout is attached as Exhibit A. A copy of the Bill of Sale transferring said interest is attached as Exhibit B.

SECTION 2. JOINT TENANCY AGREEMENT

The parties agree to enter into this Joint Tenancy Agreement for the purposes of defining the rights and responsibilities of the parties regarding the ownership of the Building. This Agreement shall be effective upon execution.

SECTION 3. TERM

The term of this Agreement shall be 20 years from February ____, 2011 to February ____, 2031.

SECTION 4. RENEWAL TERM

Either party shall have the right to renew this Agreement for additional 20 year terms upon written notice to the other party at least 30 days in advance of the expiration date of the then existing term.

SECTION 5. CONSTRUCTION

The parties acknowledge and agree that the building is under construction and it is anticipated that construction will be completed on or before July 31, 2011. Except as agreed to otherwise by and between the parties in writing, construction of the building shall be in accordance with the specifications described in Exhibit B.

SECTION 6. CAPITAL RESERVE/REPAIR AND MAINTENANCE

The parties agree to each contribute fifty percent (50%) for the costs of repair and maintenance of the exterior grounds, building structure and the fixtures in the Building. These components shall include, but not be limited to, exterior sidewalks and landscaping, building foundation, walls, exterior windows, roof, HVAC system, and all electrical wiring within the Building. Through the Building Operations Management Team as defined in the Operations and Management Agreement between the parties, the parties agree to establish an annual budget and capital reserve for the Building. The proposed budget and reserve fund shall be completed on or before the 1st day of March each year. Each party shall contribute fifty percent (50%) into the capital reserve/repair and maintenance fund within 30 days of the beginning of each party's fiscal year.

SECTION 7. ACCESS TO BUILDING

Crook County owns the land upon which the building described in Exhibit A is situated. Crook County agrees that as long as the building is jointly owned with COCC, COCC shall have the right of access to the building across the land owned by County as described in Exhibit C.

SECTION 8. TAXES AND ASSESSMENTS

In the event any taxes or assessments are assessed against the Building, each party agrees to contribute one-half for the payment of said taxes and assessments.

SECTION 9. USE OF THE BUILDING

The building, shall be used jointly by COCC and Crook County. Usage by third parties shall be as agreed between the parties hereto. The parties are presently negotiating a joint operation and management agreement for the use of the building. Until such time that agreement is finalized the parties agree that the building will be used primarily for educational purposes and computer training. The parties agree to coordinate in good faith the use of the building until the joint operation and management agreement is completed.

SECTION 10. UTILITIES

The parties agree to each pay one-half of the utilities for the Building in accordance with the budget established each year by the parties or their designees.

SECTION 11. INSURANCE

The parties agree that during the term of this Agreement and any extension thereto, County shall procure fire and casualty insurance for the Building. COCC shall reimburse County one-half of the premium for the cost of that insurance for the building.

Each party shall name the other party as an additional named insured on their general liability policy regarding the use of this building. Certificates evidencing the designation of each party as an additional named insured on the other party's general liability insurance shall provided to the other party with each renewal of each party's general liability insurance policy.

SECTION 12. RIGHT OF FIRST REFUSAL

Each party shall have the right of first refusal to purchase the other party's interest in the Building. If either party desires to sell its interest, it shall first notify the other party of its intent to sell. The other party shall 30 have days in which to determine whether or not it wishes to purchase the ownership interest of the other party. If the party elects to purchase the interest of the selling party, the price shall be established as follows:

The purchasing party shall obtain an appraisal of the Building at fair market value. The net purchase price shall be one-half of the appraised value, less one-half of any encumbrances on the Building. If the selling party disputes the appraisal amount, the selling party shall have the opportunity to obtain a second appraisal. The purchase price shall be the average of the two appraisals, less one-half of any encumbrances on the Building.

SECTION 13. BREACH

In the event there is any breach of this Agreement by either party, the injured party shall be entitled to pursue remedies as provided in Section 12.

SECTION 14. GENERAL PROVISIONS

12.1 Force Majeure. Except as otherwise set forth in this Section 12, neither party shall have liability to the other on account of the following acts (each of which is an "Excused Delay" and jointly all of which are "Excused Delays") which shall include: (1) the inability to fulfill, or delay in fulfilling, any obligations under this Agreement by reason of strike, lockout, other labor trouble, dispute or disturbance; (2) governmental regulation, moratorium, action, preemption or priorities or other controls; (3) shortages of fuel, supplies or labor; or (4) for any other reason, beyond a party's reasonable control whether similar or dissimilar to the above, or for acts of God beyond a party's reasonable control. If this Agreement specifies a time period for performance of an obligation of a party, that time period shall be extended by the period of any delay in the party's performance caused by any of the events of Excused Delay described herein.

12.2 Further Assurances. County and COCC each agree to cooperate in good faith and as reasonably required in order to effect the terms of this Agreement and the transactions contemplated herein. From time to time, each of the parties shall execute, acknowledge, and deliver any instruments or documents necessary to carry out the purposes of this Agreement.

12.3 Binding Effect. This Agreement shall be binding on and inure to the benefit of the parties and their successors and assigns.

12.4 Assignment. Except with the other party's prior written consent, a party may not assign any rights or delegate any duties under this Agreement.

12.5 Notices. Any notice or other communication required or permitted to be given under this Agreement shall be in writing and shall be by e-mail and be mailed by certified mail, return receipt requested, postage prepaid, addressed to the parties as follows:

Central Oregon Community College
Attn: Matthew J. McCoy
2600 NW College Way
Bend OR 97701
e-mail: mmccoy@coocc.edu

Crook County
Attn: Dave Gordon, County Counsel
Crook County Courthouse
300 E Third Street
Prineville, OR 97754
email: dave.gordon@co.crook.or.us

Any notice or other communication shall be deemed to be given at the expiration of three (3) days after the date of deposit in the United States mail. The addresses to which notices or other

communications shall be mailed may be changed from time to time by giving written notice to the other party as provided in this Section 12.

12.6 Attorney Fees. If any suit or action is filed by any party to enforce this Agreement or otherwise with respect to the subject matter of this Agreement, each party shall pay its own attorney fees incurred in preparation or in prosecution or defense of such suit or action and for any appeal therefrom.

12.7 Amendments. This Agreement may be amended only by an instrument in writing executed by all the parties.

12.8 Headings. The headings used in this Agreement are solely for convenience of reference, are not part of this Agreement, and are not to be considered in construing or interpreting this Agreement.

12.9 Entire Agreement. This Agreement (including the exhibits) sets forth the entire understanding of the parties with respect to the subject matter of this Agreement and supersedes any and all prior understandings and agreements, whether written or oral, between the parties with respect to such subject matter.

12.10 Counterparts. This Agreement may be executed by the parties in separate counterparts, each of which when executed and delivered shall be an original, but all of which together shall constitute one and the same instrument.

12.11 Severability. If any provision of this Agreement shall be invalid or unenforceable in any respect for any reason, the validity and enforceability of any such provision in any other respect and of the remaining provisions of this Agreement shall not be in any way impaired.

12.12 Waiver. A provision of this Agreement may be waived only by a written instrument executed by the party waiving compliance. No waiver of any provision of this Agreement shall constitute a waiver of any other provision, whether or not similar, nor shall any waiver constitute a continuing waiver. Failure to enforce any provision of this Agreement shall not operate as a waiver of such provision or any other provision.

12.13 Time of Essence. Time is of the essence for each and every provision of this Agreement.

12.14 No Third-Party Beneficiaries. Nothing in this Agreement, express or implied, is intended to confer on any person, other than the parties to this Agreement, any right or remedy of any nature whatsoever.

12.15 Expenses. Except as specifically set forth in this Agreement, each party shall bear its own expenses in connection with this Agreement and the transactions contemplated by this Agreement.

12.16 Exhibits. The exhibits referenced in this Agreement are a part of this Agreement as if fully set forth in this Agreement.

12.17 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state of Oregon.

12.18 Venue. This Agreement has been made entirely within the state of Oregon. This Agreement shall be governed by and construed in accordance with the laws of the state of Oregon. If any suit or action is filed by any party to enforce this Agreement or otherwise with respect to the subject matter of this Agreement, venue shall be in the federal or state courts in Crook County, Oregon.

12.19 Mediation. The parties will attempt to cooperatively resolve any disagreements that arise over the terms of this Agreement. If the parties are unable to resolve a disagreement, they must use mediation first. Any cost for mediation shall be shared equally by the parties or as determined in the mediation process. A written record shall be prepared of any agreement reached in mediation and shall be provided to each party. If the parties are unable to resolve a disagreement through mediation, the disagreement shall be resolved through arbitration.

12.20 Arbitration. Any controversy or claim arising out of or relating to this Agreement, including, without limitation, the making, performance, or interpretation of this Agreement, shall be settled by arbitration in Prineville, Oregon, in accordance with ORS 36.300-36.365, and judgment on the arbitration award may be entered in any court having jurisdiction over the subject matter of the controversy.

In the event the parties are unable to agree upon the arbitrator, then they shall submit a list of names of three people to each other. Each party shall strike two names and the remaining name on each party's selection shall be placed in a container and the name drawn shall be the arbitrator who shall thereafter consider all of the issues, shall make the decision to resolve the issue and such decision shall be final and binding. The cost of this arbitration shall be shared equally by the parties.

IN WITNESS WHEREOF, the parties here each executed this Agreement on the date set forth above.

CROOK COUNTY:

**CENTRAL OREGON COMMUNITY
COLLEGE:**

By: _____
_____, Its _____

By: _____
_____, Its _____

BILL OF SALE

KNOW ALL MEN BY THESE PRESENTS, that **CROOK COUNTY, a Political Subdivision of the state of Oregon**, the party of the first part, for \$1,000,000 in consideration to it from **CENTRAL OREGON COMMUNITY COLLEGE**, the party of the second part, the receipt whereof is hereby acknowledged, does by these presents, bargain, sell and deliver unto the party of the second part, its executors, administrators and assigns, an undivided fifty percent (50%) ownership interest in the building known as the Computer and Education Center located in Prineville, Oregon.

A description of the building location and layout is attached as Exhibit A.

To have and to hold the same unto the party of the second part, its executors, administrators and assigns forever.

And the party of the first part hereby covenants with the party of the second part that it is the lawful owner of said goods and chattels; they are free from all encumbrances and that it has good right to sell the same as aforesaid, and that it will and its executors and administrators shall warrant and defend the title thereto unto the parties of the second part, its executors, administrators, and assigns against the lawful claims and demands of all persons whomsoever.

CROOK COUNTY, a Political Subdivision of the State of Oregon

By Mike McCabe, Crook County Judge

STATE OF OREGON, County of Crook) ss.

I, Mike McCabe, Crook County Judge, being first duly sworn, depose and say that Crook County, a Political Subdivision of the state of Oregon, is the sole owner of the property described in the foregoing Bill of Sale, and that the same is free and clear of liens and encumbrances of every kind and nature except as stated above, at the date of execution of said Bill of Sale, and the same have been paid in full.

CROOK COUNTY, a Political Subdivision of the State of Oregon

By Mike McCabe, Crook County Judge

STATE OF OREGON, County of Crook) ss.

BE IT REMEMBERED, that on this ____ day of February, 2011, before me, the undersigned, a Notary Public in and for said County and State, personally appeared the within named Mike McCabe, Crook County Judge, known to me to be the identical individual described in and who executed the within instrument and acknowledged to me that he executed the same freely and voluntarily.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

Notary Public for Oregon
My Commission Expires