





Major Findings

- The District has been substantially underfunding facilities for many years.
- The District has not previously planned for facilities using a master plan or strategic approach.
- The District has not previously adopted standards for its facilities and now lags considerably behind the industry.

- Under the current approach, the costs of managing and operating the District's facilities is increasingly expensive and unpredictable.
- The District's current facilities are increasingly challenged with safety concerns.
- It will take a large initial capital investment to leverage long term financial value and meet the District's Core Goals.



Agenda

I) Problem Definition

Defining the Basis for a Long Range Strategic Facilities Plan

II) Conditions Assessment

Defining Reality, Standards, Goals & Objectives

III) Alternatives

Development and Evaluation of Alternatives

IV) Next Steps

Plan Completion / Prioritization & Implementation



Problem Definition





"Our first priority should be reinvesting in our core, value-creating assets: the hydropower projects, distribution systems, facilities and people"

2015 Strategic Plan

By involving our customerowners, our goal is to:

- Meet business functions effectively and efficiently
- Focus on the right level of investment in quality and condition
- Create accessibility for the public when appropriate
- Locate our facilities in keeping with long-term community planning



District Vision

"To be valued as an innovative, trusted, and highly respected public utility for generations to come".

District Mission

"To provide <u>sustainable</u>, <u>reliable</u> utility services that enhance the quality of life in Chelan County"



District Values

Safety

Protect public and employee health and safety

Stewardship

Acting on behalf of customerowners, protecting public resources entrusted to us

Trustworthiness

Competence, Integrity, Respect

Operational Excellence

High quality innovative work execution



Previous Philosophy:

A reactionary, short term approach, whereby the District builds only what is needed, when it's needed, at the lowest first cost.

The result is a collection of facilities that strain productivity, create barriers to customer service, require ever increasing, unpredictable costs to maintain and operate, and are increasingly unsafe.

New Philosophy & Core Goals:

A proactive, long range approach, investing in facilities that can achieve the following broad, Core Goals:

Productivity

Maximize efficiency potential at all operational levels.

Service Levels

Optimize level of service delivery and customer experience.

Financial Value

Produce lowest long term spending.

Cost Predictability

Create financial stability with predictable cost forecasting.

Safety

Enhance public and employee safety

Core Goals



PUD #1 Long Term Strategic Facilities Pla





"Adopt a Long Range Strategic
Facilities Plan that will enable the
District to maximize productivity,
optimize service levels, provide best
financial value and cost predictability,
and enhance public and employee
safety for the next 50 years"

Conditions Assessment



50 Years of District Growth

Since 1967, the District has:

- Expanded workforce from 285 to 800 personnel (250 personnel are located at the hydro sites).
- Expanded customer base from 16,700 to 49,700 retail customers.
- Expanded fleet assets from approximately 200 to 894.
- Expanded retail power load from 426,000 MWh to 1.54
 Million MWh
- Built Rock Island Powerhouse 2
- Added fiber optics system
- Added water systems
- Added waste water systems
- Re-Licensed RR and Chelan Dams
- Built entire park system (15 parks / 700 acres)

Defining Reality





Defining Reality

Downtown Facilities

Downtown Campus

- 8 Acres
- 5 buildings (Two with multiple wings)
- 169,640 SF
- Bldg. Age Range: 1920's, 1970's, 1990's

Hawley Street Operations

- 13 acres
- 13 Buildings
- 46,342 SF
- Bldg. Age Range: 1950's, 1980's, 1990's

CTC:

- Leased Offices
- District Owned Space: 19,285 SF







Defining Reality

Rock Island Facilities

Douglas: 2.5 Acres

■ Chelan Hill: 19 Acres

■ Chelan Side Powerhouse 2: 1.7 Acres

13 Buildings

■ 113,000 SF

■ Bldg. Age Ranges: 1950's, 1970's, 1980's, 1990's

Rocky Reach / Central Maintenance Facilities

- 24 Acres
- 15 Buildings
- 109,892 SF
- Bldg. Age Range: 1950's, 1970's, 1990's.
 (Trailers added in 2000-2001)







Existing Buildings

- 46 Structures totaling 442,000 SF
- 173,000 SF Office & Crew / 269,000 SF Shops & Storage
- 68+ Acres (not including Leavenworth & Chelan)
- Does not include fisheries, substations, pump stations, or parks buildings.
- Buildings date from 1920's to 1990's, some in early 2000's
- Annual historic cost to maintain facilities: Over \$3 Million

Facilities Conditions

The majority of the District's support facilities are substantially aged, and are either:

- Physically deteriorated, near, at, or beyond useful life,
- Functionally obsolete, or deficient in workflow efficiency,
- Poorly located for efficient operations, or,
- A combination of the above.

Defining Reality











Industry Expertise

The District sought out experienced industry consultants. The multidisciplinary planning team has successfully planned, designed, and implemented numerous similar peer agency facilities.

- Architects
- Civil Engineers
- Mech & Elect Engineers
- Structural Engineers
- Industrial Planning Specialists
- Professional Cost Estimators
- Long range cost analyst

District Participation

District personnel worked closely with the consulting team over the course of a full year (2016).

- More than 80 District personnel directly participated
- Dozens of workshops, facility tours, and presentations

Defining Reality







Defining Reality

Downtown Campus Facility Examples







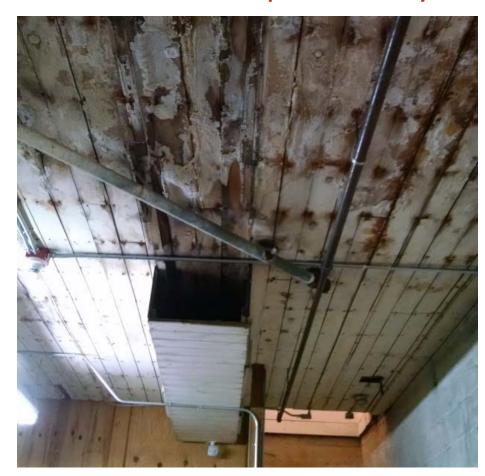


- Site configuration creates congestion, inefficiencies and unsafe conditions.
- Main building requires significant annual maintenance costs and is at capacity.
- Tech Shop is at the end of its useful life.
- Facility environments do not promote operational excellence and tend to limit a positive customer experience.



Defining Reality

Downtown Campus Facility Examples







HQ Tech Shop Building: 1920's Apple Warehouse

This building is beyond useful life, but continues to function as office, technical systems shops, and District storage.

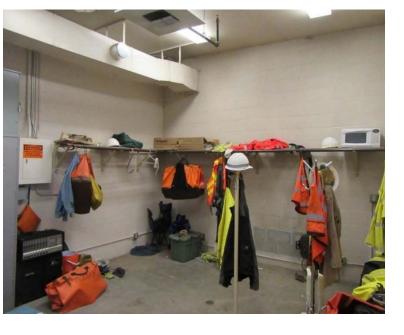


Defining Reality

Downtown Campus Facility Examples







Line Crew Dock

Not sized to accommodate the larger fleet, creating inefficiency and safety challenges every day

Fleet Shops

Fleet Maintenance shops and bays are undersized and limited for the increased fleet quantity and vehicle sizes, creating inefficient operations and safety concerns

Crew Facilities

Crew meeting rooms, locker rooms, drying rooms and other crew spaces are cramped.
Building systems and finishes are antiquated



Defining Reality

Rock Island Facility Examples







Crew Building (Chelan Side)

A 50 year building left behind by the Powerhouse 2 contractor is cramped, has 2-1/2" exterior walls, poor HVAC systems, leaking roof, etc.

Shop Building – (Chelan Side)

Shop space at the Dam level is crowded and inadequate, greatly limiting work efficiency.

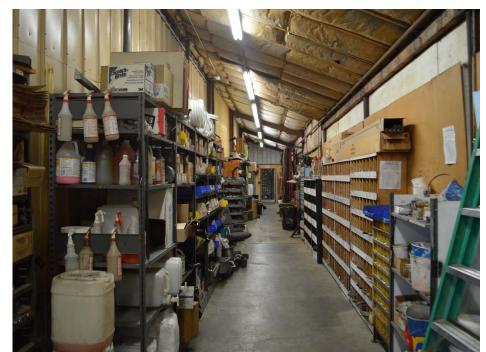
Storage Facilities (Chelan Side)

Multiple wood-framed quonnset-style storage buildings are scattered around the site, creating a chaotic and inefficient storage situation.



Defining Reality

Rock Island Facility Examples



Tool Room / Parts (Douglas Side)
Lean-to construction was added to
original 1970's building to gain more
storage.



Machine Shop (Douglas Side)
Shop height and area is frequently inadequate for fabrication tasks.



Haz Mat Storage (Chelan Side)
Storage of various hazardous materials is in facilities not designed for such materials. Containment and ventilation is inadequate.

Long Term Strategic

Defining Reality

Rocky Reach/CM Facility Examples







General Shop Space

Shop space is crowded and inefficient for optimum workflow and the wide range of maintenance tasks.

Sand Blast Bay

Too small for many of the large hydro components, ventilation and media collection system is antiquated.

Dive Shop

A converted parking garage with asphalt floor, cramped space, poor heating & ventilation, inadequate storage for dive equipment.



Defining Reality

Rocky Reach/CM Facility Examples







Crew Facilities

Locker rooms, restrooms and other crew facilities are cramped and difficult to maintain.

Modular Buildings

Office facilities are low value modular buildings at or beyond useful life, are difficult/expensive to maintain, and reduce employee morale.

Fabrication Shops

Main CM shop is cramped, greatly decreasing efficiency and safety. HVAC, electrical, and lighting systems are outdated and expensive to maintain.



Building Systems

Invest in longevity

- Design for 50 Year Facilities
- Steel & Concrete Structural Systems
- Robust, efficient M&E systems
- Technology (Design for current, accommodate future)
- Durable Building Finishes
- Compliant, durable site systems (paving, storm, etc)

Functionality

Optimize Workflow

 Design facilities to maximize productivity potential

Facility Location

Plan for Efficiency

 Locate facilities to achieve highest level of service.

Codes & Regulations

Meet or exceed

 All projects will be built to meet or exceed current codes and regulations with all required permits.

Conservation

Design for Sustainability

- Energy Star/LEED/Green Globes
- Water conservation

Defining Standards

Commitment

Adopt standards for future facility implementation that will enable the District to fulfill its Vision, Mission, and Values.



Drive-through warehouse / materials loading bay at Pierce County PW



Defining Standards

The District's facilities lag considerably behind utility industry standards



Current Standard



Current Standard



Higher Standard



Current Standard



Higher Standard



Higher Standard 23



Current Standard



Current Standard





Defining Standards



Current Standard



Higher Standard

Higher Standard

Recently Completed Wanapum Facilities



Blast/Paint Building





Defining Standards

- Renovated and New CM Shops
- New Warehouse Facilities
- New Sand Blast/Paint Facilities
- New Office / Crew Facilities
- New Visitor Center



Fabrication Shop Paint Bay

Warehouse



Mason County PUD No. 3 – New Combined Facilities









Defining Standards







Productivity

Maximize workforce
 efficiency potential
 through better planning
 and design.

Service Levels

 Optimize level of service delivery and customer experience through better planning and design.

Financial Value

 Leverage initial investment to capture lowest long term spending.

Cost Predictability

 Create long term financial stability with predictable cost forecasting through proactive planning and implementation of standards.

Safety

Implement facilities
 meeting or exceeding all
 codes and regulations,
 enhancing safety through
 better planning and
 design.

Defining Goals

Core Facilities Goals

Decisions for adopting a long term facilities strategy will be based on the potential to achieve the highest performance for each of the District's Core Goals.







1) Status Quo Approach

Maintain present course. This approach predicts what the District will encounter and spend over the next 50 years without a long range facilities strategy/plan. Difference from previous philosophy is that all new work will be built to new higher standards.

2) Rebuild/Re-invest at Current Locations

Assume a commitment to remain located at present facility sites, or portions of current facility sites.

3) Invest in New Facilities at New Locations

Optimize District operations by locating facilities where greatest efficiencies and highest productivity gains can be realized.

4) Hybrid Combination

Capture the greatest long term 50 year benefits through a combination of the above scenario approaches.

50 year Planning

Scenarios / Options

Multiple facility alternatives produced multiple development Scenarios for each property.

Scenarios were reduced to selected "Options" for final consideration:

Downtown / HQ

7 Scenarios / 3 Final Options

Rock Island

3 Scenarios / 2 Final Options

Rocky Reach/CM

4 Scenarios / 2 Final Options



50 Year Financial Modeling

A 50 Year approach was used to develop facilities strategies for Headquarters, Rock Island, and Rocky Reach/CM. As a result of the significant costs associated with a full 50 year build-out at Rock Island and Rocky Reach, a 25 year plan was developed which provides the District with flexibility to complete the full build-out at a later time.

25 Year Financial Modeling

A 25 year Facilities Plan Option at the Hydro sites best captures the District's Core Goals. The 25 year plan:

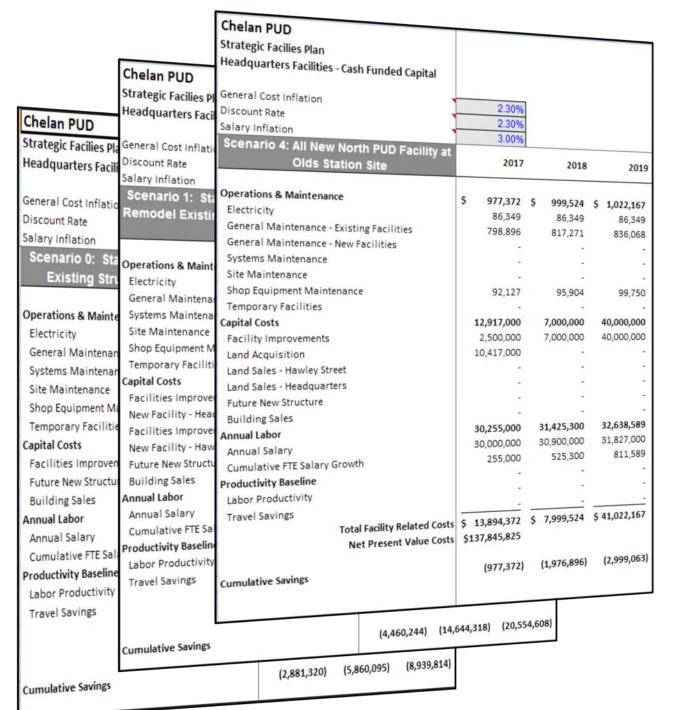
- Builds to a 50 year standard for all new construction, remodels and site development.
- Preserves options for following 25 year build-out plan
- Produces similar outcomes for actions in following 25 years
- Analysis is different than HQ because location is not an issue

50 year Planning









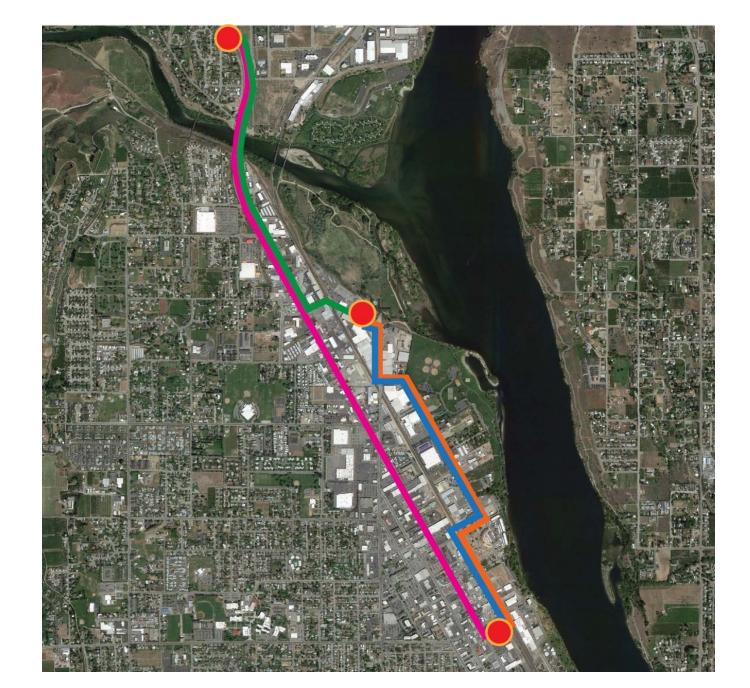


Quantitative Categories

Economic modeling for all Scenarios includes:

- First Cost Investment
- Operations & Maintenance
- Systems Replacements
- Leasing
- Escalation / Inflation
- Productivity gains (labor savings)
- Travel cost savings









Travel Analysis

Over 70% of service trips are north of Wenatchee. Annual savings for locating Operations in the Olds Stations area are estimated at over \$750,000 per year.

Line Crews / Fiber Crews

 Multiple trips between downtown property, Hawley Street, and Circle Street pole yard

Fleet Maintenance

 Multiple daily trips between HQ and Hawley Street properties

Administrative Staff

Multiple daily trips between HQ,
 Hawley Street, and CTC building.



Rock Island Annual Productivity Savings Estimates

Wiremen	Mechanics	Admin	Engineers	Warehouse & Tools	Utilities & Maint.	Total Savings (per year average)
20	37	24	15	2	10	FTES
4%	4%	3%	3%	9%	3%	4%
\$76,328	\$132,854	\$88,298	\$49,340	\$13,476	\$31,606	\$391,902

Savings Legend:

1% = 5 minutes 2% = 10 minutes 3% = 15 minutes 4% = 20 minutes 5% = 25 minutes 6% = 30 minutes 9% = 45 minutes

Productivity Values in Cost Modeling

- Dollar values for productivity gains are used in the long range economic modeling to offset hiring.
- Rate of labor growth is reduced until productivity savings are consumed by on-going systems growth.



Productivity

Downtown / HQ

Productivity estimates indicate
 3.9% annually for consolidated
 HQ facilities, less for split facilities.

Rock Island

 Productivity estimates indicate a blended 4% annual labor savings.

Rocky Reach / CM

 Productivity estimates indicate a modest 1% productivity gain at RR/CM.





Qualitative Criteria Evaluation

Each Scenario was evaluated for its response to the following qualitative criteria:

- Operational Excellence
- Safety & Security
- Implementation
- Flexibility
- Environmental Stewardship
- Public Image (Trustworthiness)
- Work Force Culture
- Community Benefits

Goals & Objectives Evaluation

Each Scenario was evaluated for its potential to achieve the District's Core Goals:

- Productivity
- Service Levels
- Financial Value
- Cost Predictability
- Safety

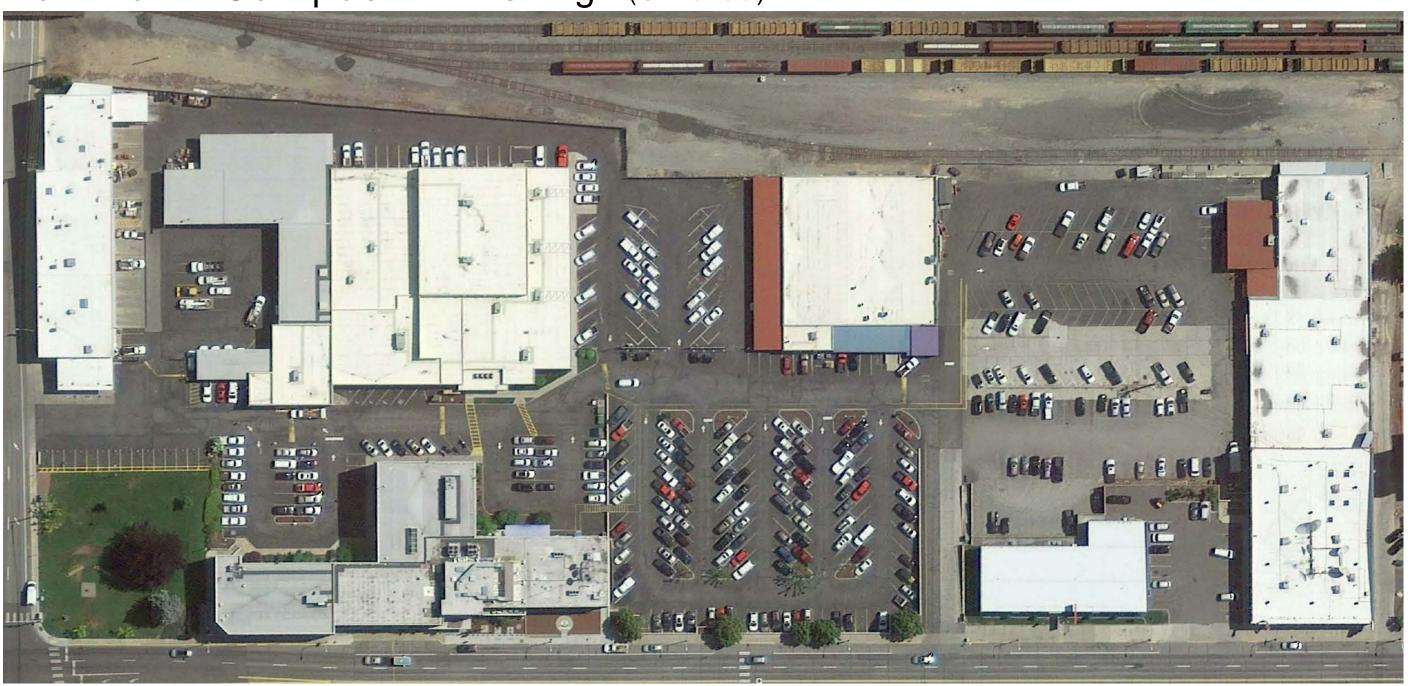
Downtown / Headquarters





Downtown HQ Facilities

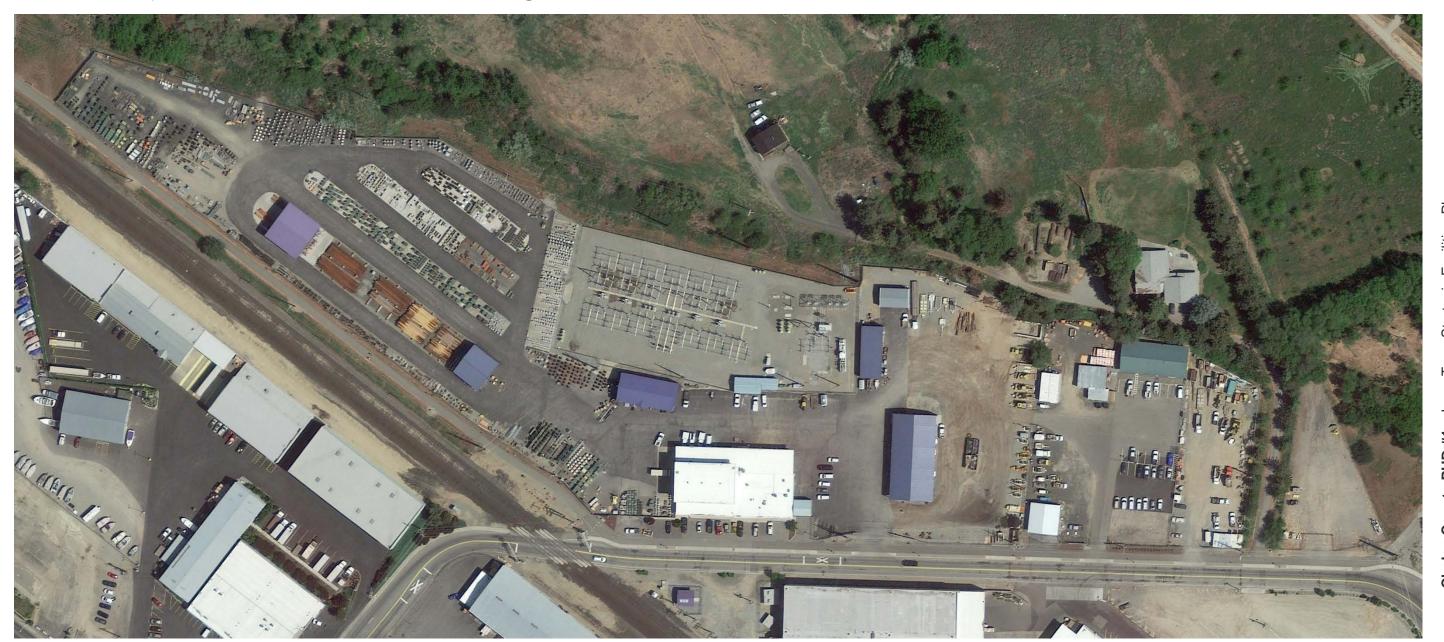
Downtown Campus - Existing (8 Acres)





Downtown HQ Facilities

Hawley Street - Existing (13 Acres)







HQ / Downtown Facilities Option Finalists

Of the seven scenarios developed, analyzed, and evaluated, three (3) Options below are compared as finalists. Note: "Status Quo" assumes no master plan, but new work built to new standards.

Option Finalists	Financial Summary and District Goals for Long Term Strategic Facilities Plan								
	50 year Present Value (*)	Initial Capital (5-6 years)	10 Year Total Spending	Maximize Productivity	Optimize Service Levels	Increase Cost Predictability	Enhance Safety	Qualitative Evaluation	
Option 1 Status Quo Facilities	\$116,307,100	\$67.5 Million	\$92.3 Million	Poor	Poor	Fair	Fair	Poor	
Option 2 Split Facilities	\$112,038,527	\$101 Million	\$109,282,826	Good	Good	Good	Good	Fair	
Option 3 Consolidated Facilities	\$107,385,925	\$114 Million	\$116 Million	Best	Best	Best	Best	Best	

Notes: (*)

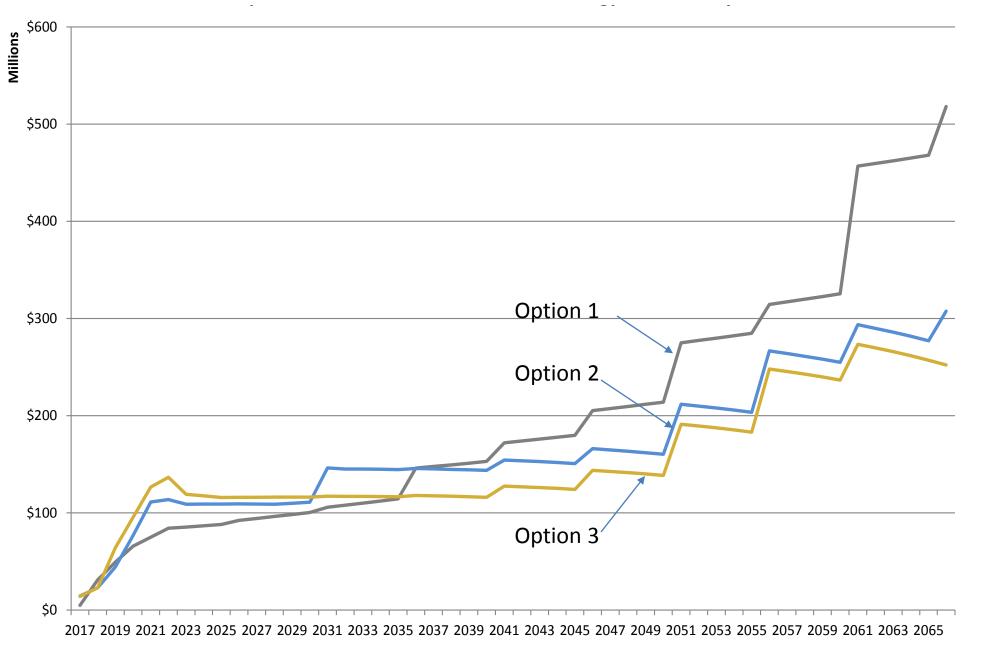
NPV calculations present the full 50 year financial projections (total spending less savings) expressed in 2016 dollars



HQ 50 Year Financial Analysis

Cumulative Cash Flow

(Capital Investment, M&O, Salary/Productivity)



Rock Island





Rock Island Existing Conditions

Rock Island



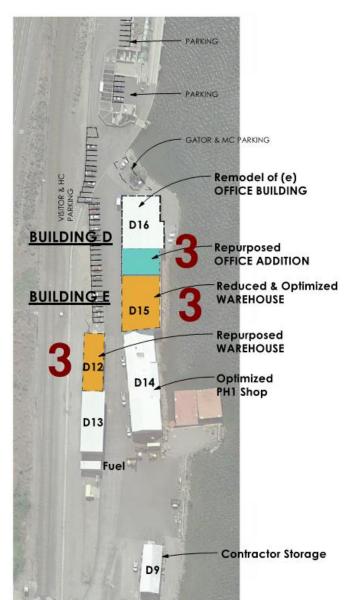
- Acres: Douglas Side: 2.5 Acres
- Chelan Dam Base: 1.7 Acres
- Chelan Hilltop: 19 Acres

- Bridge deck congestion & "wind-shield time" creates significant work inefficiencies.
- Rock Island suffers from severe lack of adequate shop and storage facilities creating additional inefficiencies.
- Many buildings are at or near the end of their useful life.

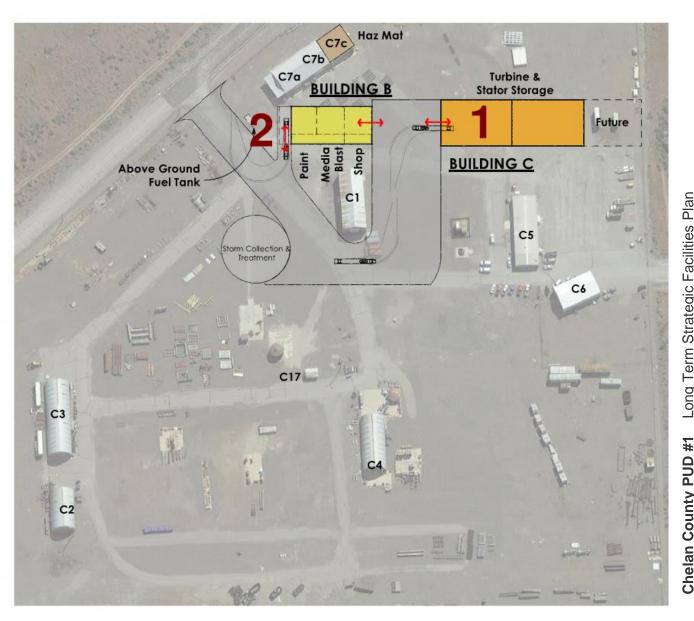


25 Year Phase to 50 Year Plan

Rock Island Initial 25 Year Plan







DOUGLAS COUNTY

CHELAN COUNTY





Rock Island Option Finalists

Two (2) options below are compared as finalists: First 25 years of a 50 year plan

	Financial Summary and District Goals for Long Term Strategic Facilities Plan							
Option Finalists	25 Year Present Value (*)	Initial Capital (3-4 years)	10 Year Total Spending	Maximize Productivity	Optimize Service Levels	Increase Cost Predictability	Enhance Safety	Qualitative Evaluation
Option 3a 25 year plan 3 year implement.	\$33,510,994	\$36.2 Million	\$36.7 Million	Best	Best	Best	Best	Best
Option 3b 25 year plan 10 year implement.	\$35,748,795	\$20 Million	\$45.7 Million	Good	Good	Good	Fair	Fair

Notes: (*)

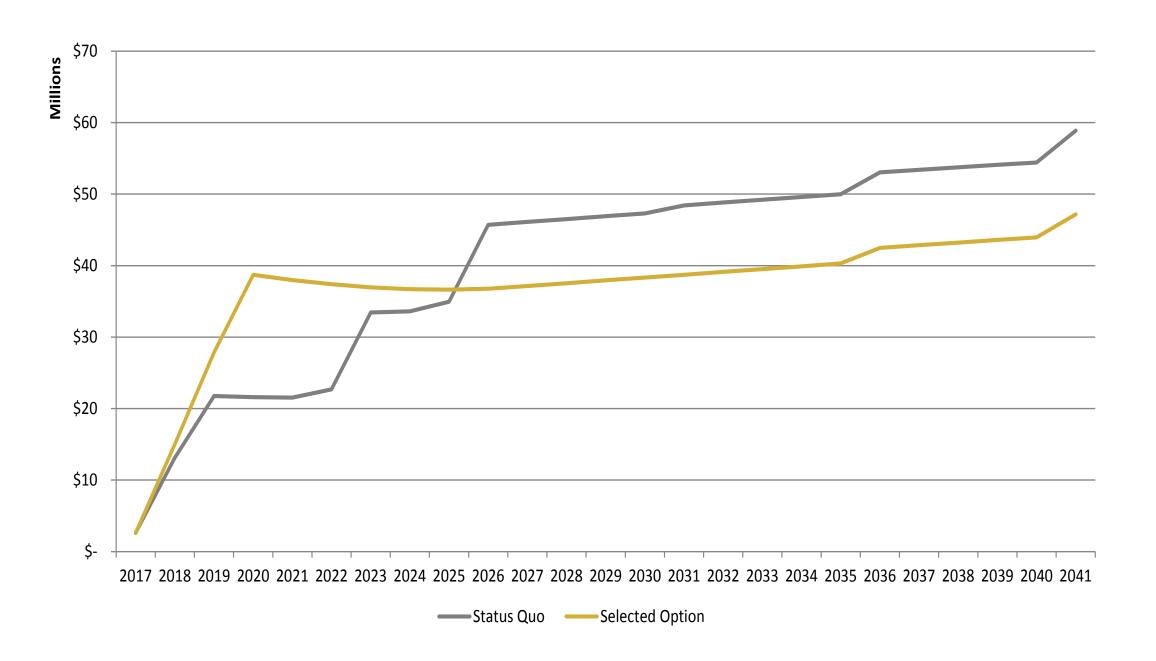
• NPV calculations present the full 25 year financial projections (total spending less savings) expressed in 2016 dollars



25 Year Financial Analysis

Cumulative Cash Flow

(Capital Investment, M&O, Salary/Productivity)



Rocky Reach/Central Maintenance





Rocky Reach/CM Existing Conditions

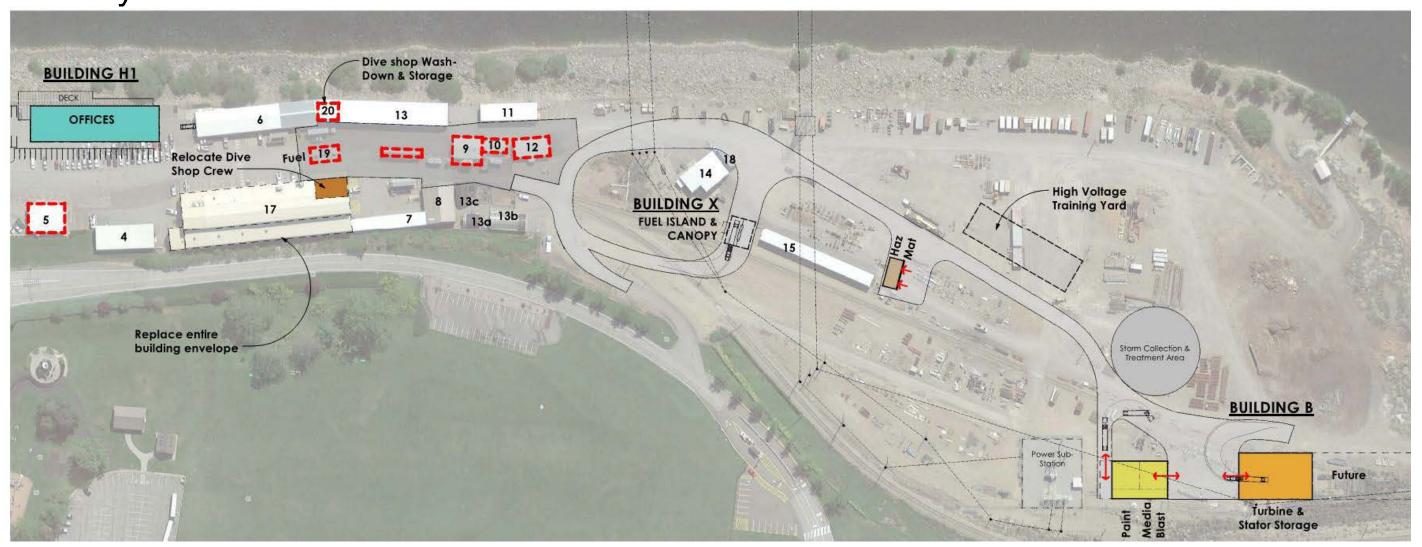
RR/Central Maintenance (24 Acres)







Rocky Reach/CM Initial 25 Year Plan



This configuration provides the District with flexibility to implement additional facilities in the south yard area or the center site area in the future for a full 50 year build-out.





Rocky Reach / CM Option Finalists

Two (2) options below are compared as finalists: First 25 years of a 50 year plan

		Financial Summary and District Goals for Long Term Strategic Facilities Plan							
Option Finalists	25 Year Present Value (*)	Initial Capital (3-4 years)	10 Year Total Spending	Maximize Productivity	Optimize Service Levels	Increase Cost Predictability	Enhance Safety	Qualitative Evaluation	
Option 3a 25 year plan 3 year implement.	\$34,012,286	\$32.6 Million	\$37,549,855	Best	Best	Best	Best	Best	
Option 3b 25 year plan with 10 year implement.	\$33,909,604	\$18.2 Million	\$43,117,747	Fair	Good	Good	Fair	Fair	

Notes (*)

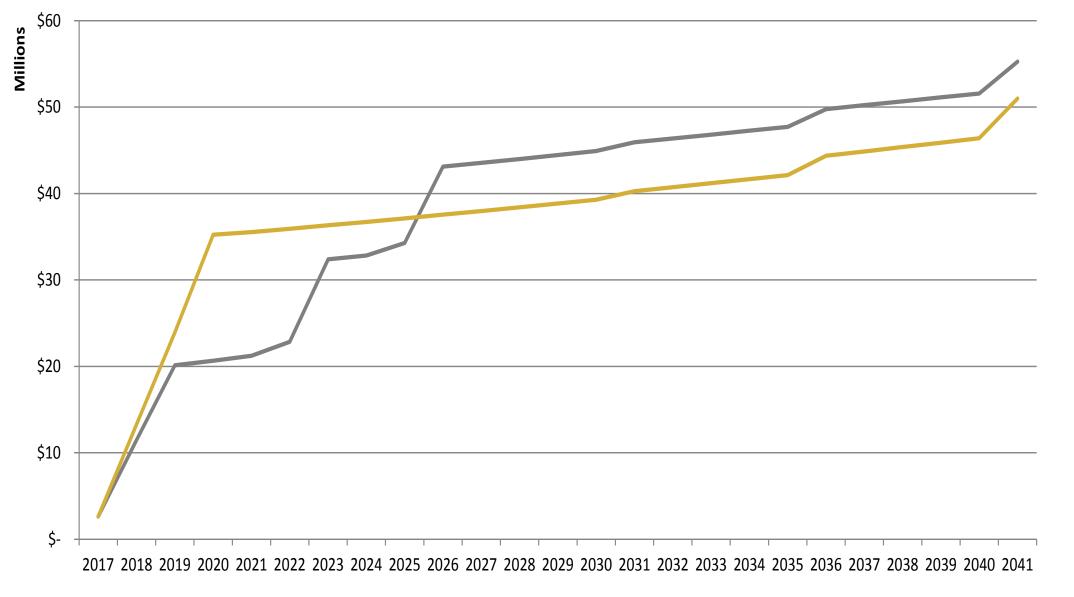
- NPV calculations present the full 25 year financial projections (total spending less savings) expressed in 2016 dollars.
- 3b NPV is slightly lower because of 10 year implementation time without off-setting productivity savings.





Cumulative Cash Flow

(Capital Investment, M&O, Salary/Productivity)





Downtown / HQ Facilities

Option 3 - 50 Year Plan

Scope: All new, consolidated Operations, Administration, and Customer Service facilities at new, north property. Sell existing PUD properties.

Lowest Present Value:

\$8.9 million lower than Option 1 (status quo) and \$4.6 million lower than Option 2 (split facilities).

Evaluation Ranking:

Ranks highest of all HQ options in qualitative evaluation, and best achieves District's Core Goals.

■ **Present Value:** \$107.4 Million

• **Initial Capital:** \$114 Million

Rock Island Facilities

Option 3a – 25 Year Plan

Scope: New and remodeled facilities for highest priority needs and greatest productivity gains, preserving options for future phases.

Lowest Present Value:

\$2.2 million lower than Option 2

Evaluation Ranking:

Ranks highest of all scenarios in qualitative evaluation, and best achieves District's Core Goals.

Present Value: \$33.5 Million

■ Initial Capital: \$36.2 Million

Grand Summary

Rocky Reach Facilities

Option 3a – 25 Year Plan

Scope: New and remodeled facilities for highest priority needs and greatest productivity gains, preserving options for future phases.

Even Present Value:

Approximately \$100K higher than Option 2, the result of implementation time (10 yrs vs 3yrs) with limited productivity.

Evaluation Ranking

Ranks highest of all scenarios in qualitative evaluation, and best achieves District's Core Goals.

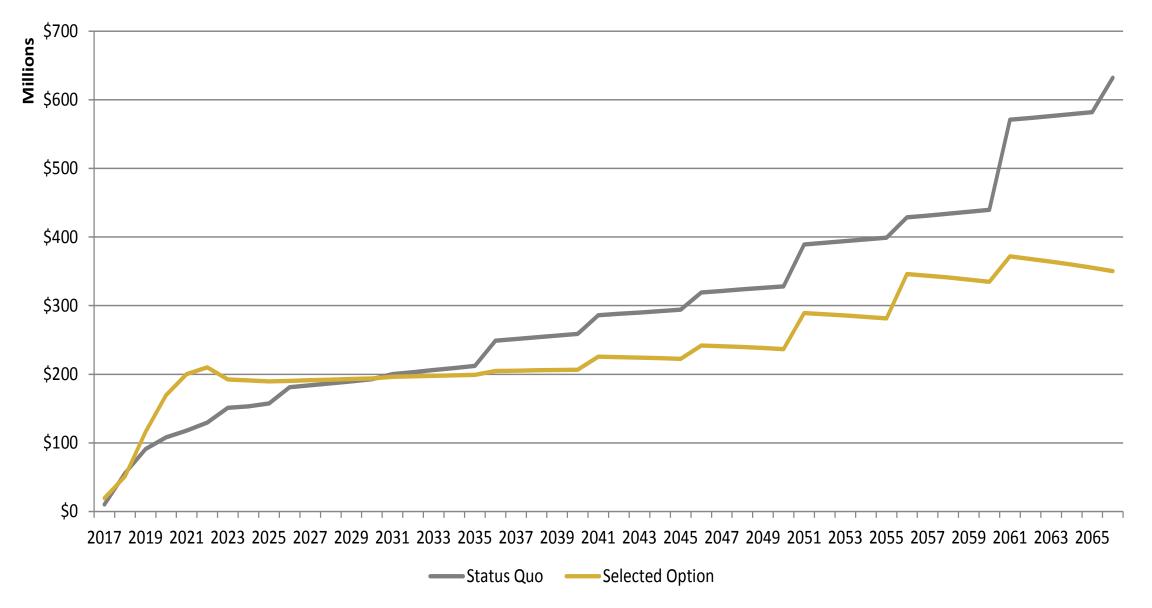
Present Value: \$34 Million

Initial Capital: \$32.6 Million



Combined Financial Analysis

Cumulative Cash Flow (HQ 50 yr / Hydros 25 yr) (Combined Capital Investment, M&O, Salary/Productivity)



^{*}Cash flow for Rock Island and Rocky Reach only shown through 2041.





- The Board has directed staff to prepare options for the Board to establish a designated fund as part of the Long-Term Facilities Planning project.
- Board Designated Funds are established when proceeds of a specific revenue source are committed for a designated purpose.

- Funds typically remain unrestricted for external reporting purposes and can be transferred back to the general fund at the Board's direction
- Using a Designated Fund demonstrates the Board is planning ahead for the identified need
- Provides visibility to a specific funding activity





Options for consideration

- Establish a Board Designated Fund recognizing the Long-Term Facilities Plan
- 2. Deposit initial amount into the fund
 - a) Option 1: \$20 million (amount 2016 results exceeded budget)
 - b) Option 2: Any other amount as directed by the Board
- 3. Future amounts to be added as directed by the Board
- 4. Funds applied to specific project expenditures as directed by the Board and the project plan
- 5. Requires a motion to establish (be back April 3)

V Outreach and Next Steps





Comments From February 27, 2017 Meeting



To me, this is the right thing to do. Study the issue to death and figure out how to get it done.

It appears you are on the right path. I'm impressed with how you've analyzed the issue. I like the plan. I see a lot of efficiency opportunities. What are the consequences of doing nothing? It's a no-brainer. I think you'd be remiss in not doing it.

This is an impressive bunch of work. I'd be aggressive in doing the hydro projects; particularly the low hanging fruit. I would actively pursue property for an Operations Center. I wouldn't be afraid to borrow money to be able to do this. The analysis conservatively estimates benefits due to the use of a 7% discount rate.

Analyzing productivity gains was brilliant.

I was shocked by the poor condition of PUD facilities — it sends the wrong message to employees and hurts talent recruitment.



Customer-Owner Outreach

Employee Outreach

- Update for employees involved in SFP Development:
 March 15-17
- All employee e-mail update:March 17
- Online information:Week of March 20

County-Wide Outreach

- On-Line Resources
- Video
- Open House Events (Wenatchee, Leavenworth, Chelan)

Implementation Planning

Create a Detailed Implementation and Spending Plan

- Determine method of project delivery
- Determine project development / management resources needed.
- Develop implementation sequencing schedule.
- Develop financing strategy.



Complete Strategic Plan

Plan Finalization

Prepare final Strategic Plan documentation with recommended scopes, schedules, and budgets for priority projects.

- Complete detailed programming work.
- Refine conceptual design for all sites.
- Establish Sustainability standards and goals.
- Incorporate Implementation Plan.

4 Questions

