

# Notice of Public Meeting

Pursuant to A.R.S. § 38-431.02, notice is hereby given to the members of the Navajo County Community College District Governing Board (Board) and to the general public that the Board will hold a regular District Governing Board Meeting open to the public on **April 12, 2016 beginning at 10:00 a.m.** The meeting will be held at the Northland Pioneer College Painted Desert Campus, Tiponi Community Center meeting room, located at 2251 E. Navajo Blvd., Holbrook, Arizona.

Notice is hereby given that Board members may convene in numbers that constitute a quorum for a reception to honor retiring members of staff and faculty, held at the Northland Pioneer College Painted Desert Campus, Tiponi Community Center meeting room, located at 2251 E. Navajo Blvd., Holbrook, Arizona, immediately following the conclusion of the Regular District Governing Board Meeting. **No action will be taken by the Board at this event.**

One or more Board members and/or staff members may participate in the meeting by telephone if necessary.

The public is invited to check on addenda that may be posted up to 24 hours prior to the meetings. Copies of the meeting agenda may be obtained through the Office of the President, Northland Pioneer College, Painted Desert Campus, 2251 E. Navajo Blvd., Holbrook, AZ, telephone (928) 524-7418 or (800) 266-7845 Ext. 7418, at least 24 hours in advance of the meeting. If any disabled person needs any type of accommodation, please notify Paul Hempsey at the above address or telephone number at least 24 hours prior to the scheduled time.

The Board may vote to hold an executive session for discussion or consideration of a personnel matter pursuant to A.R.S. §38-431.03(A)(1). The Board may vote to hold an executive session for the purpose of obtaining legal advice from the District's attorney on any matter listed on the agenda pursuant to A.R.S. §38-431.03 (A)(3). Should the District's attorney not be present in person, notice is further given that the attorney may appear by speakerphone.

I, Paul Hempsey, certify that this notice of public meeting, prepared pursuant to A.R.S. § 38-431.02, was posted on or before the 11<sup>th</sup> day of April 2016, at 10:00 a.m.

Paul Hempsey  
Recording Secretary to the Board

## NOTICE DISTRIBUTION

1. WHITE MOUNTAIN INDEPENDENT NEWSPAPER
2. TRIBUNE-NEWS & SNOWFLAKE HERALD NEWSPAPERS
3. NAVAJO TIMES
4. NAVAJO-HOPI OBSERVER
5. KINO RADIO
6. KNNB RADIO
7. KONOPNICKI COMMUNICATIONS [KQAZ/KTHQ/KNKI RADIO]
8. KWKM RADIO
9. WHITE MOUNTAIN RADIO
10. NPC WEB SITE
11. NPC ADMINISTRATORS AND STAFF
12. NPC FACULTY ASSOCIATION PRESIDENT
13. NPC CLASSIFIED AND ADMINISTRATIVE SUPPORT ORGANIZATION PRESIDENT
14. NPC STUDENT GOVERNMENT ASSOCIATION PRESIDENT

# OUR MISSION

Northland Pioneer College  
creates, supports  
and promotes  
lifelong learning.



## Northland Pioneer College

Post Office Box 610 • Holbrook, AZ 86025 • (928) 524-7311 • Fax (928) 524-7312 • [www.npc.edu](http://www.npc.edu)

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# Governing Board Meeting Agenda

Painted Desert Campus, Tiponi Community Center  
2251 East Navajo Boulevard, Holbrook, Arizona

**Date:** April 12, 2016

**Time:** 10:00 a.m. (MST)

Item	Description	Resource
1.	<b>Call to Order and Pledge of Allegiance</b> .....	Chair Handorf
2.	<b>Adoption of the <a href="#">Agenda</a></b> .....(Action)	Chair Handorf
3.	<b>Call for Public Comment</b> ..... <small>Individuals may address the Board on any relevant issue for up to 5 minutes. At the close of the call to the public, Board members may not respond to any comments but may respond to criticism, ask staff to review a matter or ask that a matter be placed on a future agenda.</small>	Chair Handorf
4.	<b>Reports:</b>	
A.	<b><a href="#">Financial Position</a></b> .....	Interim Vice President Ellison
B.	<b>NPC Friends and Family</b> .....	Director Wilson
C.	<b><a href="#">Human Resources</a></b> .....	Written Report
D.	<b>CASO</b> .....	No Report
E.	<b><a href="#">NPC Faculty Association</a></b> .....	Written Report
F.	<b><a href="#">NPC Student Government Association</a></b> .....	Written Report
G.	<b>NPC <a href="#">Outstanding Alumnus Award</a> – Spring 2016</b> .....	Written Report
5.	<b>Consent Agenda</b> .....(Action)	Chair Handorf
A.	<b>March 22, 2016 <a href="#">Regular Board Minutes</a></b>	
B.	<b>Curriculum Modifications:</b>	
	1. Program Modification – <b><a href="#">Mechatronics</a></b> AAS, CAS, CP (3 specializations)	
6.	<b>Old Business:</b> None.	
7.	<b>New Business:</b>	
A.	<b>Executive Session</b> <b>Pursuant to 38-431.03(A)(1) and (A)(3), the Board may vote to hold an executive session for discussion or consideration of a personnel matter, as well as for discussion or consultation with its attorney to receive legal advice concerning the personnel matter</b> .....	Chair Handorf
B.	<b>Possible Action on Personnel Matter</b> ..... (Action)	Chair Handorf
C.	<b>Request to Approve <a href="#">Emeritus Status</a> – Sandra Johnson</b> ..... (Action)	Faculty Association
D.	<b>Presentation of Meritorious and Emeritus Awards</b> ..... Sandra Johnson (2003-2016) - Faculty Emeritus Award JoAnn Barnes-Slocum (1994-2016) - Meritorious Service Award Lorraine Benally (1995-2016) - Administrator Emeritus Award Margaret White (1991-2016) - Meritorious Service Award Jim Boblett (1976-2016) - Faculty Emeritus Award Claude Endfield (1988-2016) - Faculty Emeritus Award Barry Graham (2000-2016) - Faculty Emeritus Award Barry Richins (1975-2016) - Faculty Emeritus Award Doug Seely (2001-2016) - Faculty Emeritus Award	Various
E.	<b>Review of <a href="#">Budget Analysis</a></b> .....	Interim Vice President Ellison
F.	<b>First Read – 2016-2017 <a href="#">Primary Property Tax</a></b> .....	Interim Vice President Ellison
G.	<b>Request to Approve 2016-2017 <a href="#">Preliminary Budget</a></b> ..... (Action)	Interim Vice President Ellison
H.	<b>Request to Approve 2016-2019 <a href="#">Preliminary Capital Budget</a> ...</b> (Action)	Interim Vice President Ellison
I.	<b><a href="#">Enrollment Report</a></b> .....	Vice President Vest
J.	<b>Request to Approve Purchase of <a href="#">Unified Communication Solution</a>/Voice over IP and Professional Services</b> ..... (Action)	Director Way
K.	<b>Request to Approve Purchase of <a href="#">Laerdal Sim Man Manikin</a></b> ..... (Action)	Vice President Vest
L.	<b>Strategic Planning Directive from the Board</b> .....	President Swarhout

- 8. **Standing Business:**
  - A. **Strategic Planning and Accreditation Steering Committee Report**..... Vice President Vest
  - B. **President’s Report**..... President Swarhout
  - C. **DGB Agenda Items and Informational Needs for Next Meeting**..... Chair Handorf
- 9. **Board Report/Summary of Current Events** ..... Board Members
- 10. **Announcement of Next Regular Meeting** ..... **May 17, 2016** Chair Handorf
- 11. **Adjournment** ..... **(Action)** Chair Handorf



NAVAJO COUNTY COMMUNITY COLLEGE DISTRICT

Statement of Financial Position  
 July 1, 2015 to February 29, 2016

Budget Period Expired 67%

Tax Supported Funds				
General Unrestricted				
	Current Month			
	Budget	Actual	Y-T-D Actual	%
<b>REVENUES</b>				
Primary Tax Levy	14,470,753	160,763	9,470,366	65%
State Aid:				
Maintenance and Operations	1,582,200	-	1,186,575	75%
Equalization	5,834,300	-	4,387,050	75%
Tuition and Fees	4,600,000	401,830	3,689,950	80%
Investment earnings	140,000	3,224	93,343	67%
Grants and Contracts	1,800,000	40,128	400,884	22%
Other Miscellaneous	200,000	23,439	159,375	80%
Fund Balance	200,000			
Transfers	(2,750,000)	(249,488)	(1,311,988)	48%
<b>TOTAL REVENUES</b>	<b>\$ 26,077,253</b>	<b>\$ 379,896</b>	<b>\$ 18,075,555</b>	<b>69%</b>
<b>EXPENDITURES</b>				
Salaries and Wages	17,296,292	1,433,991	10,087,215	58%
Operating Expenditures	8,780,961	839,292	4,510,456	51%
Capital Expenditures				
<b>TOTAL EXPENDITURES</b>	<b>\$ 26,077,253</b>	<b>\$ 2,273,283</b>	<b>\$ 14,597,671</b>	<b>56%</b>
<b>Unrestricted Plant</b>				
	Current Month			
	Budget	Actual	Y-T-D Actual	%
<b>REVENUES</b>				
State Aid:				
Capital/STEM	345,500	-	259,125	75%
Other Miscellaneous				
Fund Balance	2,800,000			
Transfers	2,000,000	211,988	711,988	36%
<b>TOTAL REVENUES</b>	<b>\$ 5,145,500</b>	<b>\$ 211,988</b>	<b>\$ 971,113</b>	<b>19%</b>
<b>EXPENDITURES</b>				
Salaries and Wages				
Operating Expenditures				
Capital Expenditures	5,145,500	138,795	971,113	19%
<b>TOTAL EXPENDITURES</b>	<b>\$ 5,145,500</b>	<b>\$ 138,795</b>	<b>\$ 971,113</b>	<b>19%</b>

NAVAJO COUNTY COMMUNITY COLLEGE DISTRICT  
 Statement of Financial Position  
 July 1, 2015 to February 29, 2016

Budget Period Expired 67%

**Restricted and Auxiliary Funds**

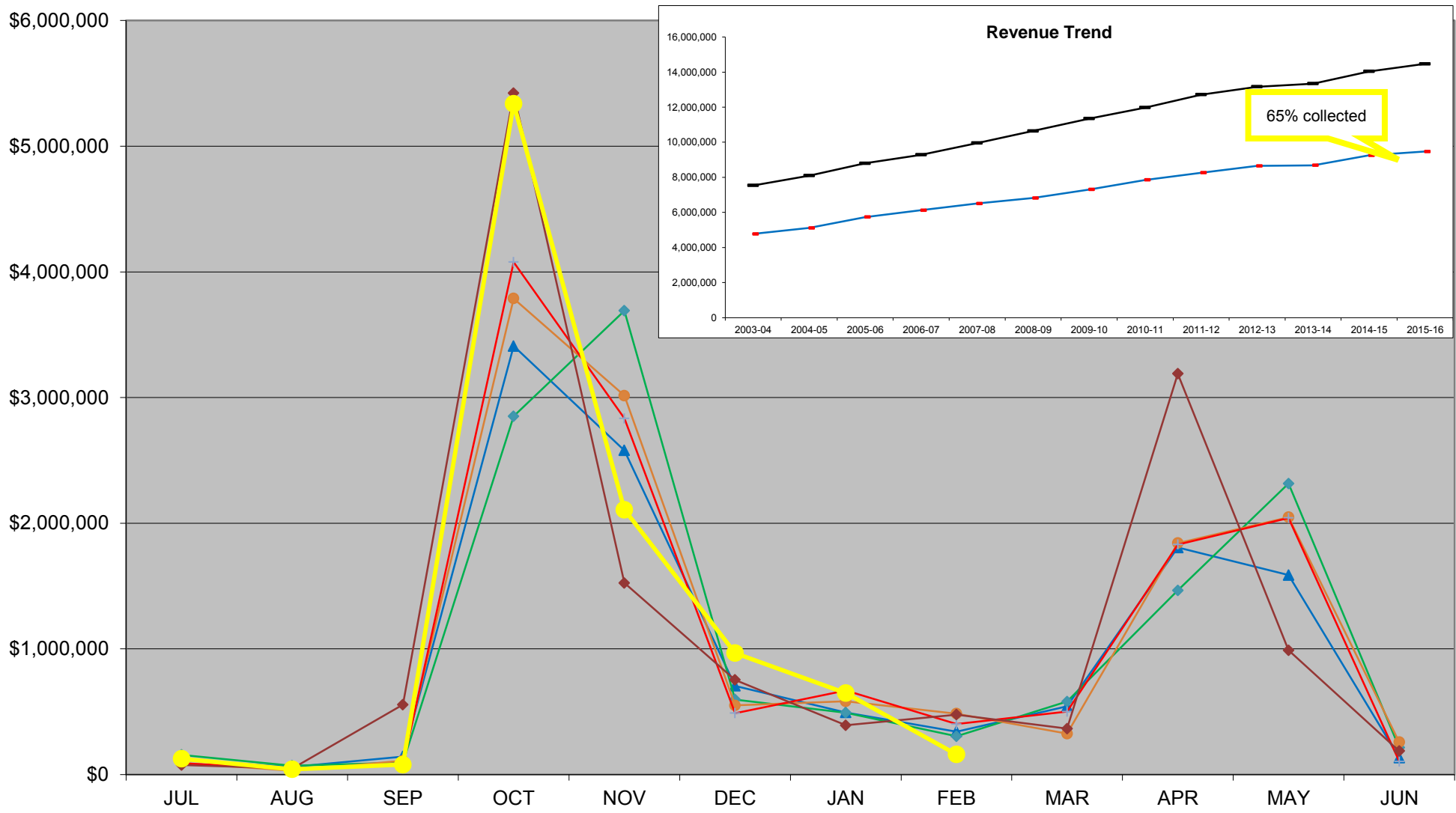
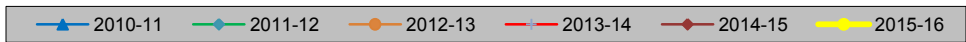
	Restricted			
	Budget	Current Month Actual	Y-T-D Actual	%
<b>REVENUES</b>				
Grants and Contracts	6,000,000	398,297	4,038,614	67%
Fund Balance	-			
Transfers	600,000	-	450,000	75%
<b>TOTAL REVENUES</b>	<b>\$ 6,600,000</b>	<b>\$ 398,297</b>	<b>\$ 4,488,614</b>	<b>68%</b>
<b>EXPENDITURES</b>				
Salaries and Wages	1,234,637	115,296	820,406	66%
Operating Expenditures	5,365,363	252,395	3,665,758	68%
Capital Expenditures				
<b>TOTAL EXPENDITURES</b>	<b>\$ 6,600,000</b>	<b>\$ 367,691</b>	<b>\$ 4,486,164</b>	<b>68%</b>

	Auxiliary			
	Budget	Current Month Actual	Y-T-D Actual	%
<b>REVENUES</b>				
Sales and Services	500,000	5,504	198,797	40%
Fund Balance	-			
Transfers	150,000	37,500	150,000	100%
<b>TOTAL REVENUES</b>	<b>\$ 650,000</b>	<b>\$ 43,004</b>	<b>\$ 348,797</b>	<b>54%</b>
<b>EXPENDITURES</b>				
Salaries and Wages	403,001	34,840	238,933	59%
Operating Expenditures	246,999	7,399	150,173	61%
Capital Expenditures				
<b>TOTAL EXPENDITURES</b>	<b>\$ 650,000</b>	<b>\$ 42,239</b>	<b>\$ 389,106</b>	<b>60%</b>

**Cash Flows**

Cash flows from all activities (YTD) .....	\$23,884,079
Cash used for all activities (YTD) .....	<b>\$20,444,054</b>
Net Cash for all activities (YTD) .....	\$3,440,025

### Monthly Primary Property Tax Receipts



**Human Resources UPDATE**  
**DGB-April 12, 2016**

**FILLED**

1. **Faculty in Mathematics – Jeff Strong starts August 15, 2016. Jeff has been an adjunct since the spring of 2014. Jeff received his Bachelor of Arts and his Masters of Arts from Brigham Young University.**
2. **Faculty in Early Childhood - Betsy Peck has been teaching since August 2012 through grant funded programs. Betsy received her Bachelor's degree from the University of Arizona and her Master's degree from Arizona State University.**
3. **Assistant to the Campus Manager – WMC – Martha Kanteena previously worked in the Student Services office. Martha received her Associate of Applied Science from Northland Pioneer College.**

**EXTERNAL OPENINGS**

4. **Network Security Coordinator - Open until filled. 3 applicants.**
5. **Network and Systems Administrator - Open until filled. 2 applicants.**
6. **Database Administrator – Open until filled. 19 applicants.**
7. **Faculty in Early Childhood Education (Chair) – Closed February 1, 2016. 7 applicants.**
8. **Faculty in Social and Behavioral Science – Closed March 1, 2016. 18 applicants.**
9. **Dean of Nursing and Allied Health – Closed March 22, 2016. 5 applicants.**
10. **Grant Project Coordinator TALON – Open until filled. 8 applicants.**
11. **Faculty in College and Career Preparation – Closed February 29, 2016. 14 applicants.**
12. **Faculty in Mechatronics – Closes April 22, 2016. 1 applicant.**
13. **Faculty in Computer Information Services – Closes April 22, 2016. 2 applicants.**
14. **Director of Institutional Effectiveness – Closes April 22, 2016. 4 applicants**

**INTERNAL OPENINGS**

15. **Assistant to the Campus Manager-20 hours – PDC – Closed March 10, 2016. 2 applicants.**
16. **Secretary to the Division of Arts and Sciences – Closed March 28, 2016. 2 applicants.**

Faculty Association  
Report to District Governing Board  
April 2016

1. FA has reviewed proposed changes to Procedure 2970. A Qualtrics survey will be sent out to all full-time faculty asking them to vote whether or not the proposed changes should be presented to the Deans and Administration.
2. A call for nominations for FA officers will go out in the next week with elections happening at the May FA meeting.
3. We've decided how we will celebrate retiring faculty, but I won't include details here so as not to ruin the surprise.
4. FA is in the process of filling committee assignments for the 2016-17 academic year.

## Student Government Association

- The student government has not had a meeting since February as the transfer road trips and talent show have been scheduled on our regular meeting dates.
- The Annual Talent Show on March 25, 2016 was successful, and we were fortunate to have a special guest judge- Tommy Boy from *The Storm 96.5*. Richard Harris was a fantastic MC, and Don Call also volunteered his time to be a judge.
- Recently there have been some issues with the SGA, there were several volunteers missing from the talent show, and due to some miscommunication of duties the transfer road trips were nearly cancelled. SGA vice president Ariel Shirley and President Tiffani Martin are currently looking into solutions to these and future problems.
- We are currently trying to finish out the last of our transfer road trips, and SGA vice president Ariel Shirley has rescheduled our UofA trip for May 6<sup>th</sup>, as the previous date planned was not available.
- The SGA is looking forward to electing new SGA officials at the next meeting.
- Please contact Tiffani Martin if you have any questions or concerns about the SGA, her email is [tmartin14@mail.npc.edu](mailto:tmartin14@mail.npc.edu)



## Outstanding Spring 2016 Alumnus Julie Vasher

Northland Pioneer College is proud to recognize the accomplishments and contributions of Class of 1995 Nursing Graduate **Julie Vasher** as the Spring 2016 Outstanding Alumnus.

Vasher and her California Maternal Quality Care Collaborative (CMQCC) colleagues at Stanford University School of Medicine are working with hospitals in California, nationally and internationally to improve obstetrical care and reduce maternal mortality and morbidity by implementing the latest best clinical practices for patient treatment.

“The United States is not the best at maternity care. In fact, we are among the worst of developed nations,” explains Vasher. “Healthy People 2020 has a goal to reduce maternal mortality in the U.S. to 11.4 per 100,000 live births. When this goal was set in 2007, the U.S. mortality rate was 12.7. Since that time, the U.S. has reached a rate of 22.0 maternal deaths per 100,000 live births (2013 data),” she continued.

In contrast, California peaked at 14.0 maternal deaths per 100,000 live births. “Since the implementation of the Collaborative’s work, California has decreased its rate of maternal mortality to 7.0 – well below the Healthy People 2020 goal. But we still have work to do,” added Vasher.

Vasher, the “Clinical Implementation Lead” for the Collaborative, earned her Doctor of Nurse Practice (DNP) degree from Vanderbilt University; her bachelor’s and master’s nursing degrees from California State University – Dominguez Hills; is licensed and board-certified as a Parent/Child Clinical Nurse Specialist; and certified in Inpatient Obstetric Nursing and Fetal Monitoring. As a Clinical Nurse Specialist, or Advanced Practice Registered Nurse, Vasher functions in five roles to improve patient care – Expert in Clinical Practice, Educator, Leader, Researcher and Consultant. Vasher explained a DNP is designed to train nurses to hasten the implementation of identified clinical best practices from research to bedside – where it can really impact patient outcomes. “My capstone project for my DNP focused on patient education on hypertension in pregnancy and future cardiovascular risks.”



Julie Vasher, DNP, RNC-OB,  
CNS-BC, C-EFM

“The Implementation Lead position capitalizes on my background as a Clinical Nurse Specialist and my work as a DNP to identify best practices and help hospitals implement these in their facilities,” explained Vasher. “I provide guidance on an individual hospital level as needed, but mostly in a larger capacity. I speak at many conferences and gatherings on our work and how to overcome barriers to implement best clinical practice.”

The current Collaborative is working with 125 California hospitals to improve outcomes related to OB Hemorrhage and Preeclampsia (hypertension in pregnancy). The Collaborative developed various CMQCC toolkits, which are downloaded every day across the country and internationally, with over 6,000 downloads of the OB Hemorrhage kits and over 7,000 of the Preeclampsia toolkit. “Very soon, (expected release is April 2016) we will start our next initiative to reduce the Primary Cesarean Rate,” said Vasher. | Learn more about the Collaborative’s work and toolkits at [www.cmqcc.org](http://www.cmqcc.org).

Born in Anaheim, California, Julie’s family re-located to Show Low when she was 8. Her parents, Roy and Pat Abbott, and brother Wayne Abbott, still reside in the Snowflake/Taylor area. Her sister, Kay, passed away in 2002, but her brother-in-law, Daryl Seymore, “who is still a member of my family,” resides in Show Low. She is married to Andrew Vasher, son of former NPC President Dr. Marvin Vasher. Together they have six children, ranging in age from 31 to 13. “We are lucky to have eight of the cutest and smartest grandkids! Our married kids are spread out in Utah, Texas and the Netherlands. We have two children at home and currently reside in Salinas, near the Monterey coast of California.”

“My kids and husband are involved heavily in athletics, so between the months of November and March, I spend a good deal of time in a gym. The basketball kind, not the working out kind!” She also enjoys traveling for fun and spending time with family and grandkids.

A graduate of Show Low High School, all she ever wanted to be was a mom. She describes herself as “a late bloomer. After four children, I felt a need to gain more education and embark on a career serving others. That sounds altruistic, but I really wanted to be a nurse, but didn’t know if I could.”

Her cousin, Nancy Montgomery (also a Class of 1995 Nursing graduate) was working on her prerequisites to enter NPC’s new Nursing program and convinced Julie to enroll in the program with her. “I wasn’t very savvy to know about the BRN requirements, I just wanted to start.”

Even though the program was just in its second year, “we had great instructors – JoAnn Crownover and Kathryn Nicolet – who provided a great foundation and education.”

After receiving her Associate Degree in Nursing, Vasher worked at San Luis Regional Medical Center in Alamosa, Colorado, before returning to the White Mountains a year later to work in the float pool of general nurses at Navapache Regional Medical Center (now Summit Healthcare). She would later start specializing in obstetrics while



working in Sonora, California, and has been in OB since 1997.

“NPC helped me to embrace the principals of lifelong learning. As a nontraditional student – in my 30s with four kids – they made it achievable. I believe their commitment to students created a visible path to continued learning and the desire to achieve all I could,” noted Vasher.

What advice would she give to current NPC Nursing students? “Nursing is a lifelong pursuit. The American Nurse Association Code of Ethics commits registered nurses to always pursue new knowledge. It is not enough to obtain an RN license and punch a clock. Nurses should always be evolving, changing and improving.”

She continues, “As the most trusted profession in the United States, nurses have a responsibility to themselves and patients to open themselves to new ideas. With each educational pursuit, I learned more about the true art and science of nursing and the impact we all can have. Keep going, learn more, do more!”

What is Vasher’s next project? “More collaborative work focused on decreasing the primary cesarean rate. We now know how important it is to avoid the first cesarean to avoid future problems of morbidity and mortality with women. Cesarean sections are a great blessing for many to ensure maternal and newborn health, but, unfortunately, a good number of these are not necessary. Our next toolkit and collaborative are called *Supporting Vaginal Birth and Reducing Primary Cesareans*.”

Her work and speaking schedule would not allow Vasher to attend this recognition ceremony. As the Outstanding Alumnus for the Spring 2016 Semester, Vasher will receive mementos of the college, a crystal eagle plaque, and a transferrable gift certificate for three credits tuition.

To nominate an NPC graduate for recognition as an outstanding alumnus, visit [www.npc.edu//alumni-award-nomination-form](http://www.npc.edu//alumni-award-nomination-form).

# Navajo County Community College District Governing Board Meeting Minutes

March 22, 2016 – 10:00 a.m.  
Painted Desert Campus, Tiponi Community Center  
2251 East Navajo Boulevard, Holbrook, Arizona

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**Governing Board Member Present:** Ms. Ginny Handorf; Mr. James Matteson; Mr. Prescott Winslow; Mr. Frank Lucero; Mr. Daniel Peaches.

**Staff Present:** President Jeanne Swarhout; Interim Vice President Maderia Ellison; Vice President Mark Vest; Director PJ Way; Recording Secretary to the Board Paul Hempsey.

**Others Present:** Betsyann Wilson; Josh Rogers; Rebecca Hunt; Bill Fee; Bobbi Sample; Everett Robinson; Ann Hess; Curtis Stevens; Kim Reed; David Huish; Amber Hill; Jason LaBute; Linda Kor; Jeremy Raisor; Kelley Harvey-Brannon; Margaret White; Sandra Johnson; Eric Henderson; Ernie Hess; Ian Graham; Ed Gentry; Colleen Readel; Tom Poscharsky ; Gus Lundberg; Dave Smith.

## **Agenda Item 1: Call to Order and Pledge of Allegiance**

Chair Handorf called the meeting to order at 10:00 a.m. and Mr. Matteson led the Pledge of Allegiance.

## **Agenda Item 2: Adoption of Agenda**

*Mr. Matteson moved to adopt the agenda as presented. Mr. Peaches seconded the motion. **The vote was unanimous in the affirmative.***

## **Agenda Item 3: Call for public Comment**

None

## **Agenda Item 4: Reports**

### **4.A. Financial Position – Interim Vice President Ellison**

Interim Vice President Ellison addressed the Board and reviewed the Financial Position report with the Board.

### **4.B. Human Resources**

Written Report Only.

### **4.C. NPC CASO**

Written Report Only.

### **4.D. Faculty Association**

Written Report Only.

#### **4.E. NPC Student Government Association**

Written Report Only.

#### **4.F. NPC Friends and Family – Director Wilson**

Director Wilson addressed the Board and stated Arizona Gives Day is slated for Tuesday, April 5<sup>th</sup> this year. Donations can be made ahead of time and post-dated. Last year was the first year NPC participated and raised over \$14,200. This year Frontier Communications has partnered with NPC Friends and Family to provide an exciting \$5,000 Challenge Gift. If NPC Friends and Family can raise \$5,000 by noon Frontier Communications will match that amount. A link to make donations will be emailed by Friends and Family and donations can also be made at [azgives.org](http://azgives.org).

#### **Agenda Item 5: Consent Agenda**

- A. **February 16, 2016 Regular Board Minutes;**
- B. **Curriculum Modifications:**
  - 1. Program Modification - CON AAS, CAS, CP, Drafting CP
  - 2. Program Modification - WLD AAS, CAS, 3 CPs
  - 3. Program Modification - AAEC
  - 4. Program Modification - CIS AAS & CIS
  - 5. Program Modification - CIS AAS Required Electives
  - 6. Program Modification - CIS AAS, CAS & 2 CPs Web Development and Graphic Design
  - 7. Program Modification - CIS AAS, CAS & CP Network and PC Support
  - 8. Program Modification - AAEE
  - 9. Program Deletion - CIS AAS, CAS & CP Graphic Design
  - 10. Program Deletion - CIS AAS, CAS & CP Web Design

*Mr. Matteson requested Items B4, B5, B6, and B7 be removed for further discussion, without opposition. Mr. Matteson then made a motion to approve the remaining consent agenda. Mr. Lucero seconded. The vote was unanimous in the affirmative.*

#### **Discussion of Consent Agenda Items B4-7, Program Modifications in CIS.**

Mr. Matteson commented that he was encouraged to read about the changes and asked Vice President Vest to comment on the Program Modifications to the CIS programs. Vice President Vest commented that the changes are relatively small and reflective of recommendations from an industry advisory board and what current faculty is qualified to offer. They are not reflective of larger changes discussed at a previous Board meeting and a much larger discussion will need to be held on the direction we need to move with CIS offerings in the future.

*Mr. Matteson made a motion to approve the remaining consent agenda. Mr. Peaches seconded. The vote was unanimous in the affirmative.*

#### **Agenda Item 6: Old Business**

None.

#### **Agenda Item 7: New Business**

##### **7.A. Preliminary Budget Analysis**

Interim Vice President Ellison reviewed the Preliminary Budget Analysis with the Board.

President Swarthout commented the State has only just begun negotiations on the budget this year and, although we believe the figures will remain stable, we do not have a final allocation at this point.

Mr. Matteson asked if the Board decided not to adopt the maximum levy rate, it would cause a reduction of \$428,000. Interim Vice President Ellison clarified if the Board adopted the TNT rate the reduction would be \$428,000.

Mr. Winslow requested clarification on the 2% levy cap not being the Tax rate but the amount of money raised compared to the previous year. Interim Vice President Ellison affirmed and referred to the Levy Limit Worksheet in the Board packet showing the calculations. Mr. Winslow asked for an explanation of how we can set the maximum raise in the tax rate, but still bring in less money than before. Interim Vice President Ellison responded that taking the maximum increase will allow for a maximum allowable tax rate of 1.7884. However this rate is then applied against assessed values, which have seen a significant decrease, meaning we will see less income from a higher tax rate.

Mr. Lucero asked if we were assuming the County will request a maximum increase also and, if we did not have that information, would it be available before the Board makes a final decision on the budget. Interim Vice President Ellison responded that the college does not have the information currently but would have it by the next Board meeting when a final decision is required. Mr. Winslow commented that, when it comes to taxation, there are a lot of moving parts and other taxing authorities involved and it would be nice to have figures on the impact to Residential Property owners and Small Business owners, before making the decision. Interim Vice President Ellison responded that the college is reviewing a draft document for tax payers that will be placed on the NPC website for the Public to review.

Mr. Winslow commented the Board needed to look at the budgets over more than a one year timeframe and not just year-by-year as trends showing increases in Equalization aid each year could be deceptive and lead to thinking that it will always go up which is not the case. President Swarthout commented that, as centrally assessed values in the area go down and affect the college's ability to raise property tax revenues, our equalization may go up. President Swarthout believes there is a good chance that centrally assessed values will continue to decline. A statute allows companies to remove infrastructure from centrally assessed values which leads to negatives. Mr. Winslow commented the importance of Equalization needs to be clear to the Public.

Mr. Lucero asked, realizing it is a three year cycle, if Property Valuations were going up. Interim Vice President Ellison commented that locally assessed Property taxes were going up. President Swarthout also commented that it is on a three year cycle making it uneven. Mr. Lucero asked what percentage the increase was. Interim Vice President Ellison offered to calculate the percentage increase arriving at the figure of 1.2%.

Tom Poscharsky, Mayor of Snowflake raised the issue that APS announced they would not be operating Units one and three till the summer, and maybe not even then, and are not taking

delivery of coal that they still are paying for, and the college might want to consider whether the plant may be decommissioned earlier than originally thought. President Swarthout responded that the college was considering the possibility as it made plans for the future.

***7.B. B. Request to Approve 2016-2017 Tuition and Fees Schedule***

Interim Vice President Ellison reviewed the 2016-2017 Tuition and Fees Schedule commenting that this was the last year in a three- year cycle the college had previously adopted.

Mr. Matteson asked if the NPC's Tuition and Fees are comparable to neighboring states. President Swarthout responded that looking at western states and, primarily sister schools in Utah, Colorado and New Mexico, NPC is one of the lowest in the west.

Mr. Winslow requested information from other colleges on waivers and/or discounts for tuition that may be similar to those offered by NPC, noting that NPC is already great value without these deals and an excellent deal with them. President Swarthout responded that, from keeping a close eye on these matters, the kinds of Tuition Waivers NPC has in place are still unusual across the western states. NPC is probably the only Arizona College offering these types of innovation to tuition. However staff will collect and provide the data at a future meeting.

*Mr. Matteson made a motion to approve the 2016-2017 Tuition and Fees Schedule as presented. Mr. Lucero seconded. The vote was unanimous in the affirmative.*

***7.C. Request to Approve 2016-2017 Wage and Salary Schedules***

Interim Vice President Ellison reviewed the options requested by Board members regarding the 2016-2017 Wage and Salary Schedules.

Mr. Matteson commented that he tries to weigh the impact to both the college and to employees. A consideration not talked about was the impact of taxes. For example, using Option 1 with a 2% rise to salary, the net amount going into the pocket of the employee is significantly less due to the deductions from federal, state and local agencies. The cost of Medical Insurance, however, has no deductions he is aware of. Therefore a dollar spent in support of employee's medical insurance provides a lot more than a dollar spent on a wage increase. For that reason he would prefer to receive an increase through medical plan support than a straight wage increase. As a result he recommends something between Options 2 and 3.

Chair Handorf asked if the employees knew of the actual Healthcare increases when they made their salary recommendations. Interim Vice President Ellison responded that when the Faculty Association and CASO made their recommendation at the February Board meeting they were working from estimations only. Chair Handorf asked if there had been any feedback from employees since learning the actual increases. President Swarthout responded that there had not been a lot of feedback but staff and faculty attending the Board meeting may have comments to make. Chair Handorf then opened the meeting to comments from those in attendance.

David Huish, Director of Facilities and Vehicles, commented that once he received the information he compared it in the same way as Mr. Matteson and decided it would be more

beneficial to his family to receive the help with Health Insurance costs than to receive a percentage rise in salary. Chair Handorf commented that she arrived at the same conclusion upon receiving the information.

Kelley Harvey-Brannon, Whiteriver Center Manager, commented that from the perspective of a single mother, who has not needed to see a doctor in over 20 years, she personally thought Option 3 would be the best option.

Mr. Lucero commented that with a percentage salary increase the higher earners at the college see a much greater benefit than lower earners and had considered taking the dollar amount increase from a 2% rise and dividing the amount evenly between employees. If he was an employee he would be opting for Option 2 as he would lose less money.

Mr. Winslow thanked the finance department staff for preparing and presenting the material in a way that helps everyone understand the total compensation packages available. As opposed to a for-profit organization looking to minimize labor expenses the college needs to look at employee morale, productivity, which is related to morale and remaining competitive to keep current staff and faculty while being able to attract new staff and faculty. Often when we see 3 options presented where there is a high number and a low number there is the attempt to drive people towards the middle number, but when he looks at the options presented he is inclined to see Option 3, although the most expensive, as his preference. A one percent salary increase adds less to the total wage structure and covering health and dental cost for employees works out at \$840 savings to them while a percentage pay rise for the lowest earners at the college would be around \$640 minus deductions like taxes.

Mr. Matteson asked if Dental coverage was a covered benefit to staff in the past. Interim Vice President Ellison responded that it was. Mr. Matteson thought that an option of removing an existing benefit should be off the table.

Mr. Lucero commented that he still took issue with a percentage pay rise as the rich get richer and the poor get poorer. He would rather take the cost of a one percent pay rise, \$125,000, and divvy it up evenly between staff instead. It would work out at close to \$550 per staff member. President Swarthout commented that, due to the salary and wage scales used by NPC it might be best done as a stipend otherwise it will be very complex. Mr. Matteson commented he would support this idea.

Mr. Winslow commented that every employee has a different economic situation to deal with, whether it is a spouse, children, elder care, etc. and while we can't accommodate every situation we need to look at helping as many as possible. Covering Healthcare cost equates to the best increase for all staff to receive.

Jason LaBute, Information Services Manager at NPC, wondered if his family could be covered by the college instead of himself as he couldn't afford to cover them currently. Mr. Winslow commented on the risks of thinking you are invulnerable and why he leaned towards income protection and a small increase to take home pay.



Mr. Matteson summarized the discussion into a proposal. He suggested a \$550 stipend be paid to staff spread over a 12 month period, NPC pays employee cost of \$30 per month for those selecting PPO medical plan, NPC contributes \$30 per month to HSA for employees selecting HDHP medical insurance, NPC pays employee portion of \$40 per month for dental coverage.

Mr. Winslow suggested pro-rating the \$550 dollars for staff that work less than 40 hours and asked staff how difficult that might be. Interim Vice President Ellison stated that it would be possible and would affect approximately 25 staff members who work less than 40 hours per week. Mr. Lucero asked if there was Health coverage for employees working less than the 40 hours per week. Interim Vice President Ellison said the college offers Health Insurance to any staff working 30 hours or more.

Betsyann Wilson clarified that the stipend would be paid over a 12 month period as suggested by Mr. Matteson and suggested it would be better to receive in a lump sum. Mr. Winslow asked if that would be easier from an administrative stand point and Interim Vice President Ellison confirmed it would require a lot less work to provide a lump sum from July 1<sup>st</sup> and payable on July 15<sup>th</sup>.

Mr. Winslow asked, of the individuals not working enough hours to receive Health coverage from NPC, if they had to go into the individual marketplace or were covered by a spouse. Interim Vice President Ellison responded that there may be one person who was not covered by NPC or a spouse but would have to seek clarification. Mr. Matteson commented that there will most likely be some unique case that was not foreseen and suggested the President be authorized to adjudicate for the college as appropriate.

Vice President Vest commented that Vice President Ellison would most likely require direction on the Adjunct Faculty scale, paid on a per-credit hour taught basis, as they would not be included in this proposal. President Swarhout suggested distinguishing between contract employees and adjunct faculty in two separate recommendations as they will most likely turn out to be quite different. Mr. Matteson agreed and suggested letting the Adjunct schedule remain the same.

Mr. Peaches asked for clarification that, if a situation arose that was not covered under the motion; the President would have the power to modify the package appropriately. President Swarhout responded that she understood, from the discussion, that the administration would have the authority to make a decision for an individual's situation that was not covered.

*Mr. Matteson made a motion to approve a \$550 stipend for full-time staff, pro-rated for staff working less than 40 hours per week, paid as a lump sum after July 1<sup>st</sup>, 2016. Furthermore NPC pays employee cost of \$30 per month for those selecting PPO medical plan, NPC contributes \$30 per month to HSA for employees selecting HDHP medical insurance, NPC pays employee portion of \$40 per month for dental coverage. The Adjunct Faculty schedule would remain the same. Administration would retain the authority to make a decision on unique situations not*

*covered in this motion as appropriate. Mr. Lucero seconded. **The vote was unanimous in the affirmative.***

**7.D. Get Into Energy Grant Report Out**

Interim Director Fee reviewed the Get Into Energy Grant Report Out with the Board commenting that the numbers show that NPC was a major player in the grant.

Mr. Winslow asked if the expected payback of funds was from the Consortium or just NPC. Interim Director Fee responded that it was from NPC and due to overestimations made by industry during the initial set-up of the grant. Mr. Winslow commented that it was great for the college to be able to add a building and equipment that can be used for many years to come.

**7.E. E. Memorandum of Understanding with Northeastern Arizona Innovative Workforce Solutions**

President Swarthout addressed the Board and reviewed the Memorandum of Understanding with Northeastern Arizona Innovative Workforce Solutions with the Board.

Mr. Winslow asked if the college was providing additional training for advisors, learning assistant, CCP faculty who may come in contact with eligible students. President Swarthout commented that the tasks are divided and the college's role will be more focused on advising and identifying necessary skills and competencies for the in-demand occupations.

Mr. Winslow clarified that Northeastern would be identifying and referring candidates to the college and the college would provide the training. President Swarthout affirmed.

**7.F. F. Request to Approve PDC Reroofing and Mechanical Equipment Installation**

Interim Vice President Ellison reviewed the Request to Approve PDC Reroofing and Mechanical Equipment Installation with the Board and stated staff recommended approval of the bid from Edge Construction in the amount of \$404,967.

*Mr. Matteson made a motion to approval of the bid from Edge Construction in the amount of \$404,967. Mr. Lucero seconded. **The vote was unanimous in the affirmative.***

Mr. Matteson asked if the roof on the Nizhoni Building was flat. David Huish commented that there is a 6 inch slope to allow water runoff.

**7.G. G. Request to Approve Title III Evaluation Contract**

Vice President Vest addressed the Board and reviewed the Request to Approve Title III Evaluation Contract with GeoDriven LLC commenting that Eva Putzova of GeoDriven was the external evaluator of the previous Title III grant and the college was very satisfied with her services.

Mr. Winslow asked if Eva Putzova had worked with any similar institutions. Vice President Vest responded that Eva Putzova was also a lead at NAU on Strategic and Policy planning.



*Mr. Winslow made a motion to approve the Title III Evaluation Contract as presented. Mr. Matteson seconded. **The vote was unanimous in the affirmative.***

**7.H. Request to Approve Additional Costs for Drainage and Landscaping Contract at SCC**  
Interim Vice President Ellison reviewed the Request to Approve Additional Costs for Drainage and Landscaping at the Silver Creek Campus and stated staff recommends approval.

Mr. Matteson commented that he had the opportunity to survey the work and approved with the wisdom of the changes. Mr. Matteson asked if the college had written approval from Property Owners to the north and south of the project for completion of the work. David Huish responded that initially the property owner to the north of campus refused permission but had since passed away. His son had then approached NPC to give verbal approval to the changes. Mr. Huish offered to approach the new owner for get written approval. Mr. Matteson commented that he believed it would be good to have a written confirmation of agreement. David Huish stated that anything south of the campus was not affected by the changes made.

*Mr. Matteson made a motion to approve the additional costs in the amount of \$34,785.47. Mr. Winslow seconded. **The vote was unanimous in the affirmative.***

**7.I. Request to Approve Purchase of Equipment for TALON Grant**

Director Way addressed the Board and reviewed the Request to Approve Purchase of Equipment for the TALON Grant stating staff recommended accepting the bid from Sentinel Technologies at a price of \$163,450.00 plus sales tax.

Mr. Lucero asked what the amount of sales tax would be. Director Way responded that they do not have a final figure on sales tax but having discussed cost with Cisco for their products he feels the final quote, including taxes, will come in lower than the \$163,450 quoted.

Mr. Winslow asked if we had prior experience with any of the vendors. Director Way believed we had worked with some in the past but Sentinel Technologies offered a comprehensive solution.

*Mr. Matteson made a motion to approve the Request to Purchase Cisco Solutions for 10 high school classrooms at a price of \$163,450.00 plus sales tax. Mr. Peaches seconded. **The vote was unanimous in the affirmative.***

**7.J. Space Use Study**

Interim Vice President Ellison reviewed the Space Use Study with the Board.

Members of the District Governing Board voted to take a recess of 30 minutes. The meeting recessed at 11:55am.

The meeting reconvened at 12:35pm.

Mr. Lucero suggested the item be tabled till next month's meeting to give everyone time to read over it a few more times.

Mr. Winslow commented that he was glad the study was completed and it seems to confirm the suspicions of the Executive Team and Staff. The report provides a lot of details that the Board would not get into directly, such as class scheduling. The Report does provide useful reference material when looking at future proposals brought to the Board by the Executive Team as well as helping with long term strategic planning.

Tom Poscharsky, Mayor of Snowflake, thanked the Board for their service and commented that many conversations have taken place in the past 14 months since plans were announced and the Space Use Study authorized. There has been a lot of participation by the Snowflake and Taylor community. The study had been forwarded to members of the Snowflake City and Taylor City councils to review.

Mayor Poscharsky thought the study was interesting but possibly not completed as the Board proposed. Bandwidth was identified as an issue and Mayor Poscharsky invited Board members to attend a meeting with the RealAZ group which has a sub-meeting on bandwidth immediately following the main meeting. The group is comprised of IT directors from the hospital, County, and several institutions including NPC. They are looking at bandwidth as a utility and therefore a requirement. He hoped to discuss using NPC's microwave system as a possible solution to expand bandwidth or to help in emergency situations.

Time has been spent working with the school system to inform students of opportunities to obtain an Associate degree, at NPC, while still in high school. Mayor Poscharsky commented that one of the points of the study was to move judiciously and cautiously into the future and he predicted a lot of changes with respect to classes on demand. Snowflake acquired a radio service providing 4G Plus and hope to continue working with NPC.

Mr. Winslow thanked Mayor Poscharsky and asked if Snowflake was interested in a Strategic Partnership with NPC on building on the technology infrastructure such as broadband and wireless connectivity to benefit both entities. Mayor Poscharsky responded that this was the hope and sees this as another component to economic development in the area. Snowflake is working to attract other entities to utilize the Railroad and have more development in the Industrial Park. They hope to have classes which will fold into programs already at NPC. Mr. Winslow commented that there is mutual interest in developing the property base in the county.

Gus Lundberg thanked President Swarthout and commented that he appreciated the opportunity to discuss the changes with her and be part of the dialogue on potential changes at the Snowflake campus.

Mr. Matteson commented that the Space Use Study was requested by the Board as they did not have the required knowledge or data to make any kind of decisions. This study has done a great deal in providing data for today and future planning. The study provides the college with a good idea of where we currently are and shows there is capacity for all kinds of opportunities at all

four campuses. He is pleased the study was completed and will be used to help the college grow and help all the communities the college affects.

Mr. Winslow suggested bringing this topic back at another Board meeting.

President Swarthout commented that members of the community had a great deal to do with bringing the Expenditure Limit legislation to a senator who carried it throughout the session and the college appreciated their efforts.

## **Agenda Item 8: Standing Business**

### **8.A. Strategic Planning and Accreditation Steering Committee (SPASC) Report**

Vice President Vest highlighted the Strategic Plan page on the website and the information to be found on each Priority.

Mr. Matteson asked if there was a sense from the faculty and student body on how the webpage is being received. Vice President Vest responded that the Board is the first people to receive this information and, if they approved, it would be rolled out to the college. Mr. Matteson commented that he likes it and feels it is the correct way to provide the information to the rest of the college. He believed that once the college does receive the information they will concentrate on the issues that directly affect them and we will start to see feedback. Mr. Matteson also commented that having the person responsible for each priority clearly listed provides accountability and the expectation to complete their tasks. Vice President Vest commented that they have already seen the positive influence of posting the information as the attempt to reach an 80% completion for the SOAR orientation by staff and faculty had stalled at the 60% mark and just seeing that had reenergized the effort to reach the benchmark.

### **8.B. President's Report**

President Swarthout stated the Expenditure Limit Bill passed through the Committee Of the Whole 39-17 and now goes to the Governor's desk. There are still concerns of a veto and we are asking community businesses, chambers, etc. to weigh in. An AZ Republic article on Maricopa perks for executives was published and this will weigh heavily on the Governor.

President Swarthout introduced Colleen Readel, Commencement Coordinator, who addressed the Board and invited members to the 2016 Commencement Ceremony on Saturday, May 14th, at Show Low High School. As a graduate last year Colleen really appreciated shaking the hands of Board Members. A reception will follow the ceremony.

Mr. Winslow commented that the speakers last year did not seem to work. Colleen Readel responded that they had worked on that issue and hoped it would be fixed this year.

Mr. Matteson asked who the Key Note speaker will be this year. Colleen Readel responded that Dr. Rufus Glasper would take the role.

## 8.C. Agenda Items/Informational Needs

### **Agenda Item 9: Board Report/Summary of Current Event**

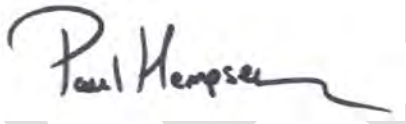
Mr. Matteson commented that Friends and Family will hold a golf tournament at the end of April to raise funds for scholarships. Two major sponsors had already shown support and a Chevrolet Impala will be posted at the seventh hole as a hole-in-one prize. Mr. Matteson issued a challenge to those present to enter teams and participate. The tournament will take place at the Silver Creek Golf course and it is important to support such a good cause. Betsyann Wilson commented about the importance of getting the word out and asked everyone to use their social media accounts to spread word of AZ Gives day as well as the Golf Tournament.

**Agenda Item 10: Announcement of Next Regular Meeting:** Regular District Governing Board meeting on Tuesday, April 12, 2016.

### **Agenda Item 11: Adjournment**

*The meeting was adjourned at 1:13a.m. upon a motion by Mr. Matteson , a second by Mr.Lucero, and a unanimous affirmative vote.*

Respectfully submitted,



Paul Hempsey  
Recording Secretary to the Board

# REQUEST TO APPROVE MODIFICATION OF THE MECHATRONICS AAS, CAS & CP IN: INDUSTRIAL ELECTRICAL, MOTORS & PLC'S; INDUSTRIAL MECHANICS AND FLUID POWER; ELECTRICAL AND INSTRUMENTATION

**Recommendation:**

The Instructional Council (IC) recommends approval of the modification of the Mechatronics (MET) Associate of Applied Science (AAS), Certificate of Applied Science (CAS) and Certificate of Proficiency (CP) in: Industrial Electrical, Motors & PLC's; Industrial Mechanics and Fluid Power; Electrical and Instrumentation.

**Summary:**

A complete Mechatronics Program revision is proposed. It includes three different areas of emphasis, where courses will be grouped into a more sequential manner and will create a better learning environment. The certifications that students can receive are currently in demand with industry. Proposed effective date of this modification is Fall 2016.

# Mechatronics (MET)

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## ~~Mechatronics Engineering Technology AAS Degree~~



### ~~Mechatronics (AAS) • 66 credits~~

**Core Requirements ..... 44 credits**

- MET 100 Introduction to Mechatronics ..... 4 credits
- MET 120 Industrial Mechanics I ..... 5 credits
- MET 130 Industrial Electrical Systems ..... 4 credits
- MET 140 Introduction to Programmable Logic Controllers ..... 4 credits

MET 150 Industrial Mechanics II.....	6 credits
MET 160 Rotating Electrical Machines .....	4 credits
MET 200 Robotics and Motion Control .....	4 credits
MET 210 Process Control & Instrumentation .....	3 credits
MET 220 Advanced Programmable Logic Controllers .....	4 credits
MET 230 Integrated Manufacturing Systems .....	3 credits
MET 238 Mechatronics Capstone Project.....	3 credits

**General Education Requirements**

Communications.....	6 credits
ENL 101 College Composition I.....	3 credits
Select any course under the <b>Communications</b> General Education list (for AAS degrees) on page 64.	
Mathematics.....	3 credits
Select any course under the <b>Mathematics</b> General Education List (for CAS and AAS Degrees) on page 64 <b>EXCEPT</b> for MAT 101, MAT 109, MAT 103 or BUS 133.	
Computer Science.....	6 credits
CIS 105 Computer Literacy.....	3 credits
CIS 141 Managing and Maintaining Your PC I (A+) .....	3 credits

**Discipline Studies** (Per the lists on page 64) ..... **7 credits**

Select one course from either the **Arts and Humanities** or **Social and Behavioral Science** lists ..... 3 credits  
 Select one course from the **Physical and Biological Sciences** list 4 credits

**Mechatronics (MET)**

**Areas of Specialization**

**Mechatronics – Industrial Electrical, Motors & PLC’s (CP) • 23 credits**

MET 130 Industrial Electrical Systems.....	4 credits
MET 140 Introduction to Programmable Logic Controllers .....	4 credits
MET 160 Rotating Electrical Machines .....	4 credits
MET 200 Robotics and Motion Control .....	4 credits
MET 210 Process Control and Instrumentation .....	3 credits
MET 220 Advanced Programmable Logic Controllers .....	4 credits

**Mechatronics – Industrial Electrical, Motors & PLC’s (CAS) • 29 credits**

Complete the Mechatronics – Industrial Electrical, Motors & PLC’s CP23 Credits

**Complete these General Education courses:**

ENL 101 College Composition I.....	3 credits
<b>Mathematics</b> .....	<b>3 credits</b>
Select any course under the <b>Mathematics</b> General Education List for (CAS and AAS degrees) on page 64 <b>EXCEPT</b> for MAT 103 and BUS 133	

**Mechatronics – Industrial Electrical, Motors & PLC’s (AAS) • 64 credits**

Complete the Mechatronics – Industrial Electrical, Motors & PLC’s CAS ..... 29 credits

**PLUS**

- General Education Requirements..... 16 credits**
- Communications ..... 3 credits**  
Select any course under the **Communications** General Education List  
(For AAS Degrees) on page 64
- Computer Science..... 6 credits**  
CIS 105 Computer Applications and Information Technology..... 3 credits  
CIS 141 Managing and Maintaining Your PC I (A+)..... 3 credits
- Discipline Studies (per the lists on page 64) ..... 7 credits**  
Select one course from the **Physical and Biological Sciences** and one  
course from either the **Arts and Humanities** or **Social and Behavioral  
Sciences** lists on page 64
- REQUIRED ELECTIVES ..... 19 credits**  
Choose from any unduplicated MET courses

**Mechatronics – Industrial Mechanics and Fluid Power (CP) • 25 credits**

- MET 100 Introduction to Mechatronics ..... 4 credits
- MET 120 Industrial Mechanics I..... 5 credits
- MET 150 Industrial Mechanics II..... 6 credits
- MET 160 Rotating Electrical Machines ..... 4 credits
- MET 230 Integrated Manufacturing Systems ..... 3 credits
- MET 241 Hydraulic Troubleshooting ..... 3 credits

**Mechatronics – Industrial Mechanics and Fluid Power (CAS) • 31 credits**

Complete the Mechatronics – Industrial Mechanics and Fluid Power CP ..... 25 credits

**Complete these General Election courses:**

- ENL 101 College Composition I..... 3 credits
- Mathematics ..... 3 credits**  
Select any course under the **Mathematics** General Education List for  
(CAS and AAS degrees) on page 64 **EXCEPT** for MAT 103 and BUS 133

**Mechatronics – Industrial Mechanics and Fluid Power (AAS) • 64 credits**

Complete the Mechatronics – Industrial Mechanics and Fluid Power (CAS)31 credits

**PLUS**

- General Education Requirements..... 16 credits**
- Communications ..... 3 credits**  
Select any course under the **Communications** General Education List

(For AAS Degrees) on page 64

- Computer Science..... 6 credits**
- CIS 105 Computer Applications and Information Technology..... 3 credits
- CIS 141 Managing and Maintaining Your PC I (A+)..... 3 credits
- Discipline Studies (per the lists on page 64)..... 7 credits**
- Select one course from the **Physical and Biological Sciences** and one course from either the **Arts and Humanities** or **Social and Behavioral Sciences** lists on page 64
- REQUIRED ELECTIVES ..... 17 credits**
- Choose from any unduplicated MET courses

## **Mechatronics – Electrical and Instrumentation (CP) • 24 credits**

- MET 242 Industrial Maintenance Electrical and Instrumentation Technician Level I.....6 credits
- MET 243 Industrial Maintenance Electrical and Instrumentation Technician Level II.....6 credits
- MET 244 Industrial Maintenance Electrical and Instrumentation Technician Level III.....6 credits
- MET 245 Industrial Maintenance Electrical and Instrumentation Technician Level IV ....6 credits

## **Mechatronics – Electrical and Instrumentation (CAS) • 30 credits**

Complete the Mechatronics – Electrical and Instrumentation CP..... 24 credits

### **Complete these General Election courses:**

- ENL 101 College Composition I..... 3 credits
- Mathematics ..... 3 credits**
- Select any course under the **Mathematics** General Education List for (CAS and AAS degrees) on page 64 **EXCEPT** for MAT 103 and BUS 133

## **Mechatronics – Electrical and Instrumentation (AAS) • 64 credits**

Complete the Mechatronics – Electrical and Instrumentation (CAS). 30 credits

### **PLUS**

- General Education Requirements..... 16 credits**
- Communications ..... 3 credits**
- Select any course under the **Communications** General Education List (For AAS Degrees) on page 64
- Computer Science..... 6 credits**
- CIS 105 Computer Applications and Information Technology..... .3 credits
- CIS 141 Managing and Maintaining Your PC I (A+)..... 3 credits
- Discipline Studies (per the lists on page 64) ..... 7 credits**
- Select one course from the **Physical and Biological Sciences** and one course from either the **Arts and Humanities** or **Social and Behavioral Sciences** lists on page 64
- REQUIRED ELECTIVES ..... 18 credits**
- Choose from any unduplicated MET courses



## Request to Approve Faculty Emeritus Status for Dr. Sandra Johnson

### **Recommendation:**

The Faculty Association recommends the District Governing Board approve Faculty Emeritus status for retiring Faculty member, Dr. Sandra Johnson

### **Summary:**

Per Procedure 2776, any member of the college community may recommend the Board approve emeritus status for a faculty member who lacks the 15 years of service required for automatic conferral.

Sandy Johnson hails originally from Nebraska but since earning her initial bachelor's degree from Dana College in English and History she has worked/taught in some very interesting and culturally diverse places: Yupik villages in southwestern Alaska, Tucson Early Education Program and on Navajo with the first Navajo Teacher Training Program (University of Arizona). She also worked for the National Indian Bi-lingual Center at ASU, which included traveling throughout the state of Arizona and to thirteen other states to various Native communities providing teacher training, curriculum and materials development. She served as the Early Childhood Coordinator for the Peach Spring School District on the Hualapai Nation and has served as the Federal Programs Director with Cedar Unified School District, serving Navajo and Hopi children. In addition she operated her own consulting business for five years providing teacher training, materials development, grant writing and program evaluations.

She came to NPC in 2003 to help start the new Associate of Arts Degree in Elementary Education and has been teaching a variety of thirteen education and early childhood courses since then. She estimates that she has had over a thousand students complete the three internet based courses for Structured English Immersion course for certified teachers that she developed. Ninety AAEE and AA degrees have been awarded to education focused students since the AAEE program began. Just this spring four of her education students were selected as All Arizona Academic Scholars and will receive tuition assistance from the AZ University they plan on attending next.

Sandy is a friendly, compassionate, and dedicated to her beliefs and values. She is likeable person who has served as a strong advocate for the students and the EDU program here at NPC. She enjoys teaching, including those still in the area high schools that have enrolled in her courses. She comments that she left the public school system after the first year of No Child Left Behind and can finally say that No Child Left Behind is no more and she is glad that "we are moving on to a more holistic view of learning and assessment!" Other recent accomplishments include

successfully working with Dine College administration and faculty on a MOU between Dine and NPC re: articulation of education and early childhood courses. This has been a long time goal of other faculty but through Sandy's persistence and effort the MOU has been achieved, awaiting NPC Board approval. She also has successfully worked with NAU bringing forth to reality the two plus two agreement with NAU which will result in better service for NPC 2 NAU transfer students.

Sandy has been actively involved in the NPC Faculty Association having served as Vice-President for 2008-2009 and then as President 2009-2010 school year. She has served on the Navajo County Education Service Agency Advisory Board and the Elementary Education Articulation Task Force (ATF). In these groups, she has held true to her beliefs and values and strongly served as an advocate for what she believes in best for students, faculty and staff. And she continues to be politically active in the community again participating as an advocate.

A currently enrolled student who in mid-life has decided to change careers and go into the field of education stated: "Sandy is more than an educator; she is a believer in education and the opportunities learning provides. She is a wealth of information and insight. Today's challenges in education ask for us to see beyond the pages of a text book and to use our experiences and good judgment as well as what we learn in her classes. She helps cultivate that within each of us, by sharing her insight and experiences and lessons learned in life. That extra effort assures us that we can make a difference, even in the most challenging of areas."

As Sandy's 48th year of teaching comes to an end at NPC, a discussion recently with one of her former students now enrolled at ASU in their Teacher Prep. Program, comes to mind. "Sandy is irreplaceable".

## 2016-17 BUDGET ANALYSIS

**Summary:**

The 2016-17 budget development process is on target. The Board approved budget calendar and the assumptions are included. The proposed preliminary budget will be presented for action on the official forms provided by the Office of the Auditor General. The following analysis is intended to provide overall context for the anticipated action items.

The proposed budget reflects alignment with the President’s initiatives and the Strategic Plan.

1. General fund revenues (estimate):

- Overall revenues are expected to increase \$169,914 compared to current fiscal year
- Primary property tax levied at the maximum rate, which is 2% higher than current year tax levy and will require a truth-in-taxation hearing. The proposed rate is \$1.7884/\$100 NAV compared to the current rate of \$1.7423.
- Tuition is expected to increase \$100,000 compared to current fiscal year related to the approved increase of \$2 per credit hour.
- State aid, which includes maintenance and equalization, is expected to increase \$267,300, although the state of Arizona has not finalized their budget.

Revenue:	FY17 Amount	Change from FY16
Primary property tax (max levy)	\$14,361,969	-\$147,386
Tuition	\$4,700,000	+\$100,000
State aid	\$7,683,800	+\$267,300
Grants and contracts	\$1,800,000	No change
Investment earnings	\$140,000	No change
Other	\$200,000	No change
Transfers out	(\$2,800,000)	-\$50,000
<b>Revenues</b>	<b>\$26,085,769</b>	<b>+\$169,914</b>
Fund balance	\$377,250	+215,852
<b>TOTAL</b>	<b>\$26,463,019</b>	<b>+\$385,766</b>

2. General fund expenditures (excludes contingency):

- Compensation increase includes:
  - Board approved stipend for all contract employees; covering employee portion of health insurance and dental insurance, and additional contribution to health savings account for employees on the high deductible health plan
  - Employer portion of health insurance increase of 12-13 percent
  - Employer portion of Arizona State Retirement System increase of .01%

<b>Expenditures:</b>	<b>FY17 Amount</b>	<b>Change from FY16</b>
Compensation increase	\$18,191,493	+\$492,200
All other operating expenditures	\$8,271,526	-\$106,434
<b>TOTAL</b>	<b>\$26,463,019</b>	<b>+385,766</b>

3. Unrestricted plant fund (capital):

a. Revenues & expenditures:

State STEM Aid	\$353,700	+8,200
General fund transfer	\$2,000,000	No change
Fund balance	\$3,000,000	+\$200,000
<b>TOTAL</b>	<b>\$5,353,700</b>	<b>+\$208,200</b>
Capital expenditures	\$5,353,700	+\$208,200
<b>TOTAL</b>	<b>\$5,353,700</b>	<b>+\$208,200</b>

4. Restricted fund (grants and student federal financial aid)

- a. General fund transfer remains same
- b. Continue to identify grant opportunities

5. Auxiliary fund

- a. General fund transfer increased \$50,000
- b. Corporate Training is expected to continue to grow
- c. Non-credit courses will continue to be offered
- d. Bookstore revenues are declining
- e. Other auxiliary activities remaining steady

6. Expenditure limitation - Staff anticipates the expenditure limit will be breached in FYE 2016; however, carry-forward will be used. SB1322 was recently signed by the Governor which will help with the expenditure limit in the future.

# STRATEGIC PLANNING AND BUDGET DEVELOPMENT CALENDAR

FISCAL YEAR 2016 – 2017

REVISED

ACTIVITY	RESOURCE	DUE BY
1. Receive & approve calendar	DGB	✓15 September
2. Receive draft strategic plan	DGB	✓15 September
3. Approve strategic plan	DGB	✓20 October
4. Develop operational plans	SPASC	✓21 October
<b>5. Receive preliminary budget assumptions/guidelines</b>	<b>DGB</b>	<b>✓17 November</b>
6. Executive team receives operational plans	SPASC	✓11 December
<del>7. ERC receives wage/salary recommendations</del>	<del>FA-CASO</del>	<del>11 December</del>
8. Receive and approve budget assumptions & overview	DGB	✓15 December
9. Review current strategic plan/budget at convocation	SPASC	✓4 January 2016
10. Solicit input for upcoming strategic plan at convocation	SPASC	✓4 January
11. Distribute budget materials for operational & capital	Director Fin Svcs	✓5 January
<del>12. College Council receives wage &amp; salary recommendation</del>	<del>ERC/FA-CASO</del>	<del>8 January</del>
13. President receives wage & salary recommendations	College Council ERC/FA CASO	✓4 5 February
14. Executive team receives budget requests	Department Managers	✓4 February
15. Review of operational & capital plans/budget requests	Executive Team	✓8 February
16. Receive introductory budget analysis	DGB	✓16 February
17. Receive wage and salary recommendation	DGB	✓16 February
18. Receive tuition and fee schedules	DGB	✓16 February
19. Budget hearings	SPASC	✓29 February
20. Receive preliminary budget analysis	DGB	✓22 15 March
21. Receive operational plans	DGB	✓22 15 March
22. Approve salary schedules	DGB	✓22 15 March
23. Approve tuition and fee schedules	DGB	✓22 15 March
24. Receive complete budget analysis	DGB	✓12 April
25. Adopt tentative budgets & approve publication	DGB	✓12 April
26. Publish notice of budget public hearing/TNT hearing	VP Adm Svcs	28 April
27. Develop priorities for upcoming strategic plan	DGB	29 April
28. Publish notice of TNT hearing (2)	VP Adm Svcs	5 May
29. Publish notice of budget public hearing (2)/TNT hearing (3)	VP Adm Svcs	10 May
30. Conduct taxpayer public hearings	DGB	17 May
31. Adopt property tax levy and final budgets	DGB	17 May
32. Notify PTOC of primary property tax levy	VP Adm Svcs	20 May
33. Submit tax levy to Navajo County	VP Adm Svcs	20 May
34. Develop upcoming strategic plan draft	SPASC	July 29
35. Present strategic plan report & new draft at convocation	SPASC	August 15
36. Receive input for future strategic plans at convocation	SPASC	August 15
37. Receive annual report on strategic planning	DGB	August 16 2016

**Northland Pioneer College**  
**Preliminary Budget Development Assumptions**  
**FY 2016-17**

**GENERAL ASSUMPTIONS**

- Budget Development Calendar will be followed
- Introductory budget analysis for DGB in February will be prior to budget hearings and will be limited to an overview of expenditure and revenue trends.
- Preliminary budget analysis for DGB in March will include a detailed examination of budget planning similar to prior year preliminary budget analyses
- Statutory Expenditure Limit will be breached.
- Carry-forward is available to address short-term issues and expenditures will not be restricted by statutory expenditure limitations, however, identification and recommendation for cost savings actions will be identified

**REVENUE ASSUMPTIONS**

- Overall revenues are expected to remain relatively flat compared to current fiscal year.
- State funding, based on the FY16-17 requested budget, is expected to increase \$265,100 on a net basis. This is relatively flat compared to the current fiscal year and equates to 1% of the General Fund budget for the current year. Equalization Funding would increase \$243,500 and Operational State Aid would increase \$21,600.
- Each \$1 increase in tuition is estimated to generate \$50,000 in additional revenue - tuition and general fees will be set at a rate that
  - (A) Gives consideration to the impact on students, student enrollment, and student retention rates
  - (B) Increases incrementally
  - (C) Is competitive in our market by maintaining a comparative position to the average overall tuition and general fees at other Arizona community colleges
- Course fees will be set at a rate calculated to offset expendable supplies and equipment
- Primary property tax will be levied at the maximum rate, which is two percent higher than current year tax plus new construction and will require a truth-in-taxation hearing.
- Other revenues will be estimated based on historical information and emerging trends

## EXPENDITURE ASSUMPTIONS

- Overall general fund expenditures are expected to be flat or decrease compared to current fiscal year
- Items in budget requests will be linked to the current **NPC Strategic Plan** through operational plans developed at the division or departmental level. Any budget amounts that are higher than current budget **or** actual historical spending will require **justification and will be reviewed during the budget hearing process.**
- Budget requests from Department Managers for operational and capital expenditures will be completed by **Thursday, February 4, 2016.**
  
- SALARY SCHEDULES will be developed with
  - (A) Incrementally increasing rates
  - (B) Consideration to competitive market conditions with the goal to maintain a comparative position to the average increases/rates at other local public entities, other Arizona community colleges, and other similar institutions.
  - (C) Consideration to salary recommendations received through the shared governance process
- BENEFITS will be developed with
  - (A) No major changes expected in plan benefit structure or options
  - (B) Consideration on impacts from third-party partnerships
    - (1) Navajo County Schools Employee Benefit Trust for medical and dental insurance
    - (2) Arizona State Retirement System for retirement contributions
- Education partner relationships will be maintained
  - (A) Apache County
  - (B) NAVIT
  - (C) Dual enrollment
  - (D) Other
- CAPITAL budget requests will be developed for a three-year period (2016 – 2019).
- GRANT funding will continue to be identified and pursued
- AUXILIARY fund activities will be maintained

**Northland Pioneer College  
Preliminary Budget Development Assumptions  
FY 2016-17**

**Budget Categories & Targets:**

Revenues	<ul style="list-style-type: none"> <li>• Budget will be prepared by Administrative Services</li> </ul>
Salaries/Wages & Benefits	<ul style="list-style-type: none"> <li>• Budget will be prepared by Administrative Services <b>except</b> for the following wages that budget managers will <b>include in budget requests</b>: <ul style="list-style-type: none"> <li>○ Adjunct faculty</li> <li>○ Faculty overload</li> <li>○ Temporary employee</li> <li>○ Lab aid</li> <li>○ Substitute faculty</li> </ul> </li> </ul>
Operating Expenditures	<ul style="list-style-type: none"> <li>• Funding expected to remain level in FY 2016-17.</li> <li>• Budget requests should reflect only those items identified in division or departmental operational plans.</li> <li>• Any new programs/services must demonstrate linkage to the adopted strategic plan.</li> </ul>
Capital Expenditures	<ul style="list-style-type: none"> <li>• All requests for funding will be linked to revenues from the operational budget, grant funds, or reserved funds.</li> <li>• Minimal state funding for STEM is expected to continue.</li> </ul>



## PRIMARY PROPERTY TAX LEVY

### Summary:

The preliminary budget includes primary property taxes levied at the maximum. The maximum levy is a 2 percent increase over the prior year, excluding new construction. When the levy is set at the maximum a Truth in Taxation hearing is required. What is unusual this year is that new construction for Navajo County is a negative \$24,447,582, which decreases the levy (or revenues) NPC will receive even though the levy is set at the maximum. The negative new construction in Navajo County is partly related to closures at the Cholla Power Plant and the Peabody coal mine.

The 2016 Levy Limit worksheet is attached listing the maximum levy as \$14,361,969 and a rate of \$1.7884. This is a decrease of \$147,386 from the current year levy. A Truth in Taxation hearing along with publication of notices will be required. Documentation received from the Property Tax Oversight Commission is included.

Truth in Taxation notices will be published in the Holbrook Tribune-News and the White Mountain Independent. A notice of the scheduled Truth in Taxation hearing will also be published and sent as a news release to all area media outlets. The news release will also present supporting information for the proposed increase. Staff will seek input regarding the scheduling of the Truth in Taxation hearing, which needs to occur prior to final action on the primary property tax levy.

Staff recommends increasing the levy to the maximum rate in order to demonstrate a continuing and consistent local willingness to support the operations of the District, to recognize the value of the educational opportunities provided to communities and individuals throughout Navajo County, and to provide necessary current and future funding.

The Board approved the Budget Development assumptions and guidelines including a determination to levy at the maximum rate. However, the Board can levy the primary property tax at a level below the maximum rate, including setting the rate at a level that does not require a Truth-in-Taxation hearing. The attached 2016 Truth in Taxation analysis shows the calculation if the levy was set at a level that would not require a hearing. The rate of \$1.7534 would result in a levy of \$14,080,897 which is decrease from prior year of \$428,664 associated with the negative new construction.

Final action on the primary property tax levy will be taken at a special meeting on May 17, 2016, following Truth in Taxation and budget hearings. The levy can be decreased but not increased at that time.

Graphs providing historical property tax levy and rate information are also included.

## 2016 LEVY LIMIT WORKSHEET

<b>NAVAJO COUNTY - NORTHLAND PIONEER COLLEGE</b>
--

<b>MAXIMUM LEVY</b>	<b>2015</b>
A.1. Maximum Allowable Primary Tax Levy	\$14,509,355
A.2. A.1 multiplied by 1.02	\$14,799,542

<b>CURRENT YEAR NET ASSESSED VALUE SUBJECT TO TAXATION IN PRIOR YEAR</b>	<b>2016</b>
B.1. Centrally Assessed	\$253,961,384
B.2. Locally Assessed Real Property	\$559,287,226
B.3. Locally Assessed Personal Property	\$14,261,438
B.4. Total Assessed Value (B.1 through B.3)	\$827,510,048
B.5. B.4. divided by 100	\$8,275,100

<b>CURRENT YEAR NET ASSESSED VALUES</b>	<b>2016</b>
C.1. Centrally Assessed	\$222,928,447
C.2. Locally Assessed Real Property	\$565,872,581
C.3. Locally Assessed Personal Property	\$14,261,438
C.4. Total Assessed Value (C.1 through C.3)	<b>\$803,062,466</b>
C.5. C.4. divided by 100	\$8,030,625

<b>LEVY LIMIT CALCULATION</b>	<b>2016</b>
D.1. LINE A.2	\$14,799,542
D.2. LINE B.5	\$8,275,100
<b>D.3. D.1/D.2 (MAXIMUM ALLOWABLE TAX RATE)</b>	<b>1.7884</b>
D.4. LINE C.5	\$8,030,625
<b>D.5. D.3 multiplied by D.4 = MAXIMUM ALLOWABLE LEVY LIMIT</b>	<b>\$14,361,969</b>
D.6. Excess Collections/Excess Levy	
D.7. Amount in Excess of Expenditure Limit	
<b>D.8. ALLOWABLE LEVY LIMIT (D.5 - D.6 - D.7)</b>	<b>\$14,361,969</b>

<i>2016 New Construction</i>	(\$24,447,582)
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<i>Prior year actual levy (from line F.1 of the 2015 worksheet)</i>	\$14,509,355
<i>Divided by current values excluding new construction per line B.5</i>	\$8,275,100
<b>Truth in Taxation Rate</b>	<b>1.7534</b>

*If the proposed tax rate is greater than the Truth in Taxation Rate noted above, a truth in taxation hearing must be held. (see A.R.S. § 42-17107)*

**Note: The values certified by the County Assessor cannot be changed after February 10 without the approval of the Property Tax Oversight Commission pursuant to § 42-17051.A. Therefore, the total net assessed values per line C.4 must be used when adopting a primary property tax levy and tax rate.**

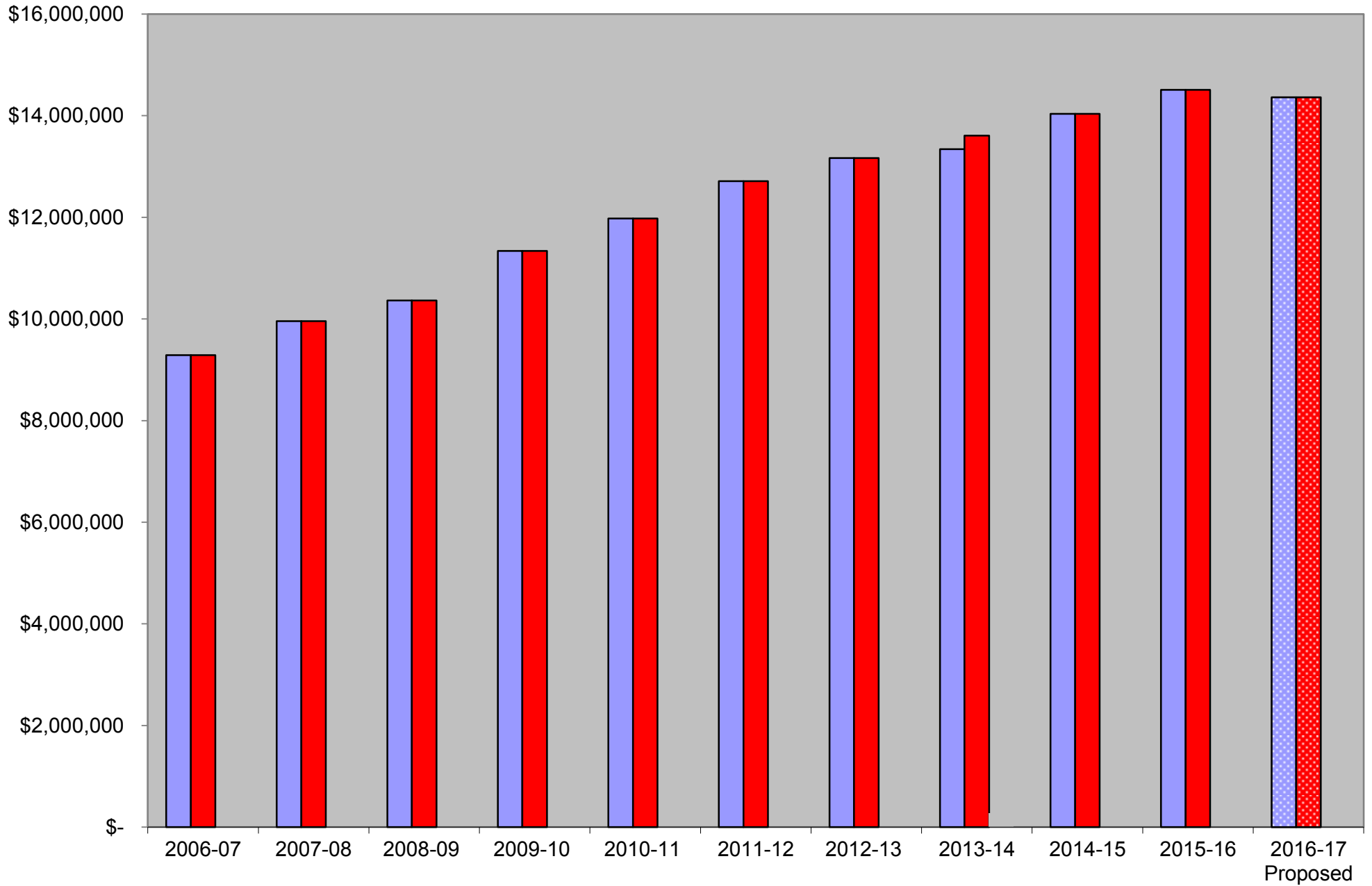
*For questions, contact Darlene Teller at (602) 716-6436 or dteller@azdor.gov.*

# Truth in Taxation Analysis

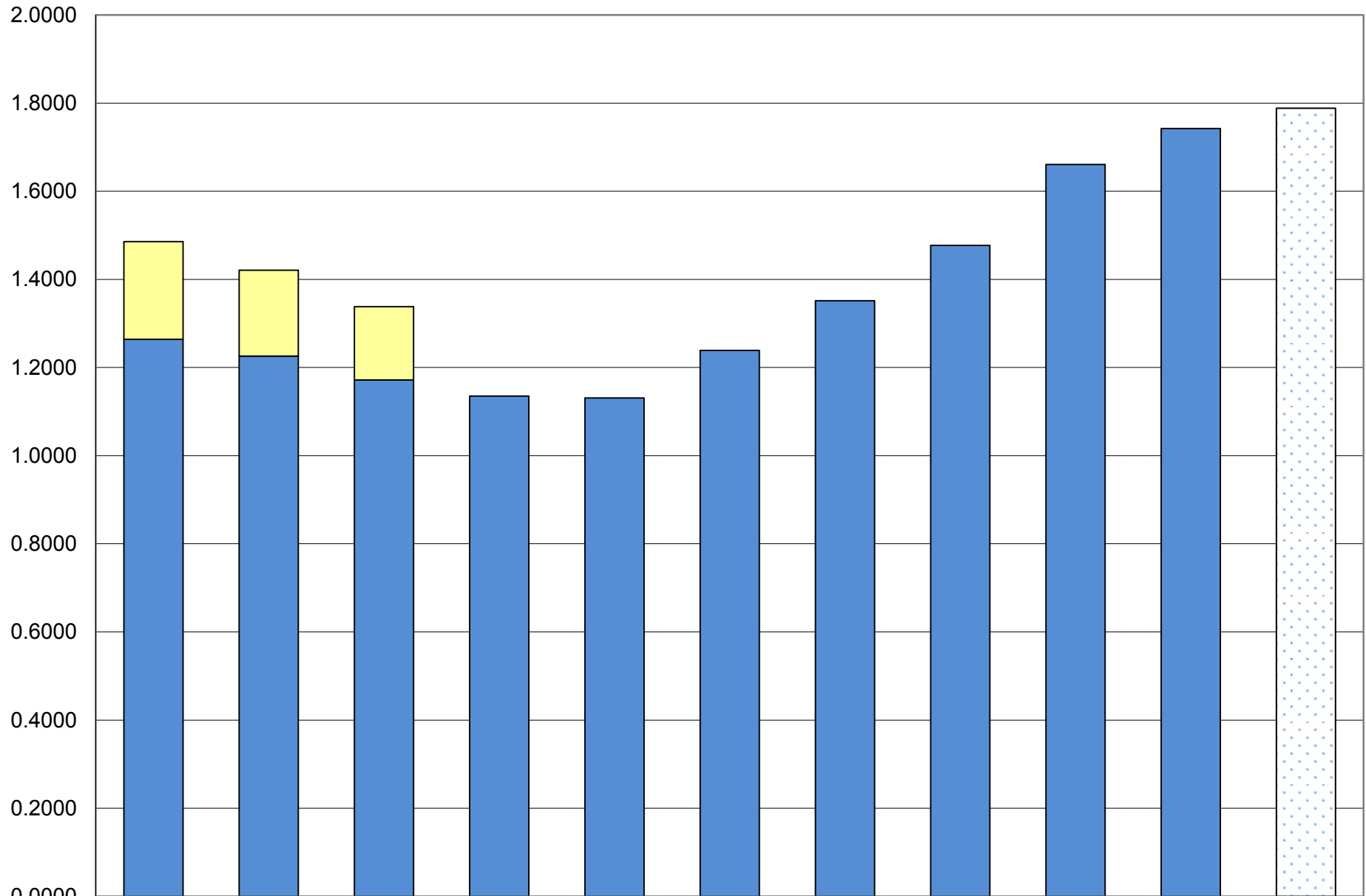
Calculation for Truth in Taxation Hearing Notice pursuant to A.R.S. § 42-17107

Actual current primary property tax levy: <i>(line F.1. actual levy from prior year's final levy limit worksheet)</i>	\$ 14,509,355
Net assessed valuation: <i>(line C.4. from current year's worksheet)</i>	\$ 803,062,466
Value of new construction:	\$ (24,447,582)
Net assessed value minus new construction: <i>(line B.4. from current year's levy limit worksheet)</i>	\$ 827,510,048
MAXIMUM TAX RATE THAT CAN BE IMPOSED WITHOUT A TRUTH IN TAXATION HEARING:	\$ 1.7534
Growth in property tax levy capacity associated with new construction:	\$ (428,664)
MAXIMUM PRIMARY PROPERTY TAX LEVY WITHOUT A TRUTH IN TAXATION HEARING:	\$ 14,080,897
Proposed primary property tax levy:	\$ 14,361,969
Proposed increase in primary property tax levy, exclusive of new construction	\$ 281,072
Proposed percentage increase in primary property tax levy:	2.0%
Proposed primary property tax rate:	\$ 1.7884
Proposed increase in primary property tax rate:	\$ 0.0350
Proposed primary property tax levy on a home valued at \$100,000	\$ 178.84
Primary property tax levy on a home valued at \$100,000 if the tax rate was not raised:	\$ 175.34
Proposed primary property tax levy increase on a home valued at \$100,000:	\$ 3.50

# NPC Primary Maximum Property Tax Levy compared to Actual Levy

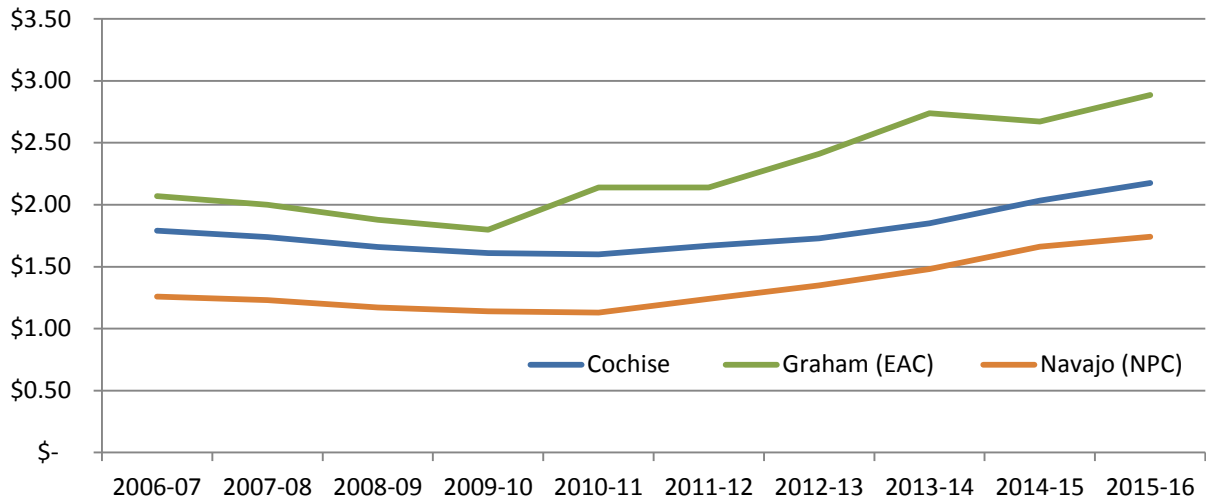


## NPC Historical Property Tax Rates



	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17 Proposed
Secondary	0.2219	0.1949	0.1663	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Primary	1.2639	1.2257	1.1719	1.1352	1.1308	1.2387	1.3515	1.4769	1.6610	1.7423	1.7884

## Primary Property Tax Rates for Equalization CCs



## REQUEST TO APPROVE 2016-17 PRELIMINARY BUDGET

### **Recommendation:**

Staff recommends approval of the 2016-2017 Preliminary Budget as presented.

### **Summary:**

Staff will review the budget with the Board and will answer questions. The budget can be reduced, but cannot be increased at the Board meeting on May 17, 2016. The preliminary budget as approved by the District Governing Board will be published prior to the budget hearing according to statutory requirements. Notices about the budget hearing will be published on the NPC website, in the Holbrook Tribune and in the White Mountain Independent. A notice of the hearing scheduled for May 17 will also be published and sent as a news release to all area media outlets.

The preliminary budget includes operational and staffing adjustments based on the NPC Strategic Plan approved by the District Governing Board along with Board discussions throughout the budget development process. Extensive involvement at the department and executive level produced the attached budget proposal following the approved budget development calendar, assumptions and guidelines.

Revenue estimates discussed in the regular March 2016 Board meeting have been finalized and have been included on the attached official budget forms. The preliminary budget reflects the maximum primary property tax levy along with all other budget assumptions previously approved by the Board.

Although the Arizona State Budget is not final, NPC anticipates it will receive the amounts included in the preliminary budget. Both operating state aid and equalization aid in total will increase revenues \$267,300 or almost four percent. Capital equipment funding for STEM activities will increase revenues \$8,200 or two percent.

Expenditure targets have been updated as a result of the completion of all budget hearings. The Board decision from March related to the stipend and paying for employing portion of medical and dental insurance costs are also included in the preliminary budget.

Staff anticipates the expenditure limit will be breached in FYE 2017, but carry-forward balances will cover the excess.

**OFFICIAL BUDGET FORMS  
NAVAJO COUNTY COMMUNITY COLLEGE DISTRICT  
NORTHLAND PIONEER COLLEGE  
FISCAL YEAR 2017**



**NAVAJO COUNTY COMMUNITY COLLEGE DISTRICT  
NORTHLAND PIONEER COLLEGE  
BUDGET FOR FISCAL YEAR 2017  
SUMMARY OF BUDGET DATA**

	<b>Budget 2017</b>	<b>Budget 2016</b>	<b>Increase/Decrease From Budget 2016 To Budget 2017</b>	
			<b>Amount</b>	<b>%</b>
<b>I. CURRENT GENERAL AND PLANT FUNDS</b>				
A. Expenditures:				
Current General Fund	\$ 26,463,019	\$ 26,077,253	\$ 385,766	1.5%
Unexpended Plant Fund	5,353,700	5,145,500	208,200	4.0%
Retirement of Indebtedness Plant Fund				
TOTAL	\$ 31,816,719	\$ 31,222,753	\$ 593,966	1.9%
B. Expenditures Per Full-Time Student Equivalent (FTSE):				
Current General Fund	\$ 13,232 /FTSE	\$ 13,373 /FTSE	\$ (141) /FTSE	-1.1%
Unexpended Plant Fund	\$ 2,677 /FTSE	\$ 2,639 /FTSE	\$ 38 /FTSE	1.4%
Projected FTSE Count	2,000	1,950		
<b>II. TOTAL ALL FUNDS ESTIMATED PERSONNEL COMPENSATION</b>				
Employee Salaries and Hourly Costs	\$ 14,736,058	\$ 14,651,144	\$ 84,914	0.6%
Retirement Costs	1,562,910	1,561,637	1,273	0.1%
Healthcare Costs	1,792,560	1,488,040	304,520	20.5%
Other Benefit Costs	1,346,602	1,360,976	(14,374)	-1.1%
TOTAL	\$ 19,438,130	\$ 19,061,797	\$ 376,333	2.0%
<b>III. SUMMARY OF PRIMARY AND SECONDARY PROPERTY TAX LEVIES AND RATES</b>				
A. Amount Levied:				
Primary Tax Levy	\$ 14,361,969	\$ 14,509,355	\$ (147,386)	-1.0%
Secondary Tax Levy				
TOTAL LEVY	\$ 14,361,969	\$ 14,509,355	\$ (147,386)	-1.0%
B. Rates Per \$100 Net Assessed Valuation:				
Primary Tax Rate	1.7884	1.7423	0.0461	2.6%
Secondary Tax Rate				
TOTAL RATE	1.7884	1.7423	0.0461	2.6%
<b>IV. MAXIMUM ALLOWABLE PRIMARY PROPERTY TAX LEVY FOR FISCAL YEAR 2017 PURSUANT TO A.R.S. §42-17051</b>				\$ 14,361,969
<b>V. AMOUNT RECEIVED FROM PRIMARY PROPERTY TAXES IN FISCAL YEAR 2016 IN EXCESS OF THE MAXIMUM ALLOWABLE AMOUNT AS CALCULATED PURSUANT TO A.R.S. §42-17051</b>				\$ _____

**NAVAJO COUNTY COMMUNITY COLLEGE DISTRICT  
NORTHLAND PIONEER COLLEGE  
BUDGET FOR FISCAL YEAR 2017  
RESOURCES**

	CURRENT FUNDS			PLANT FUNDS		Other Funds 2017	Total All Funds 2017	Total All Funds 2016	% Increase/ Decrease
	General Fund 2017	Restricted Fund 2017	Auxiliary Fund 2017	Unexpended Plant Fund 2017	Retirement of Indebtedness 2017				
<b>BEGINNING BALANCES-July 1*</b>									
Restricted	\$	\$	\$	\$	\$	\$	\$	\$ 600,000	-100.0%
Unrestricted	15,900,000			9,500,000			25,400,000	45,100,000	-43.7%
Total Beginning Balances	\$ 15,900,000	\$	\$	\$ 9,500,000	\$	\$	\$ 25,400,000	\$ 45,700,000	-44.4%
<b>REVENUES AND OTHER INFLOWS</b>									
Student Tuition and Fees									
General Tuition	\$ 2,900,000	\$	\$	\$	\$	\$	\$ 2,900,000	\$ 2,800,000	3.6%
Out-of-District Tuition									
Out-of-State Tuition	100,000						100,000	100,000	
Student Fees	700,000						700,000	700,000	
Tuition and Fee Remissions or Waivers	1,000,000						1,000,000	1,000,000	
State Appropriations									
Maintenance Support	1,606,000						1,606,000	1,582,200	1.5%
Equalization Aid	6,077,800						6,077,800	5,834,300	4.2%
Capital Support				353,700			353,700	345,500	2.4%
Property Taxes									
Primary Tax Levy	14,361,969						14,361,969	14,470,753	-0.8%
Secondary Tax Levy									
Gifts, Grants, and Contracts	1,800,000	6,000,000					7,800,000	7,800,000	
Sales and Services									
Investment Income	140,000						140,000	140,000	
State Shared Sales Tax		400,000					400,000	400,000	
Other Revenues	200,000		450,000				650,000	700,000	-7.1%
Proceeds from Sale of Bonds									
Total Revenues and Other Inflows	\$ 28,885,769	\$ 6,400,000	\$ 450,000	\$ 353,700	\$	\$	\$ 36,089,469	\$ 35,872,753	0.6%
<b>TRANSFERS</b>									
Transfers In		600,000	200,000	2,000,000			2,800,000	2,750,000	1.8%
(Transfers Out)	(2,800,000)						(2,800,000)	(2,750,000)	1.8%
Total Transfers	(2,800,000)	600,000	200,000	2,000,000					
Less:									
Governing Board Designations	(2,291,240)	(400,000)					(2,691,240)	(22,061,373)	-87.8%
Policy 1924 - Cash Reserve	(13,231,510)						(13,231,510)	(13,038,627)	1.5%
Policy 1926 - Future Capital Reserve				(6,500,000)			(6,500,000)	(8,000,000)	-18.8%
<b>Total Resources Available for the Budget Year</b>	\$ 26,463,019	\$ 6,600,000	\$ 650,000	\$ 5,353,700	\$	\$	\$ 39,066,719	\$ 38,472,753	1.5%

\*These amounts exclude amounts not in spendable form (i.e., prepaids, inventories, and capital assets) or amounts legally or contractually required to be maintained intact.

**NAVAJO COUNTY COMMUNITY COLLEGE DISTRICT  
NORTHLAND PIONEER COLLEGE  
BUDGET FOR FISCAL YEAR 2017  
EXPENDITURES AND OTHER OUTFLOWS**

**TOTAL RESOURCES AVAILABLE FOR THE BUDGET YEAR** (from Schedule B)

**EXPENDITURES AND OTHER OUTFLOWS**

Instruction  
Public Service  
Academic Support  
Student Services  
Institutional Support (Administration)  
Operation and Maintenance of Plant  
Scholarships  
Auxiliary Enterprises  
Capital Assets  
Debt Service-General Obligation Bonds  
Debt Service-Other Long Term Debt  
Other Expenditures  
Contingency  
  
Total Expenditures and Other Outflows

	CURRENT FUNDS			PLANT FUNDS		Other Funds 2017	Total All Funds 2017	Total All Funds 2016	% Increase/Decrease
	General Fund 2017	Restricted Fund 2017	Auxiliary Fund 2017	Unexpended Plant Fund 2017	Retirement of Indebtedness 2017				
\$ 26,463,019	\$ 6,600,000	\$ 650,000	\$ 5,353,700	\$	\$	\$ 39,066,719	\$ 38,472,753	1.5%	
\$ 10,446,133	\$ 1,400,000	\$	\$	\$	\$	\$ 11,846,133	\$ 11,459,741	3.4%	
	20,000					20,000	20,000		
1,108,841						1,108,841	1,097,567	1.0%	
1,826,180	650,000					2,476,180	2,357,284	5.0%	
8,428,518	30,000					8,458,518	7,908,662	7.0%	
1,709,072						1,709,072	1,687,028	1.3%	
1,944,275	4,500,000					6,444,275	6,444,275		
		650,000				650,000	650,000		
			5,353,700			5,353,700	5,145,500	4.0%	
1,000,000						1,000,000	1,702,696	-41.3%	
\$ 26,463,019	\$ 6,600,000	\$ 650,000	\$ 5,353,700	\$	\$	\$ 39,066,719	\$ 38,472,753	1.5%	

# ECONOMIC ESTIMATES COMMISSION

Department of Revenue Building



Douglas A. Ducey  
Governor

David Briant  
Chairman

Elliott D. Pollack  
Member

Alan E. Maguire  
Member

March 31, 2016

Community College Business Officials  
State of Arizona

## RE: Final FY 2016/17 Expenditure Limits

The final fiscal year 2016/17 expenditure limits for all community colleges are being supplied in accordance with Article IX, Section 21, Constitution of Arizona and A.R.S. § 41-563.

The fiscal year 1979/80 base limits have been adjusted for changes in the population and the cost of living between 1978 and 2015. The formula is shown below.

$$\frac{\text{2016/17 Population (estimate)}}{\text{1978 Population}} \times \frac{\text{GDP Implicit Price Deflator 2015}}{\text{GDP Implicit Price Deflator 1978}} \times \text{FY 1979/80 Base Limit} = \text{Final FY 2016/17 Expenditure Limit}$$

Please contact Karen Jacobs in Economic Research and Analysis at (602) 716-6923 if you have any questions.

Sincerely,

ECONOMIC ESTIMATES COMMISSION

A handwritten signature in black ink, appearing to read "David Briant".

David Briant, Chairman

**FINAL FY 2016/17 EXPENDITURE LIMITS: COMMUNITY COLLEGES**

COMMUNITY COLLEGE DISTRICT	POPULATION**		POPULATION FACTOR	INFLATION FACTOR*	FY 1979/80 BASE LIMIT	FINAL FY 2016/17 EXPENDITURE LIMITATION
	2016/17	1979/80				
COCHISE	6,000	2,156	2.7829	2.9194	\$6,038,815	<b>\$49,062,166</b>
COCONINO	2,065	1,000	2.0650	2.9194	\$2,459,758	<b>\$14,828,763</b>
GILA	725	905	0.8011	2.9194	\$1,948,412	<b>\$4,556,829</b>
GRAHAM	3,250	1,329	2.4454	2.9194	\$4,508,230	<b>\$32,185,254</b>
MARICOPA	80,678	27,299	2.9553	2.9194	\$52,841,755	<b>\$455,908,951</b>
MOHAVE	2,750	1,033	2.6621	2.9194	\$3,163,993	<b>\$24,590,105</b>
NAVAJO	2,000	1,566	1.2771	2.9194	\$3,716,543	<b>\$13,857,022</b>
PIMA	20,000	11,038	1.8119	2.9194	\$19,071,763	<b>\$100,884,152</b>
PINAL	5,000	2,452	2.0392	2.9194	\$7,534,121	<b>\$44,851,258</b>
SANTA CRUZ	325	700	0.4643	2.9194	\$1,507,059	<b>\$2,042,716</b>
YAVAPAI	3,860	1,568	2.4617	2.9194	\$5,759,613	<b>\$41,393,014</b>
YUMA/LA PAZ	5,500	1,952	2.8176	2.9194	\$6,215,322	<b>\$51,125,670</b>
<b>TOTAL</b>	<b>132,153</b>	<b>52,998</b>	<b>2.4935</b>		<b>\$114,765,384</b>	<b>\$835,285,901</b>

\* SOURCE: BEA March 2016 - (2015 GDP Implicit Price Deflator/1978 GDP Implicit Price Deflator) = 109.775 / 37.602

\*\* FTSE counts are provided by Community College Business Officials.

## REQUEST TO APPROVE 2016-19 PRELIMINARY CAPITAL BUDGET

**Recommendation:**

Staff recommends approval of the 2016-19 Preliminary Capital Budget as presented.

**Summary:**

The preliminary budget as approved by the District Governing Board will guide capital project planning for the next three years. The first year of the preliminary capital budget is incorporated into the 2016-17 preliminary annual budget. The budget is based on the NPC Strategic Plan approved by the District Governing Board along with involvement at the division and department levels.

Funding has been identified as a combination of current fund balances, contributions from ongoing general fund operating revenues and state appropriations for STEM funding. STEM funding will be used for capital equipment purchases. Staff anticipates STEM to be funded at the levels included in this preliminary budget but if it isn't sufficient fund balance is available.

**Northland Pioneer College  
Capital Fund (50) Budget  
FY1617 Budget Cycle**

	<b>FY1516 Budget</b>	<b>FY1617 Budget</b>	<b>FY1718 Budget</b>	<b>FY1819 Budget</b>	
<b>Fund Balance</b>	2,800,000	3,000,000	4,000,000	2,500,000	
<b>Transfer from Operating Fund</b>	2,000,000	2,000,000	2,000,000	2,000,000	
<b>State Funding - STEM</b>	345,500	353,700	350,000	300,000	
<b>Annual Capital Funding</b>	<u>5,145,500</u>	<u>5,353,700</u>	<u>6,350,000</u>	<u>4,800,000</u>	
<b>Annual Capital Requirements</b>					
Building Maintenance	814,800	750,000	750,000	750,000	
Strategic Plans	-	150,000	15,000	-	
<b>Total - Annual Requirements</b>	<u>814,800</u>	<u>900,000</u>	<u>765,000</u>	<u>750,000</u>	
<b>Annual Capital Requests</b>					
Administrative Services	1,707,000	1,509,500	1,875,000	1,874,000	\$8.4M WMC Expansion - On Hold
Student Services	55,000	55,000	55,000	55,000	
IS	1,371,500	1,979,789	2,367,500	1,351,000	
Instruction:					
Arts & Science	-	-	-	-	
CTE	301,000	155,500	223,000	70,000	
Nursing	125,000	35,000	320,000	-	
<b>Total - Annual Requests</b>	<u>3,559,500</u>	<u>3,734,789</u>	<u>4,840,500</u>	<u>3,350,000</u>	
<b>Contingency</b>	<u>771,200</u>	<u>718,911</u>	<u>744,500</u>	<u>700,000</u>	
<b>Total Expenses</b>	<u>5,145,500</u>	<u>5,353,700</u>	<u>6,350,000</u>	<u>4,800,000</u>	
<b>Surplus/(Deficit)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

**Northland Pioneer College  
Capital Budget  
FY1617 - FY1819**

Sorted by Division

Div	Dept	Dept #	Object Code	FY1617 Budget Request \$	FY17/18 Budget Request \$	FY18/19 Budget Request \$	Description of Capital Item(s) Requested	Justification for Request	SPASC Initiative & Priority	Postponed? Y/N
ANN REQMNT	ADM SVC MAINT	6100	5610	750,000	750,000	750,000	Annual Building Maintenance	Annual Capital Requirements - backlog of maintenance items		No
<b>ANN REQMNT</b>	<b>Annual Required Capital Total</b>			<b>750,000</b>	<b>750,000</b>	<b>750,000</b>				
CONTINGENCY	VP Admin	5060		718,911	744,500	700,000	Contingency			
<b>CONTINGENCY</b>	<b>Contingency Total</b>			<b>718,911</b>	<b>744,500</b>	<b>700,000</b>				
SPASC	MARKETING	5920	5615	135,000	-	-	Rebuild entire www.NPC.edu site in Drupal 8 software, make site mobile friendly, improve user experience and SEO results.  Project may be finalized in FY1718.	<b>SPASC Initiative &amp; Priority</b> - Site has not been redesigned since 2009 and is not mobile friendly.	Strategic Priority II - To improve the user experience with technology, the college will enhance technology professional development and improve the NPC website and MyNPC.	No
SPASC	IS	5070	5615	15,000	15,000	-	Retention Management Software Consulting	<b>SPASC Initiative &amp; Priority</b> Consulting for software implementation	Technical Support for the Community College	No
<b>SPASC</b>			<b>SPASC Total</b>	<b>150,000</b>	<b>15,000</b>	<b>-</b>				
ADM SVC	MAINT	6100	5610	1,250,000	1,800,000	1,799,000	Annual Maintenance & Master Facilities Projects	In addition to capital budget for ongoing maintenance a "catch-up" campaign is needed to bring facilities up to standards college-wide. Also, includes some projects identified in the Master Facilities report.		No
ADM SVC	MAINT	6100	5108	50,000	50,000	50,000	Professional/Consulting Services	Architecture & Engineering Services		
ADM SVC	TRANS	5750	5645	25,000	25,000	25,000	Repaint maintenance and IS vehicles (4)	Vehicles rusting	Extend life of fleet	No
ADM SVC	TRANS	5750	5680	56,000	-	-	2 new minivans	Rotate fleet		
ADM SVC	TRANS	5750	5680	38,500	-	-	1 new passanger van (holds 15)	Student use		
ADM SVC	TRANS	5750	5680	45,000	-	-	1 new maintenance truck	Vehicle 20 yrs old; parts not available after 10		No
ADM SVC	TRANS - IS	5750	5680	45,000	-	-	IS Double Cab Truck; Tower Climbing Equip			
ADM SVC	MAINT	6100	5610	-	-	-	WMC Expansion Phase I FY17/18 Phase II FY18/19  Project on Hold \$8.4M	Relocation of off campus facility use plus addition of new programs and classrooms.		Yes
<b>ADM SVC</b>			<b>Admin Services Total</b>	<b>1,509,500</b>	<b>1,875,000</b>	<b>1,874,000</b>				
STUD SERV	LIBRARY	3500	5650	55,000	55,000	55,000	Materials in the library collection: print, audio, video	These materials support college-wide academic programs. They are for student and faculty research and instruction. It		No
	12 April 2016						Navajo County Community College District Governing Board		Packet Page 52	
<b>STUD SERV</b>			<b>Student Services Total</b>	<b>55,000</b>	<b>55,000</b>	<b>55,000</b>				



**Northland Pioneer College  
Capital Budget  
FY1617 - FY1819**

Sorted by Division

Div	Dept	Dept #	Object Code	FY1617 Budget Request \$	FY17/18 Budget Request \$	FY18/19 Budget Request \$	Description of Capital Item(s) Requested	Justification for Request	SPASC Initiative & Priority	Postponed? Y/N
IS	IS	5070	5615	225,000	250,000	275,000	Jenzabar Maintenance	Yearly Maintenance Contract	Technical Support for the Community College	No
IS	IS	5070	5615	45,000	45,000	45,000	NOLIJ Web Maintenance	Yearly Maintenance Contract	Technical Support for the Community College	No
IS	IS	5070	5615	17,500	18,000	18,500	HP Server Contracts from FY1314 budget	Yearly Maintenance Contract	Technical Support for the Community College	No
IS	IS	5070	5615	30,000	30,000	30,000	Jenzabar Consultants	Consultant training/update NPC Servers	Technical Support for the Community College	No
IS	IS	5070	5615	50,000	50,000	50,000	IS Professional Services	Outside Consultant as needed	Technical Support for the Community College	No
IS	IS	5070	5615	50,000	47,000	50,000	VMWare Support	Yearly Maintenance Contract	Technical Support for the Community College	No
IS	IS/Bus	5070	5615	15,000	15,000	15,000	Jenzabar Training hours (remote)	Support Business Office Jenzabar Users	Technical Support for the Community College	No
IS	IS	5070	5635	14,000	14,000	15,000	Commvault	Yearly Maintenance Contract	Technical Support for the Community College	No
IS	IS	5070	5600	68,500	68,500	70,000	9 Smartboards and Projectors (includes polycom & doc cameras)	9 Smart Classrooms - NEW, supports CTE and other divisions	Technical Support for the Community College	No
IS	IS	5070	5600	68,000	72,000	75,000	10 Smartboards & Projectors	Lifecycle Replacement	Technical Support for the Community College	No
IS	IS	5070	5620	180,000	180,000	180,000	Server Replacements @ 4 years	Update Aging Server/Blade Cycle	Technical Support for the Community College	No
IS	IS	5070	5620	60,000	200,000	150,000	Replace old routers, switches and AP's @ 6 years	Update Aging Routers, Switches, and Aps	Technical Support for the Community College	No
IS	IS	5070	5620	750,000	750,000	60,000	Upgrade WAN Links FY16/17 Phase II	Upgrade remaining WAN radio links for increased capacity at all other NPC owned network locations	Technical Support for the Community College	No
IS	IS	5070	5620	14,000	15,000	-	UPS (batteries for servers) lifecycle Replacements @ 5 years	Replace aging UPS systems	Technical Support for the Community College	No
IS	IS	5070	5620	25,000	-	-	SSO and Password Reset solution	Develop and incorporate a single sign on and password reset solution	Technical Support for the Community College	No
IS	IS	5070	5620	-	300,000	50,000	Upgrade Cisco Phone system environment	Replace aging phone system	Technical Support for the Community College	No
IS	IS	5070	5630	125,000	100,000	100,000	Computers @ 4 years (230)	Replace aging computers	Technical Support for the Community College	No
IS	IS	5070	5630	37,000	40,000	42,000	Printers @ 3 years	Replace aging printers	Technical Support for the Community College	No
IS	IS	5070	5630	30,000	30,000	30,000	Monitors @ 4 years	Replace aging monitors	Technical Support for the Community College	No
IS	IS	5070	5630	40,000	40,000	40,000	iPads (iPad lifecycle 4 years)	Replace some laptops with iPads to allow traveling staff to remain connected	Technical Support for the Community College	Yes
IS	IS	5070	5630	14,000	14,000	14,000	Thin Clients (6 year life cycle)	Replace aging Thin Clients	Technical Support for the Community College	No

**Northland Pioneer College  
Capital Budget  
FY1617 - FY1819**

Sorted by Division

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IS	IS/HR	5070	5630	30,000	-	-	Integrated Photo ID/Data Card for students and employees	IS/HR will work together to establish a system and process to generate student/employee data cards and IDs	Technical Support for the Community College	Yes
IS	CTE	5070	5630	5,000	-	-	3-D Printer	PDC-MET-Current Industry Standards	Technical Support for the Community College	Yes
IS-CTE	ATO	5070	5635	-	-	7,500	CDX Online Training 2 Years Fee	2 Years Fee	Technical Support for the Community College	No
IS-CTE	CON	5070	5635	-	-	5,000	Enroute Pro Software	5 more seats due to increased enrollment	Technical Support for the Community College	Yes
IS-CTE	IMO	5070	5630	-	30,000	-	Laptops and PC for IMO labs	replace computers at IMO Labs	Technical Support for the Community College	No
IS-CTE	FRS	5070	5630	20,000	-	-	Convert one classrooms at NATC into a video classroom	connect NATC to the rest of the campuses to allow us to participate in video conferences	Technical Support for the Community College	No
IS-CTE	FRS	5070	5630	-	25,000	-	Replace 3 smartboards	Lifetime replacement cycle	Technical Support for the Community College	No
IS-CTE	CCL	5070	5635	30,789	-	-	Xenegrade Registration & Marketing Software	Registration Process for CCL-Contracts, Kids College & All Non-Credit Courses	Technical Support for the Community College	Yes
IS	PAD	5700	5645	12,000	10,000	5,000	Replacement of aging and broken equipment	To maintain a professional print production for staff and students	Technical Support for the Community College	No
IS	PAD	5700	5316	24,000	24,000	24,000	Konica Minolta Copier Lease	Old Copier at end of life was replaced with new to continue professional production for our staff and students	Technical Support for the Community College	No
<b>IS</b>			<b>IS Total</b>	<b>1,979,789</b>	<b>2,367,500</b>	<b>1,351,000</b>				
CTE	AJS	1205	5645	-	-	20,000	Wrestling Mats	Replacements	Remove student barriers to current Industry standards.	No
CTE	ATO	1110	5645	5,500	-	-	40' Rolloff storage container	Will provide security and dry place for new and donated Engines and Transmissions	Remove student barriers to current Industry standards.	Yes one year
CTE	ATO	1110	5645	20,000	22,000	-	Three Scanners	Keep to Current Industry Standards	Remove student barriers to current Industry standards.	Yes
CTE	ATO	1110	5645	-	8,000	-	Air Compressor	Replacement of current one.	Remove student barriers to current Industry standards.	No
CTE	ATO	1110	5645	20,000	-	-	4 top and bottom toolboxes complete w/Tools	Keep up with the amount of students	Remove student barriers to current Industry standards.	No
CTE	ATO	1110	5645	20,000	20,000	-	2007 & up cars	Keep to current industry standards	Remove student barriers to current Industry standards.	No

**Northland Pioneer College  
Capital Budget  
FY1617 - FY1819**

Sorted by Division

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CTE	CON	1135	5630	-	10,000	-	Software Update additional seats enroute	Expnding training	Remove student barriers to current Industry standards.	Yes
CTE	FRS	1336	5645	30,000	-	-	Bullex Natural Gas Hoseline Training System w/ remote	Provides secondary fire prop for extended attack.	Remove student barriers to current Industry standards.	No
CTE	FRS	1336	5645	-	35,000	-	Bullex Natural Gas Vehicle fire training prop w/integrated smoke & sound effects option.	Provides secondary fire prop for extended attack.	Remove student barriers to current Industry standards.	No
CTE	FRS	1336	5645	-	15,000	-	Bullex Natural Gas Pressure Vessel fire training prop.	Provides secondary fire prop for extended attack.	Remove student barriers to current Industry standards.	No
CTE	FRS	1336	5645	-	-	50,000	Purchase used Fire truck	replace one of the current Fire Engine being used	Remove student barriers to current Industry standards.	No
CTE	IMO/MET	1155	5645	-	8,000	-	Robotic Competition Equipment	Equipment needed to host Robotic skills competition	Remove student barriers to current Industry standards.	No
CTE	IMO/MET	1155	5645	-	18,000	-	Hydraulic Trainer	to train the basci hydraulics theory	Remove student barriers to current Industry standards.	Yes
CTE	WLD	1170	5645	40,000	42,000	-	Welding Machines	Replace worn machines as part of facility maintenance	Remove student barriers to current Industry standards.	No
CTE	WLD	1170	5645	-	6,000	-	One Metal Brake	Provide new and different technology to welding students	Remove student barriers to current Industry standards.	Yes
CTE	WLD	1170	5645	20,000	-	-	Three- Millhogs	Replace worn machines as part of facility maintenance	Remove student barriers to current Industry standards.	No
CTE	WLD	1170	5645	-	39,000	-	3-Cutting/Weld Table W/Hardware	Provide new and different technology to welding students	Remove student barriers to current Industry standards.	Yes
<b>CTE</b>			<b>CTE Total</b>	<b>155,500</b>	<b>223,000</b>	<b>70,000</b>				
NURS	NURS ASST	1370	5610	-	100,000	-	Nursing - Remodel or Ponderosa Center to provide additional office space required by the AZBON  Nursing & Maintenance to collaborate	AZBON has required that each faculty person have a private office, dislocating key personnel, this renovation would allow the return of science faculty to the building	Master Facilities Plan	No
NURS	NURS	1375	5645	-	35,000	-	Sim Junior	Junior mannequin at LCC is broken and no longer supported due to age.	Remove student barriers to current Industry standards.	No
NURS	NURS	1375	5645	-	25,000	-	Sim Baby	New training mannequin to provide advanced intesive care simmulation for infants	Remove student barriers to current Industry standards.	No

**Northland Pioneer College  
Capital Budget  
FY1617 - FY1819**

Sorted by Division

Div	Dept	Dept #	Object Code	FY1617 Budget Request \$	FY17/18 Budget Request \$	FY18/19 Budget Request \$	Description of Capital Item(s) Requested	Justification for Request	SPASC Initiative & Priority	Postponed? Y/N
NURS	NURS	1335	5645	-	125,000	-	Sim Man	Replacement for EMS adult simulator which is now broken and due to age is no longer supported by manufacturer.	Remove student barriers to current Industry standards.	No
NURS	NURS	1375	5645	35,000	35,000	-	Sim Mom	Advanced simulator for LCC, to provide similar instruction environment for all students	Remove student barriers to current Industry standards.	No
<b>Nursing</b>			<b>Nursing Total</b>	<b>35,000</b>	<b>320,000</b>	<b>-</b>				
<b>Total NPC Annual Capital</b>				<b>5,353,700</b>	<b>6,350,000</b>	<b>4,800,000</b>				

	TOTAL FTSE		NAVIT FTSE		DUAL FTSE		REGULAR FTSE	
	2015	2016	2015	2016	2015	2016	2015	2016
Little Colorado	157	158	20	21	15	21	122	116
Painted Desert	224	235	47	49	67	61	110	125
Silver Creek	163	143	23	21	45	45	95	77
White Mountain	569	594	64	76	151	167	354	352
Subtotal	1113	1130	154	167	278	294	681	670
ALU	1	1	0.0	0.0	0.0	0.0	1	1
CDA	47	47	0.0	0.0	0.0	0.0	47	47
DOC	84	47	0.0	0.0	0.0	0.0	84	47
Hopi	52	53	0.0	0.0	7	9	45	44
Internet	94	103	0.0	0.0	0.0	0.0	94	103
Kayenta	18	22	0.0	0.0	0	4	18	18
Springerville-Eagar	74	65	4	7	38	33	32	26
St Johns	100	106	47	45	13	22	41	40
Whiteriver	94	98	0.0	0.0	35	40	59	58
Apache Co Misc	22	28	0.0	0.0	19	23	4	5
Navajo Co Misc	5	26	0.0	0.0	5	6	0	20
Subtotal	592	596	51	51	117	137	425	407
<b>TOTAL</b>	<b>1706</b>	<b>1726</b>	<b>205</b>	<b>218</b>	<b>394</b>	<b>431</b>	<b>1107</b>	<b>1077</b>

Regular Enrollment percentage change, Spring 2015-Spring 2016: -2.8% (+0.7% if DOC excluded)  
**Total Enrollment percentage change, Spring 2015-Spring 2016: +1.2%**

**HEADCOUNT**

2015 – 3531

2016 – 3505

## Request to Approve the Purchase of Unified Communication Solution/Voice over IP and Professional Services

### **Recommendation:**

Staff recommends an approval to purchase Unified Communication Cisco solution (hardware and equipment) from Logicalis for a price of \$326,726.86 including sales tax along with professional services provided by HyeTech at a competitive bid price of \$75,940.00 including sales tax for a total cost of \$402,667. Two other companies, Dimension Data and Sentinel, also provided bids which were ultimately more expensive and did not provide the same level of service.

### **Summary:**

This purchase will provide essential improvements to internal architecture and design to achieve a future single platform, delivery and communication environment. This project will directly impact and positively affect our classroom learning environments, the TALON Project, students, faculty and staff.

The proposed Unified Communication Cisco solution from Logicalis will provide a comprehensive classroom design to meet the key deliverable for effective instruction and the business environment. The common design provides improved performance across the networks, reduces infrastructure complexity and improve environment engagement. Essential to the success of numerous efforts and a continued sustainable environment, this recommended solution will remove current limitations and performance capability barriers. New security features, communication enhancements such as Instant Messaging and voicemail to email and updated environments which support our current phone hardware are part of the enhancement lists available with this development. Improved classroom technology supports future development potential for the distance learning environment as well as a scalable solution to meet increases of demand.

The proposed professional services will provide essential support and scope of work to be performed to meet the key deliverables for our unified communication needs. The resources provide NPC with support for key activities and reliable performance. The use of this service meets the expectations for the level of work to be performed in setup, configuration, testing and deployment to upgrade our current environment. Providing the recommended services will support timely delivery and essential activities related to the completion of the Unified Communication

upgrade. Deliverables related to the current Title III TALON Grant, consolidation of our distance education platform, voice mail to email, maintained currency of our existing phone system and other associated security enhancements will be available.

The following bids were received to complete the project and are outlined below.

### Unified Communication/VoIP Project

	Hardware UC/VoIP		4 NPC Classrooms		Prof Svcs UC/VoIP		Total
HyeTech	\$ -		\$ -		\$ 75,940.00		\$ 75,940.00
Locigcalis	\$326,727.00		\$ -		\$ -		\$326,727.00
Sentinel	\$362,626.00		\$ -		\$ 78,752.00		\$441,378.00
Dim. Data	\$256,304.00		\$89,856.00		\$ 94,017.00		\$440,177.00
Comparison							
Log and HT	\$402,667.00						
Sentinel	\$441,378.00						
Dim Data	\$440,177.00						



# PROPOSAL

Terms	Account Manager	Date	Quote #
NET 30	Robert Lundblade	03/29/16	LOGQ13577-04
<b>Contract:</b>			
Commercial			

<b>Customer:</b> Northland Pioneer College Phillip Way <b>Phone:</b> 800-266-7845 <b>Fax:</b>	<b>Address:</b> 2251 N. Navajo Blvd. Holbrook, 86025 US	<b>Project Name:</b> Northland Pioneer College - VoIP Upgrades v4  <b>Project Number:</b> OPP067538
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\* Fulfillment only. Drop ship to Customer Site  
 \* Purchase order constitutes acceptance of Quote and above referenced Contract's Standard Terms & Conditions

Manufacturer	Part Number	Description	Qty	Unit Price	Ext. Price
CISCO	BE6H-M4-K9=	Cisco Business Edition 6000H Svr (M4), Export Restricted SW	4.00	\$7,488.00	\$29,952.00
CISCO-SMARTN	CON-SNTP-BE6HM4K9	SNTP-24X7X4 Cisco Business Edition 6000H Server, Exp	4.00	\$937.44	\$3,749.76
CISCO	CAB-N5K6A-NA	Power Cord, 200/240V 6A North America	8.00	\$0.00	\$0.00
CISCO	BE6K-SW-10X11X-K9	Cisco Business Edition 6000 - Software App Version 10.X 11.X	4.00	\$0.00	\$0.00
CISCO	VMW-VS5-HYP-K9	Cisco UC Virt. Hypervisor 5.x (2-socket)	4.00	\$0.00	\$0.00
CISCO	VMW-VS5-SNS	Cisco UC Virt. Hypervisor 5.x - SnS	4.00	\$0.00	\$0.00
CISCO	CIT-A03-D300GA2	300GB 6Gb SAS 10K RPM SFF HDD/hot plug/drive sled mounted	32.00	\$0.00	\$0.00
CISCO	CIT-CPU-E52630D	2.40 GHz E5-2630 v3/85W 8C/20MB Cache/DDR4 1866MHz	8.00	\$0.00	\$0.00
CISCO	CIT-MR-1X081RU-A	8GB DDR4-2133-MHz RDIMM/PC4-17000/single rank/x4/1.2v	24.00	\$0.00	\$0.00
CISCO	CIT-MRAID12G	Cisco 12G SAS Modular Raid Controller	4.00	\$0.00	\$0.00
CISCO	CIT-MRAID12G-1GB	Cisco 12Gbps SAS 1GB FBWC Cache module (Raid 0/1/5/6)	4.00	\$0.00	\$0.00
CISCO	CIT-PCIE-IRJ45	Intel i350 Quad Port 1Gb Adapter	4.00	\$0.00	\$0.00
CISCO	CIT-PSU1-770W	770W AC Hot-Plug Power Supply for 1U C-Series Rack Server	8.00	\$0.00	\$0.00
CISCO	R2XX-RAID5	Enable RAID 5 Setting	4.00	\$0.00	\$0.00
CISCO	R-CBE6K-K9	Cisco Business Edition 6000-Electronic SW Delivery-Top Level	4.00	\$0.00	\$0.00
CISCO-SMARTN	CON-ECMU-RCBE6KK	SWSS UPGRADES Cisco Business Editi	4.00	\$0.00	\$0.00
CISCO	BE6K-SW-11.0	Business Edition 6000 v11 export restricted software	4.00	\$0.00	\$0.00
CISCO	JAB-ADR-CLNT-UWL	Jabber for Android CUWL Only	2,000.00	\$0.00	\$0.00
CISCO	JAB-IPH-CLNT-UWL	Jabber for iPhone CUWL Only	2,000.00	\$0.00	\$0.00
CISCO	JABBER-TABLET	Jabber for iPad and Android Tablet	2,000.00	\$0.00	\$0.00
CISCO	JABBER-DESKTOP	Jabber for Desktop for PC and Mac	3,200.00	\$0.00	\$0.00
CISCO	EXPWY-VE-C-K9	Cisco Expressway-C Server, Virtual Edition	8.00	\$0.00	\$0.00
CISCO	EXPWY-VE-E-K9	Cisco Expressway-E Server, Virtual Edition	8.00	\$0.00	\$0.00
CISCO	SW-EXP-8.X-K9	Software Image for Expressway with Encryption, Version X8	4.00	\$0.00	\$0.00

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Manufacturer	Part Number	Description	Qty	Unit Price	Ext. Price
CISCO	JABBER-GUEST	Jabber Guest Session	200.00	\$0.00	\$0.00
CISCO	JAB-ADR-RTU	Jabber for Android Right to Use	4.00	\$0.00	\$0.00
CISCO	JAB-IPH-RTU	Jabber for iPhone Right to Use	4.00	\$0.00	\$0.00
CISCO	JAB-GUEST-RTU-K9	Jabber Guest Right to Use	4.00	\$0.00	\$0.00
CISCO	JABBER-TABLET-RTU	Jabber for Tablet Right to Use	4.00	\$0.00	\$0.00
CISCO	JABBER-DSK-K9-RTU	Jabber for Desktop Right to Use	4.00	\$0.00	\$0.00
CISCO	LIC-EXP-E-PAK	Expressway Series, Expressway-E PAK	4.00	\$0.00	\$0.00
CISCO	LIC-EXP-GW	Enable GW Feature (H323-SIP)	16.00	\$0.00	\$0.00
CISCO	LIC-EXP-E	Enable Expressway-E Feature Set	8.00	\$0.00	\$0.00
CISCO	LIC-EXP-TURN	Enable TURN Relay Option	8.00	\$0.00	\$0.00
CISCO	LIC-EXP-AN	Enable Advanced Networking Option	8.00	\$0.00	\$0.00
CISCO	LIC-SW-EXP-K9	License Key Software Encrypted	16.00	\$0.00	\$0.00
CISCO	LIC-EXP-SERIES	Enable Expressway Series Feature Set	16.00	\$0.00	\$0.00
CISCO	UNITY	Migrating from Unity Standalone to CUWL	4.00	\$0.00	\$0.00
CISCO	CTI-410V-VTS-K9	Cisco Multiparty Media 410v Server	2.00	\$8,516.16	\$17,032.32
CISCO-SMARTN	CON-SNTP-CTI-410V	SNTP-24X7X4 Cisco Multiparty Med	2.00	\$1,408.02	\$2,816.04
CISCO	CAB-N5K6A-NA	Power Cord, 200/240V 6A North America	4.00	\$0.00	\$0.00
CISCO	VTS-SW-4X	Media (no lic) for Cisco TelePresence Svr Virt. Machine 4.x	2.00	\$0.00	\$0.00
CISCO	CIT3-A03-D300GA2	300GB 6Gb SAS 10K RPM SFF HDD/hot plug/drive sled mounted	4.00	\$0.00	\$0.00
CISCO	CIT3-PSU1-770W	770W AC Hot-Plug Power Supply for 1U C-Series Rack Server	4.00	\$0.00	\$0.00
CISCO	CIT3-CPU-E52690D	2.60 GHz E5-2690 v3/135W 12C/30MB Cache/DDR4 2133MHz	4.00	\$0.00	\$0.00
CISCO	CIT3-MR-1X081RU-A	8GB DDR4-2133-MHz RDIMM/PC4-17000/single rank/x4/1.2v	16.00	\$0.00	\$0.00
CISCO	CIT3-MRAID12G	Cisco 12G SAS Modular Raid Controller	2.00	\$0.00	\$0.00
CISCO	R2XX-RAID1	Enable RAID 1 Setting	2.00	\$0.00	\$0.00
CISCO	VMW-VS5-410V-K9	Embedded License, Cisco TelePresence Virt. SW 5.x	2.00	\$899.64	\$1,799.28
CISCO-SMARTN	CON-ECMU-VMWVS54V	SWSS UPGRADES Embedded License, Cisco TelePresence Vir	2.00	\$744.00	\$1,488.00
CISCO	VMW-VS5-410V-SNS	Cisco TelePresence Virt. SW 5.x SnS	2.00	\$0.00	\$0.00
CISCO	R-VBRICK-DME-SP	Solutions Plus for VBRICK REV DME - Top Level	1.00	\$0.00	\$0.00
CISCO	SP-PRODUCTS-TERMS	Buyer Acceptance of SolutionsPlus Terms and Conditions	1.00	\$0.00	\$0.00
CISCO	VBRICK-PAK	VBRICK PAK for REV and DME	1.00	\$0.00	\$0.00
CISCO	VBRICK-RTU	Vbrick User and DME Right to Use	1.00	\$0.00	\$0.00
CISCO	DME-M-SUB	DME Medium Subscription (Annual)	3.00	\$3,185.70	\$9,557.10
CISCO	R-VBRICK-USER-SP	Solutions Plus for VBRICK REV User Tiers - Top Level	1.00	\$0.00	\$0.00
CISCO	CL-STARTER	Cloud Rev Starter Portal up to 1000 users	3.00	\$16,400.00	\$49,200.00
CISCO	SP-PRODUCTS-TERMS	Buyer Acceptance of SolutionsPlus Terms and Conditions	1.00	\$0.00	\$0.00
CISCO	VBRICK-PAK	VBRICK PAK for REV and DME	1.00	\$0.00	\$0.00
CISCO	VBRICK-RTU	Vbrick User and DME Right to Use	1.00	\$0.00	\$0.00
CISCO	CVC-DME-M4-M	Vbrick M4 Server Appliance for Vbrick DME Medium	1.00	\$5,881.45	\$5,881.45
CISCO-SMARTN	CON-SNTP-CVCDMEMM	SNTP-24X7X4 Vbrick M4 Server Appliance	1.00	\$937.44	\$937.44
CISCO	CVC-MRAID12G-1GB	Cisco 12Gbps SAS 1GB FBWC Cache module (Raid 0/1/5/6)	1.00	\$0.00	\$0.00
CISCO	CVC-PSU1-770W	UCS Server 770W power supply	2.00	\$0.00	\$0.00
CISCO	CVC-MRAID12G	VBRICK UCS 12G SAS Modular Raid Controller	1.00	\$0.00	\$0.00
CISCO	CVC-MR-1X081RU-A	VBRICK UCS Server DRAM - 8GB DDR3	2.00	\$0.00	\$0.00
CISCO	R2XX-RAID5	Enable RAID 5 Setting	1.00	\$0.00	\$0.00
CISCO	CVC-A03-D600GA2	VBRICK UCS Server Hard Disk 600 GB, 10K RPM	4.00	\$0.00	\$0.00

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Manufacturer	Part Number	Description	Qty	Unit Price	Ext. Price
CISCO	CVC-CPU-E52630D	UCS Server CPU	1.00	\$0.00	\$0.00
CISCO	CAB-9K12A-NA	Power Cord, 125VAC 13A NEMA 5-15 Plug, North America	2.00	\$0.00	\$0.00
CISCO	R-VMTCS-PROBUN-K9	Virtual TCS 5 Rec, 2 Live Port with Premium Resolution	1.00	\$19,792.00	\$19,792.00
CISCO-SMARTN	CON-ECMU-RVMTCSPPN	SWSS UPGRADES Virtual TCS 5 Rec, 2 Live Port with Prem	1.00	\$4,052.94	\$4,052.94
CISCO	LIC-VMTCS-5R	5 Recording Ports License	1.00	\$0.00	\$0.00
CISCO	LIC-VMTCS-PAK	Virtual TCS Options Release Key	1.00	\$0.00	\$0.00
CISCO	LIC-VMTCS-2L	2 Live Output Ports License	1.00	\$0.00	\$0.00
CISCO	LIC-SWTCS-K9	Virtual TCS Software Release Key	1.00	\$0.00	\$0.00
CISCO	LIC-VMTCS-PRO+	Premium Resolution Option for TCS	1.00	\$0.00	\$0.00
CISCO	LIC-VMTCS-CLUSTER	Cluster Option for TCS	1.00	\$1,782.00	\$1,782.00
CISCO	R-VMTCS-PRO10P-K9	Virtual TCS 10 Rec, 2 Live Port with Premium Resolution	1.00	\$27,792.00	\$27,792.00
CISCO-SMARTN	CON-ECMU-RVMTCSPP	SWSS UPGRADES Virtual TCS 10 Rec, 2 Live Port with Pre	1.00	\$5,541.56	\$5,541.56
CISCO	LIC-VMTCS-5R	5 Recording Ports License	1.00	\$0.00	\$0.00
CISCO	LIC-VMTCS-PRO+	Premium Resolution Option for TCS	1.00	\$0.00	\$0.00
CISCO	LIC-VMTCS-ADD5RP+	Additional 5 Port Option for TCS	1.00	\$0.00	\$0.00
CISCO	LIC-VMTCS-PAK	Virtual TCS Options Release Key	1.00	\$0.00	\$0.00
CISCO	LIC-VMTCS-2L	2 Live Output Ports License	1.00	\$0.00	\$0.00
CISCO	LIC-SWTCS-K9	Virtual TCS Software Release Key	1.00	\$0.00	\$0.00
CISCO	LIC-VMTCS-CLUSTER	Cluster Option for TCS	1.00	\$1,782.00	\$1,782.00
CISCO	CTS-SX80-IPST60-K9	Cisco SX80 Codec, Speaker Track 60, Touch 10	4.00	\$12,505.00	\$50,020.00
CISCO-SMARTN	CON-ECDN-SX80IP60	ESS WITH 8X5XNBD Cisco SX80 Codec Speaker Trk 60 Touch 10	4.00	\$1,811.70	\$7,246.80
CISCO	PWR-CORD-US-A	Pwr Cord US 1.8m Black YP-12 To YC-12	12.00	\$0.00	\$0.00
CISCO	CTS-MIC-CLNG-G2	Cisco TelePresence Ceiling Microphone Generation 2	12.00	\$610.90	\$7,330.80
CISCO-SMARTN	CON-ECDN-CTSMICG2	ESS WITH 8X5XNBD Cisco TelePresence Ceiling Microphone Ge	12.00	\$105.60	\$1,267.20
CISCO	CAB-ETHRSHLD-10M	Shielded cable for Ceiling Mic (10m), not plenum rated	12.00	\$30.75	\$369.00
CISCO	LIC-TC-CRYPTO-K9	License key to activate sw encryption module	4.00	\$0.00	\$0.00
CISCO	CTS-CAM-P60	Cisco TelePresence Precision 60 Camera	4.00	\$3,649.00	\$14,596.00
CISCO-SMARTN	CON-ECDN-CTSCAM60	ESS WITH 8X5XNBD Cisco TelePresence Precision 60 Camera	4.00	\$528.66	\$2,114.64
CISCO	CTS-CAM60-BRKT	Bracket for mounting of Precision 60 Camera	4.00	\$102.50	\$410.00
CISCO	LIC-TP-SMP-EP	Shared Multiparty Lic for 1 Concurrent Meeting inc 2 RMS Lic	14.00	\$2,045.90	\$28,642.60
CISCO-SMARTN	CON-ECMU-LICTPSEP	SWSS UPGRADES Shared Multiparty Lic for 1 Concurrent M	14.00	\$526.68	\$7,373.52
CISCO	LIC-TP-ROOM-11.X	Choose if VCS or for CUCM version 11.x TP-Room License	4.00	\$0.00	\$0.00
CISCO	PSU-12VDC-40W2	Power Supply 12 VDC 40W	4.00	\$0.00	\$0.00
CISCO	CAB-PWR-ST-SHORT-	Two 12V power cables (0.45m & 0.2m) for SpeakerTrack 60	4.00	\$0.00	\$0.00
CISCO	CAB-DVI-VGA-PHOEN	Presentation cable w/audio, VGA/Jack to DVI/Phoenix	4.00	\$0.00	\$0.00
CISCO	CTS-CTRL-DVX-10+	Touch 10 auto expand	4.00	\$0.00	\$0.00
CISCO	CTS-ST-INT-PLATE-	Interface plate CAM-P60 to Speaker Track 60	8.00	\$0.00	\$0.00
CISCO	CTS-PWR-AIR-INJ5+	Power Injector (802.3af)	4.00	\$0.00	\$0.00
CISCO	DOC-P60CAM-BRKT	Installation sheet for Precision 60 Camera bracket	4.00	\$0.00	\$0.00
CISCO	CTS-ST-ARR60-WMK-	Wall Mount Kit for Speaker Track 60 Microphone Array	4.00	\$0.00	\$0.00
CISCO	CAB-DV10-12.5M	12.5 meter flat grey Ethernet cable for Touch 10	4.00	\$0.00	\$0.00
CISCO	LIC-EXP-RMS-PMP	RMS Licensing included with PMP & SMP	8.00	\$0.00	\$0.00
CISCO	CAB-DV10-4M	4 meter flat grey Ethernet cable for Touch 10	4.00	\$0.00	\$0.00
CISCO	CAB-ETH-ST-SHORT-	Two Ethernet cables (0.35m & 0.2m) for SpeakerTrack 60	4.00	\$0.00	\$0.00
CISCO	CTS-CAM-P60+	Cisco TelePresence Precision 60 Camera - auto expand only	8.00	\$0.00	\$0.00

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Manufacturer	Part Number	Description	Qty	Unit Price	Ext. Price
CISCO	LIC-EXPE-PMP-PAK	Expressway Series, Expressway-E PAK	4.00	\$0.00	\$0.00
CISCO	SW-S52020-TC7-K9	SW Image for SX80, MX700, MX800	4.00	\$0.00	\$0.00
CISCO	PWR-12VDC-84W-	Power supply 12VDC 84W	4.00	\$0.00	\$0.00
CISCO	PWR-CORD-US-A	Pwr Cord US 1.8m Black YP-12 To YC-12	4.00	\$0.00	\$0.00
CISCO	CTS-SX80CODEC	Cisco SX80 Codec	4.00	\$0.00	\$0.00
CISCO	UCM-PAK	UCM 9X/10X/11X PAK	4.00	\$0.00	\$0.00
CISCO	LIC-VMCNDTR-PMP-PK	PAK for virtual Conductor	4.00	\$0.00	\$0.00
CISCO	CTS-SX80-RACKEARS-	SX80 rack ears - for auto expand only	4.00	\$0.00	\$0.00
CISCO	CTS-ST-ARRAY60+	Speaker Track 60 Microphone Array	4.00	\$0.00	\$0.00
CISCO	TRN-CLC-001	100 Prepaid training credits:Redeem w/Cisco Learning Partnrs	2.00	\$0.00	\$0.00

Total Material:			\$302,526.45
Sales Tax:			\$24,200.41
<b>Total</b>			<b>\$326,726.86</b>

Please note Logicalis Quote number on purchase order. Proposal expires 30 days from the date above.

Logicalis, Inc.

Northland Pioneer College

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_  
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# UC Infrastructure Upgrade

Proposal 1102-011

for

**Northland Pioneer College**

*Developed by*

**HYE TECH NETWORK & SECURITY SOLUTIONS, LLC**



**HYE TECH**  
NETWORKS

April 6, 2016

4802 E Ray Road  
Suite 23-414  
Phoenix, Arizona 85044  
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## PROPOSAL OVERVIEW & OBJECTIVES

### **Hye Tech Network & Security Solutions, LLC (HyeTech) will meet the following Service objectives:**

Upgrade the Cisco UC infrastructure currently in production at Northland Pioneer College (NPC). Additionally, video infrastructure and room builds will be completed as part of this proposal. The scope of the upgrades will include the following:

- Implement 4 new Cisco BE6H UC Servers to host the upgraded UC apps
  - 2 servers at Holbrook datacenter (1 internal, 1 with internal and DMZ interfaces)
  - 2 servers at Show Low datacenter (1 internal, 1 with internal and DMZ interfaces)
- Install new Unified Call Manager (CUCM) servers and migrate from version 8.5 to version 11.X
  - 1 publisher and 1 subscriber in Holbrook
  - 1 subscriber in Show Low
- Install new IM & Presence (IM&P) servers and migrate from version 8.5 to version 11.X
  - 1 pub/sub in Holbrook
  - 1 sub in in Show Low
- Install new Unity Connection (CUC) servers and migrate from version 8.5 to 11.X
  - Implement Unified Messaging for Exchange 2010
  - 1 pub/sub in Holbrook
  - 1 sub in Show Low
- Install new Unified Contact Center Express (UCCX) servers and migrate from version 8.5 to 10.6
  - 1 instance in Holbrook only
- Implement new Expressway-C servers on internal BE6H servers
  - 1 in Holbrook and 1 in Show Low
- Implement new Expressway-E servers on DMZ BE6H servers
  - Configure for firewall traversal and XMPP federation
  - 1 in Holbrook and 1 in Show Low
- Verify SRST and voice gateways
  - Upgrade code on voice gateways as appropriate
- Migrate existing integrations to retain like functionality after upgrade
  - Xmedius
  - CallRex
  - SA Announce



- Configure previously deployed Expressway-C and Expressway-E servers for video integration
  - 2 Expressway-C servers (1 in Holbrook and 1 in Show Low)
  - 2 Expressway-E servers (1 in Holbrook and 1 in Show Low)
- Install and configure 2 new Cisco TelePresence (TP) Server v410s
  - 1 server in Holbrook datacenter
  - 1 server in Show Low datacenter
- Install and configure Cisco TelePresence Management Server (TMS)
  - Use previously deployed BE6H hardware in Holbrook and Show Low DCs
  - Integrate all video components into TMS
- Install and configure Cisco TelePresence Conductor
  - Use previously deployed BE6H hardware in Holbrook and Show Low DCs
- Install and configure Cisco TelePresence Content Server (TCS)
  - Use previously deployed BE6H hardware in Holbrook and Show Low DCs
- Install and configure Video hardware endpoints on the CUCM platform
  - Up to four (4) SX80 video endpoints
- Install 1 new VBrick Rev appliance and configure platform
  - 1 caching server in Holbrook DC
- Configure infrastructure for Hybrid CMR connectivity from TP Server to the Webex cloud
  - Test joining Webex users to video endpoint based conferences running on the TP Server
- Perform 4 room builds for SX80 and Smartboard infrastructure
  - Perform builds based on high-level designs outlined in Appendix A

## SCOPE OF WORK

### DISCOVERY

- Kick Off Meeting
- Perform discovery of existing CUCM, CUC, UCCX, IM&P and Voice Gateway environment
  - Confirm versions
  - Identify phones, gateways (Analog/PSTN/etc), other endpoints
  - Perform discovery of call routing plan and related configurations
- Identify any road-blocks and risks in migration
- Identify any upgrades required to other components



- PRI gateways, analog gateways, other devices that utilize CUCM
- Perform export of all exportable items
- Work with NPC network staff to gather necessary information for video deployment
  - VLANs/Networks
    - IP addresses to be used
    - Private and public
  - Physical location of hardware
    - Identify network devices that will provide connectivity
  - Virtual Machine (VM) details
    - Identify VM hosts and VM networks necessary for full functionality
    - Identify the number VMs necessary
    - Identify the operating system for each VM
  - Microsoft infrastructure integration
    - Active directory integration points
    - Service accounts (if needed)
    - Integration into MS Exchange for calendaring/scheduling
- Provide NPC with overall video network design to include
  - Network Diagrams (MS Visio or PDF format)
  - IP addressing documentation

## IMPLEMENTATION AND MIGRATION

- Unbox, rack, cable, and provision 4 new BE6H servers
  - 2 servers in the Holbrook DC
  - 2 servers in the Show Low DC
  - Follow NPC standards for installation and cabling
- Install and configure new CUCM version 11.X servers, then migrate existing version 8.5 data
  - Backup existing CUCM Publisher to customer provided sFTP server and verify backup.
  - Verify no devices are registered with the Publisher server in preparation for migration.
  - Install 1 CUCM 11.X Publisher - in Holbrook
    - Activate services and configure critical service parameters
    - Verify all parameters on CUCM (route patterns, groups and lists, gateways, partitions, etc.)





- Install 2 CUCM 11.X Subscribers – 1 in Holbrook and 1 in Show Low
  - Verify database replication among all servers
- Verify Voice gateways have the recommended IOS version and upgrade, as necessary
  - Verify IP Phones registration on CUCM 11.X
  - Verify IP Phones firmware upgrade successful completion
- Confirm CUCM 11.X and Unity Connection integration following Unity Connection 11.X installation and upgrade
- Test IP Phones and failover
- Install and configure new IM&P version 11.X servers, then migrate existing version 8.5 data
  - Backup existing IM&P to customer provided sFTP server and verify backup
  - Install IM&P Primary version 11.X
    - Activate services and configure critical service parameters
  - Verify all parameters on IM&P
  - Install IM&P Secondary version 11.X
    - Activate services and configure critical service parameters
  - Verify all parameters on IM&P
  - Confirm IM&P 11.X integration with CUCM 11.X after installation and upgrade
  - Configure Expressway-C and Expressway-E integration
  - Perform failover to primary/secondary IM&P and test services
- Install and configure new CUC version 11.X servers, then migrate existing version 8.5 data
  - Backup existing CUC to customer provided sFTP server and verify backup
  - Install CUC Primary version 11.X
    - Activate services and configure critical service parameters
  - Verify all parameters on CUC
  - Install CUC Secondary version 11.X
    - Activate services and configure critical service parameters
  - Verify all parameters on CUC
  - Confirm CUC 11.X integration with CUCM 11.X after installation and upgrade
  - Implement Unified Messaging for Exchange 2010
  - Confirm and test Exchange integration
  - Perform failover to primary/secondary CUC and test services
- Install and configure new UCCX version 10.6 servers, then migrate existing version 8.5 data



- Backup existing UCCX to customer provided sFTP server and verify backup
- Install UCCX Primary version 10.6
  - Activate services and configure critical service parameters
- Verify all parameters on UCCX
- Confirm UCCX 10.6 integration with CUCM 11.X after installation and upgrade
- Install and configure new Expressway-C and Expressway-E servers
  - Review current design and video needs
    - Review existing equipment in place
    - Devise Dial Plan
  - Implement Expressway-C on internal BE6H servers
    - 1 in Holbrook
    - 1 in Show Low
  - Implement Expressway-E on DMZ BE6H servers
    - 1 in Holbrook
    - 1 in Show Low
- Migrate existing integrations to retain like functionality
  - Perform discovery on application version and integration method
  - Develop migration plan
  - Perform any upgrades required for the integration to retain like functionality
  - Validate operation and like functionality after integration migration
  - Integrations:
    - Xmedius
    - CallRex
    - SA Announce
- Configure Expressway-C servers
  - Confirm install of Expressway virtual machine
  - Verify and install all licensing as needed
  - Utilize information from planning phase to allocate IP address(es) as needed for Expressway
  - Build dial-plan
    - To Cisco Call Manager
    - To Expressway-E



- Configure domain(s) for security
- Configure proxy domain(s)
- Configure traversal zone
- Integrate with LDAP
- Prepare for TMS integration
- Cluster for High Availability (if appropriately licensed)
- Test and verify operation
- Configure Expressway-E servers
  - Confirm install of Expressway virtual machine
  - Verify and install all licensing as needed
  - Utilize information from planning phase to allocate IP address(es) as needed for Expressway-E (private and public NICs)
  - Build dial-plan
    - To Expressway-C
  - Configure traversal zone
  - Utilize information from planning phase to finalize the placement on the network
  - Verify firewall traversal needs and configurations, if any
  - Test and verify operation
- Build and Deploy 2 x TPS v410 appliances
  - Utilize information from planning phase
    - Allocate IP address(es) as needed for TPS v410s
    - Identify physical locations
  - Install C220 chassis (1) (rack/stack)
  - Burn in for a period of 24-48 hours minimum
  - Upgrade firmware to latest stable release
  - Activate all necessary licensing
  - Integrate into TMS for management and configuration
  - Add to conductor bridge pool
  - Verify and install all licensing as needed
  - Test and verify operation
- Install and Configure TMS
  - Install TMS on Windows 2012r2 server



- Domain joined server would be preferred
- Verify and install all licensing as needed
- Utilize information from planning phase to allocate IP address(es) as needed for TMS
- Provision all endpoints utilizing TMS
  - Hardware endpoints
- Integrate Expressway-C and Expressway-E Servers
- Configure conferencing default settings
- Integrate with MS Exchange 2010 for scheduling and calendaring features
- Install utilizing SQL Express
  - NOTE: NPC may need to migrate to full SQL if express does not meet their needs in the long-term
- Add TPS v410 appliances into TMS
  - Configure resources and resource usage as needed
  - Verify all integrated hardware is fully operational
- Test and verify operation
- Install and configure Cisco TelePresence Conductor
  - Install conductor VM
  - Identify and configure IP Address
  - Integrate with TPS v410 appliances
  - Integrate with CUCM
  - Configure conference room alias
  - Configure Hostname/DNS/Certificates
  - Test conference generation
  - Test Webex enabled meeting
- Install and configure Cisco TCS
  - Configure IP Addressing
  - Configure administrator login and password
  - Activate Licensing
  - Configure recording aliases
  - Configure external media storage if necessary
  - Integrate with TMS
    - Allow users to schedule recording resources for their meetings



- Configure Distribution outputs
  - Configure automatic publishing to Cisco Show and Share
- Build and Deploy SX80 based video endpoints
  - Deploy four (4) SX80 room based endpoints
    - See below section for room build layout
  - Configure endpoints on CUCM
  - Verify Operation
    - Inbound Call
    - Outbound Call
    - Conferencing
    - Content Share
- Install and configure VBrick Rev
  - Rack VBrick appliance
    - Configure all required network information
  - Register license keys
  - Integrate with on premise TCS server
    - Develop recording template
  - Integrate with vBrick cloud site
    - Verify viewing of recorded content
- Configure infrastructure for Hybrid CMR to WebEx cloud
  - Load WebEx CA certificates on Expressway-E
  - Fill out A2Q process with Cisco
    - Wait for approval and configuration of the WebEx Site
  - Add WebEx site to TMS
    - Add WebEx credentials to test user
  - Test
    - Schedule meeting and add WebEx to meeting
    - Verify SIP signaling and RTP stream out to WebEx

## SX80 BASED ROOM BUILDS

- Telepresence Equipment
  - Telepresence SX80 Codec



- Needs to be in a cabinet
- Telepresence SpeakerTrack 60
  - Will be wall mounted
- Telepresence Touch 10
- Telepresence Audio Science Ceiling Microphone
  - Will be hung from ceiling
- 55-inch Presenter TV
  - Mounted on front classroom wall
- 55-inch Remote Participant TV
  - Mounted on side classroom wall
- 84-inch SmartBoard TV
  - Mounted on front classroom wall
- Two (2) Loudspeakers
  - Required Specifications
    - ◆ Sound pressure level (SPL): At least 80 dB at all listening positions.
    - ◆ Frequency response: Within  $\pm 3$  dB in the 70 Hz to 13 kHz range
    - ◆ Total harmonic distortion plus noise (THD+N): Lower than 1 percent.
- Hardware Equipment
  - Two wall mounts for 55-inch TVs
    - TVs should be mounted as flush as possible
    - If there are neighboring TVs, their screens should be flush with each other
  - One wall mount for 84-inch SmartBoard TV
    - TVs should be mounted as flush as possible
    - If there are neighboring TVs, their screens should be flush with each other
  - One Cabinet for SX80 Codec
  - One mount for Precision 60 Camera
    - It is recommended to use a recessed camera mount when possible. This prevents the camera from protruding out into the room and becoming damaged by pedestrian traffic
- Classroom Maintenance Changes
  - Remove any items currently on walls where Collaboration equipment will be deployed
- Classroom Cable and Power Changes
  - Electrical



- Add 3 outlets to the front of the room high enough to be behind the remote presenter's TV.
  - ◆ 1 outlet for 85inch TV
    - Should be hidden behind TV
  - ◆ 1 outlet for 55inch TV
    - Should be hidden behind TV
  - ◆ 1 outlet for Cisco SpeakerTrack 60
    - Should be hidden behind TV
    - There will not be room behind the SpeakerTrack 60
- Add 3 outlets to the side wall of room
  - ◆ 1 outlet for 55inch TV
    - Should be hidden behind TV
  - ◆ 1 outlet for Precision 60 camera
    - Should be hidden within the mount
  - ◆ 1 outlet for SX80 codec
    - Should be hidden behind media cabinet
- Ethernet Cable (Will be patched into NPC's network)
  - Add 3 CAT5e drops to the front of the room
    - ◆ 1 drop for 85inch TV
      - Should be hidden behind TV
    - ◆ 1 drop for 55inch TV (Optional)
      - Should be hidden behind TV
    - ◆ 1 drop for Cisco Touch 10
      - Should be near teacher's desk so the device can sit on the desk
  - Add 2 CAT5e drops to the side of the room
    - ◆ 1 drop for 55inch TV (Optional)
      - Should be hidden behind TV
    - ◆ 1 drop for Cisco SX80
      - Should be hidden behind media cabinet
- Room layout and device placement
  - 84-inch TV front of room
    - This is one of two focal points in the room for the local participants.

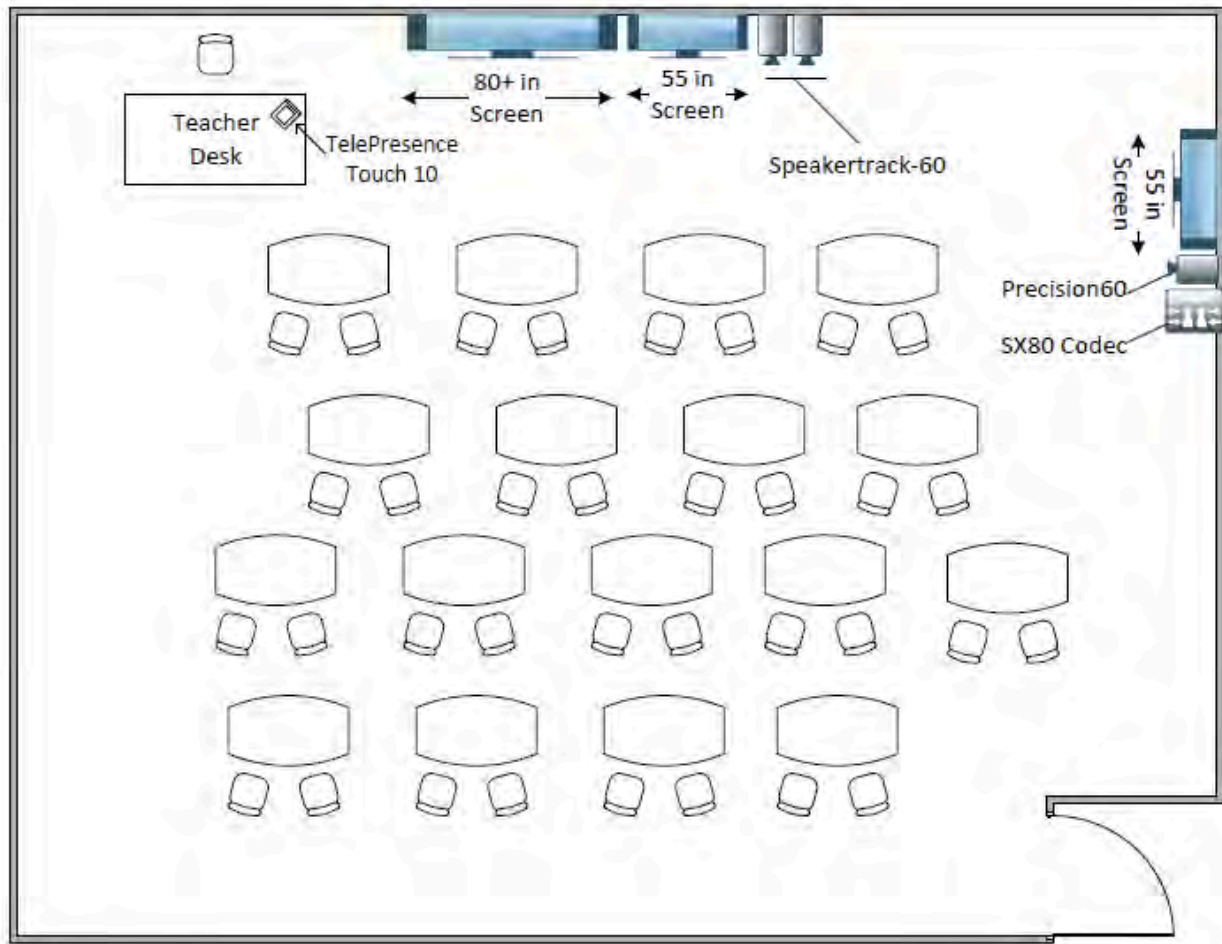


- 55-inch TV front of room
  - Designed to host the remote presenter (second focal point if presenter is remotely instructing)
- Cisco SpeakerTrack 60
  - Placed above the 55-inch front TV
  - Designed to track and display participants as they speak.
- Cisco SX80 Codec
  - Located off to the side, below the remote participant TV in a cabinet.
- 55-inch TV side of room
  - Designed to host the remote participants.
- Cisco Precision 60 Camera
  - Position on the side wall, next to the 55-inch remote participant TV.
    - ◆ It is recommended to use a recessed camera mount when possible. This prevents the camera from protruding out into the room and becoming damaged by pedestrian traffic
  - Designed to capture video of the local presenter.
- Telepresence Touch 10
  - Placed near the local presenter.
  - Touch 10 is the control panel for the Collaboration room





## Room Layout Diagram

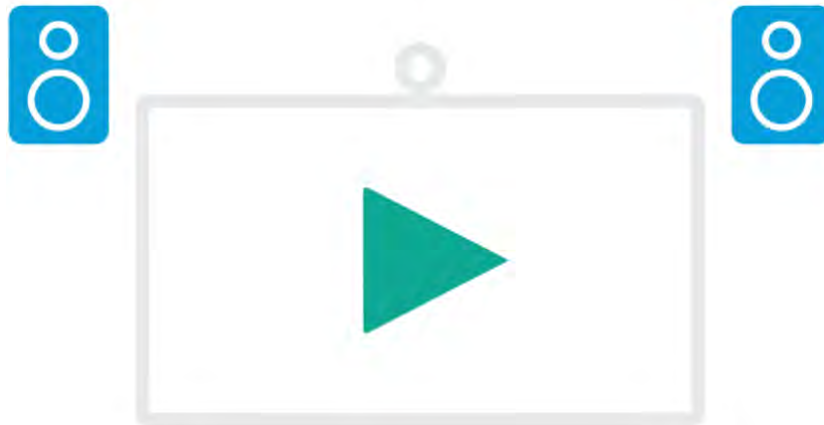


### ➤ Front wall device placement

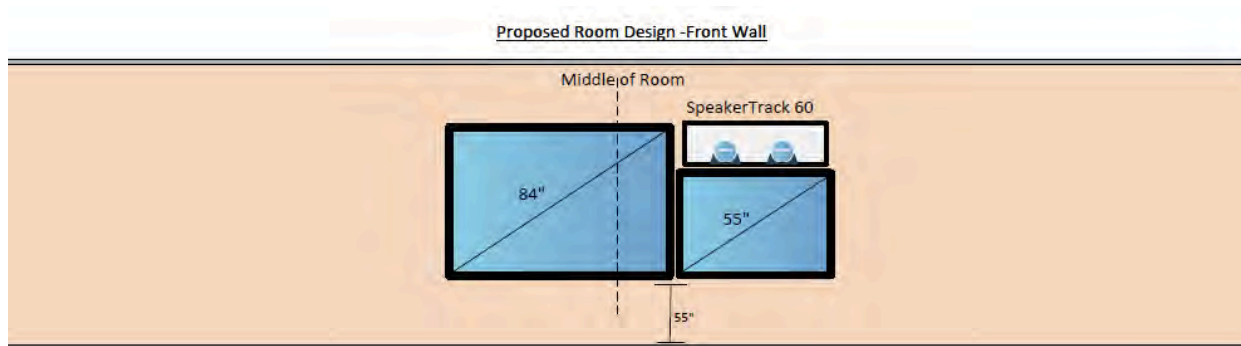
- 84-inch Smartboard TV in front of room
  - Content Device, should be focal point.
  - Center of TV will be placed in center of room.
  - Bottom of TV will be 55 inches above the floor
  - The screen must be flush with the neighboring TV to allow for optimal aesthetics
- 55-inch Remote Presenter TV
  - Remote Presenter Device, Second focal point for remote participants.
  - Placed to the Left of the 84-inch TV.
  - Bottom of TV will be 55 inches above floor.



- The screen must be flush with the neighboring TV to allow for optimal aesthetics
- SpeakerTrack 60
  - Will be mounted to wall one to three inches above 55-inch Remote Presenter TV.
- Loudspeakers
  - Required Specifications
    - ◆ Sound pressure level (SPL): At least 80 dB at all listening positions.
    - ◆ Frequency response: Within  $\pm 3$  dB in the 70 Hz to 13 kHz range
    - ◆ Total harmonic distortion plus noise (THD+N): Lower than 1 percent.
  - Stereo Mounting
    - ◆ For better content reproduction, stereo speakers on the sides of the screen are advisable



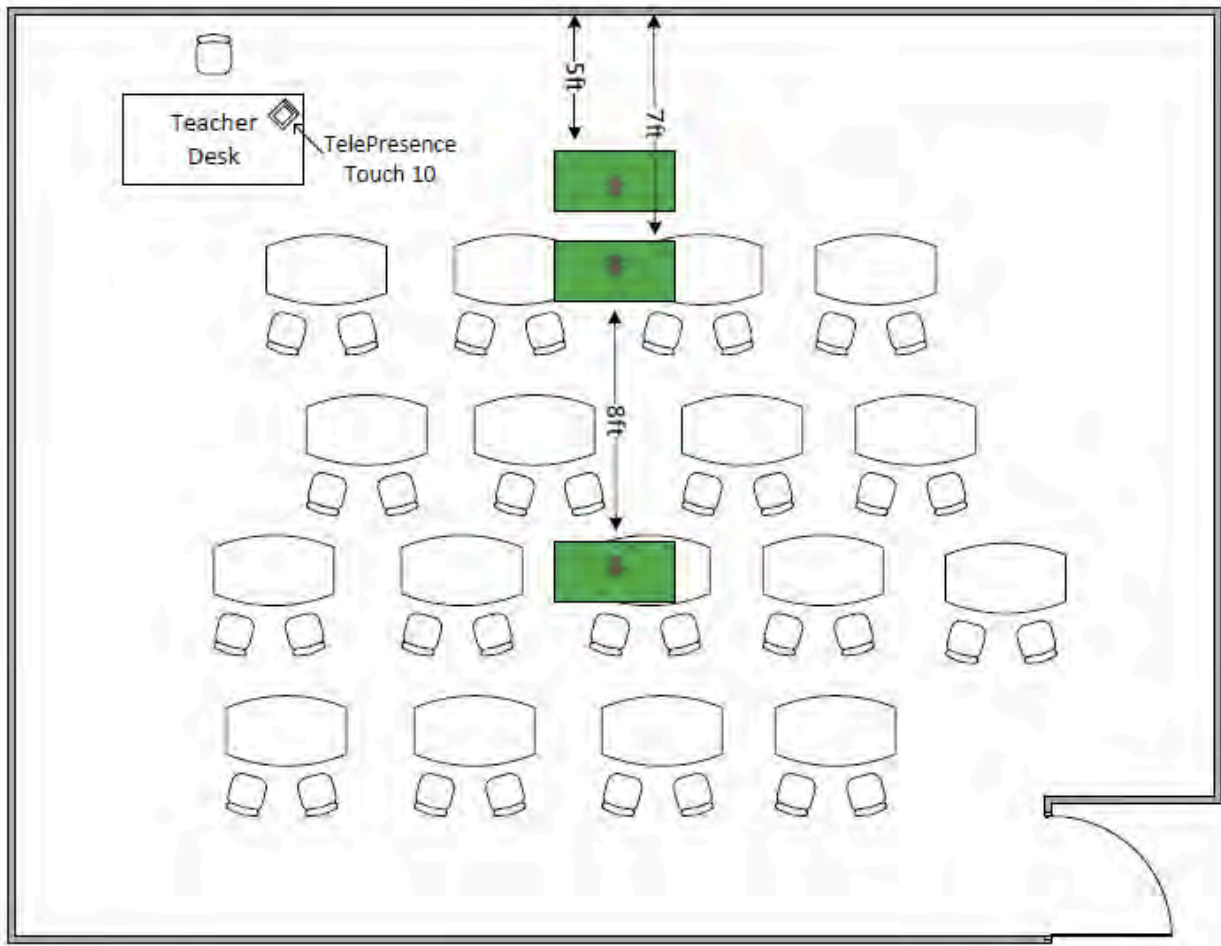
## Front Wall Layout Diagram



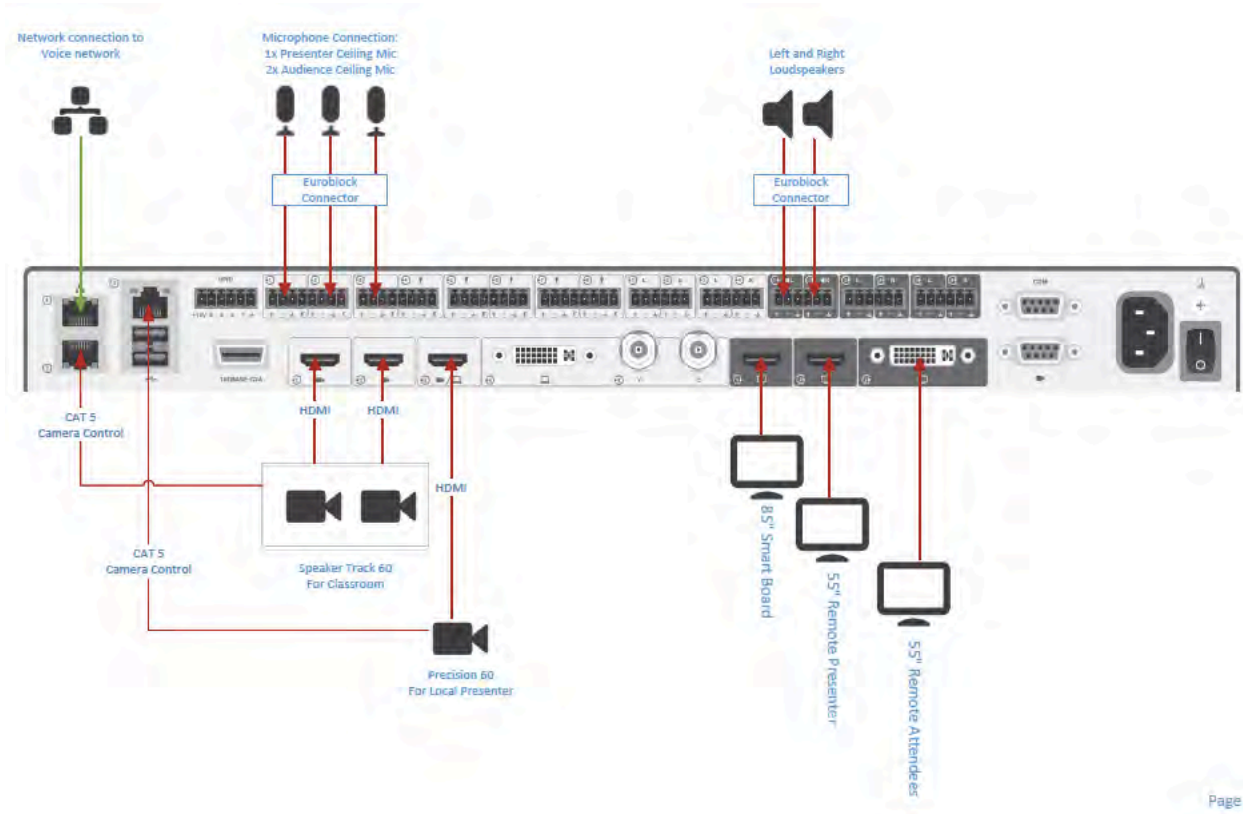
- Side wall device placement
  - 55-inch Remote participant TV.
    - Closest edge of the TV will be mounted 7 ft from the front of the room.
    - Bottom of TV will be mounted 55-inches from floor.
    - TV should be mounted as flush as possible
  - Precision 60 Camera
    - Mount for Camera will be mounted 60-inches from floor.
      - ◆ It is recommended to use a recessed camera mount when possible. This prevents the camera from protruding out into the room and becoming damaged by pedestrian traffic
  - Cisco SX80 Codec
    - Will be placed in a cabinet under the remote participant TV
- Audio Science Microphone placement
  - All Audio Science Microphones are hung 7 ft. from the floor.
    - Presenter Microphone
      - ◆ Facing the front of the room
      - ◆ 5 ft. from the front wall
    - Local Participant Microphone
      - ◆ Facing the back of the room
      - ◆ First Microphone is 7 ft. from front of the room.
      - ◆ Second Microphone is 8 ft. from the first microphone



### Ceiling Microphone Layout Diagram



# SX80 Codec Cabling Diagram



## Sample Room View



### DELIVERABLES

- Implementation services as outlined in the Project Scope
- As-built network diagrams and any related documentation to the project\*\*
- Informal over-the-shoulder knowledge transfer

\*\* This does not include any direct user training or customized "how to" documentation.



## ASSUMPTIONS / REQUIREMENTS / OUT OF SCOPE ITEMS

The following assumptions and constraints apply for this Services engagement.

- NPC will provide HyeTech an overview of relevant policies associated with the project. This should include any standardization information, naming conventions, IP addressing, or other pertinent information to the project
- NPC will provide access to all information, documentation, and technology necessary for HyeTech to perform discovery
- NPC will provide HyeTech access to all existing infrastructure
- NPC will provide access to support contracts as applicable
- NPC will provide HyeTech with remote access
- Items not specified within this document are explicitly excluded from the scope of service
- NPC has current software support contracts to support the upgrade of integrations as needed. Any procurement of upgrade software or licensing required for integrations is the responsibility of NPC.



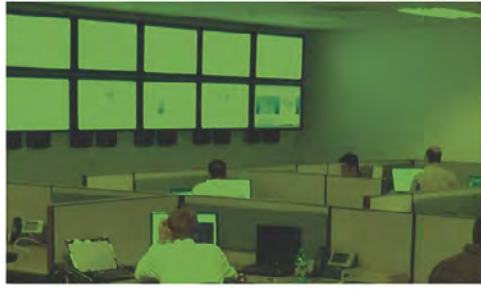
APPENDIX A – PRICING

DESCRIPTION	COST
<p>UC Infrastructure Upgrade Services</p> <ul style="list-style-type: none"> <li>• Implement 4 x BE6H servers</li> <li>• CUCM 8.5 -&gt; 11.X Migration</li> <li>• IM&amp;P 8.5 -&gt; 11.X Migration</li> <li>• CUC 8.5 -&gt; 11.X Migration + Unified Messaging</li> <li>• UCCX 8.5 -&gt; 10.6 Migration</li> <li>• Expressway-C and Expressway-E Implementation</li> <li>• Migrate integrations with like functionality</li> </ul> <p>Video Implementation Services</p> <ul style="list-style-type: none"> <li>• Configure 2 Expressway-C servers</li> <li>• Configure 2 Expressway-E servers</li> <li>• Implement 2 TPS v410 appliances</li> <li>• Implement TMS server</li> <li>• Implement Telepresence Conductor server</li> <li>• Implement TCS server</li> <li>• Build and deploy 4 SX80 based video rooms</li> <li>• Implement VBrick Rev appliance and platform</li> <li>• Configure Hybrid CMR for TPS connectivity to Webex Cloud</li> </ul>	\$ 75,940.00
<b>TOTAL</b>	<b>\$ 75,940.00</b>

Hye Tech Network & Security Solutions, LLC	Northland Pioneer College
Signature: _____	Signature: _____
Name: _____	Name: _____
Date: _____	Date: _____
Title: _____	Title: _____







**ALWAYS LEADING**

Cisco UC Upgrade and TelePresence Solution



A PROPOSAL TO

# Northland Pioneer College

MARCH 29, 2016



**s e n t i n e l**®

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## GENERAL CONTACT INFORMATION

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### General Contact Information

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[jkahalew@sentinel.com](mailto:jkahalew@sentinel.com)



# NEVER FOLLOW

At Sentinel we've always taken the lead. Since 1982, Sentinel Technologies has been recognized as a premier business technology services provider dedicated to delivering the highest quality IT solutions, customer service and support. Even as our services have spanned generations of technology, Sentinel has stayed at the forefront of IT developments and maintained a singular focus on providing practical and innovative solutions. With single-source accountability, Sentinel processes and teams can efficiently address a range of IT needs – from communications, to data center, to cloud and managed services. Our proven success has allowed us to expand from our original charter of providing technology maintenance services to our current standing as one of the leading IT services and solutions provider in the U.S.

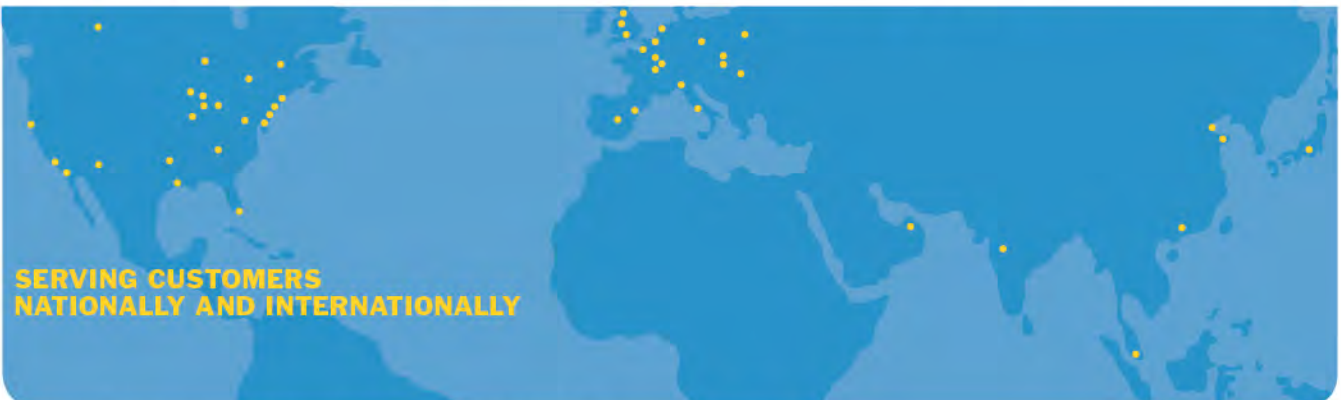
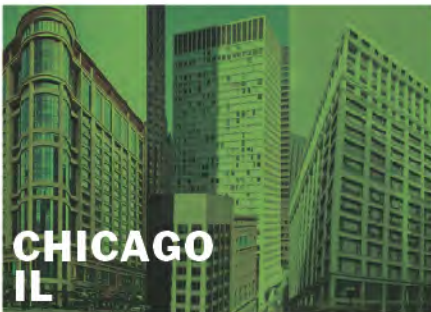
By aligning with many of today's global technology leaders including Cisco, Microsoft, EMC, NetApp and VMware, Sentinel solutions achieve tangible results.

When it comes to achieving a tangible ROI and sustainable performance from your IT environment, Sentinel takes the lead!



SENTINEL TECHNOLOGIES OVERVIEW

Headquartered in Downers Grove IL, Sentinel Technologies has independently managed offices in eight locations; Chicago IL, Springfield IL, Milwaukee WI, Phoenix AZ, Ann Arbor MI, Grand Rapids MI, and Crystal Falls MI allowing us to service our customers both nationally and internationally.



# ALWAYS INVOLVED

At Sentinel, we understand technology is a “living, breathing” organism that is continually changing and evolving to better meet the demands of business. We call it “Living Technology”. However, the term not only applies to how technology adapts to better serve business, it also describes our culture at Sentinel. Because here, we are “living technology” everyday — it’s part of our DNA. Customizing technology to enhance the companies we serve is our life. Therefore, we remain dedicated to always be looking forward in discovering how the latest technological advancements can translate into tangible benefits for our clients. For us, “always involved” means providing the complete solution; from inception – to production turn-up of the solution – to post-install support model.

**VISION | DESIGN | PRODUCT | IMPLEMENTATION |  
DOCUMENTATION | TRAINING | SUPPORT**



OUR CAPABILITIES

**THE COMPLETE PACKAGE**

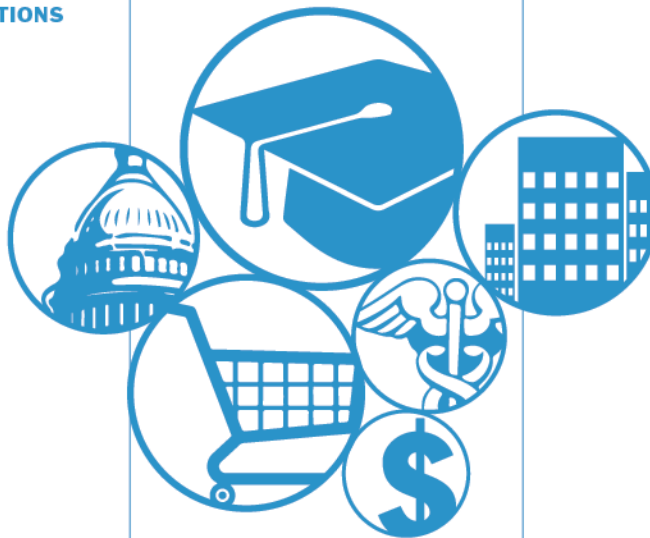
Sentinel provides our customers with a comprehensive solution: vision, design, product, implementation, documentation, training and support.



**COMPREHENSIVE SOLUTIONS**

**ANY INDUSTRY**

Sentinel’s services span the range of business verticals in mid-market, upper mid-market and enterprise level organizations. Companies in the Healthcare, Financial / Banking, Government, Education, Legal, Utilities, and Manufacturing verticals have taken advantage of Sentinel’s ability to take either full responsibility or act as a supplemental contributor to our customer’s business technology initiatives.



**DIVERSE INDUSTRIES**

**THE SENTINEL DIFFERENCE**

Sentinel applies an extraordinary breadth of technical solution expertise to design, sell, deploy and support our customer’s business technology needs. Our unwavering commitment to thought leadership and customer satisfaction maximizes both the value of technology investments and its impact to the business.

**500**  
**EMPLOYEES**

**HIGHLY-TRAINED**

# SENTINEL CORE SOLUTIONS

Sentinel understands your business is in constant motion. We take the initiative to make solutions happen that drive your business forward.

To jumpstart solution development, we perform analysis ranging from a rapidly-delivered “technical review” focused in a specific area to a “detailed review” of your entire business technology environment. During solution development, our LMC methodology – Location/Management/Consumption – uncovers the preferred solution Location (customer site or collocation), Management (customer or Sentinel) and the financial Consumption model (CAPEX/OPEX).

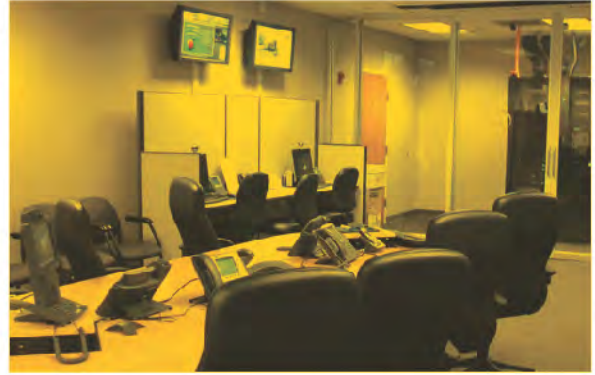
If you need assistance evaluating your LMC, Sentinel Advisory Services determine how to best balance your computing workloads – whether cloud, private cloud or hybrid cloud – based on business needs.

Once the direction is set, highly skilled Sentinel teams provide technology solutions and products that keep you always engaged and always connected:

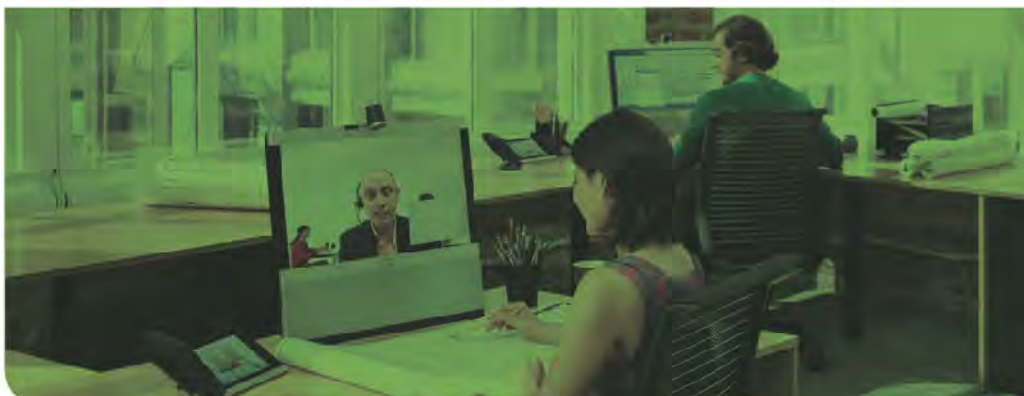
**COMMUNICATION | DATA CENTER | CLOUD & MANAGED SERVICES**



SENTINEL CORE SOLUTIONS



- Unified Communications
- Collaboration Tools
- Mobility/ Wireless
- Conferencing
- Unified Contact Center
- High Availability Networking
- Video Signage and Security
- Unified Computing
- Private and Hybrid Cloud
- Unified Fabric
- Virtualization – Network/Desktop
- High Performance Storage
- Backup and Recovery
- Cyber Security – Network/Email/Web
- Data Center Design



**ALWAYS ENGAGED** When your needs require the design, sale and implementation of a technology solution, Sentinel project teams are always up to the task! We combine the strength of a seasoned technical design team with highly-trained field engineers and a world-class Project Management Organization. The Sentinel team remains “always engaged” throughout the life of the project to ensure the highest quality solution is delivered on time and on budget.

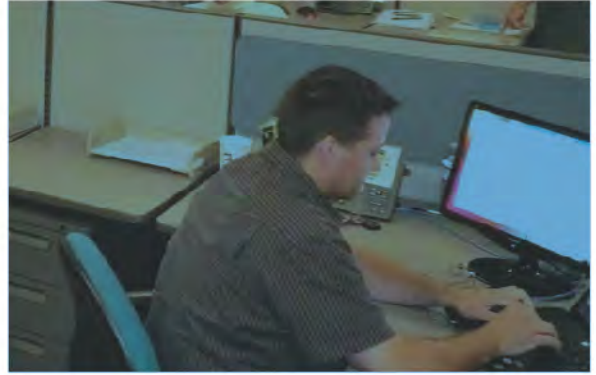


**SEASONED  
TECHNICAL  
DESIGN TEAM**

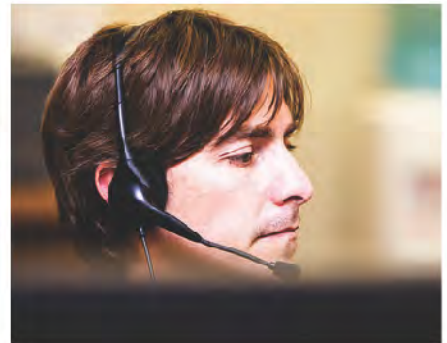
**HIGHLY-TRAINED  
FIELD ENGINEERS**

**WORLD-CLASS  
PROJECT  
MANAGEMENT  
ORGANIZATION**

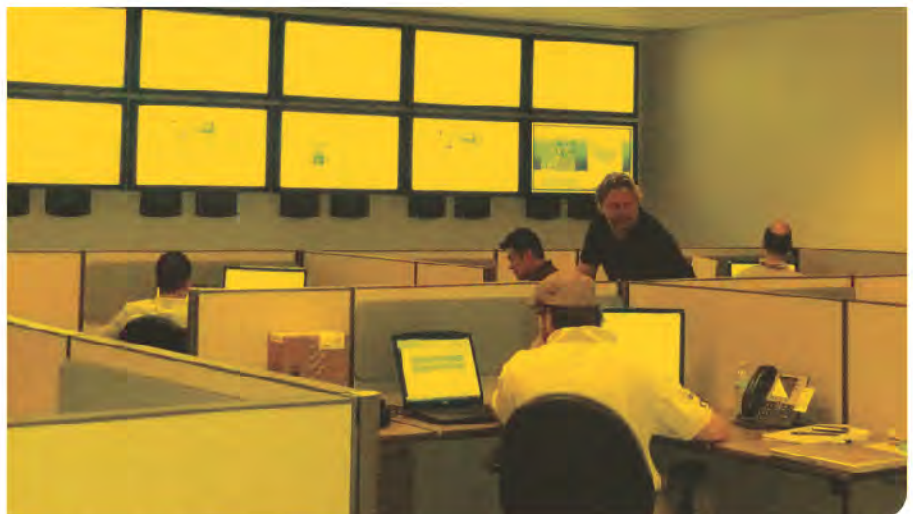




**ALWAYS  
CONNECTED**



- Sentinel CloudSelect™ – Compute, Storage, Backup/DR, Voice, Wireless, Co-location
- Fully Managed Solutions
- Complete System Monitoring and Support
- Supplemental Staffing
- Assessment and Advisory Services
- Maintenance and Support Contracts
- Sentinel HANS™, HANS + and HANS with PSS
- Outsourced support Models



**ALWAYS CONNECTED** When customers seek to maximize the lifespan of their current systems or desire a more efficient model to deliver IT, Sentinel's support teams and cloud services make certain you are "always connected". · Maximizing the availability of current systems through managed services, maintenance, monitoring and staffing has always been a cornerstone of Sentinel's business. · Our CloudSelect™ products are built on a high-availability platform that delivers cloud or hybrid cloud computing solutions through a customized, yet cost effective, model.



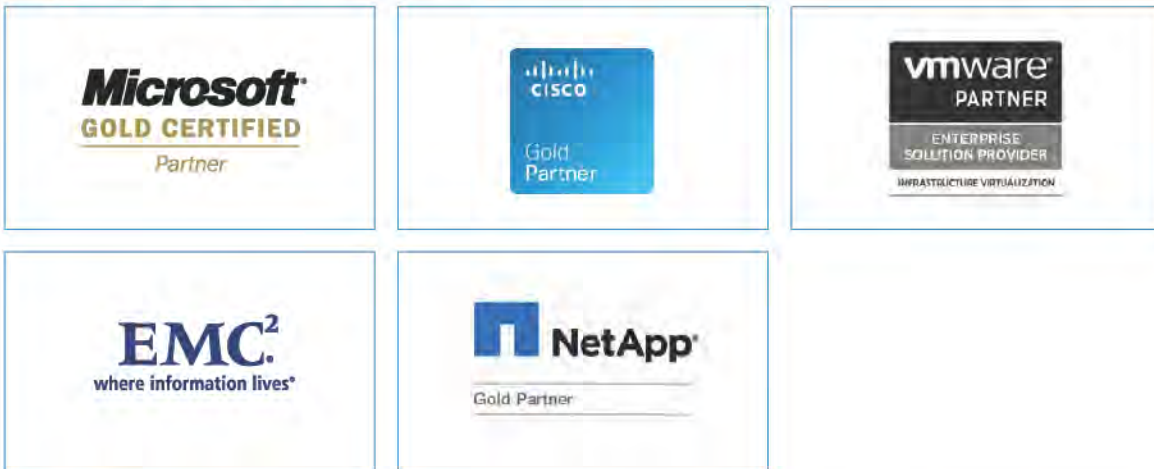


OUR VALUED PARTNERS

Sentinel recognizes that the quality of our solution partners directly affects the quality and value of the solutions we deliver to our customer. Our strategy is to partner with the best in the industry and obtain the highest level of certification available from all our key partners which, in turn, enables us to buy at the best price available. This ensures that we not only have the technical and business expertise to deliver on our promise but we can do so in the most cost-effective manner possible.

Sentinel is proud to maintain the following organizations as our strategic business partners:

Key Partner Certification Levels



Valued Partners



## OUR CLIENTS



### GOVERNMENT

Chicago Housing Authority  
Chicago Transit Authority  
City of Ann Arbor  
City of Joliet  
City of Naperville  
City of Phoenix  
City of Rockford  
Cook County  
DuPage County  
Genesee County  
Gila River Indian Community  
State of Illinois  
Tohono O'Odham Gaming Ent.  
Village of Downers Grove  
Village of Huntley  
Village of Palatine  
Village of Wheeling



### EDUCATION

Ann Arbor Public Schools  
Arizona State University  
Champaign CUSD 4  
Chicago City Colleges  
Chicago Public Schools  
Chippewa Valley Schools  
Eastern Illinois University  
Glendale School District  
ITT Technical Institute  
Joliet Junior College  
Kalamazoo College  
Loyola University Chicago  
New Trier High School  
Perspectives Charter Schools  
Roosevelt University  
Schaumburg SD 54  
University of Chicago  
University of Michigan



### HEALTHCARE

Access Community Health  
Advocate Healthcare  
Alatrium Institute  
Cancer Treatment Centers of America  
CFNI  
Children's Memorial  
Cook County Hospital  
DuPage Medical Group  
Gila River Healthcare Corporation  
Hospice of Northeastern Illinois  
Midwest Palliative & Hospice CareCenter  
Northwestern Memorial Hospital  
Passavant Area Hospitals  
Resurrection Healthcare  
Rush Presbyterian St. Luke's Hospital  
Sarah Bush Lincoln Health Center  
Silver Cross Hospital  
Sparrow Health Systems  
University of Wisconsin Hospitals



### MANUFACTURING

Agro-Culture Liquid Fertilizers  
AM Castle  
Amcol  
Chicago Bridge and Iron-CB&I  
Danfoss Inc  
Gardner Denver Inc.  
Kohler Co.  
Komatsu Corporation  
Kone  
Nalco Company  
Panduit  
Rustoleum Corporation  
Steelcase, Inc.  
Tate & Lyle  
Tenneco Automotive



### BANKING & FINANCIAL SERVICES

ABN Amro  
Acquity Group  
American Express  
Banco Popular  
Chicago Trading Company Holdings  
Citibank  
Euclid Insurance  
First Analysis  
First Midwest Bank  
Fortune Brands  
Michigan State Univ. Federal Credit  
OptionsXpress  
Optiver  
PPM America LLP  
Wheels, Inc.



### RETAIL

Art Van Furniture  
Apothecary Shop Inc.  
Brookfield Zoo  
Capital Fitness  
Casino Arizona  
Coinstar  
Crescent Crown  
Dot Foods  
East Bank Club  
Field Museum  
Koch Foods  
National Van Lines  
Personalization Mall.Com  
Redbox Automated Retail  
SC Johnson & Sons Inc  
Sears



### PROFESSIONAL SERVICES

Axiom Corporation  
A.J. Gallagher  
AT Kearney  
Duff and Phelps, LLP  
HPR Partners  
Locke Lord Bissell and Liddell  
Mayer Brown Rowe & Maw  
Reyes Holdings  
Schiff Hardin LLP  
Unitrin Data Systems  
Videojet  
Zenith Administrators



### UTILITIES

Arizona Electric Power Cooperative  
Central IL. Water, Light and Power  
City Water Light & Power-Springfield, IL  
Exelon  
We Energies-Wisconsin



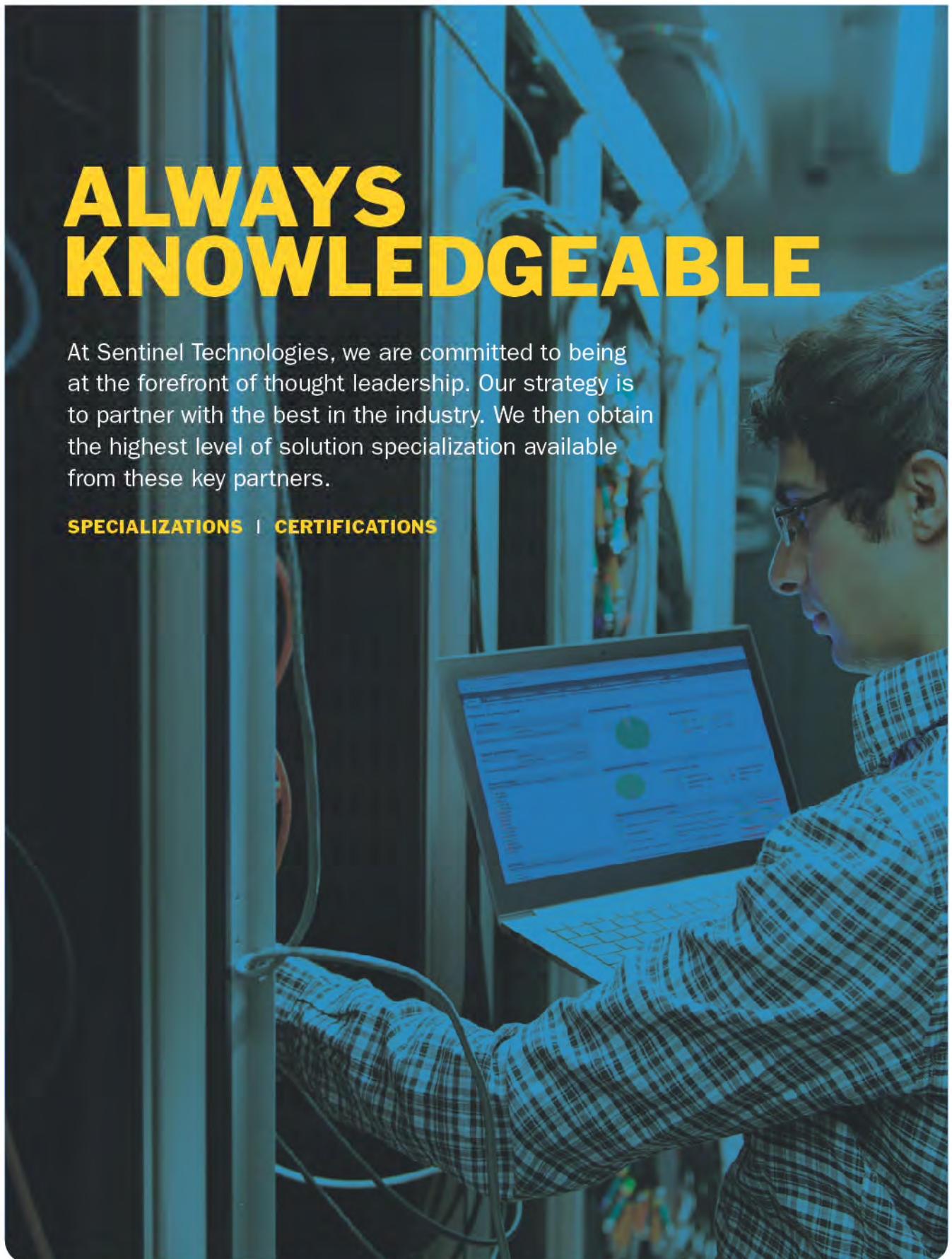
### REAL ESTATE

Ambitech Engineering Corp.  
AMLI Residential Properties  
Bentley Forbes  
CB Richard Ellis  
Equity Residential  
GITC-Greater Illinois Title Company  
LeaseCorp  
Marmon Group  
NAI Hiffman  
NPL Construction  
US Equities

# ALWAYS KNOWLEDGEABLE

At Sentinel Technologies, we are committed to being at the forefront of thought leadership. Our strategy is to partner with the best in the industry. We then obtain the highest level of solution specialization available from these key partners.

**SPECIALIZATIONS | CERTIFICATIONS**





## OUR QUALIFICATIONS

### Company Technical Specialization Certifications

The following Manufacturer Technology Certifications recognize Sentinel's expertise within each of our manufacturer partner's technologies:

#### SPECIALIST DESIGNATION FROM CISCO IN:

- Master Unified Communications
- Master Security
- Cisco Cloud & Managed Services Master
- Master Cloud Builder
- Cisco Powered Cloud Services
- Cisco Powered Managed Services
- Advanced Routing & Switching
- Advanced Data Center Networking Infrastructure
- Advanced Borderless Network
- Advanced Content Security
- Advanced Unified Computing & Unified Fabric
- TelePresence Video Advanced Plus
- Advanced Wireless LAN
- Cisco Partner Support Services
- Digital Media



#### ADVANCED TECHNOLOGY PARTNER (ATP) FROM CISCO IN THE FOLLOWING AREAS:

- Identity Services Engine (ISE)
- Cloud Partner – EMC, NetApp, and VMware
- Unified Contact Center Enterprise
- Customer Voice Portal
- Outdoor Wireless Mesh
- Emergency Notification Interoperability
- Video Surveillance



#### MICROSOFT AUTHORIZATIONS:

- Gold Management and Virtualization
- Gold Communications
- Silver Midmarket Solution Provider
- Silver Server Platform
- Silver Messaging





OUR QUALIFICATIONS

**EMC AUTHORIZATIONS:**

- Premier Partner Level
- Velocity Advantage Partner
- Authorized Service Partner
- Consolidate Specialty
- BRS Specialty



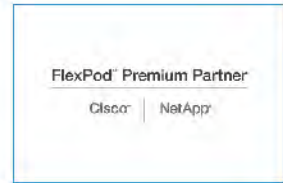
**VMWARE AUTHORIZATIONS:**

- Solution Provider Enterprise Partner
- Infrastructure Virtualization
- Business Continuity
- Desktop Virtualization



**NETAPP AUTHORIZATIONS:**

- Gold Level Partner
- Virtualization Specialized
- FlexPod Specialized
- NetApp Support Services Certified



**50+**  
**COMPANY**  
**CERTIFICATIONS**

## OUR QUALIFICATIONS

### Individual Technical Certifications

Sentinel makes substantial investments in keeping the training of our technical, sales and design team members up to date. We possess hundreds of vendor technical certifications and continuous technical education and training is a way of life. This ensures we have the technical and business expertise to deliver on our promise.

We also spend numerous hours in the computer lab applying and testing theory before we go to the customer site. This combination of classroom and lab training ensures we are properly trained and have already gone through much of the learning curve – the result is we know how to respond when the unexpected occurs.

Sentinel possesses over 2,400 technical certifications from our manufacturer partners. A sampling is below.

#### NETWORK AND DATA CENTER

##### 524 CISCO CERTIFICATIONS

- CCIE – 24, CCDP – 11, CCDA – 19, CCNA – 120, CCNP – 57, CCSP – 2, Cisco Data Center – 62
- 50+ Unified Communications Specialist Certifications
- 100+ Sales and Design certified



##### 54 EMC CERTIFICATIONS

- Expert Level Implementation Certification, EMCIE Clariion, NAS, VNX, BRS (Avamar, Data Domain and Networker)
- Architect certification – EMCTA; VNX, BRS, VMAX, CLARiiON, NAS, Storage, and Management specialization
- ASN Partner – certified for complete installation and implementation of the entire EMC portfolio
- VCE VBLOCK certified partner
- VSPEX partner
- Velocity Premier Partner



## OUR QUALIFICATIONS

### NETWORK AND DATA CENTER

#### 77 MICROSOFT CERTIFICATIONS

- MCSE – 23
- Sales and Design certified



#### NETAPP INDIVIDUAL TECHNICAL CERTIFICATIONS

##### NetApp Professional Certifications

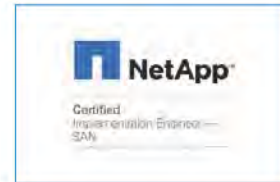
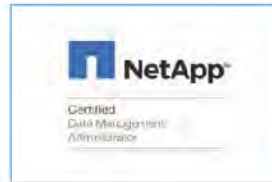
- NetApp Certified Data Management Administrator (NCDA) – 6

##### NetApp Specialist Certifications

- NetApp Certified SAN Implementation Engineer (NCIE-SAN) – 6

##### Accreditations

- NetApp Server Virtualization Professional – 3
- NetApp Storage Architect Professional – 3
- Installation Accreditation Professional – 3



#### CITRIX AUTHORIZATIONS

- Citrix Access Gateway
- Citrix AppDNA
- Citrix Branch Repeater
- Citrix CloudGateway
- Citrix Essentials for Microsoft Hyper-V
- Citrix NetScaler
- Citrix XenApp
- Citrix XenDesktop
- Citrix XenServer



#### SOLAR WINDS SOLARWINDS CERTIFIED PROFESSIONAL



OUR QUALIFICATIONS

NETWORK AND DATA CENTER

In addition to our core partners, Sentinel possesses partnerships/technical experience with many other technology providers including those listed below.



**2,400+**  
INDIVIDUAL  
CERTIFICATIONS

## OUR QUALIFICATIONS

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### MAINTENANCE AND REPAIR

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- **HP** – 698 certifications (workstations, notebooks, server, printer etc)
- **DELL** – 229 certifications (server, storage, notebook etc)
- **LENOVO** – 86 certifications (desktop/laptop)
- **LEXMARK** – 34+ certifications (printers)
- **PC SUPPORT** – 163 Certifications (workstations, notebooks, server, printer etc)



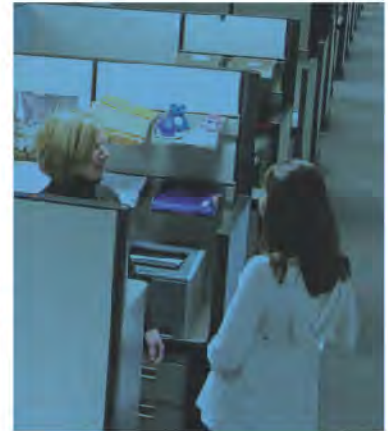
### CUSTOMER SATISFACTION QUALIFICATIONS

- Recipient of Advocate Healthcare Corporate Partner Award
- Recipient of AM Castle Supplier of the Year Award
- Recipient of Illinois Auto Auctions Inc. Outstanding Performance Award
- Recipient of hundreds of letters from customers recognizing outstanding contribution and performance

### TECHNOLOGY PARTNER AWARDS

- Recipient of Cisco Customer Satisfaction Excellence Award for seven straight years
- Best year over year performance in Central Operations District
- Best year over year performance U.S. Regional VAR
- Best of AVVID Show Award in Customer Satisfaction for Sentinel's IQ for Education application suite for Cisco IP phones
- Awarded Cisco "Global IP Communications Partner of the year"
- Awarded Cisco "Great-Lakes-Region, Partner of the year"
- Awarded Cisco "Central Region IP Communications – Top Partner"
- Awarded Cisco "Central Region Partner Summit - Partner of the Year"
- Awarded Cisco Wireless "Excellence in Partnership"
- Six time HP Service Excellence Award Winner
- 2014 EMC Quality Service Award





Since the inception of Sentinel in 1982, the company has abided by a simple philosophy – “happy and motivated employees equal happy customers”. To that end, Sentinel has been vigilant in creating a work environment that encourages creativity, fosters growth and rewards success.

Sentinel has received independent recognition for the company’s ability to create an outstanding work environment. The company has been recognized as one of Chicago’s Best Places to Work by both the Chicago Tribune and Crain’s Chicago Business and the company has received hundreds of letters of recommendation from national and international customers for the outstanding support delivered by the Sentinel team.



Sentinel Technologies, Inc. is pleased to announce that it has been named one of The Chicago Tribune Top Workplaces for the third year in a row. Sentinel was selected as #21 based on employee feedback compared to other companies in the Chicago area. Sentinel has also been recognized as a “Best Place to Work” by Crain’s Chicago Business.







# ALWAYS EFFICIENT

Sentinel is committed to producing high quality results as efficiently as possible for our customers. This is why we have embraced professional project management as the cornerstone of every project we undertake.

Sentinel's approach to Project Management incorporates a unique blending of both Strategic and Tactical monitoring and control techniques thus realizing the "how" of the work we perform. We have achieved this via formal planning techniques and sophisticated virtualized work-flows – "Guides to Assembly" which are real mechanisms that help guide project participants through communication channels and work assignments in order to realize task sequence, manage risk, and avoid re-work.

OUR METHODOLOGY

Sentinel’s Enterprise Project Management Organization has a large core of PMP certified project managers who work with our customer and the assigned Sentinel technical project team to ensure we deliver on our promise. Our PM’s have the professional certification and a strong technical background necessary to provide the management and guidance required to keep projects on time and on budget. Sentinel’s EPMO utilizes tools such as Microsoft SharePoint Portal and Organizational Project Management Maturity Model (OPM3) along with basic blocking and tackling around issues like defects, root cause analysis and risk mitigation to deliver optimum results.

For projects requiring project management (typically 80+ hours of technical services), Sentinel will adhere to the following guidelines.\*

**1 INTRODUCTION CALL**

Within two business days of PMO notification, a Sentinel Project Manager will contact you for an introduction and to answer any questions you might have.

**2 SCHEDULE EXTERNAL KICK-OFF**

Within three business days of the introduction call, the Project Manager will call again to arrange a time and date to set up an initial “Customer Kick-Off” meeting with you and your Team.

*(Between the Introduction Call and the subsequent Kick-Off Meeting, Sentinel assembles the project team for a Internal Kick-Off or formal review of the project’s characteristics, inherent risks, and to perform formal planning and scheduling.)*

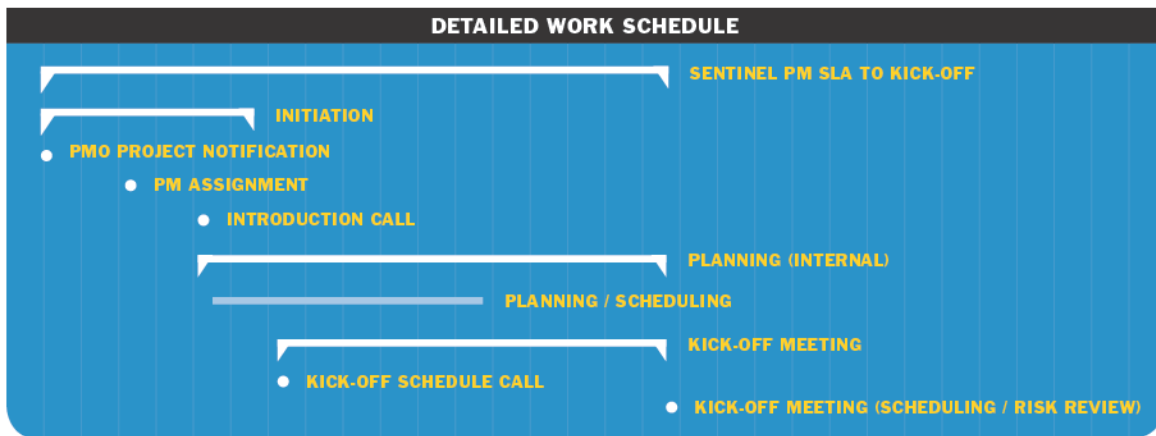
**3 KICK-OFF MEETING (CUSTOMER SITE)**

Ten business days from the Introduction Call, the Customer Kick-Off will be held at the customer location.

The purpose of this meeting:

- Acceptance of Initiation Documentation, Risk Review and Top Down Structured Planning (TDSP)
- Walk through (if needed depending on Solution purchased)
- Scheduling of Blueprint Meeting(s)

As a result of this session, a detailed *final* work schedule (*MS Project*) will be created and used to track and control the project. Once completed and resources are scheduled the Design phase can commence.



\* Depending on the size and complexity of the project, planning sessions and the subsequent creation of schedules and other administrative project management artifacts such as risk plans, communications plans, and resource scheduling, can extend out from the intervals shown above. Project Management process may be customized based on factors such as project size, urgency or complexity.



## ENVIRONMENTAL POLICY STATEMENT

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At Sentinel, environmental protection is a management responsibility as well as the responsibility of every employee. Our environmental protection policy addresses all aspects of the corporation's operations which can potentially impact the environment. In creating this policy, we have taken into account the following factors:

- Compliance with applicable laws, regulations, and standards concerning environmental protection
- Establish corporate environmental objectives and targets
- Minimize the environmental risks to our employees and the communities in which we operate
- Promote employee awareness of environmental concerns, actions, and responsibilities
- The efficient use of energy and materials in our operations
- Reduce/ eliminate waste through recycling and responsible disposal
- Continuous improvement and monitoring of the current environmental policy

Further, Sentinel suppliers are encouraged to develop an Environmental Policy and Environmental Management System by following the Environmental Protection Agency guidelines.

## Executive Summary

Northland Pioneer College (NPC) is looking to upgrade the existing Cisco Unified Communications platform and related Cisco collaboration applications, and upgrade related third-party applications, including Syn-Apps SA-Announce, XMediusFAX, and CallRex. NPC is also looking to design and implement a new Cisco TelePresence solution with VBRICK and four Cisco TelePresence SX80 endpoints at NPC locations to support a new Distance Education video conferencing project under a Talon Grant to High School within the NPC service area in Northern Arizona. The new TelePresence platform will initially support ten Cisco TelePresence MX300 video endpoints at ten different High Schools. The MX300 endpoints will be implemented under a separate project scope of service.

This project includes upgrade and virtualization of the existing Cisco Unified Communications Manager, Cisco Unity Connection, Cisco Emergency Responder, Cisco Unified Presence, Cisco Unified Contact Center Express, and upgrade and virtualization of XMediusFAX, CallRex Call Recording, and Syn-Apps SA-Announce. New Virtual machine servers will be implemented on the proposed Cisco UCS appliances running on VMware vSphere 5.5 Standard.

The proposed new Cisco TelePresence platform includes TelePresence Server, TelePresence Conductor, TelePresence Manager, TelePresence Content Server, Expressway-C and Expressway-E servers, and VBRICK DME and VBRICK REV in the Cloud, and four Cisco SX80 TelePresence codecs for four NPC classrooms to be enabled to broadcast live video courses to the new MX300 endpoints at the High Schools across the internet.

It is the intent of this engagement that Sentinel will architect, design, and implement the project according to Sentinel established best practices and in a manner ready for production computing. During this project, knowledge transfer of general administration tasks, points of scale, and the environment will be provided to prepare the customer staff moving forward after the engagement.

The next section “Project Overview” highlights the main phases involved in this project. The “Scope of Work” section then lays out in further detail what is covered as part of this project. Finally, “Client Responsibilities and Assumptions” details important assumptions Sentinel has made in discussion with Northland Pioneer College’s Team.

## Project Overview

### PROJECT PHASES

#### *Phase 1 - Project Initiation Meeting*

⇒ Sentinel Project Management will coordinate a kick-off meeting to review and approve the scope of work provided to the customer. Customer and Sentinel provided resources will be introduced and their relevant roles for the project discussed. Sentinel Project Management will then coordinate a time for a site visit by Sentinel Engineers in order to draft blueprints of all proposed work which will be provided to the customer. High level timelines for project milestones will also be identified and discussed.

#### *Phase 2 - Analysis & Design*

⇒ Sentinel engineers will perform a high-level audit of the client's relevant infrastructure. The data collected from this audit will be used to generate a design for the implementation of the solution. Sentinel engineers will inform the client of any design requirements that will need to be completed by the client's IT staff prior to the start of the next phase (such as acquisitions of Microsoft Windows Server licenses, and other essential design components not covered within this document). Upon acceptance of the work as detailed within the blueprint by the customer, Sentinel engineers and project managers will then coordinate specific dates and times appropriate for accommodating the nature of the work involved (i.e. Work which will require outages will be scheduled during appropriate maintenance windows).

#### *Phase 3 - Staging*

⇒ During the staging phase, new equipment will be unboxed, burned-in, configured and tested off-site before being repacked and delivered for onsite implementation. This ensures maximum efficiency and quality while minimizing the disruptions and impacts to the customer's environment.

#### *Phase 4 - Implementation*

⇒ Sentinel engineers will proceed with the implementation of all items specified within this Scope of Work and further detailed in the customer approved Design Document.

#### *Phase 1 - Cisco Collaboration Upgrade*

⇒ Sentinel engineers will upgrade and virtualize the Cisco Collaboration environment which is comprised of the following application and hardware components:

- Cisco Unified Communications Manager (CUCM)
- Cisco Emergency Responder (CER)
- Cisco Unity Connection (CUC)
- Instant Messaging and Presence (IM&P)
- Cisco Unified Contact Center Express (CCX)
- CallRex Call Recording
- XMediusFAX
- Syn-Apps SA-Announce
- Cisco BE6H-M4-K9 appliance servers

## PROJECT OVERVIEW

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### *Phase 2 - Cisco TelePresence with VBRICK*

⇒ Sentinel engineers will design and implement a new Cisco TelePresence and VBRICK solution, which is comprised of the following application and hardware components:

- Cisco TelePresence Server
- Cisco TelePresence Manager
- Cisco TelePresence Conductor
- Cisco Expressway-C (Core)
- Cisco Expressway-E (Edge)
- Cisco TelePresence Content Server
- VBRICK DME
- VBRICK REV
- Cisco BE6H-M4-K9 appliance servers
- Cisco CTI-410V-VTS-K9 appliance servers
- Cisco CVC-DME-M4-M VBRICK DME appliance server

### *Phase 3 - Redundancy*

⇒ Sentinel engineers will design and implement redundant virtual machine and appliance servers for each of the following applications components. The intent is to install at both WMC (Show Low) and PDC (Holbrook) locations.

- Cisco Unified Communications Manager (CUCM)
- Cisco Emergency Responder (CER)
- Cisco Unity Connection (CUC)
- Instant Messaging and Presence (IM&P)
- Cisco TelePresence Server
- Cisco TelePresence Manager
- Cisco TelePresence Conductor
- Cisco Expressway-C (core)
- Cisco Expressway-E (edge)
- Cisco TelePresence Content Server
- VBRICK DME
- VBRICK REV
- Cisco BE6H-M4-K9 appliance servers
- Cisco CTI-410V-VTS-K9 appliance servers

### *Phase 5 - Migrations/Cutover*

⇒ After implementations are complete, Sentinel engineers will proceed with all migrations and cutovers. Sentinel engineers will work with Sentinel's project managers to coordinate any needed maintenance windows for the completion of the project.

### *Phase 6 - Post Support*

⇒ Sentinel engineers will be dedicated to being available for the resolution of any problems or issues that arise during the post support portion of the project.

### *Phase 7 - Project Completion*

⇒ Upon conclusion of all other phases of work Sentinel's engineers will provide the client with updated design documents for the project. Sentinel's project management team will then arrange for a meeting with the client to review the status of all project items. If no project items remain open Sentinel's project managers will request that the client sign off on the project, thus closing the project at this time.

## Scope of Work

### Planning and Pre-Engagement Preparation

- Identification of key Customer project team members with whom Sentinel will work to accomplish the tasks defined in this scope
- Review required hardware, software, networking and facilities required to successfully complete this engagement

### Analysis & Design

#### GENERAL

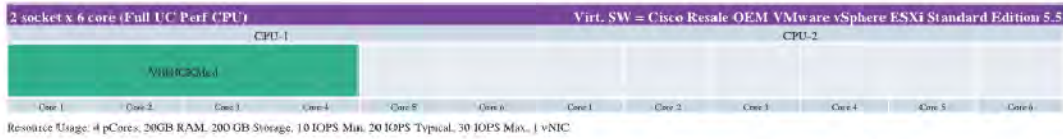
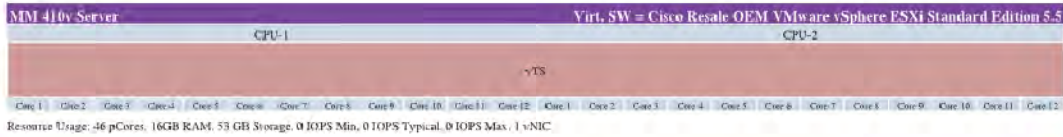
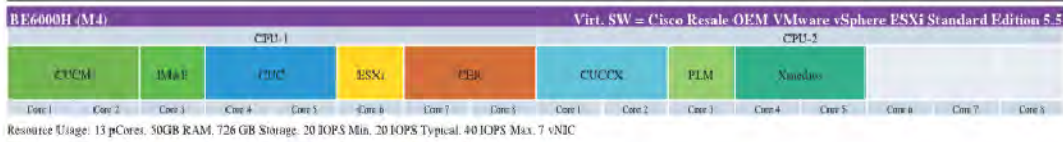
- Analyze the current environment to make sure the environment is ready for infrastructure implementation based upon the assumptions laid out in the next section
- Engage with the Customer team to brainstorm the technical requirements and use case design for the implementation
- Develop specific requirements, design and use case specifications blueprint document based upon customer discussion. It is anticipated that the Cisco UC and third-party UC applications will be implemented on the proposed seven (7) UCS C-series appliances similar to the following diagram. The final placements will be determined after the blueprint design documentation is completed. Appliances 1, 3, 5, and 7 are anticipated to be located at the PDC campus. Appliances 2, 4, and 6 are anticipated to be located at the WMC campus.



SCOPE OF WORK



Collaboration Virtual Machine Placement Tool



File Name: Northland Pioneer

## Implementation – Cisco Collaboration - Upgrades

### HARDWARE – CISCO UCS APPLIANCES

- The proposal includes the installation and configuration of the following hardware appliance servers.
  - Four BE6H-M4-K9= Cisco BE6000 appliance servers
  - Two CTI-410V-VTS-K9 appliance servers
  - One CVC-DME-M4-M appliance server
- Each server will be rack-mounted and connected to the customer network switch ports and customer-assigned VLANs.
- Each will be installed and configured with the proposed VMware vSphere Standard Edition licenses and prepared to be integrated and managed by the existing vCenter server instances at NPC. vSphere Standard 5.5 will be installed by Sentinel.
- Customer-provided static IP address information will be installed into each vSphere hypervisor.

### APPLICATIONS – COMMUNICATIONS MANAGER

- Northland Pioneer College has engaged Sentinel to upgrade their current CUCM environment from version 8.x to version 11 as redundant (publisher/subscriber) virtual machine instances, with one publisher, and one subscriber per campus (PDC & WMC). This upgrade will be a Virtual Server upgrade utilizing a new Cisco UCS C-Series Servers. The current CUCM environment has 777 licensed endpoints. Northland Pioneer College is not adding any additional licenses as part of this project. If Northland Pioneer College requires additional licensing, the project manager will work with the project team and the customer throughout the PCR process.
  - As explained in the presales meetings, Cisco has a DLU to UCL/UWL licensing conversion process. Cisco uses a DLU calculator to complete this conversion <https://software.cisco.com/download/navigator.html>

### APPLICATIONS – UNITY CONNECTION

- As part of the project, Northland Pioneer College has elected to upgrade Unity Connection. The current Unity version is 8.x and will be upgraded to version 11 as redundant (publisher/subscriber) virtual machine instances, one per campus (PDC & WMC).
- Unified Messaging (Single Inbox) will also be configured and integrated with the existing Microsoft Exchange Server 2010 platform.
- As part of this upgrade, the Sentinel engineer will request information about current mailbox sizes and corporate retention policies. Sentinel will use the Cobra tool to migrate current mailbox files over to the upgraded server. This is typically done a few days prior to the upgrade.
- No configuration changes are anticipated nor planned as part of this upgrade, however, all data and configurations will be retained and migrated to the new virtual machine servers.

### APPLICATIONS - PRESENCE

- As part of this project, Northland Pioneer College has elected to upgrade an existing Presence Server.
  - The current Presence version 8.x will be upgraded to 11.x. Northland Pioneer College currently has 17 users that will be migrated to the new version of Presence called Instant Messaging & Presence (IM&P) and will be implemented as redundant (publisher/subscriber) virtual machine instances, one per campus (PDC & WMC).
  - No configuration changes are anticipated nor planned as part of this upgrade, however, all data and configurations will be retained and migrated to the new virtual machine servers.
  - Sentinel will ensure IM&P is integrated with Active Directory and Microsoft Exchange Server 2010.

## SCOPE OF WORK

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### APPLICATIONS – EMERGENCY RESPONDER

- As part of this project, Northland Pioneer College has elected to upgrade their CER server. The current CER version 8.x will be upgraded to 11 as redundant (publisher/subscriber) virtual machine instances, one per campus (PDC & WMC).
  - Under the existing configuration, Northland Pioneer College has multiple zones which will be migrated to the upgraded servers. Sentinel's project team will work the customer to gather the zone description and number of users in each zone. This documentation is required for CER configuration. Once the project is in the testing phase, Sentinel will work with Northland Pioneer College to test 911 to make sure the correct zones appear.
  - No configuration changes are anticipated nor planned as part of this upgrade, however, all data and configurations will be retained and migrated to the new virtual machine servers.
- A link for all states 911 laws has been provided below:
  - <http://www1.911enable.com/resource-center/state-e911-legislation>

### APPLICATIONS – CONTACT CENTER EXPRESS

- As part of this project, Northland Pioneer College has elected to upgrade their CCX server. The current CCX version 8.x will be upgraded to version 11 as a single virtual machine instance.
  - No configuration changes are anticipated nor planned as part of this upgrade, however, all data and configurations will be retained and migrated to the new virtual machine server.

### APPLICATIONS – 3<sup>RD</sup> PARTY

- Northland Pioneer College uses several third party applications within their Cisco Collaboration Infrastructure. Third Party application upgrades such as **XMediusFAX**, **CallRex**, and **SA-Announce** will be upgraded to the latest version of each application and implemented as single virtual machine server instances on Windows Server 2012 R2 using NPC-provided licensing with the following conditions.
  - Remediation of any existing issues with these applications are outside of the scope of this proposal and may require separate effort, especially if remediation is required to complete the upgrade and migration tasks. Sentinel will perform a basic health check of each application and advise the customer of any conditions that may adversely impact the upgrade and migration and provide a separate labor estimate for remediation.
  - No configuration changes are anticipated nor planned as part of this upgrade, however, all data and configurations will be retained and migrated to the new virtual machine servers as-is, with only necessary configuration changes required to complete the upgrade, migration, and virtualization of the application.
  - Sentinel will utilize NPC-provided support and maintenance contracts with each respective vendor and manufacturer to obtain the upgraded licensing and to support the migrations tasks.
  - Sentinel can perform basic verification steps but will depend on broader testing and verification to be completed by NPC. Sentinel will collaborate with NPC staff to test and verify the operation of these applications after the migration is complete using typical and routine tasks and business processes.



## SCOPE OF WORK

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### HARDWARE – VOICE GATEWAYS

- Northland Pioneer College currently has 11 voice gateways in production today. No configuration changes are anticipated nor planned for any of the voice gateways.

### UPGRADE APPROACH

- As part of this scope, Northland Pioneer College has decided to move forward with a phased approach. With a phased approach, Sentinel and Northland Pioneer College will need to determine the best way to implement this solution. With a phased approach, there may be intercluster communication delays as other sites will be on the upgraded platform and the others will remain on the old platform. All of these scenarios will be discussed during the planning phase of the project.

## Implementation – Cisco TelePresence

### APPLICATIONS – TELEPRESENCE SUITE

The proposal includes Cisco TelePresence for Audio and Video Conferencing services between NPC and the target High Schools using new Cisco TelePresence SX80 and MX300 endpoints. TP licenses are part of the Cisco MultiParty (MP) licensing program and are available as either Personal MultiParty (PMP) or Shared MultiParty (SMP). PMP licenses are for named hosts/users whom can schedule TP conferences and are included only with each Cisco Unified Workspace Licenses (CUWL) Professional Edition license. SMP licenses are purchased a 'la carte and permit one shared TP conference, but can be scheduled by any user. SMP is used to allow scheduling by users outside of CUWL Pro named user/host PMP licenses.

TP utilizes the Cisco UCM system and can be integrated with Microsoft Exchange/Outlook to facilitate convenient scheduling of video and audio conferences, or can be scheduled through a TP Web GUI user interface. TP also utilizes either dedicated TP video endpoints, such as the proposed TP MX300 or SX80 video endpoints, or personal video endpoints such as Cisco Jabber clients. TP can also be integrated with third-party video endpoints that support either H.323 or SIP.

The MX300 endpoints for the High School will be accessed across the public internet and supported into TP with the Expressway-C and Expressway-E servers included with this proposal and can traverse the NPC and High School firewalls using Expressway.

Jabber video client endpoints integration is not included with this project.

TP uses the UCM infrastructure for simplified dialing and identification of video endpoints with 4 or 5-digit extension numbers. TP will use internet bandwidth to connect to external TP MX300 conference participants. The resolution of TP endpoints will automatically vary to the bandwidth available for respective endpoints. Each TP conference can support multiple video resolutions and frame rates, all the way up to 1080p. Continuous Presence with a multitude of CP layout options for video frames or panels are also provided and can be pre-configured for simple selection.

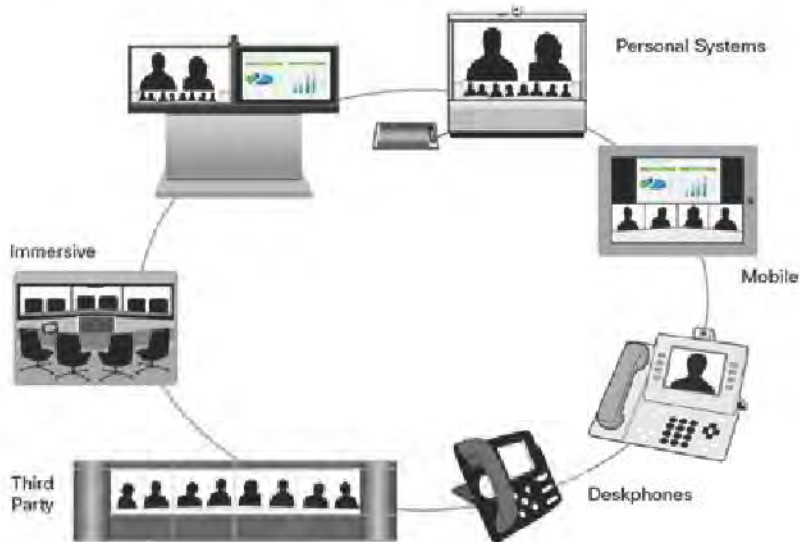
Cisco TP Endpoints also include simplified directory and dialing services and can permit direct dialing between TP endpoints for point-to-point video calls without scheduling. Scheduled TP conferences can automatically dial and join TP and registered third-party video endpoints into video conferences.

## SCOPE OF WORK

### Examples of Cisco TelePresence Server Supported Modes



### Cisco TelePresence Server Interoperability



The proposed TP server infrastructure includes redundant virtual machine server instances of the following:

- TelePresence Management Suite
- TelePresence Conductor
- TMS Exchange Integration for Microsoft Exchange
- TelePresence Conductor
- TelePresence Content Server
- Expressway-C and Expressway-E
- vTS Virtual TelePresence Servers

VTS provides software-based MultiPoint Control Unit features for video and audio conference mixing to support simultaneous TP conferences. The number of TP conference participants is now only limited by the hardware capacity of the VTS servers and is not limited by TP licensing. The proposed UCS solution includes Cisco Multiparty Media 410v rackmount UCS C-series servers, which are dedicated to VTS roles.

**SCOPE OF WORK**

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The Cisco Multiparty Media 410v servers are each a dedicated Cisco UCS C220 M4 server that supports up to 27 x FullHD, 54 x HD, 108 x SD, or 145 x 360p screens per server, although the resources can be used more flexibly. Maximum capacity is achieved with 27 screen licenses per virtual machine dedicated and utilizing all resources on the respective CTI v410v server. Screen licenses also form the basis for capacity planning for each server, as different types of Audio and Video connections affect the number or fractional number of screen licenses needed per conference participant.

Cisco TelePresence Server Screen Licenses per Participant

Call Type Description			Screen Licenses Required per Participant
Main Video	Audio	Content	
-	Mono	-	1/52
360p30 <sup>1</sup>	Mono	In main video	1/8
360p30 <sup>1</sup>	Stereo	720p5	1/4
480p30	Stereo	In main video	1/4
480p30	Stereo	720p5	1/3
720p30	Stereo	720p5	1/2
720p30	Stereo	720p30	1
1080p30	Stereo	720p15	1
720p60	Stereo	720p15	1
1080p30	Stereo	720p30	1 and 1/2
Three-screen 720p30	Multichannel	720p5	1 and 1/2
Three-screen 720p30	Multichannel	720p30	2
1080p30	Stereo	1080p30	2
Dual-screen 1080p30	Stereo	720p30	2
Three-screen 1080p	Multichannel	720p30	3
Three-screen 1080p	Multichannel	1080p30	4
Four-screen 1080p	Stereo	1080p30	4

**SCOPE OF WORK**

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Cisco TelePresence Server Conferencing Capacity on Various Platforms. The 410v is proposed.

Screen Licenses Required per Call	8-Core Virtual Machine	Media 410v <sup>1</sup> (46 vCPU) <sup>2</sup>
	5 screen licenses	27 screen licenses
1/52	200 <sup>3</sup>	200 <sup>3</sup>
1/8	41	145
1/4	20	108
1/3	15	81
1/2	10	54
1	5	27
1 and 1/2	3	18
2	2	13
3	1	9
4	1	6

<sup>1</sup> To achieve the maximum number of calls, Cisco TelePresence Server on Virtual Machine must be the only virtual machine hosted on the Multiparty Media 410v or 30 vCPU/high-density virtual machines. It cannot be co-resident with any other unified communications application (unlike the 8-core option that runs at 2.4 GHz minimum and can be co-resident).

<sup>2</sup> Media 410v is configured with 46v CPUs as per the high-density configuration, but is has a higher capacity.

<sup>3</sup> 200 is the maximum number of calls possible on a Cisco TelePresence Server. It requires Cisco TelePresence Conductor Version XC2.3.

The proposed TP SMP solution utilizes TP SMP a ‘la carte licensing for 4 concurrent meetings or conferences. With TP-SMP shared licenses, any NPC user can be configured to schedule video conferences. The supporting TP infrastructure is described in a prior section and is supported on the proposed data center infrastructure.

The TP proposed design supports includes two (2) VTS CTI 410v rackmount servers each with 27 screen licenses supported.

Sentinel will design, install, and configure TP with the design listed herein, including integration with the Cisco UCM system. Sentinel will collaborate and coordinate with NPC about necessary Firewall and Internet services to support TP, including public IP address and public DNS host entry configuration. Programming and configuration of the Firewalls is NPC provided.

## SCOPE OF WORK

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### APPLICATIONS – VBRICK

The proposal includes a VBRICK DME Medium subscription for 3-years to be implemented on a Cisco VBRICK DME appliance based on a Cisco UCS C-series rackmount server. VBRICK manufacturer professional services are included to design, implement, and integrate the VBRICK DME application.

The proposal also includes a VBRICK REV subscription for a Cloud Rev portal for 1,000 users for 3-years to be implemented as a cloud-based service. VBRICK manufacturer professional services are included to design, implement, and integrate the VBRICK REV application.

### ENDPOINTS – TELEPRESENCE SX80

The proposal includes four Cisco TelePresence SX80 Codec Endpoints, including the dual SpeakerTrack Cameras and a Precision 60 Camera, a Touch 10 control keypad, Ceiling Mounted Microphone Array.

The SX80 will be installed, wall-mounted, and configured by Sentinel, and integrated with NPC-provided and installed display monitors.

- It is anticipated that each of the SX80 endpoints will be wall-mounted within a selected NPC classroom.
- It is the responsibility of the customer to verify sufficient wall space is available at the front of the classroom and to locate the wall support studs and verify it can support the weight of the SX80 and display monitors.
- Sentinel will wall mount each SX80 endpoint and cameras and connect to the NPC-provided network jack and electrical outlet.
- Sentinel will connect the SX80 to the NPC network in each classroom and assign a static IP address provided by NPC.
- Sentinel will install and configure the Ceiling Microphones and Touch 10 keypad controller provided with each SX80 endpoint.
- TelePresence Integration
  - Sentinel will configure each SX80 for local network connectivity to the TelePresence system at NPC and internet connectivity to the remote MX300 endpoints
  - Sentinel will test and verify video and audio connectivity to the NPC TelePresence systems and configure for centralized scheduling from the NPC TelePresence System.
  - Sentinel will configure default conference scheduling and display templates for continuous presence layouts appropriate for different sized class session and various endpoint attendees and configurations.

## Documentation and Knowledge Transfer

- Provide documentation of the setup including a revised Sentinel design doc as well as any available vendor-created administrative and/or best practices guides.
- Provide knowledge transfer including basic functional overviews of products implemented, demonstrating the normal operations as installed in the customer's environment.
  - Note that knowledge transfer and functional overviews are not a substitute for formal vendor product Customer Education courses available. Sentinel strongly encourages attendance at Customer Education classes to gain further insight into the product architecture and its integration.

## Project Management

Sentinel will provide a project manager committed to the success of the project. The project manager will be responsible for:

- Complete success of the project
- Optimal coordination of all resources
- Guiding the client on aspects of the project they are required to perform
- Tracking and reporting of progress
- Management of agreed to budget issues
- Management of expected timelines for implementation
- Changes to the project and communications of changes in writing using a Project Change Form
- Post installation document gathering, assembly and presentation
- Post installation project completion agreement and signature

Project management will ensure complete project success. Communication is the cornerstone of project management and the project manager will be the central communication mechanism for all parties. This will assure all relevant parties are informed about decisions that may affect the success of their component of the solution.



## ASSUMPTIONS

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### Client Responsibilities and Assumptions

The following is a list of responsibilities and/or tasks that Sentinel assumes have been completed or reviewed by Northland Pioneer College prior to the installation of the above-mentioned project. If additional responsibilities are uncovered during the project, Sentinel will make sure that Northland Pioneer College is made aware of any issues promptly to determine resolution.

### General Proposal Assumptions

#### PRODUCT LEAD TIMES

Depending on the technologies quoted, orders may be direct or through distribution. Lead times should be expected to be 8 weeks but can exceed 8 weeks. Should expedited equipment requirements arise, there could be an additional charge to source through a warehousing distribution partner.

#### SITE READINESS AND SITE SURVEY REQUIREMENT

Every effort has been made to ensure that proper power cords and patch cables have been included to match your environment's infrastructure. The notes section of the Bill of Materials (BOM) explicitly states the quantity and type of cords quoted.

**Three options are available to ensure the accuracy of the selected items; please initial next to which method you agree to: (SELECT AND INITIAL ONLY ONE)**

**Initials**     **OPTION 1**

Customer waives the opportunity to complete a site/closet checklist, has reviewed the BOM and agrees to quantity, type and length of the power and patch cables provided. [Financial obligation for labor and materials for changes identified post order will be the Customer's responsibility]

\_\_\_\_\_

**OPTION 2**

Customer has provided a site/closet review checklist document and confirms the quantity, type and length of the power and patch cables quoted. [Financial obligation for labor and materials for changes identified post order will be the Customer's responsibility, unless Sentinel provided the incorrect part based upon the provided checklist]

\_\_\_\_\_

**OPTION 3**

Customer elects a "for charge" onsite survey of the facilities and closets to determine the quantity, type and length of the power and patch cables required. In addition, Sentinel will assess each closet's cooling and UPS readiness for the proposed equipment being provided. [Financial obligation for labor and materials for changes identified post order will be Sentinel's full responsibility, unless changes to the site have taken place subsequent to the site assessment]

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## ASSUMPTIONS

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### POWER, RACKS AND COOLING

Like the optics, Sentinel has made a best effort to match any power requirements and answer any requests of the Customer related to equipment specifications, power cables included or other physical requirements. Any adjustments to fit in racks, connect to specific power terminal types, or secure electrician services to run a new service are beyond the fixed bid project price. Sentinel will respond to any inquiry and provide product literature. Any sizing charts provided are done so as a convenience to the client and DO NOT represent a commitment by Sentinel that, as sold, the equipment is ready for the Customer site. Sentinel offers Technology Area Design (TAD) consulting services should the Customer prefer a more formal and accurate solution.

### PATCH CABLES/CABLE LENGTHS

In most cases the BOM includes any note(s) on cable lengths included. Without the design validation of a formal TAD engagement, only a best effort is made to match the site requirements. Any changes to the cord lengths, connectors or other site readiness items will be in addition to the solution once the order is placed with the manufacturer(s). Many of the vendors offer the ability to select the appropriate items prior to order, but will charge for any replacements needed after the order and this offer will be extended to the Customer through the Sentinel Project Change Request (PCR) process. Unless specified, Sentinel assumes the Customer will provide all patch cables needed and can provide the product literature on any devices upon request.

### LABOR UNION REQUIREMENTS

Sentinel has NOT included any parameters for Union workers. Any requirement would require a subcontract arrangement to be determined up front and would increase the cost of deployment.

### PERMITS & ACCESS

Unless otherwise agreed, all permits, variances, access to facilities, roof access, building warranty concerns or other site specific information and procedures are the responsibility of the Customer. Sentinel can assist as needed, but will need to be informed of any requirements prior to the site survey to consider these within the validation process.

### PROJECT CHANGES REQUEST

Any changes to scope will be presented and approved through Sentinel Project Management using the Project Change Request (PCR). Changes will not be performed until the PCR is approved for procedure and all budget and timeframe impacts are understood.

### REMOTE SUPPORT

Sentinel's service estimate assumes remote access support through IP VPN or IP PPP connection. Without this access, additional services may be incurred for optimization and tuning required pre and post installation.

### TRAVEL REQUIREMENTS AND COST

Unless specified within the proposal, all travel expenses and time are not included. Travel time shall be invoiced at pre-negotiated rates and expenses plus per diem at actual costs.

## ASSUMPTIONS

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### Unified Communications

#### VOIP SITE POWER

Power backup provisions are recommended. Unless noted here or within the equipment detail, Sentinel has not provided power backup analog lines, phones or cabling. There are many ways to provide this service including automatic power failure relay equipment, and Sentinel can provide a recommendation and cost estimate upon request.

#### LANGUAGE SUPPORT

Unless noted within the proposal detail, the solution assumes US English language only. Additional language support needs to be identified and quoted at an additional cost.

#### MESSAGE SUPPORT

Prompts, messages and music on hold. Unless noted, this proposal assumes Customer provided prompts and messages. Sentinel can recommend a professional service for this as required.

#### QUALITY OF SERVICE

This proposal does not specifically include QoS provisioning unless otherwise specified in the above deliverables. Basic QoS will be configured on all endpoints and/or devices per best practices. For services that will leverage a broadband/Internet based connection, Sentinel will not be able to guarantee quality and/or performance on these connections as they are considered “best-effort”.

#### ACTIVE DIRECTORY

Customer may be required to make adjustments or additions to the existing LDAP/Active Directory environment for UC application integration. This would be in adherence with best practices in most cases. Customer is responsible for these changes if needed.

#### UPGRADES

The upgrade process may involve the updating of production systems that can make the applications unavailable, as well as some network resources. The work that requires system or network resources to be unavailable to the end users will be performed during non-business hours. Customer must schedule the upgrade at a time where the systems will be available for upgraded processes with no interruption from network activities.

Although the Customer UC platforms have been checked against the Cisco hardware compatibility list to ensure compatibility with the required upgrades; Sentinel has encountered cases where the platform has failed hardware checks during installation/upgrade when applicable. Sentinel makes all efforts to ensure platforms are compatible but cannot guarantee all platforms will validate hardware checks until the upgrade process is started. In cases where hardware is not compatible, Sentinel will offer possible alternative options where applicable.

Sentinel assumes that there are active ESW and UCSS or (SAU Equivalent) or SWSS contracts in place to allow “no cost” software upgrade licensing and media for the proposed upgrades

#### CLIENT SOFTWARE

Sentinel will install the applicable Cisco client software (i.e. CAD, Jabber, CUCI, CUVA, etc.) on up to three (3) Customer provided workstations. The Customer is responsible for the deployment of any Cisco client software to the remaining workstations in the environment.

## ASSUMPTIONS

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### WAN MULTICAST

Support for multicast over the WAN may not be supported depending on the WAN technology being leveraged. MPLS WAN technology typically does not support multicast unless specifically allowed by the provider. In these cases Sentinel may recommend unicast or tunneling alternatives to help facilitate. These recommendations may require additional services that are not included in this proposal.

### LIVE MUSIC ON HOLD

Live music on hold is not currently supported for the virtualized installation of Cisco Unified Communications. Sentinel recommends leveraging a lesser model physical server for live MoH if required. If this option is not feasible, Sentinel can suggest possible solutions to work with live MoH. These solutions are not included as part of this proposal.

### SPEC-BASED UC

When installing Cisco UC on non-Cisco hardware or hardware that does not specifically match Cisco trusted reference configurations (TRC), the Customer is responsible for ensuring that the hardware platform(s) meet the requirements as outlined by Cisco for UC. This includes but is not limited to CPU, Memory, Disk IOPs, etc.

## E911 and Cisco Emergency Responder

Sentinel assumes that a Locator ID/Locator ID Lite or equivalent E911 service will be provided by the Customer. This service works with the Cisco Emergency Responder solution. Should the Customer require E911 services and the solution does not include the Cisco Emergency Responder solution, the system will support ANI information on an extension by extension basis. This means that services such as MACs would require a manual entry change in the carrier's database and also would eliminate compliance if using Extension Mobility. For truly zero cost MACs and compliance when using Extension Mobility, Sentinel highly recommends Cisco's Emergency Responder solution.

Sentinel assumes that at a minimum, each chassis switch will be its own Emergency Responder zone. Any additional breakdown of zones outside of these criteria will be handled through the PCR process.

The Cisco Emergency Responder solution requires database registration support. Sentinel assumes the Customer will be responsible for obtaining registration services for the phone number corresponding to the Emergency Responder server.

### EMERGENCY SERVICES FOR VOICE

Sentinel implements 911 services on all voice solutions. Depending on local, state or federal regulation, enhanced 911 services may be required. Sentinel's standard installation allows 911 calling from "9911", "x911" where x is the digit agreed to for PBX outside line requests and for "911" being dialed. This assures 911 calls are processed by the most common methods used in telecom solutions and does not block any potential emergency calls. Please refer to the detailed solution listing for 911 specific information and E911 specific equipment. Sentinel must be made aware of specific E911 requirements and recommends Northland Pioneer College seek professional counsel for E911 compliance recommendations for design.

### E911 EMERGENCY RESPONDER

Will require service from carrier for mapping zones to location information. Services offered similar to SBC LocatorID Lite are adequate. Recurring cost services such as full LocatorID are not specifically required.



## ASSUMPTIONS

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### DID REQUIREMENT

Sentinel recommends no less than 3 dedicated DID numbers per zone. The number of zones is to be determined in the planning and design post sales. These will be programmed into the data network switches for E911 services.

### SWITCHES

A Cisco network infrastructure is required. Most new Cisco switches will work with Emergency Responder. Any existing switches will be confirmed by the installation engineer and may require upgrades or replacement.

### CARRIER SERVICE

Along with the carrier E911 service there will be a requirement for a PRI line or CAMA trunk. Sentinel's default design assumes PRI circuits unless CAMA trunks are specifically called out within the design.

### E911 NOTIFICATION

Emergency Responder includes automated notification. This will be planned within the deployment and Sentinel will require the information of the notified parties.

### LICENSING

Emergency Responder does require a license per end E911 compliant device. This includes IP attached end points AND analog FXS attached end points.

### REDUNDANCY

In the absence of the Emergency Responder service the system will only adhere to standard 911 services. Redundant Emergency Responder servers are possible, please refer to the detailed bill of materials for the specific Emergency Responder design.

### CHANGE CONTROL

Once E911 information is programmed into the data network the Customer is required to maintain good change control. Because switches may be segmented into zones, there can be no patch cable moving of ports without an update to the programmed E911 information into the data network. Any replacement switches will also need to be re-programmed with the E911 information if the model of switch is changed and the original configuration is not able to be re-used.

### COMPLIANCE

Sentinel's service includes enabling E911 to the planned design. In no way does Sentinel take any responsibility for, or guarantee, compliance. Compliance requirements and programming are recommended but are to be validated and agreed to by the Customer, Customer's legal counsel and local emergency services organization. Sentinel recommends the Customer engage the local emergency services for compliance testing and perform ongoing compliance testing to assure E911 services are operating properly after installation and through the lifetime of the system.

### SITE REQUIREMENTS

Working with the Customer, Sentinel has made every effort to determine the E911 needs nationally and internationally. However, since Sentinel is not the Customer's legal counsel, the responsibility for identification of E911 required sites and international emergency service requirement remains with the Customer. Sentinel will work with the Customer, as required, to determine any possible requirements and make a recommendation for compliance with the solution. The final emergency services plan will be agreed to by the Customer, installed by Sentinel and tested prior to final project sign off.

## ASSUMPTIONS

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### Microsoft Licensing

NPC will provide all Microsoft Windows Server Licenses required for this project. It is anticipated that Windows Server 2012 R2 Standard Edition or above licenses will be required for at least the following virtual machine server instances.

- Cisco TelePresence Manager (2)
- Cisco TelePresence Content Server (2)
- CallRex Call Recording
- XMediusFAX
- Syn-Apps SA-Announce

SQL Server 2012 is also required for this project. An existing SQL Server 2012 can be used for this project, or new SQL Server 2012 instances can be installed on the TelePresence servers. SQL Server can be either the Express (free) Edition, or Standard or Enterprise Editions. Sentinel can install SQL Server 2012 Express at no additional charge, if no licenses or access to existing SQL Servers are available. It is anticipated that SQL Server 2012 R2 Express or above will be required for at least the following virtual machine server instances.

- Cisco TelePresence Manager (2)
- Cisco TelePresence Content Server (2)

After the blueprinting and design sessions are completed a final listing of Microsoft license requirements will be provided to NPC.

### Current Environment

This section provides details of the existing Cisco Unified Communications and related applications and infrastructure at NPC.

### Cisco Communications Manager

Communications Manager 8.5.1.13900-5 unrestricted is implemented as two nodes in a cluster on both a UCS Chassis (Publisher, Virtual, 10.105.4.5) and an MCS 7825 (subscriber, physical). Both the Publisher and Subscriber are in Holbrook (Painted Desert Campus) data center. There is no subscriber currently in Show Low (WMC).

The Export Unrestricted software is currently installed and NPC wants to migrate to the Export Restricted version in order to implement SSL with high-encryption. NPC would like to upgrade and virtualize as redundant UCM servers at both PDC and WMC campuses.

The following tables include the identified endpoints and gateways.



## ASSUMPTIONS

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### NPC voice endpoints

Qty	Model
65	CTI Ports
19	Cisco 30 VIP
47	Cisco 6911
1	Cisco 7921
28	Cisco 7937
1	Cisco 7940
1	Cisco 7941
160	Cisco 7942
369	Cisco 7962
20	Cisco 8831
29	Cisco 8945
2	Cisco ATA 187
1	Cisco Dual Mode for Android (Adjunct)
5	Cisco Dual Mode for iPhone (Adjunct)
5	Cisco Unified Client Services Framework
8	Cisco Unified Client Services Framework (Adjunct)
17	Cisco Unified Personal Client End User Feature License
1	Cisco Unified Personal Communicator
5	Cisco Unified Personal Communicator (Adjunct)
17	Cisco Unified Presence Server End User Feature License
22	Mobility Enabled End Users
42	Mobility Enabled End Users (Adjunct)
865	Total Endpoints

### NPC voice gateways

Model	Name	Description	Protocol
2901	FRS-MDF-RT-01.npc.edu	FRS-MDF-RT-01.npc.edu	MGCP
2901	do-main-vgrt-01.npc.edu	DO VGW	MGCP
2901	hop-main-vgrt-01.npc.edu	HOPI VGW	MGCP
2901	kay-mdf-vgrt-01.npc.edu	KAY VGW	MGCP
2951	lcc-lc-vgrt-01.npc.edu	LCC Winslow VGW	MGCP
3925	pdc-tc-vgrt-01.npc.edu	PDC Holbrook VGW	MGCP
2951	scc-ssmb-vgrt-01.npc.edu	SCC Snowflake VGW	MGCP
2901	spr-mdf-vgrt-01.npc.edu	SPE VGW	MGCP
2901	sti-mdf-vgrt-01.npc.edu	STJ VGW	MGCP
2951	wmc-qw-vgrt-01.npc.edu	WMC Show Low VGW	MGCP
2901	wrv-main-vgrt-01.npc.edu	WRV VGW	MGCP
11	Total Voice Gateways		

## ASSUMPTIONS

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### Cisco Unity Connection

Unity Connection 8.5.1.10000-26 is implemented as a single virtual server (10.105.4.10). NPC would like to upgrade and virtualize as redundant CUC servers.

The following tables include the identified licensing and mailboxes on CUC.

<u>Description</u>	<u>Used</u>	<u>Unused</u>	<u>Maximum</u>
Voice Mailboxes	287	179	466
Single Inbox/IMAP	287	179	466
Voice Ports	24	0	24

### Cisco Emergency Responder

Emergency Responder 8.5.1.10000-26 is implemented as a single server. NPC would like to upgrade and virtualize as redundant CER servers.

### Contact Center Express

CCX 8.5.1.11002-22 is implemented as a single physical server and is used as the automated attendant for NPC 800-numbers and for the help desk for Information Systems (Support Center). CCX is licensed with eleven (11) Standard Edition seat licenses and is currently used with the IPPA IP Phone Agent for 6 users in the IS Support Center. NPC would like to upgrade and virtualize. Redundancy will require a separate purchase of the CCX High-Availability server license. It is no longer sold for version 8.5, but can be quoted separate for either version 10 or 11 of CCX.

### Cisco Unified Business Attendant Console

CUBAC is implemented as a single physical server and will be discontinued as part of this project as it is not in production.

### Cisco Unified Presence Server

CUPS 8.5 is implemented as a single server and is used by approximately 25-30 users for Presence and Instant Messaging, but is not in widespread use. NPC would like to upgrade and virtualize as redundant IM&P servers.

### XMediusFAX

XMediusFAX version 6.5.5.123 is implemented as a single physical server on Windows Server 2008 SP1. Only the XMediusFAX web client is currently used for faxing soft-copy documents. This server is also not a member in any active directory domain and has no DNS hostname.

NPC would like to migrate to Windows Server 2012 R2 as a virtual machine server that is a member server in active directory, and upgrade the XMediusFAX software to the latest version.

## ASSUMPTIONS

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### CallRex

CallRex Call Recording version 4.1.0.9554 is implemented as a single physical server on Windows Server 2008 with 15 recording licenses and is configured for network-based voice recording using a local SPAN session configured on the network for recording of voice calls on the local network-only.

NPC would like to migrate to Windows Server 2012 R2 as a virtual machine server that is a member server in active directory, and upgrade the CallRex software to the latest version.

### SA-Announce

Syn-Apps SA-Announce version 8.2.20 is implemented as a single physical server on Syn-Apps SA300 appliance server with Microsoft Windows Server 2008.

NPC would like to migrate to Windows Server 2012 R2 as a virtual machine server that is a member server in active directory, and upgrade the SA-Announce software to the latest version.

### Microsoft Active Directory

Active Directory (AD) is implemented with multiple domain controllers with the following functional levels:

2003 forest, 2008 domain, 2012 schema

An existing single Certificate Authority is currently implemented in AD. There is a current project underway to upgrade to a multi-tier Microsoft CA server running Windows Server 2012.

NPC would like to upgrade all windows-based applications within this project to Windows Server 2012 with Microsoft licensing provided by NPC.

### VMware vCenter and vSphere

vCenter and vSphere 5.x is currently implemented at both PDC and WMC with two separate vCenter instances one at each campus data center.

NPC would like to manage all new VMware virtual machines with vCenter. This will require implementing vSphere Standard Edition or above on the proposed new virtual appliance servers, rather than the limited-use Cisco foundation vSphere licensing, which is not manageable by vCenter.

Licensing for vSphere Standard Edition is included with this proposal.

### Polycom Video Conferencing

An existing Polycom video conferencing system with applications and endpoints is currently installed. This system is independent of this proposal and will not be integrated with this new proposal.



## Northland Pioneer College

### Cisco VoIP & Video Solution - Infrastructure & NPC Endpoints

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### VoIP & Video Solution

	Hardware/Software	Maintenance
Cisco Business Edition 6000 Appliance Servers	\$ 30,024.00	
Cisco SMARTnet Maintenance (3-Years)		\$ 3,772.00
Cisco Business Edition 6000 Licensing	\$ 3,766.00	
Cisco SMARTnet Maintenance (3-Years)		\$ 2,044.00
Vmware vSphere Standard Edition Licensing for Cisco Server Appliances	\$ 7,448.00	
Vmware Maintenance (3-Years)		\$ 11,256.00
Cisco TelePresence Shared Multiparty Licensing	\$ 16,240.00	
Cisco SMARTnet Maintenance (3-Years)		\$ 13,465.00
Cisco Virtual TelePresence Server Appliance	\$ 17,072.00	
Cisco SmartNet Maintenance (3-Years)		\$ 2,832.00
VBrick DME Medium Subscription (3-Years)	\$ 9,615.00	
VBrick Cloud Starter Portal (1000-users) Subscription (3-Years)	\$ 49,485.00	
Cisco VBrick Server Appliance	\$ 5,916.00	
Cisco SMARTnet Maintenance (3-Years)		\$ 943.00
Cisco TelePresence Content Server Licensing (10 Rec, 2 Live, Premium)	\$ 30,694.00	
Cisco SMARTnet Maintenance (3-Years)		\$ 16,711.00
Cisco TelePresence Content Server Licensing (5 Rec, 2 Live, Premium)	\$ 22,447.00	
Cisco SMARTnet Maintenance (3-Years)		\$ 12,222.00
Cisco TelePresence SX80 Endpoints	\$ 68,204.00	
Cisco SMARTnet Maintenance (3-Years)		\$ 27,724.00
Cisco Training Credits	\$ -	
<b>Subtotal</b>	<b>\$ 260,911.00</b>	<b>\$ 90,969.00</b>

### TOTAL PROJECT

	Extended Price
Hardware and Software	\$ 260,911.00
Solution Maintenance & Support	\$ 90,969.00
Professional Services - UC Upgrades	\$ 25,830.00
Professional Services - TelePresence / vBrick	\$ 78,752.40
Estimated Travel Expenses (Bill Actual)	\$ 11,582.00
<b>Project Total</b>	<b>\$ 468,044.40</b>

**Plus applicable tax, shipping & handling**

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**Northland Pioneer College  
BE6K Appliances**



<b>Cisco Business Edition 6000 Appliance Servers</b>		
Description	Qty	Special Notes

**Cisco Business Edition 6000 - Hardware Appliance (High Density)**

Cisco Business Edition 6000H Svr (M4), Export Restricted SW	4	
Power Cord, 125VAC 13A NEMA 5-15 Plug, North America	8	
Cisco Business Edition 6000 - Software App Version 10.X 11.X	4	
Cisco UC Virt. Hypervisor 5.x (2-socket)	4	
Cisco UC Virt. Hypervisor 5.x - SnS	4	
300GB 6Gb SAS 10K RPM SFF HDD/hot plug/drive sled mounted	32	
2.40 GHz E5-2630 v3/85W 8C/20MB Cache/DDR4 1866MHz	8	
8GB DDR4-2133-MHz RDIMM/PC4-17000/single rank/x4/1.2v	24	
Cisco 12G SAS Modular Raid Controller	4	
Cisco 12Gbps SAS 1GB FBWC Cache module (Raid 0/1/5/6)	4	
Intel i350 Quad Port 1Gb Adapter	4	
770W AC Hot-Plug Power Supply for 1U C-Series Rack Server	8	
Enable RAID 5 Setting	4	
<b>Hardware and Software Sub-Total</b>	<b>\$30,024.00</b>	

<b>Cisco SMARTnet Maintenance (3-Years)</b>		
Description	Qty	Special Notes

<b>Cisco SMARTnet Maintenance</b>		
SNTC-24X7X4 Cisco Business Edition 6000H Server, Exp	4	<i>36 Months Duration</i>
<b>Maintenance Sub-Total</b>	<b>\$3,772.00</b>	

**Northland Pioneer College  
BE6K Licensing**



<b>Cisco Business Edition 6000 Licensing</b>		
Description	Qty	Special Notes

**Cisco Business Edition 6000 Licensing - TCS**

Cisco Business Edition 6000-Electronic SW Delivery-Top Level	4	
Business Edition 6000 v11 export restricted software	4	
Jabber for Android CUWL Only	2000	
Jabber for iPhone CUWL Only	2000	
Jabber for iPad and Android Tablet	2000	
Jabber for Desktop for PC and Mac	3200	
Cisco Expressway-C Server, Virtual Edition	8	
Cisco Expressway-E Server, Virtual Edition	8	
Software Image for Expressway with Encryption, Version X8	4	
Jabber Guest Session	200	
Jabber for Android Right to Use	4	
Jabber for iPhone Right to Use	4	
Jabber Guest Right to Use	4	
Jabber for Tablet Right to Use	4	
Jabber for Desktop Right to Use	4	
Expressway Series, Expressway-E PAK	4	
Enable GW Feature (H323-SIP)	16	
Enable Expressway-E Feature Set	8	
Enable TURN Relay Option	8	
Enable Advanced Networking Option	8	
License Key Software Encrypted	16	
Enable Expressway Series Feature Set	16	

**Communications Manager - User Connect Licensing**

Top Level SKU For 9.x/10.x User License - eDelivery	1	
Telepresence Room Based Endpoint, Single or Multi-Screen	14	
Cisco Expressway-E Server, Virtual Edition	2	
Cisco Expressway-C Server, Virtual Edition	2	
Software Image for Expressway with Encryption, Version X8	1	
CUCM Software version 11.0	1	
Enable Expressway-E Feature Set	2	
Expressway Series, Expressway-E PAK	1	
Enable Advanced Networking Option	2	
UCM 9X/10X/11X PAK	1	
Enable Expressway Series Feature Set	4	
Enable GW Feature (H323-SIP)	4	
Enable TURN Relay Option	2	
License Key Software Encrypted	4	

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**Hardware and Software Sub-Total                    \$3,766.00**

<b>Cisco SMARTnet Maintenance (3-Years)</b>		
Description	Qty	Special Notes

<b>Cisco SMARTnet Maintenance</b>		
SWSS UPGRADES Cisco Business Edition 6000 Licensing	4	<i>36 Months Duration</i>
SWSS UPGRADES Telepresence Room Ba	14	<i>36 Months Duration</i>

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**Maintenance Sub-Total                    \$2,044.00**



**Northland Pioneer College  
vSphere Licensing**



Vmware vSphere Standard Edition Licensing for Cisco Server Appliances		
Description	Qty	Special Notes

**Vmware vSphere Standard Edition Licensing for Cisco Server Appliances**

Academic vSphere 6 Standard Edition (1 Processor)	14	
<b>Hardware and Software Sub-Total</b>		<b>\$7,448.00</b>

Vmware Maintenance (3-Years)		
Description	Qty	Special Notes

**Vmware Production Maintenance**

Academic Production Support vSphere 6 Standard 1 Processor 3-Years	14	<i>36 Months Duration</i>
<b>Maintenance Sub-Total</b>		<b>\$11,256.00</b>

**Northland Pioneer College  
TP SMP**



<b>Cisco TelePresence Shared Multiparty Licensing</b>		
Description	Qty	Special Notes
<b>TelePresence Shared Multiparty Licensing (4 Concurrent Meetings, and Starter Kit with TMS, TPC 25 devices)</b>		
Cisco TelePresence Shared Multiparty	1	
PAK for virtual Conductor	1	
RMS Licensing included with PMP & SMP	8	
Cisco TelePresence Conductor base software image v4.x	1	
Conductor license, support up to 30 bridges	2	
Conductor 2400 call sessions license	2	
Conductor clustering support	2	
Conductor License for Base Encrypted Software Image	2	
TMS PAK for Configuration Use	1	
TMS Serial Number included with Base Software	1	
TMS Base Software Image Version 15.X	1	
Cisco TMS - Additional 25 Direct Managed Systems	1	
Expressway Series, Expressway-E PAK	1	
Microsoft Interoperability Option	1	
TMS Exchange integration for 25 Systems	1	
Cisco TMS - included 10 System License	1	
Expressway Series, Expressway-E PAK	1	
Shared Multiparty License for 1 Concurrent Meeting	4	
Shared MP Starter Kit inc Conductor & TMS with 25 devices	1	
<b>Hardware and Software Sub-Total</b>		<b>\$16,240.00</b>

<b>Cisco SMARTnet Maintenance (3-Years)</b>		
Description	Qty	Special Notes
<b>Cisco SMARTnet Maintenance</b>		
SWSS UPGRADES Cisco TelePresence Shared Multiparty	1	<i>36 Months Duration</i>
SWSS UPGRADES Shared Multiparty License for 1 Concurr	4	<i>36 Months Duration</i>
SWSS UPGRADES Shared MP Starter Kit inc Conductor TMS	1	<i>36 Months Duration</i>
<b>Maintenance Sub-Total</b>		<b>\$13,465.00</b>

**Northland Pioneer College  
VTS Appliance**



<b>Cisco Virtual TelePresence Server Appliance</b>		
Description	Qty	Special Notes

**Cisco TelePresence Server Appliance**

Cisco Multiparty Media 410v Server	2	
Do not factory-load a virtualization software license	2	
Power Cord, 125VAC 13A NEMA 5-15 Plug, North America	4	
Media (no lic) for Cisco TelePresence Svr Virt. Machine 4.x	2	
Cisco 12G SAS Modular Raid Controller	2	
300GB 6Gb SAS 10K RPM SFF HDD/hot plug/drive sled mounted	4	
770W AC Hot-Plug Power Supply for 1U C-Series Rack Server	4	
8GB DDR4-2133-MHz RDIMM/PC4-17000/single rank/x4/1.2v	16	
2.60 GHz E5-2690 v3/135W 12C/30MB Cache/DDR4 2133MHz	4	
Enable RAID 1 Setting	2	
<b>Hardware and Software Sub-Total</b>		<b>\$17,072.00</b>

<b>Cisco SmartNet Maintenance (3-Years)</b>		
Description	Qty	Special Notes

**Cisco SMARTnet Maintenance**

SNTC-24X7X4 Cisco Multiparty Media 410v Server	2	<i>36 Months Duration</i>
<b>Maintenance Sub-Total</b>		<b>\$2,832.00</b>

**Northland Pioneer College  
VBrick DME Subscription**



<b>VBrick DME Medium Subscription (3-Years)</b>		
<b>Description</b>	<b>Qty</b>	<b>Special Notes</b>
<b>VBrick DME Medium Subscription (3-Years)</b>		
Solutions Plus for VBRICK REV DME - Top Level	1	
DME Medium Subscription (Annual)	3	
Buyer Acceptance of SolutionsPlus Terms and Conditions	1	
VBRICK PAK for REV and DME	1	
VBrick User and DME Right to Use	1	
<b>Hardware and Software Sub-Total</b>		<b>\$9,615.00</b>

**Northland Pioneer College  
VBrick Cloud Subscription**



<b>VBrick Cloud Starter Portal (1000-users) Subscription (3-Years)</b>		
<b>Description</b>	<b>Qty</b>	<b>Special Notes</b>
<b>VBrick Cloud Starter Portal (1000-users) Subscription (3-Years)</b>		
Solutions Plus for VBRICK REV User Tiers - Top Level	1	
Cloud Rev Starter Portal up to 1000 users	3	
Buyer Acceptance of SolutionsPlus Terms and Conditions	1	
VBRICK PAK for REV and DME	1	
VBrick User and DME Right to Use	1	
<b>Hardware and Software Sub-Total</b>		<b>\$49,485.00</b>

**Northland Pioneer College  
Cisco VBrick Appliance**



<b>Cisco VBrick Server Appliance</b>		
<b>Description</b>	<b>Qty</b>	<b>Special Notes</b>
<b>Cisco VBrick Server Appliance</b>		
VBrick M4 Server Appliance for VBrick DME Medium	1	
Power Cord, 125VAC 13A NEMA 5-15 Plug, North America	2	
VBRICK UCS Server Hard Disk 600 GB, 10K RPM	4	
Cisco 12Gbps SAS 1GB FBWC Cache module (Raid 0/1/5/6)	1	
VBRICK UCS 12G SAS Modular Raid Controller	1	
UCS Server CPU	1	
UCS Server 770W power supply	2	
VBRICK UCS Server DRAM - 8GB DDR3	2	
Enable RAID 5 Setting	1	
<b>Hardware and Software Sub-Total</b>		<b>\$5,916.00</b>

<b>Cisco SMARTnet Maintenance (3-Years)</b>		
<b>Description</b>	<b>Qty</b>	<b>Special Notes</b>
<b>Cisco SMARTnet Maintenance</b>		
SNTC-24X7X4 VBrick M4 Server Appliance	1	<i>36 Months Duration</i>
<b>Maintenance Sub-Total</b>		<b>\$943.00</b>



**Northland Pioneer College  
TCS Licensing (10 Rec)**



Cisco TelePresence Content Server Licensing (10 Rec, 2 Live, Premium)		
Description	Qty	Special Notes

**Cisco TelePresence Content Server Licensing (10 Rec, 2 Live Port, Premium Resolution, Cluster Option)**

Virtual TCS 10 Rec, 2 Live Port with Premium Resolution	1	
Cluster Option for TCS	1	
Virtual TCS Software Release Key	1	
2 Live Output Ports License	1	
5 Recording Ports License	1	
Virtual TCS Options Release Key	1	
Premium Resolution Option for TCS	1	
Additional 5 Port Option for TCS	1	
<b>Hardware and Software Sub-Total</b>		<b>\$30,694.00</b>

Cisco SMARTnet Maintenance (3-Years)		
Description	Qty	Special Notes

<b>Cisco SMARTnet Maintenance</b>		
SWSS UPGRADES Virtual TCS 10 Rec, 2 Live Port with Pre	1	<i>36 Months Duration</i>
<b>Maintenance Sub-Total</b>		<b>\$16,711.00</b>

**Northland Pioneer College  
TCS Licensing (5 Rec)**



Cisco TelePresence Content Server Licensing (5 Rec, 2 Live, Premium)		
Description	Qty	Special Notes

**Cisco TelePresence Content Server Licensing (5 Rec, 2 Live Port, Premium Resolution, Cluster Option)**

Virtual TCS 5 Rec, 2 Live Port with Premium Resolution	1	
Premium Resolution Option for TCS	1	
Cluster Option for TCS	1	
Virtual TCS Software Release Key	1	
2 Live Output Ports License	1	
5 Recording Ports License	1	
Virtual TCS Options Release Key	1	

<b>Hardware and Software Sub-Total</b>		<b>\$22,447.00</b>
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Cisco SMARTnet Maintenance (3-Years)		
Description	Qty	Special Notes

<b>Cisco SMARTnet Maintenance</b> SWSS UPGRADES Virtual TCS 5 Rec, 2 Live Port with Prem	1	<i>36 Months Duration</i>
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<b>Maintenance Sub-Total</b>		<b>\$12,222.00</b>
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**Northland Pioneer College  
SX80 TP Endpoints**



<b>Cisco TelePresence SX80 Endpoints</b>		
Description	Qty	Special Notes
<b>Cisco TelePresence SX80 Endpoint Coders with SpeakerTrack 60 Cameras and Touch 10 Keypad, Ceiling Microphone Gen 2 (customer-provided displays)</b>		
Cisco SX80 Codec, Speaker Track 60, Touch 10	4	
Pwr Cord US 1.8m Black YP-12 To YC-12	12	
Cisco TelePresence Ceiling Microphone Generation 2	4	
Shielded cable for Ceiling Mic (10m), not plenum rated	4	
License key to activate sw encryption module	4	
Cisco TelePresence Precision 60 Camera	4	
Bracket for mounting of Precision 60 Camera	4	
Power Supply 12 VDC 40W	4	
Two 12V power cables (0.45m & 0.2m) for SpeakerTrack 60	4	
Presentation cable w/audio, VGA/Jack to DVI/Phoenix	4	
Touch 10 auto expand	4	
Interface plate CAM-P60 to Speaker Track 60	8	
Power Injector (802.3af)	4	
Installation sheet for Precision 60 Camera bracket	4	
Wall Mount Kit for Speaker Track 60 Microphone Array	4	
12.5 meter flat grey Ethernet cable for Touch 10	4	
4 meter flat grey Ethernet cable for Touch 10	4	
Two Ethernet cables (0.35m & 0.2m) for SpeakerTrack 60	4	
Cisco TelePresence Precision 60 Camera - auto expand only	8	
SW Image for SX80, MX700, MX800	4	
Power supply 12VDC 84W	4	
Pwr Cord US 1.8m Black YP-12 To YC-12	4	
Cisco SX80 Codec	4	
SX80 rack ears - for auto expand only	4	
Speaker Track 60 Microphone Array	4	
Miscellaneous Mounting Hardware and Consumables	4	
<b>Hardware and Software Sub-Total</b>		<b>\$68,204.00</b>

<b>Cisco SMARTnet Maintenance (3-Years)</b>		
Description	Qty	Special Notes
<b>Cisco SMARTnet Maintenance</b>		
ESS WITH 8X5XNBD Cisco SX80 Codec Speaker Trk 60 Touch 10	4	36 Months Duration
ESS WITH 8X5XNBD Cisco TelePresence Ceiling Microphone Generation 2	4	36 Months Duration
ESS WITH 8X5XNBD Cisco TelePresence Precision 60 Camera	4	36 Months Duration
<b>Maintenance Sub-Total</b>		<b>\$27,724.00</b>

Northland Pioneer College  
Cisco Training Credits



Cisco Training Credits		
Description	Qty	Special Notes
<b>Cisco Training Credits</b>		
100 Prepaid training credits:Redeem w/Cisco Learning Partnrs	2	
<b>Hardware and Software Sub-Total</b>		<b>\$0.00</b>

Northland Pioneer College  
VBrick Services



VBrick Professional Services		
Description	Qty	Special Notes
<b>VBrick Professional Services</b> Professional Services Fixed Fee Labor - Remote Install/Configuration Fixed Fee pricing for VBrick Professional Services. Travel and Expenses are not included.	1	
<b>Services Sub-Total</b>		<b>\$11,877.00</b>

## General Proposal Assumptions

### Product Lead Times

Depending on the technologies quoted, orders may be direct or through distribution. Lead times should be expected to be 8 weeks but can exceed 8 weeks. Should expedited equipment requirements arise, there could be an additional charge to source through a warehousing distribution partner.

### Site Readiness and Site Survey Requirement:

Every effort has been made to ensure that proper power cords and patch cables have been included to match your environment's infrastructure. The notes section of the Bill of Materials (BOM) explicitly states the quantity and type of cords quoted.

Three options are available to ensure the accuracy of the selected items; please initial next to which method you agree to: **(SELECT AND INITIAL ONLY ONE)**

#### Initials

##### Option 1

Customer waives the opportunity to complete a site/closet checklist, has reviewed the BOM and agrees to quantity, type and length of the power and patch cables provided. [Financial obligation for labor and materials for changes identified post order will be the Customer's responsibility]

##### Option 2

Customer has provided a site/closet review checklist document and confirms the quantity, type and length of the power and patch cables quoted. [Financial obligation for labor and materials for changes identified post order will be the Customer's responsibility, unless Sentinel provided the incorrect part based on the provided checklist]

##### Option 3

Customer elects a "for charge" onsite survey of the facilities and closets to determine quantity, type and length of the power and patch cables required. In addition, Sentinel will assess each closet's cooling and UPS readiness for the proposed equipment being provided. [Financial obligation for labor and materials for changes identified post order will be Sentinel's full responsibility, unless changes to the site have taken place subsequent to the site assessment]

### Fiber

It is assumed that the Customer's existing fiber will support proposed transmission speeds (i.e. 1GB, 10GB, 40GB, etc.). Customer must ensure that the fiber optic cabling is within manufacturer tolerances for distance and loss in order to support the required transport speeds. In some cases specialized equipment such as attenuators and mode conditioning cables may be required to properly support these speeds. This equipment will be at the expense of the Customer.

### Optics (SFP, SFP+, GBIC, etc...)

Every effort was made in the pre-sales process through white board sessions, BOM reviews and diagrams to identify any and all optics required. **OPTICS AS QUOTED AND SOLD ASSUME A STAND ALONE SYSTEM UNLESS OTHERWISE NOTED.** Migration items and integration items to existing equipment, if not noted, are not included nor is time for the interconnection, planning or design of same. Should any question exist as to the total number, types and use of the optics, Sentinel can set up a design review and white board session prior to the order upon request.



It may be determined during the blueprint process that additional connections are required or recommended. These will require an additional purchase cost to the Customer. Sentinel makes a best effort to avoid any foreseeable additional purchases, but in most cases the final connectivity varies slightly either for a technical reason or due to a physical requirement and this is beyond the fixed price solution design.

### **Power, Racks and Cooling**

Like the optics, Sentinel has made a best effort to match any power requirements and answer any requests of the Customer related to equipment specifications, power cables included or other physical requirements. Any adjustments to fit in racks, connect to specific power terminal types, or secure electrician services to run a new service are beyond the fixed bid project price. Sentinel will respond to any inquiry and provide product literature. Any sizing charts provided are done so as a convenience to the Customer and DO NOT represent a commitment by Sentinel that, as sold, the equipment is ready for the Customer site. Sentinel offers Technology Area Design (TAD) consulting services should the Customer prefer a more formal and accurate solution.

### **Patch Cables/Cable Lengths**

In most cases the BOM includes any note(s) on cable lengths included. Without the design validation of a formal TAD engagement, only a best effort is made to match the site requirements. Any changes to the cord lengths, connectors or other site readiness items will be in addition to the solution once the order is placed with the manufacturer(s). Many of the vendors offer the ability to select the appropriate items prior to order, but will charge for any replacements needed after the order and this offer will be extended to the Customer through the Sentinel Project Change Request (PCR) process. Unless specified, Sentinel assumes the Customer will provide all patch cables needed and can provide the product literature on any devices upon request.

### **Labor Union Requirements**

Sentinel has **NOT** included any parameters for Union workers. Any requirement would require a subcontract arrangement to be determined up front and would increase the cost of deployment.

### **Permits & Access**

Unless otherwise agreed, all permits, variances, access to facilities, roof access, building warranty concerns or other site specific information and procedures are the responsibility of the Customer. Sentinel can assist as needed, but will need to be informed of any requirements prior to the site survey to consider these within the validation process.

### **Remote Support**

Sentinel's service estimate assumes remote access support through IP VPN or IP PPP connection. Without this access, additional services may be incurred for optimization and tuning required pre and post installation.

### **Project Changes Request**

During Project Changes: Any changes to scope will be presented and approved through Sentinel Project Management using the Project Change Request (PCR). Changes will not be performed until the PCR is approved for procedure and all budget and timeframe impacts are understood.

### **Travel Requirements and Cost**

Unless specified within the proposal, all travel expenses and time are not included. Travel time shall be invoiced at pre-negotiated rates and expenses plus per diem at actual costs.

## Video Conferencing

### WAN Assumption

Sentinel assumes any existing WAN components and sizing are sufficient for adding video. As needed Sentinel can perform a network analysis of performance and capacity. Sentinel also offers consulting services for design validation if requested by the client. Sentinel, will provide a separate quote based on this request.

### IP Camera Wiring Support

Customer is responsible for all wiring (Cat 5 Ethernet and 110V power) to all Cameras.

### Audio quality

Axis audio module is not synchronized with video via HTTP. The audio stream is sent as a stream of digital audio (Adaptive Differential Pulse Code Modulation, ADPCM G.711, G.726-32, or G.726-24). What codec is used is configured at the outset.

# DIMENSION DATA

**Corporate Address:**  
 Dimension Data North America, Inc  
 11006 Rushmore Drive,  
 Suite 300,  
 Charlotte, NC 28277  
 United States



**PRICE QUOTATION - NORTHLAND - SX 80 V1**

**Quote Name:** Northland - SX 80 V1      **Quote Status:** In Process      **Date Entered:** 03/29/2016  
**Quotation #:** 1859149      **Expiration Date:** 04/28/2016

**Organization:**  
 Northland Pioneer College  
 2251 Navajo Blvd.  
 Holbrook, AZ 86025  
**Sales Person:** Barry Edelman

**Account Manager:**  
 Denise Ruiz  
 Denise.Ruiz@us.didata.com

**Sales Support:**  
 Barry Edelman  
 barry.edelman@dimensiondata.com +1 713 9093092

**Email:** barry.edelman@dimensiondata.com  
**Phone:** +1 713 9093092

**Bill To:**  
 Northland Pioneer College  
 2251 Navajo Blvd.  
 Holbrook, AZ 86025  
 United States

**Ship To:**  
 Northland Pioneer College  
 2251 Navajo Blvd.  
 Holbrook, AZ 86025  
 United States

**Delivery Country:** United States      **Ordering Country:** United States  
**Shipping Method:** Ground      **Install Country:** United States  
**Currency:** US Dollar      **Multi Currencies:** Normal View  
**Comments:** AZ State Contract: ADSP016-117850  
**Payment Terms:** 30 Days Net

**DIMENSION DATA TERMS AND CONDITIONS OF SALE**

All products and services are offered subject to the Dimension Data Terms and Condition of Sale available at <http://www.dimensiondata.com/en-US/Documents/DimensionDataTermsandConditionsUS.pdf> and which are incorporated herein by reference. Dimension Data's offer to sell such products or services and its obligation to perform are expressly conditional upon Customer's acceptance of these Terms and Conditions of Sale without additional or different terms. Customer may accept Dimension Data's offer by issuing a purchase order and such action shall be deemed to be Customer's unconditional acceptance of the Terms and Conditions of Sale. Customer acknowledges and agrees that it has the ability to access each URL referenced in this quotation. Customer waives any claims or defenses to the validity or enforceability of the Terms and Conditions of Sale arising from any electronic submission of it to Customer.

If you observe any illegal or unethical behavior by any Dimension Data employee, please report such behavior to our anonymous Ethics Hotline by phone at 877-217-6364 or by web at <https://iwf.tnwgrc.com/dimensiondata>.

# Mfr Part #	Description	Qty	List Price	Discount	Unit Price	Ext Price
<b>Teacher Classroom Telepresence</b>						
<b>Comments:</b>						
1	<b>CISCO Cisco SX80 Codec, Speaker Track 60, Touch 10</b>					
	<b>CTS-SX80-IPST60-K9</b> CISCO Cisco SX80 Codec, Speaker Track 60, Touch 10	4	\$ 30,500.00	59.00%	\$ 12,505.00	\$ 50,020.00
	<b>PWR-CORD-US-A</b> CISCO Pwr Cord US 1.8m Black YP-12 To YC-12	12	\$ 0.00		\$ 0.00	\$ 0.00
	<b>CTS-MIC-TABL60</b> CISCO Cisco TelePresence Table Microphone 60	4	\$ 599.00	59.00%	\$ 245.59	\$ 982.36
	<b>CTS-MIC-CLNG-G2</b> CISCO Cisco TelePresence Ceiling Microphone Generation 2	4	\$ 1,490.00	59.00%	\$ 610.90	\$ 2,443.60
	<b>CAB-ETHRSHLD-10M</b> CISCO Shielded cable for Ceiling Mic (10m), not plenum rated	4	\$ 75.00	59.00%	\$ 30.75	\$ 123.00
	<b>LIC-TC-CRYPTO-K9</b> CISCO License key to activate sw encryption module	4	\$ 0.00		\$ 0.00	\$ 0.00
	<b>CTS-CAM-P60</b> CISCO Cisco TelePresence Precision 60 Camera	4	\$ 8,900.00	59.00%	\$ 3,649.00	\$ 14,596.00
	<b>LIC-TP-SMP-EP</b> CISCO Shared Multiparty Lic for 1 Concurrent Meeting inc 2 RMS Lic	4	\$ 4,990.00	59.00%	\$ 2,045.90	\$ 8,183.60

# Mfr Part #	Description	Qty	List Price	Discount	Unit Price	Ext Price
<b>Teacher Classroom Telepresence</b>						
<b>Comments:</b>						
LIC-TP-ROOM-11.X	CISCO Choose if VCS or for CUCM version 11.x TP-Room License	4	\$ 0.00		\$ 0.00	\$ 0.00
PSU-12VDC-40W2	CISCO Power Supply 12 VDC 40W	4	\$ 0.00		\$ 0.00	\$ 0.00
CAB-DV10-4M	CISCO 4 meter flat grey Ethernet cable for Touch 10	4	\$ 0.00		\$ 0.00	\$ 0.00
CTS-PWR-AIR-INJ5+	CISCO Power Injector (802.3af)	4	\$ 0.00		\$ 0.00	\$ 0.00
LIC-EXP-RMS-PMP	CISCO RMS Licensing included with PMP & SMP	8	\$ 0.00		\$ 0.00	\$ 0.00
LIC-EXPE-PMP-PAK	CISCO Expressway Series, Expressway-E PAK	4	\$ 0.00		\$ 0.00	\$ 0.00
LIC-VMCNDTR-PMP-PK	CISCO PAK for virtual Conductor	4	\$ 0.00		\$ 0.00	\$ 0.00
UCM-PAK	CISCO UCM 9X/10X/11X PAK	4	\$ 0.00		\$ 0.00	\$ 0.00
PWR-CORD-US-A	CISCO Pwr Cord US 1.8m Black YP-12 To YC-12	4	\$ 0.00		\$ 0.00	\$ 0.00
CAB-DV10-12.5M	CISCO 12.5 meter flat grey Ethernet cable for Touch 10	4	\$ 0.00		\$ 0.00	\$ 0.00
CAB-DVI-VGA-PHOEN	CISCO Presentation cable w/audio, VGA/Jack to DVI/Phoenix	4	\$ 0.00		\$ 0.00	\$ 0.00
CAB-ETH-ST-SHORT-	CISCO Two Ethernet cables (0.35m & 0.2m) for SpeakerTrack 60	4	\$ 0.00		\$ 0.00	\$ 0.00
CAB-PWR-ST-SHORT-	CISCO Two 12V power cables (0.45m & 0.2m) for SpeakerTrack 60	4	\$ 0.00		\$ 0.00	\$ 0.00
CTS-CAM-P60+	CISCO Cisco TelePresence Precision 60 Camera - auto expand only	8	\$ 0.00		\$ 0.00	\$ 0.00
CTS-ST-ARRAY60+	CISCO Speaker Track 60 Microphone Array	4	\$ 0.00		\$ 0.00	\$ 0.00
CTS-ST-INT-PLATE-	CISCO Interface plate CAM-P60 to Speaker Track 60	8	\$ 0.00		\$ 0.00	\$ 0.00
CTS-SX80-RACKEARS-	CISCO SX80 rack ears - for auto expand only	4	\$ 0.00		\$ 0.00	\$ 0.00
CTS-SX80CODEC	CISCO Cisco SX80 Codec	4	\$ 0.00		\$ 0.00	\$ 0.00
PWR-12VDC-84W-	CISCO Power supply 12VDC 84W	4	\$ 0.00		\$ 0.00	\$ 0.00
SW-S52020-TC7-K9	CISCO SW Image for SX80, MX700, MX800	4	\$ 0.00		\$ 0.00	\$ 0.00
CTS-ST-ARR60-WMK-	CISCO Wall Mount Kit for Speaker Track 60 Microphone Array	4	\$ 0.00		\$ 0.00	\$ 0.00
CTS-CTRL-DVX-10+	CISCO Touch 10 auto expand <b>Estimated Lead Time:</b> Not Available	4	\$ 0.00		\$ 0.00	\$ 0.00
Hardware Part #: CTS-SX80-IPST60-K9 CON-ECDN-SX80IP60	CISCO ESS WITH 8X5XNBD Cisco SX80 Codec Speaker Trk 60 Touch 10 <i>Maintenance pricing is based on an annual contract with an estimated start date of 04/27/2016. This contract covers 4 device(s) and is for 1 year(s). Maintenance contract start date is subject to product shipment if applicable.</i>	4	\$ 2,745.00	34.00%	\$ 1,811.70	\$ 7,246.80
Hardware Part #: CTS-MIC-TABL60 CON-ECDN-CTSMICTB	CISCO ESS WITH 8X5XNBD Cisco TelePresence Table Microphone 60 <i>Maintenance pricing is based on an annual contract with an estimated start date of 04/27/2016. This contract covers 4 device(s) and is for 1 year(s). Maintenance contract start date is subject to product shipment if applicable.</i>	4	\$ 48.00	34.00%	\$ 31.68	\$ 126.72
Hardware Part #: CTS-MIC-CLNG-G2 CON-ECDN-CTSMICG2	CISCO ESS WITH 8X5XNBD Cisco TelePresence Ceiling Microphone Ge <i>Maintenance pricing is based on an annual contract with an estimated start date of 04/27/2016. This contract covers 4 device(s) and is for 1 year(s). Maintenance contract start date is subject to product shipment if applicable.</i>	4	\$ 160.00	34.00%	\$ 105.60	\$ 422.40

# Mfr Part #	Description	Qty	List Price	Discount	Unit Price	Ext Price
<b>Teacher Classroom Telepresence</b>						
<b>Comments:</b>						
<b>Hardware Part #: CTS-CAM-P60 CON-ECDN-CTSCAM60</b>	CISCO ESS WITH 8X5XNBD Cisco TelePresence Precision 60 Camera <i>Maintenance pricing is based on an annual contract with an estimated start date of 04/27/2016. This contract covers 4 device(s) and is for 1 year(s). Maintenance contract start date is subject to product shipment if applicable.</i>	4	\$ 801.00	34.00%	\$ 528.66	\$ 2,114.64
<b>Hardware Part #: LIC-TP-SMP-EP CON-ECMU-LICTPSEP</b>	CISCO SWSS UPGRADES Shared Multiparty Lic for 1 Concurrent M <i>Maintenance pricing is based on an annual contract with an estimated start date of 04/27/2016. This contract covers 4 device(s) and is for 1 year(s). Maintenance contract start date is subject to product shipment if applicable.</i>	4	\$ 798.00	34.00%	\$ 526.68	\$ 2,106.72
<b>SECTION SUB TOTAL [TEACHER CLASSROOM TELEPRESENCE]:</b>						<b>\$ 88,365.84</b>
<b>SECTION GRAND TOTAL [TEACHER CLASSROOM TELEPRESENCE]:</b>						<b>\$ 88,365.84</b>

<b>QUOTE SUB TOTAL:</b>	<b>\$ 88,365.84</b>
<b>ESTIMATED LOGISTICS CHARGE:</b>	<b>\$ 1,489.73</b>
<b>QUOTE GRAND TOTAL:</b>	<b>\$ 89,855.57</b>

PRODUCT SUMMARY	EXT PRICE
Product	\$ 76,348.56
OEM Maintenance	\$ 12,017.28
Logistics Charge	\$ 1,489.73
<b>Total</b>	<b>\$ 89,855.57</b>

Interested in Leasing? A 36--month lease for All Items on this quote is \$ 2,509.69 month.

Hardware: \$ 2,122.49 per month

Software and Services: \$ 387.20 per month

These estimates exclude shipping and taxes. All leases are subject to credit approval, equipment verification and soft cost verification and applicable lease agreement.

**Customer's Logistics Comments :**

Dimension Data Supply Chain Services Limited (DDCC) logistic fee does not cover: VAT, Duties, Pre & Post shipment inspections, registering companies for importation, import licences (for importation and encryption), Importation Permissions etc. We advise where possible but they are still costs for the importer of record to cover.





March 17th, 2016

P.J. Way  
Northland Pioneer College

P.J.,

Dimension Data is pleased to provide this proposal to Northland Pioneer College. We recognize the importance of this solution to your business goals and have provided the following project overview and estimate based on our recent discussions.

**Client Requirements**

Northland Pioneer College is moving forward to upgrade their current Cisco Telephony infrastructure from version 8.x to version 11.x. This will bring stability and manufacturer support to the current voice platform and refresh legacy hardware. This scope includes the following UC Applications:

1. Communications Manager
2. Unity Voicemail
3. UCCX
4. IM and Presence
5. Emergency Responder
6. Syn-Apps Paging

**Project Flow**

**Planning and Design Phase:**

- Organize and conduct planning and design meetings
- Requirements gathering
- Provide acceptance testing plan
- Creation of initial cut sheets

**Staging Phase:**

- Stage various UCS hardware
- Acquire and verify all UC software and licensing
- Verify and assist with SmartNet/SWSS contracts
- Verify all VMware ESXi licenses
- Rack and stack UCS server hardware as needed





**Implementation Phase:**

- ESXi Build out virtual machines/OVA templates
- Provide and deploy OVA templates
- Backup v8.x CUCM user DB
- Install/Configure ELM server for centralized license distribution
- Build new CUCM v11.X environment on UCS server hardware
- Transfer user database to new CUCM environment
- Configure dedicated IM/P subscribers
- Backup v8.X UNC user DB
- Build new UNC v11.X environment on UCS server hardware
- Transfer user database to new UNC environment
- Backup v8.X Emergency Responder configuration
- Build new Emergency Responder environment on UCS server hardware
- Transfer existing configuration to new Emergency Responder environment
- Backup v8.X UCCX configuration
- Build new UCCX environment on UCS server hardware
- Transfer existing configuration to new UCCX environment
- Test all services running

**Cutover Phase:**

- Re-configure Analog Gateways to point to new CUCM IP address
- Re-configure all ISR voice gateways to point to new CUCM IP address
- Conduct final testing – All IP phones register, all gateways register and are operational

**Go Live Phase:**

- Provide post cutover support (Not to exceed 2 days)
- Provide admin training to cover the upgraded capabilities (2 hours)
- Provide train the trainer update on new features and functionality (2 hours)

**Assumptions**

The pricing below is based on the following assumptions:

1. All cabling connectivity will be provided by client.
2. Price does not include formal training but will include informal training during the project implementation.



3. Pricing does include onsite discovery and planning in addition to onsite cutover and go-live. Dimension Data reserves the right to perform some work remotely and will require VPN access.

**Budgetary Pricing**

Based upon Northland Pioneer College's preliminary requirements and the assumptions identified, Dimension Data is pleased to provide the following pricing for our services:

Professional Services Estimate	
<b>Total</b>	<b>\$94,016.72</b>

We hope this gives you a better idea of the overall investment of this solution. Once you decide you would like to pursue this solution further, we can engage for the development of a complete scope of work document to further define the requirements.

Sincerely,

Denise Ruiz  
Client Manager  
Phone: +1 (480) 517-6682  
[denise.ruiz@dimensiondata.com](mailto:denise.ruiz@dimensiondata.com)

**Legal disclaimer:** *This estimate is based on the information provided by the client and is not binding. It will be revised upon a more detailed assessment and further conversation with the client and during the design stage.*

# DIMENSION DATA

**Corporate Address:**  
 Dimension Data North America, Inc  
 11006 Rushmore Drive,  
 Suite 300,  
 Charlotte, NC 28277  
 United States



**PRICE QUOTATION - NPC CISCO UC UPGRADE 3/16/2016 V6**

**Quote Name:** NPC Cisco UC Upgrade 3/16/2016 V6      **Quote Status:** In Process      **Date Entered:** 03/17/2016  
**Quotation #:** 1849556      **Expiration Date:** 04/16/2016

**Organization:**  
 Northland Pioneer College  
 2251 E. Navajo Blvd.  
 Holbrook, AZ 86025  
**Sales Person:** Barry Edelman

**Account Manager:**  
 Denise Ruiz  
 Denise.Ruiz@us.didata.com

**Sales Support:**  
 Barry Edelman  
 barry.edelman@dimensiondata.com +1 713 9093092

**Email:** barry.edelman@dimensiondata.com  
**Phone:** +1 713 9093092

**Bill To:**  
 Northland Pioneer College  
 2251 E. Navajo Blvd.  
 Holbrook, AZ 86025  
 United States

**Ship To:**  
 Northland Pioneer College  
 2251 E. Navajo Blvd.  
 Holbrook, AZ 86025  
 United States

**Delivery Country:** United States      **Ordering Country:** United States  
**Shipping Method:** Ground      **Install Country:** United States  
**Currency:** US Dollar      **Multi Currencies:** Normal View  
**Comments:** AZ State Contract: ADSP016-117850  
**Payment Terms:** 30 Days Net

**DIMENSION DATA TERMS AND CONDITIONS OF SALE**

All products and services are offered subject to the Dimension Data Terms and Condition of Sale available at <http://www.dimensiondata.com/en-US/Documents/DimensionDataTermsandConditionsUS.pdf> and which are incorporated herein by reference. Dimension Data's offer to sell such products or services and its obligation to perform are expressly conditional upon Customer's acceptance of these Terms and Conditions of Sale without additional or different terms. Customer may accept Dimension Data's offer by issuing a purchase order and such action shall be deemed to be Customer's unconditional acceptance of the Terms and Conditions of Sale. Customer acknowledges and agrees that it has the ability to access each URL referenced in this quotation. Customer waives any claims or defenses to the validity or enforceability of the Terms and Conditions of Sale arising from any electronic submission of it to Customer.

If you observe any illegal or unethical behavior by any Dimension Data employee, please report such behavior to our anonymous Ethics Hotline by phone at 877-217-6364 or by web at <https://iwf.tnwgcr.com/dimensiondata>.

# Mfr Part #	Description	Qty	List Price	Discount	Unit Price	Ext Price
<b>UC Upgrade</b>						
<b>Comments:</b>						
1	<b>CISCO Cisco Business Edition 6000H Svr (M4), Export Restricted SW</b>					
	<b>BE6H-M4-K9=</b> CISCO Cisco Business Edition 6000H Svr (M4), Export Restricted SW	4	\$ 20,800.00	64.65%	\$ 7,353.54	\$ 29,414.16
	<b>CAB-N5K6A-NA</b> CISCO Power Cord, 200/240V 6A North America	8	\$ 0.00		\$ 0.00	\$ 0.00
	<b>BE6K-SW-10X11X-K9</b> CISCO Cisco Business Edition 6000 - Software App Version 10.X 11.X	4	\$ 0.00		\$ 0.00	\$ 0.00
	<b>VMW-VS5-HYP-K9</b> CISCO Cisco UC Virt. Hypervisor 5.x (2-socket)	4	\$ 0.00		\$ 0.00	\$ 0.00
	<b>VMW-VS5-SNS</b> CISCO Cisco UC Virt. Hypervisor 5.x - SnS	4	\$ 0.00		\$ 0.00	\$ 0.00
	<b>CIT-A03-D300GA2</b> CISCO 300GB 6Gb SAS 10K RPM SFF HDD/hot plug/drive sled mounted	32	\$ 0.00		\$ 0.00	\$ 0.00
	<b>CIT-CPU-E52630D</b> CISCO 2.40 GHz E5-2630 v3/85W 8C/20MB Cache/DDR4 1866MHz	8	\$ 0.00		\$ 0.00	\$ 0.00
	<b>CIT-MR-1X081RU-A</b> CISCO 8GB DDR4-2133-MHz RDIMM/PC4-17000/single rank/x4/1.2v	24	\$ 0.00		\$ 0.00	\$ 0.00

# Mfr Part #	Description	Qty	List Price	Discount	Unit Price	Ext Price
<b>UC Upgrade</b>						
<b>Comments:</b>						
CIT-MRAID12G	CISCO Cisco 12G SAS Modular Raid Controller	4	\$ 0.00		\$ 0.00	\$ 0.00
CIT-MRAID12G-1GB	CISCO Cisco 12Gbps SAS 1GB FBWC Cache module (Raid 0/1/5/6)	4	\$ 0.00		\$ 0.00	\$ 0.00
CIT-PCIE-IRJ45	CISCO Intel i350 Quad Port 1Gb Adapter	4	\$ 0.00		\$ 0.00	\$ 0.00
CIT-PSU1-770W	CISCO 770W AC Hot-Plug Power Supply for 1U C-Series Rack Server	8	\$ 0.00		\$ 0.00	\$ 0.00
R2XX-RAID5	CISCO Enable RAID 5 Setting <b>Estimated Lead Time:</b> Not Available	4	\$ 0.00		\$ 0.00	\$ 0.00
Hardware Part #:BE6H-M4-K9= CON-SNTP-BE6HM4K9	CISCO SNTC-24X7X4 Cisco Business Edition 6000H Server, Exp <i>Maintenance pricing is based on an annual contract with an estimated start date of 04/16/2016. This contract covers 4 device(s) and is for 3 year(s). Maintenance contract start date is subject to product shipment if applicable.</i>	12	\$ 504.00	38.94%	\$ 307.75	\$ 3,693.00
<b>2 CISCO Cisco Business Edition 6000-Electronic SW Delivery-Top Level</b>						
R-CBE6K-K9	CISCO Cisco Business Edition 6000-Electronic SW Delivery-Top Level	4	\$ 0.00		\$ 0.00	\$ 0.00
BE6K-SW-11.0	CISCO Business Edition 6000 v11 export restricted software	4	\$ 0.00		\$ 0.00	\$ 0.00
UNITY	CISCO Migrating from Unity Standalone to CUWL	4	\$ 0.00		\$ 0.00	\$ 0.00
JAB-ADR-CLNT-UWL	CISCO Jabber for Android CUWL Only	2000	\$ 0.00		\$ 0.00	\$ 0.00
JAB-IPH-CLNT-UWL	CISCO Jabber for iPhone CUWL Only	2000	\$ 0.00		\$ 0.00	\$ 0.00
JABBER-TABLET	CISCO Jabber for iPad and Android Tablet	2000	\$ 0.00		\$ 0.00	\$ 0.00
JABBER-DESKTOP	CISCO Jabber for Desktop for PC and Mac	3200	\$ 0.00		\$ 0.00	\$ 0.00
EXPWY-VE-C-K9	CISCO Cisco Expressway-C Server, Virtual Edition	8	\$ 0.00		\$ 0.00	\$ 0.00
EXPWY-VE-E-K9	CISCO Cisco Expressway-E Server, Virtual Edition	8	\$ 0.00		\$ 0.00	\$ 0.00
SW-EXP-8.X-K9	CISCO Software Image for Expressway with Encryption , Version X8	4	\$ 0.00		\$ 0.00	\$ 0.00
JABBER-GUEST	CISCO Jabber Guest Session	200	\$ 0.00		\$ 0.00	\$ 0.00
JAB-ADR-RTU	CISCO Jabber for Android Right to Use	4	\$ 0.00		\$ 0.00	\$ 0.00
JAB-IPH-RTU	CISCO Jabber for iPhone Right to Use	4	\$ 0.00		\$ 0.00	\$ 0.00
JAB-GUEST-RTU-K9	CISCO Jabber Guest Right to Use	4	\$ 0.00		\$ 0.00	\$ 0.00
JABBER-TABLET-RTU	CISCO Jabber for Tablet Right to Use	4	\$ 0.00		\$ 0.00	\$ 0.00
JABBER-DSK-K9-RTU	CISCO Jabber for Desktop Right to Use	4	\$ 0.00		\$ 0.00	\$ 0.00
LIC-EXP-E-PAK	CISCO Expressway Series, Expressway-E PAK	4	\$ 0.00		\$ 0.00	\$ 0.00
LIC-EXP-GW	CISCO Enable GW Feature (H323-SIP)	16	\$ 0.00		\$ 0.00	\$ 0.00
LIC-EXP-E	CISCO Enable Expressway-E Feature Set	8	\$ 0.00		\$ 0.00	\$ 0.00
LIC-EXP-TURN	CISCO Enable TURN Relay Option	8	\$ 0.00		\$ 0.00	\$ 0.00
LIC-EXP-AN	CISCO Enable Advanced Networking Option	8	\$ 0.00		\$ 0.00	\$ 0.00
LIC-SW-EXP-K9	CISCO License Key Software Encrypted	16	\$ 0.00		\$ 0.00	\$ 0.00
LIC-EXP-SERIES	CISCO Enable Expressway Series Feature Set <b>Estimated Lead Time:</b> Not Available	16	\$ 0.00		\$ 0.00	\$ 0.00
Hardware Part #:R-CBE6K-K9 CON-ECMU-RCBE6KK	CISCO SWSS UPGRADES Cisco Business Editi <i>Maintenance pricing is based on an annual contract with an estimated start date of 04/16/2016. This contract covers 4 device(s) and is for 3 year(s). Maintenance contract start date is subject to product shipment if applicable.</i>	12	\$ 0.00		\$ 0.00	\$ 0.00
<b>3 CISCO Cisco TelePresence Shared Multiparty</b>						
TP-SMP-K9	CISCO Cisco TelePresence Shared Multiparty	1	\$ 0.00		\$ 0.00	\$ 0.00
LIC-VMCNDTR-PMP-PK	CISCO PAK for virtual Conductor	1	\$ 0.00		\$ 0.00	\$ 0.00

# Mfr Part #	Description	Qty	List Price	Discount	Unit Price	Ext Price
<b>UC Upgrade</b>						
<b>Comments:</b>						
LIC-EXP-RMS-PMP	CISCO RMS Licensing included with PMP & SMP	20	\$ 0.00		\$ 0.00	\$ 0.00
LIC-EXPE-PMP-PAK	CISCO Expressway Series, Expressway-E PAK	1	\$ 0.00		\$ 0.00	\$ 0.00
LIC-TP-SMP	CISCO Shared Multiparty License for 1 Concurrent Meeting <b>Estimated Lead Time:</b> Not Available	10	\$ 9,000.00	64.65%	\$ 3,181.82	\$ 31,818.20
Hardware Part #:TP-SMP-K9 CON-ECMU-TPSMPK9	CISCO SWSS UPGRADES Cisco TelePresence Shared Multiparty <i>Maintenance pricing is based on an annual contract with an estimated start date of 04/16/2016. This contract covers 1 device(s) and is for 3 year(s). Maintenance contract start date is subject to product shipment if applicable.</i>	3	\$ 0.00		\$ 0.00	\$ 0.00
Hardware Part #:LIC-TP-SMP CON-ECMU-LICTPSMP	CISCO SWSS UPGRADES Shared Multiparty License for 1 Concurr <i>Maintenance pricing is based on an annual contract with an estimated start date of 04/16/2016. This contract covers 10 device(s) and is for 3 year(s). Maintenance contract start date is subject to product shipment if applicable.</i>	30	\$ 1,440.00	38.94%	\$ 879.27	\$ 26,378.10
<b>4 CISCO Cisco Multiparty Media 410v Server</b>						
CTI-410V-VTS-K9	CISCO Cisco Multiparty Media 410v Server	2	\$ 23,656.00	64.65%	\$ 8,363.23	\$ 16,726.46
VMW-VS5-410V-K9	CISCO Embedded License, Cisco TelePresence Virt. SW 5.x	2	\$ 2,499.00	64.65%	\$ 883.48	\$ 1,766.96
CAB-N5K6A-NA	CISCO Power Cord, 200/240V 6A North America	4	\$ 0.00		\$ 0.00	\$ 0.00
VMW-VS5-410V-SNS	CISCO Cisco TelePresence Virt. SW 5.x SnS	2	\$ 0.00		\$ 0.00	\$ 0.00
VTS-SW-4X	CISCO Media (no lic) for Cisco TelePresence Svr Virt. Machine 4.x	2	\$ 0.00		\$ 0.00	\$ 0.00
CIT3-A03-D300GA2	CISCO 300GB 6Gb SAS 10K RPM SFF HDD/hot plug/drive sled mounted	4	\$ 0.00		\$ 0.00	\$ 0.00
CIT3-PSU1-770W	CISCO 770W AC Hot-Plug Power Supply for 1U C-Series Rack Server	4	\$ 0.00		\$ 0.00	\$ 0.00
CIT3-CPU-E52690D	CISCO 2.60 GHz E5-2690 v3/135W 12C/30MB Cache/DDR4 2133MHz	4	\$ 0.00		\$ 0.00	\$ 0.00
CIT3-MR-1X081RU-A	CISCO 8GB DDR4-2133-MHz RDIMM/PC4-17000/single rank/x4/1.2v	16	\$ 0.00		\$ 0.00	\$ 0.00
CIT3-MRAID12G	CISCO Cisco 12G SAS Modular Raid Controller	2	\$ 0.00		\$ 0.00	\$ 0.00
R2XX-RAID1	CISCO Enable RAID 1 Setting <b>Estimated Lead Time:</b> Not Available	2	\$ 0.00		\$ 0.00	\$ 0.00
Hardware Part #:CTI-410V-VTS-K9 CON-SNTP-CTI-410V	CISCO SNTP-24X7X4 Cisco Multiparty Med <i>Maintenance pricing is based on an annual contract with an estimated start date of 04/16/2016. This contract covers 2 device(s) and is for 3 year(s). Maintenance contract start date is subject to product shipment if applicable.</i>	6	\$ 757.00	38.94%	\$ 462.23	\$ 2,773.38

# Mfr Part #	Description	Qty	List Price	Discount	Unit Price	Ext Price
<b>UC Upgrade</b>						
<b>Comments:</b>						
Hardware Part #:VMW-VS5-410V-K9 CON-ECMU-VMWVS54V	CISCO SWSS UPGRADES Embedded License, Cisco TelePresence Vir <i>Maintenance pricing is based on an annual contract with an estimated start date of 04/16/2016. This contract covers 2 device(s) and is for 3 year(s). Maintenance contract start date is subject to product shipment if applicable.</i>	6	\$ 400.00	38.94%	\$ 244.24	\$ 1,465.44
5 CISCO Solutions Plus for VBRICK REV R-VBRICK-USER-SP	<b>User Tiers - Top Level</b> CISCO Solutions Plus for VBRICK REV User Tiers - Top Level	1	\$ 0.00		\$ 0.00	\$ 0.00
CL-STARTER	CISCO Cloud Rev Starter Portal up to 1000 users	3	\$ 40,000.00	59.60%	\$ 16,161.62	\$ 48,484.86
SP-PRODUCTS-TERMS	CISCO Buyer Acceptance of SolutionsPlus Terms and Conditions	1	\$ 0.00		\$ 0.00	\$ 0.00
VBRICK-PAK	CISCO VBRICK PAK for REV and DME	1	\$ 0.00		\$ 0.00	\$ 0.00
VBRICK-RTU	CISCO VBrick User and DME Right to Use <b>Estimated Lead Time:</b> Not Available	1	\$ 0.00		\$ 0.00	\$ 0.00
6 CISCO VBrick M4 Server Appliance for CVC-DME-M4-M	<b>VBrick DME Medium</b> CISCO VBrick M4 Server Appliance for VBrick DME Medium	1	\$ 14,345.00	59.60%	\$ 5,795.96	\$ 5,795.96
CAB-9K12A-NA	CISCO Power Cord, 125VAC 13A NEMA 5-15 Plug , North America	2	\$ 0.00		\$ 0.00	\$ 0.00
CVC-A03-D600GA2	CISCO VBRICK UCS Server Hard Disk 600 GB, 10K RPM	4	\$ 0.00		\$ 0.00	\$ 0.00
CVC-CPU-E52630D	CISCO UCS Server CPU	1	\$ 0.00		\$ 0.00	\$ 0.00
CVC-MRAID12G-1GB	CISCO Cisco 12Gbps SAS 1GB FBWC Cache module (Raid 0/1/5/6)	1	\$ 0.00		\$ 0.00	\$ 0.00
R2XX-RAID5	CISCO Enable RAID 5 Setting	1	\$ 0.00		\$ 0.00	\$ 0.00
CVC-MR-1X081RU-A	CISCO VBRICK UCS Server DRAM - 8GB DDR3	2	\$ 0.00		\$ 0.00	\$ 0.00
CVC-MRAID12G	CISCO VBRICK UCS 12G SAS Modular Raid Controller	1	\$ 0.00		\$ 0.00	\$ 0.00
CVC-PSU1-770W	CISCO UCS Server 770W power supply <b>Estimated Lead Time:</b> Not Available	2	\$ 0.00		\$ 0.00	\$ 0.00
Hardware Part #:CVC-DME-M4-M CON-SNTP-CVCDMEMM	CISCO SNTP-24X7X4 VBrick M4 Server Appliance <i>Maintenance pricing is based on an annual contract with an estimated start date of 04/16/2016. This contract covers 1 device(s) and is for 3 year(s). Maintenance contract start date is subject to product shipment if applicable.</i>	3	\$ 504.00	38.94%	\$ 307.75	\$ 923.25
7 CISCO Virtual TCS 10 Rec, 2 Live Port R-VMTCS-PRO10P-K9	<b>with Premium Resolution</b> CISCO Virtual TCS 10 Rec, 2 Live Port with Premium Resolution	1	\$ 74,480.00	67.02%	\$ 24,563.64	\$ 24,563.64
LIC-VMTCS-CLUSTER	CISCO Cluster Option for TCS	1	\$ 4,950.00	64.65%	\$ 1,750.00	\$ 1,750.00
LIC-SWTCS-K9	CISCO Virtual TCS Software Release Key	1	\$ 0.00		\$ 0.00	\$ 0.00
LIC-VMTCS-2L	CISCO 2 Live Output Ports License	1	\$ 0.00		\$ 0.00	\$ 0.00
LIC-VMTCS-5R	CISCO 5 Recording Ports License	1	\$ 0.00		\$ 0.00	\$ 0.00
LIC-VMTCS-PAK	CISCO Virtual TCS Options Release Key	1	\$ 0.00		\$ 0.00	\$ 0.00
LIC-VMTCS-PRO+	CISCO Premium Resolution Option for TCS	1	\$ 0.00		\$ 0.00	\$ 0.00
LIC-VMTCS-ADD5RP+	CISCO Additional 5 Port Option for TCS <b>Estimated Lead Time:</b> Not Available	1	\$ 0.00		\$ 0.00	\$ 0.00



# Mfr Part #	Description	Qty	List Price	Discount	Unit Price	Ext Price
<b>UC Upgrade</b>						
<b>Comments:</b>						
<b>Hardware Part #:R-VMTCS-PRO10P-K9 CON-ECMU-RVMTCSPP</b>	CISCO SWSS UPGRADES Virtual TCS 10 Rec, 2 Live Port with Pre <i>Maintenance pricing is based on an annual contract with an estimated start date of 04/16/2016. This contract covers 1 device(s) and is for 3 year(s). Maintenance contract start date is subject to product shipment if applicable.</i>	3	\$ 8,938.00	38.94%	\$ 5,457.60	\$ 16,372.80
<b>8 CISCO Virtual TCS 5 Rec, 2 Live Port with Premium Resolution R-VMTCS-PROBUN-K9</b>	CISCO Virtual TCS 5 Rec, 2 Live Port with Premium Resolution	1	\$ 49,480.00	64.65%	\$ 17,492.93	\$ 17,492.93
<b>LIC-VMTCS-PRO+</b>	CISCO Premium Resolution Option for TCS	1	\$ 0.00		\$ 0.00	\$ 0.00
<b>LIC-VMTCS-CLUSTER</b>	CISCO Cluster Option for TCS	1	\$ 4,950.00	64.65%	\$ 1,750.00	\$ 1,750.00
<b>LIC-SWTCS-K9</b>	CISCO Virtual TCS Software Release Key	1	\$ 0.00		\$ 0.00	\$ 0.00
<b>LIC-VMTCS-2L</b>	CISCO 2 Live Output Ports License	1	\$ 0.00		\$ 0.00	\$ 0.00
<b>LIC-VMTCS-5R</b>	CISCO 5 Recording Ports License	1	\$ 0.00		\$ 0.00	\$ 0.00
<b>LIC-VMTCS-PAK</b>	CISCO Virtual TCS Options Release Key	1	\$ 0.00		\$ 0.00	\$ 0.00
	<b>Estimated Lead Time:</b> Not Available					
<b>Hardware Part #:R-VMTCS-PROBUN-K9 CON-ECMU-RVMTCSPP</b>	CISCO SWSS UPGRADES Virtual TCS 5 Rec, 2 Live Port with Prem <i>Maintenance pricing is based on an annual contract with an estimated start date of 04/16/2016. This contract covers 1 device(s) and is for 3 year(s). Maintenance contract start date is subject to product shipment if applicable.</i>	3	\$ 6,537.00	38.94%	\$ 3,991.54	\$ 11,974.62
<b>9 CISCO Solutions Plus for VBRICK REV DME - Top Level R-VBRICK-DME-SP</b>	CISCO Solutions Plus for VBRICK REV DME - Top Level	1	\$ 0.00		\$ 0.00	\$ 0.00
<b>DME-M-SUB</b>	CISCO DME Medium Subscription (Annual)	3	\$ 7,770.00	59.60%	\$ 3,139.39	\$ 9,418.17
<b>SP-PRODUCTS-TERMS</b>	CISCO Buyer Acceptance of SolutionsPlus Terms and Conditions	1	\$ 0.00		\$ 0.00	\$ 0.00
<b>VBRICK-PAK</b>	CISCO VBRICK PAK for REV and DME	1	\$ 0.00		\$ 0.00	\$ 0.00
<b>VBRICK-RTU</b>	CISCO Vbrick User and DME Right to Use	1	\$ 0.00		\$ 0.00	\$ 0.00
	<b>Estimated Lead Time:</b> Not Available					
<b>SECTION SUB TOTAL [UC UPGRADE]:</b>						<b>\$ 252,561.93</b>
<b>SECTION GRAND TOTAL [UC UPGRADE]:</b>						<b>\$ 252,561.93</b>

<b>QUOTE SUB TOTAL:</b>	<b>\$ 252,561.93</b>
<b>ESTIMATED LOGISTICS CHARGE:</b>	<b>\$ 3,741.83</b>
<b>QUOTE GRAND TOTAL:</b>	<b>\$ 256,303.76</b>

PRODUCT SUMMARY	EXT PRICE
Product	\$ 188,981.34
OEM Maintenance	\$ 63,580.59
Logistics Charge	\$ 3,741.83
<b>Total</b>	<b>\$ 256,303.76</b>

Interested in Leasing? A 36--month lease for All Items on this quote is \$ 7,302.25 month.  
 Hardware: \$ 5,253.68 per month  
 Software and Services: \$ 2,048.57 per month  
 These estimates exclude shipping and taxes. All leases are subject to credit approval, equipment verification and soft cost verification and applicable lease agreement.

## REQUEST TO APPROVE PURCHASE OF LAERDAL SIM MAN MANIKIN

**Recommendation:**

Staff recommends approval of the purchase of a Laerdal Medical Corporation SimMan manikin and maintenance agreement. The total purchase price, tax included, is \$96,323.75.

**Summary:**

Nursing programs nationwide utilize programmable manikins to enhance educational opportunities for students. The College has selected Laerdal SimMan manikins due to their breadth of instructional use, superior lifespan and onsite maintenance. Alternative options that have been purchased in the past have quickly deteriorated and required remote maintenance. The SimMan is a critical component in preparing nursing students for clinical rotations involving live patients. The funds to purchase the Laerdal SimMan are earmarked in the 2015-2016 capital budget. The purchase price of \$96,323.75 includes applicable taxes and all hardware and software needed to program and run the simulator.



**Laerdal**<sup>®</sup>  
helping save lives

Laerdal Medical Corporation  
167 Myers Corners Road  
Wappingers Falls, NY 12590  
Fax Order To: (800)227-1143  
Phone Order To: 877-Laerdal  
Tax ID: 13-2587752

**TERRITORY MANAGER**  
Andrea Sinay  
(800) 648-1851x2330  
andrea.sinay@laerdal.com

**INSIDE SALES REPRESENTATIVE**  
Barron Williams  
(888) 297-7772x4448  
barron.williams@laerdal.com

**SALES SUPPORT SPECIALIST**  
Sarah Kirschenheiter  
(800) 648-1851x4408  
sarah.kirschenheiter@laerdal.com

**DATE :** Monday, February 29, 2016

**ATTN:** Ms. Penny Weiermann  
Faculty  
NORTHLAND PIONEER COLLEGE  
102 N 1st Ave  
Holbrook AZ 86025-2902  
(928) 532-6134x  
pweiermann@npc.edu

**QUOTE NUMBER :** 1-3DHJBI  
**CUSTOMER NUMBER :** 00124770  
**EXPIRATION DATE :** 08/31/2016

**SHIP TO:**  
NORTHLAND PIONEER COLLEGE  
White Mountain Campus  
1001 W Deuce Of Clubs  
Show Low AZ 85901-6211

QTY	PRODUCT	DESCRIPTION	LIST PRICE	UNIT PRICE	EXTENDED PRICE
1	212-02001	SimMan 3G Manikin and Accessories	\$71,530.00	\$67,953.50	\$67,953.50
1	400-10201	Laptop LLeap Instructor	\$2,000.00	\$1,940.00	\$1,940.00
1	400-29301	Patient Monitor LLEAP Instructor	\$3,155.00	\$3,060.35	\$3,060.35
1	400-96050	USB HD Web Cam	\$184.00	\$174.80	\$174.80
1	212-LL51200	Intro to SimMan 3G Course LLEAP, 2 Conse	\$4,540.00	\$4,313.00	\$4,313.00
1	212-VPLUSP2	SimMan 3G ValuePlus Platinum (2 yr)	\$15,205.00	\$14,444.75	\$14,444.75
<b>ITEM TOTAL:</b>					\$91,886.40
<b>ESTIMATED TAX:</b>					\$4,113.35
<b>SHIPPING &amp; HANDLING:</b>					\$324.00
<b>TOTAL:</b>					\$96,323.75

There are various payment options; please see bottom of your quote for further clarification.  
Appropriate Sales Tax will be added to invoice – Pricing and Availability are subject to change  
Shipping/Handling costs will be added to invoice

**Terms:**

- . Net 30 Days for approved open accounts; CIA; Credit Cards accepted. Financing options now available – sample leasing payment terms follow.  
For additional information, ask your Inside Sales Representative listed above.
- Lease term 24 months: \$3,828.60\*
- Lease term 36 months: \$2,552.40\*
- Lease term 48 months: \$1,914.30\*
- \*Quoted payments do not include Interest, Taxes, Maintenance, or Insurance. Quotes are subject to credit approval and may change without notice.
- . One(1) year warranty on manufactured products and 90 day warranty on refurbished products
- . Two(2) year parts replacement warranty with technical assistance by phone on all Hill-Rom refurbished products
- . Delivery of product to a specific location within your building, if requested is at an additional charge and not included in this quote
- . Quotes that included training. Training must be booked and performed 1 year from installation. The training obligation expires one year from install

USER I



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# Entity Dashboard

- Entity Overview
  - Entity Record
    - Core Data
    - Assertions
    - Reps & Certs
      - POCs
      - Reports
  - Service Contract Report
  - BioPreferred Report
    - Exclusions
    - Active Exclusions
    - Inactive Exclusions
  - Excluded Family Members

[RETURN TO SEARCH](#)

**LAERDAL MEDICAL CORPORATION**  
**DUNS: 042791152 CAGE Code: 63783**  
**Status: Active**

**Expiration Date: 09/07/201**  
**Purpose of Registration: All Aw**

## Entity Overview

### Entity Information

**Name:** LAERDAL MEDICAL CORPORATION  
**Business Type:** Business or Organization  
**POC Name:** Terry Frazier  
**Registration Status:** Active  
**Activation Date:** 09/08/2015  
**Expiration Date:** 09/07/2016

### Exclusions

**Active Exclusion Records? No**

SAM | System for Award Management 1.0

IBM v1.P.46.20160226-1435

WWW9



**Note to all Users:** This is a Federal Government computer system. Use of this system constitutes consent to monitoring at all times.

Northland Pioneer College

DIRECTED OR SOLE SOURCE JUSTIFICATION FORM

Purpose of this form: To communicate and document the reason for recommending a supplier where (a) competitive bidding was not used or (b) competitive bidding was used and a supplier other than the lowest bidder is recommended.

Description of Product and/or Service: SimMan 3G

Name of Supplier: Laerdal Medical Date: 3/10/16

Please select the reason for recommending the above named supplier:

- checkboxes for reasons: integral part, existing equipment, unique design, unique skills, one supplier, emergency.

Additional Information (Required Irrespective of Reason Selected):

Please explain why other suppliers were excluded from the evaluation. Attach additional sheets if necessary.

We had a Meti man, he broke easily, was costly to fix we had to mail him in for repairs. Laerdal comes out for repairs, Nursing has had no difficulty with their Laerdal simulators

If compatibility with existing equipment is your reason for recommending the supplier, provide the following information about the existing equipment.

Description:

Manufacturer & Model No.:

Other Suppliers Contacted: Note all other suppliers considered for this product or service. Include the reason why the product or service was not acceptable. Attach additional sheets if necessary.

a) Supplier: Meti

Contact Name & Phone #: Not this time

Product/Service Description: Meti Man

Technical Deficiency: We had one and had many problems with it

Northland Pioneer College

DIRECTED OR SOLE SOURCE JUSTIFICATION FORM

b) Supplier: \_\_\_\_\_
Contact Name & Phone #: \_\_\_\_\_
Product/Service Description: \_\_\_\_\_
Technical Deficiency: \_\_\_\_\_

Authorization

MARK WEST
Printed or Typed Name of Vice President

x [Signature]
Signature of Vice President

Penny J. Weiermann
Printed or Typed Name of Requester

x [Signature]
Signature of Requester

I certify that I am in compliance with the Disclosure of Substantial Interest requirements (Policy 1220, Procedure 2715). I understand and accept my obligation to disclose any interest in a proposed College transaction.

I have no substantial interest to disclose.

The above is an accurate and current statement of all my reportable outside interests and activities, to the best of my knowledge.

Date: 8/16/16 Requester's Signature: Penny J. Weiermann

For VPAS Use Only
VICE PRESIDENT FOR ADMINISTRATIVE SERVICES APPROVAL
Approved by: [Signature] Date of Review: \_\_\_\_\_
Approved: [X] Yes [ ] No Reason for denial: \_\_\_\_\_
[ ] Need additional information before a decision can be made.
Information needed: \_\_\_\_\_



## Northland Pioneer College

### DIRECTED OR SOLE SOURCE JUSTIFICATION FORM

#### **NPC Procedures:**

Northland Pioneer College purchasing procedures permit, under certain conditions, purchases of goods or services from a directed or sole source without soliciting bids from multiple sources.

NPC recognizes that special circumstances may not support the use of competitive bidding. In these situations, directed or sole source purchases may be an acceptable alternative.

Directed or sole source purchases are an exception to the Northland Pioneer College Purchasing Procedure, and must always be in writing. The Vice President for Administrative Services will approve a directed or sole source purchase on a case-by-case basis.

#### **Definitions:**

Directed Source: Indicates a product or service must, for specific and justifiable reasons, be purchased from one specified supplier. Directed Source procurement may be used when one of the following conditions exists:

- The requested product is an integral part or accessory to existing equipment.
- The service requested is for existing equipment which can only be completed by the original manufacturer or manufacturer's designated service provider.
- The requested product or service has unique design, performance, and/or quality specifications that are essential to a particular research protocol or teaching needs and are not available in comparable products.
- The requested service or system requires a supplier with unique skills or experience.

Sole Source: Indicates only one supplier exists capable of providing a particular product or service.

#### **Process:**

The Directed or Sole Source Justification Form shall accompany any request for a purchase from a Directed or Sole Source where:

- the purchase exceeds \$1,000, and
- the purchase is not covered by an existing contract or price agreement.

Furnish the necessary explanation and documentation as noted on the form. The requestor and the appropriate approver (vice president) must co-sign this document. Forward the form and supporting documentation to the Vice President for Administrative Services for review and approval.

#### **Evaluation:**

For directed and sole source purchases, each department is responsible for evaluating alternative sources of supply and documenting the reasons that the purchase will be directed to a particular supplier or service provider when alternative sources are available. Departments also are responsible for verifying that prices paid for directed and sole source purchases are fair and reasonable.

Under no circumstances shall a supplier be advised that a contract will be awarded on a directed or sole source basis before approval by the Vice President for Administrative Services.

The determination as to whether a directed or sole source justification is reasonable is based on one or more of these criteria:

- the requestor has investigated and documented his/her evaluation of potential alternate sources of supply for the requested product and/or service.
- the requestor's documentation explains how similar products and/or services cannot meet the required specifications.
- the requestor has documented that a good faith effort has been made to identify other sources.

If the purchase meets the criteria for Directed or Sole Source, the Vice President for Administrative Services will authorize the purchase. The Directed or Sole Source Form will be returned to the requestor if the purchase does not meet the criteria or if additional information is needed.

#### **Exclusions:**

Subscriptions, dues, memberships and other similar items will be treated as sole source, and do not require sole source justification documentation.