

DRAFT
August 19 Board Meeting

Chelan County PUD **STRATEGIC PLAN**



**2020
2024**



CHELAN COUNTY

MESSAGE FROM THE BOARD

After many months of public outreach and community input, we have completed the draft 2020-2024 strategic plan for Chelan County PUD. We want to thank our customer-owners for responding to our call for participation as we make key decisions about the future of our utility. About 100 community stakeholders attended our kick-off event in February 2019. In March 2019, we conducted an aesthetics and economic development survey that included 600 community members, and in May we mailed a strategic planning survey to over 35,000 customer-owners and employees. Our customer-owners responded to more than 2,700 surveys and our stakeholder-driven Topic Teams held numerous meetings attended by a diverse group of community members.

Our goal was to incorporate your thoughts on six strategic topics as Chelan PUD prepares for a wide range of financial outcomes and operational scenarios between now and 2024. Based on your input, it is clear that Chelan County residents value their locally-controlled public power utility. We want to thank you for your participation, and encourage your ongoing involvement as we move to finalize the 2020 – 2024 Strategic Plan.



Chelan County PUD commissioners, from top left to bottom right: Dennis Bolz, Garry Arseneault, Steve McKenna, Randy Smith and Ann Congdon.

EXECUTIVE SUMMARY

Chelan PUD's Strategic Plan is based on our vision statement to provide "the best value for the most people for the longest period of time." This means we evaluate our decisions and plans based on what produces long-term value for customer-owners and how such actions align with our core values. We enter this next five-year period in a very strong financial position, but our Strategic Plan needs to be resilient because it is impossible to predict the future. Our revenues and expenses may be higher or lower than our base forecast. We may see prosperity or a financial decline, and must be able to adapt to either outcome. To do this, our strategic plan is based on four strategic priorities:

1. Invest in assets and people and seek industry top quartile performance for hydro generation, retail reliability, and safety while improving our customer service technology.

Our board decided early in the process that this existing strategic priority needed to be maintained, with a focus on specific areas. Chelan PUD's premier electric generating assets are an advantage for this county. These assets were built decades ago, a testament to Chelan County's original commitment to long-term value. But today, our generation and distribution systems are aging. Pursuant to the last Strategic Plan, we increased our capital budgets from roughly \$30 million in 2013 to \$150 million in 2019. We have better assessed the state of our infrastructure, and will be implementing cost-effective, long-term upgrades through our asset management program. In addition, we are committed to providing the development opportunities our employees need to create the greatest possible value for our customer-owners.

While our financial performance is in the top quartile of the electric industry, we have challenges in other areas. Our hydropower projects have had numerous unplanned outages due to age or equipment that fails to meet life expectancy. Within the next five-year planning period, our massive reinvestment program should show positive results. Meanwhile, our transmission and distribution equipment is also aging and faces significant fire

risk. We see opportunities to improve our retail electric service through smart meters and customer service technology, which requires major investment. We also are experiencing more load growth than most utilities across the country, prompting a need for new substations and other infrastructure. During the next five years, we plan to reduce the duration and frequency of utility outages, improve customer-owner access to outage information, and build seven new substations to meet demand.

2. Sustain excellent financial resiliency while mitigating the risk of large rate increase.

In our last Strategic Plan, we set a goal to significantly reduce debt. We achieved that goal and now we will focus on maintaining our financial health. After eight years without electric rate increases, based on customer-owner feedback, we will implement rate adjustments for our electric business units on a steady, "cost of inflation" basis to avoid the risk of dramatically large increases. Over time, we will also move our water, wastewater and fiber businesses toward financial self-sustainability. We will continue to implement business practices aimed at retaining industry top-tier bond ratings while using metrics to evaluate our financial performance.

Because our financial health is primarily tied to revenue generated from power sold outside the county, we will work to obtain optimal value for our hydropower in wholesale power markets. We also will seek fair value for coordinated hydro system operations with Canada and our U.S. neighbors on the Columbia River.

3. Enhance the quality of life in Chelan County through programs that distribute the benefits of public power.

In our last Strategic Plan, we initiated the public power benefit (PPB) program. The PPB program invests in our community during periods of healthy financial performance, focusing on initiatives within our statutory authority. In this Strategic Plan, we recommit to the PPB program. Through our public outreach, our customer-owners let us know their preferred criteria for PPB projects. Already, we plan to expand our broadband system to increase access from 75% to roughly 90% of county residents. We

also learned that the community is interested in pursuing economic development activities, as long as the costs for existing customers are modest. Our customer-owners also support early investment in recreational improvements that could help us get a 50-year license for Rock Island Dam in 2028. We will solicit ideas for other PPB projects that are within our statutory authority and consistent with our community's highest priorities (economic development, environmental stewardship, and recreation).

4. Engage in countywide growth planning and job creation efforts while ensuring the Chelan PUD's rates and policies remain stable and predictable.

The issue of economic development is a complex one for Chelan PUD. If we were to recommit significant amounts of surplus hydropower from the wholesale markets to serve local electric loads, we would need to increase retail electric rates significantly. Our customer-owners are concerned about this potential outcome and want to ensure that the tradeoff in jobs for lost megawatts sold on the wholesale market provides substantial local benefit. With this qualifier, there is a great deal of support in our community for actions that create family-wage jobs and increase the tax base. Based on the last Strategic Plan, we developed a high-density load rate that covers our full cost of production. This has led to a new industry, the Diamond Foundry, moving to Chelan County. We will continue to look for opportunities to support job growth where the rate impact is modest. In addition, we will investigate the possibility of creating "industrial hubs" for potential industrial development. These could reduce the time it takes to site the electric infrastructure necessary to attract new business and industries. Finally, we will streamline our process for responding to new services requests from potential industrial customers.

BEYOND THE STRATEGIC PLAN

Our Strategic Plan highlights the issues most relevant to our customer-owners. But it does not

capture the wide array of programs and activities undertaken by Chelan PUD. As described in our "Building on our Strengths" paper, we have five-year performance targets in place. We are currently reevaluating the targets and are presenting our comprehensive five-year business plans in September 2019 concurrent with the adoption of this plan. These new business plans incorporate key strategic objectives while increasing attention to innovation, resilience and employee performance. For example, we are including technology roadmaps in our business plans to define how we will pursue innovation.

MISSION, VISION, AND CHELAN PUD VALUES

Strategic planning begins with a Mission and a Vision. Citizens of this county voted in 1936 to create a local utility. Over time, Chelan PUD acquired valuable generating assets that enabled this county to have local control over a big part of its economic destiny — reliable, low-cost electricity. Early county leaders believed that investing in the future through hydropower would provide benefits for generations to come.

Our Board of Commissioners updated our Mission, Vision and Values in parallel with the strategic planning process. The Mission reflects our legacy of enhancing the quality of life in Chelan County, even as community needs and preferences change. Our Vision incorporates the outcome of the last strategic planning process and sets us on course for an exciting and compelling future focused on providing the best value for the most people for the longest period of time. Finally, we updated our Values to include our focus on collaboration and personal ownership to achieve operational excellence.

UTILITY OVERVIEW AND RESOURCE POSITION

Chelan PUD is primarily an electric utility. About 95 percent of our revenues come from the electric business. We are a relatively small utility in terms of retail customers, but our assets are significant.



Mission, Vision, and Values

MISSION

To enhance the quality of life in Chelan County by providing sustainable, reliable utility services

VISION/CHALLENGE

In a rapidly changing utility environment, we will provide:

The Best Value for the Most People for the Longest Time

Strategic components of vision/challenge

- Commit to highest levels of customer-owner satisfaction
- Invest to create long-term value
- Ensure financial stability
- Advance human and organizational performance
- Protect natural resources impacted by operations
- Seek operational excellence through continuous improvement mindset
- Encourage innovation

VALUES

Safety: protect public and employee health and safety

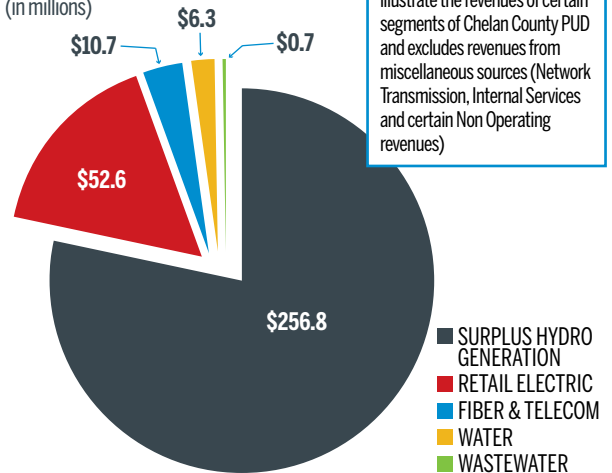
Trustworthiness: competence, integrity, respect, collaboration

Stewardship: acting on behalf of customer-owners, protecting public resources entrusted to us

Operational Excellence: high quality, innovative work execution through supporting personal accountability

Chelan County PUD Revenues

2018 AUDITED RESULTS
(in millions)



This graphic is intended to illustrate the revenues of certain segments of Chelan County PUD and excludes revenues from miscellaneous sources (Network Transmission, Internal Services and certain Non Operating revenues)

We operate some of the largest non-federal hydro-power projects in the nation. Chelan PUD serves approximately 51,500 electric customers in Chelan County, but our hydropower dams generate enough power for about one million people.

We have a unique business model because we use less than 20 percent of our power in Chelan County to serve retail customers. Chelan PUD sells the rest through long-term contracts to other Northwest utilities and Alcoa (under an ongoing power sales contract) or on the wholesale power market. Low retail load and modest load growth in Chelan County allows Chelan PUD to sell enough surplus hydropower generation to support low electric rates at home. Historically, load growth for all types of electric customers has been 1 to 3 average megawatts per year. However, there is an increasing trend toward more requests for new large loads.

Large load increases have substantial implications for all customer-owners because of our utility's reliance on surplus wholesale power sales. More power used within the county means less power available to sell on the wholesale market, and less revenue available to keep retail rates low — but it could also spur local economic development. This Strategic Plan balances these competing priorities.

Chelan PUD has made choices to use revenue from surplus hydropower sales to support utility

services that otherwise may not be available in a rural area. These investments improve our quality of life. They include construction and operation of the fiber-optics system; water services to outlying, high elevation regions that are more expensive to serve; and wastewater services to the upper Wenatchee River valley, which is costly due to water quality and other challenges.

While our hydropower projects provide our primary source of value, major equipment is aging and newer equipment is suffering higher failure rates. These circumstances necessitate significant reinvestment. Currently our hydro projects are operating at about 70% capability. Our goal is to exceed 89% capability. In addition, the Rock Island Project's existing license expires in 2028 – meaning that with a long application process, we expect to initiate the relicensing process within the strategic planning period.

Our electric distribution infrastructure also will require new investment. It includes 1,720 miles of overhead and underground power distribution lines over approximately 3,000 sq. miles and 37 substations. We recently compared our reliability to that of other high-performing public power providers. While we are good, we are not in the top tier. We have opportunities to improve reliability and ensure our current reliability does not degrade.

Chelan PUD's water system now serves about 6,100 customers. These assets also are aging. In addition, larger regional water planning issues are at stake as our community examines water supply redundancy and expansion. Meanwhile, our wastewater system serves about 500 customers. This small system is facing significant challenges as existing equipment approaches the end of its useful life. We are performing an inventory and assessment of the sewage tank systems, which will provide important information about future system improvements, maintenance strategies, and associated ongoing costs.

Chelan PUD provides wholesale broadband services (i.e. transport for services such as internet access, virtual local-area networks, Ethernet, and dark fiber) to retail service providers who then serve nearly 16,250 fiber end-users directly.

Our broadband services are now available to 74 percent of the county. We are striving to increase the customer take-rate that has risen from 43% to 49% since 2014 while reducing the time that customers wait for line extensions. Chelan PUD is expanding the fiber network, with a goal of reaching 85 to 90% of the county by 2024.

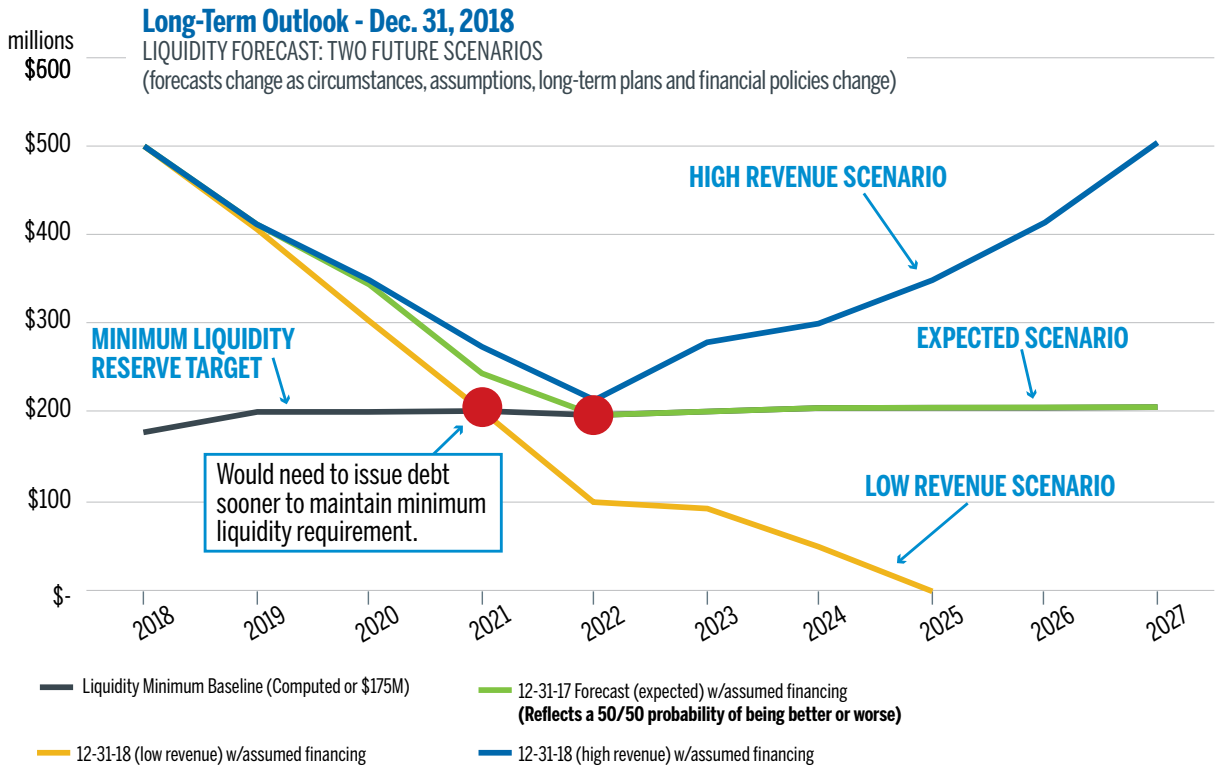
Chelan PUD also is promoting enhanced performance with a results-based approach driven by business needs. Human and organizational improvement focuses on reducing error rates, maintaining high levels of safety, and fostering a culture of learning and operational excellence in a supportive environment and culture.

More detailed information about the state of Chelan PUD's assets and infrastructure is available in the "Building on our Strengths" document at ourpublicpower.org and a complete demographic profile for Chelan County is included in Appendix A.

FINANCIAL POSITION

In our 2015 – 2019 Strategic Plan, we set out to lower our debt ratio to less than 35 percent by 2019. We achieved that goal a year early in 2018. At its peak in 2010, Chelan PUD carried over \$1 billion in debt. Since that time, we have retired roughly half of our debt - leaving about \$514 million remaining. Now, our debt-to-equity ratio is substantially lower than average compared to our peer utilities, and our credit ratings are among the highest-rated public power utilities in the country. Over the same period of time, we experienced the four best net revenue years in our history. This means that our renewable hydropower returned value to us through the wholesale electric market.

While we are in a good financial position, the future holds many uncertainties and potential risk factors that could affect our financial wellbeing. Our forecasts predict that we are unlikely to see the same high revenues from wholesale market power sales in future years. Power markets are changing, and wholesale power market prices have been in a downward trend until only recently, where the market has shown signs of increased prices. The value of our carbon free power has been increasing as well.



NOTE: Both the Q4-2018 expected and low revenue scenarios assume approximately \$200M of new debt in the periods 2022-2027 to fund long-lived capital projects. The debt ratio for Chelan PUD remains at or below 35% for the forecasted periods scenario.

In addition, we may see changes in Chelan County’s power demands that reduce the surplus generation we have to sell to others. This shift can have pros and cons for our community and our existing business model.

Today, Chelan PUD has a strong cash balance. On the other hand, our asset management program has uncovered a substantial need for reinvestment in existing hydropower, transmission and distribution systems and buildings. Currently, we are using cash to fund capital asset programs, but some additional borrowing will be necessary for future projects. Our goal is to maintain our debt ratio below 35%. This will allow us to maintain healthy cash reserves while using debt wisely to maintain and enhance our assets. Chelan PUD’s five-year forecasts estimate that we will need net income of approximately \$41 million per year for at least the next five years

to meet the financial targets. We expect to reinvest in our essential assets at an estimated rate of \$134 million annually.

The graphic above illustrates our long-term outlook for the 2020 – 2024 strategic planning period. Under the low revenue scenario, Chelan PUD may need to issue debt as soon as 2021 to maintain our minimum liquidity requirement.

STRATEGIC OBJECTIVES

As a result of our 2015 – 2019 strategic planning process, we identified seven strategic objectives that drive our business operations and support the ultimate goal of providing the best value for the most people for the longest period of time. These objectives have been refined for this planning cycle and an updated SWOT (strengths, weaknesses, opportunities and threats) analysis was recently completed

(see “Building on our Strengths” document). At the business-unit level, these strategic objectives influence the actions that each of our business units will carry out over the next five years. The adopted five-year business plan will be considered for adoption by the PUD Commission this fall and is available upon request.

1. Commit to the highest level of customer-owner satisfaction.

Everything we do should be for the benefit of our customer-owners. We will take a strategic, long-term view that assesses the implications of our decisions. Our policy decisions will be built around enhancing overall customer-owner satisfaction. Our employees will interact with customer-owners in an empathetic, proactive, and attentive manner, making sure people feel like individuals and are heard. As a utility, we will take a county-wide perspective when considering the impact of all our decisions. When possible under our financial metrics, we will provide a public power benefit built around enhancing the quality of life for customer-owners as they define quality of life.

2. Invest in creating long-term value.

We will define plans and make resources available to invest in all our physical assets (generation, transmission, distribution, fiber, parks, water and wastewater) based on a long-term value perspective. We will continue our actions to reduce the volatility of wholesale power sales revenue while also seeking ways to enhance revenues. We will work with our industry colleagues as much as possible, in a collaborative manner built around long-term relationships. Because relationships are important to us, we will look at the spirit and intent of issues rather than just the “letter of the law.” Investing in the source of our organization’s financial value will give us the best opportunity for deriving future public power benefits.

3. Protect natural resources impacted by operations.

We will meet or exceed statutory requirements and commitments to mitigate for the environmental impacts of all our actions. As part of this objective, we will think ahead and seek out least-cost alternatives for meeting emerging societal environmental goals.

4. Ensure financial stability.

During these dynamic times, we will sustain a financial structure that creates financial flexibility, supports affordable and stable electric rates under all plausible scenarios and creates access to low-cost capital when needed.

5. Seek operational excellence through continuous improvement mindset (with a focus on efficiency, effectiveness, compliance, risk-assessment, and resiliency).

We will rigorously and holistically review spending and policy decisions using strong risk assessment practices to assure best value, resiliency, effectiveness and efficiency. We will do all of these things with a focused mindset that is oriented towards lasting cultural and organizational change.

6. Advance human and organizational performance.

We expect and support that every employee will advance his or her skills for the benefit of customer-owners. Through continual learning and investments in developing our employees, policies and procedures, we constantly improve our resiliency, our defenses and our ability to adapt to our environment. Through curiosity and continual learning, our employees provide the solutions to problems. By learning from our errors and failures, and examining our practices, we improve our operational excellence on behalf of our customer-owners. We provide educational opportunities and varied work experiences to foster diversity in perspectives and thought.

7. Encourage innovation.

We will comply with all statutory requirements. We will seek out, evaluate, and utilize new technology that is ready for deployment if there are sufficient economic and customer benefits. We encourage creative thinking and trying new ideas to meet the challenges of the future. We set aspirational goals with the belief that much will be learned and achieved even when the ultimate goal may be unachievable. We seek to be recognized as experts and industry thought leaders on all issues relevant to our operations.

STRATEGIC QUESTIONS AND PUBLIC OUTREACH

Our four strategic priorities align with our vision to provide the best value for the most people for the longest time.

In determining how to implement these strategic priorities, we identified six key questions for our customer-owners. We then gathered information in several ways. First, we created Topic Teams of community volunteers and Chelan PUD employees to delve into each topic. The reports from each Topic Team are included in Appendix B and were posted on our strategic planning website, www.ourpublicpower.org. Next, we conducted two countywide surveys. We reached out to our customer-owners online, through the mail and in person at community events. Topic Team reports were posted as background on each strategic issue, along with the key issues and questions.

We are extremely pleased that our survey received more than 2,700 survey responses, with more than 3,700 comments (see Appendix C for a summary of community outreach). This level of participation helped us make decisions based on the preferences of the people we serve. The following sections explain each strategic issue and our path forward for 2020–2024.

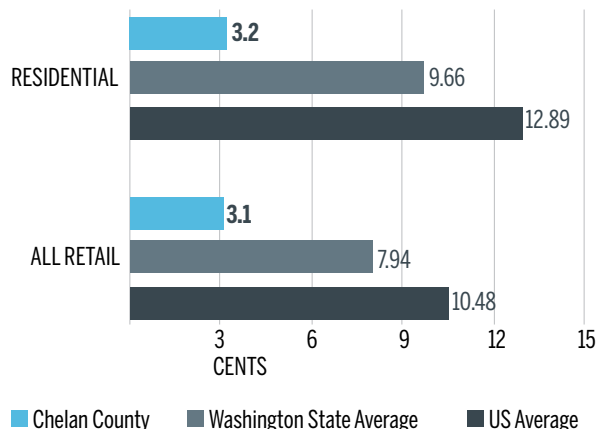
LONG-TERM RATE PLANNING

Chelan PUD has not increased electric rates for eight years and has only had a 9% rate increase since 2000, while cumulative inflation has been around 40%. Average residential rates in Chelan County are 3.2¹ cents per kwh, compared to the Washington State average of about 9.7 cents per kwh (and a national average of about 12.9 cents per kwh).² Our industrial and commercial rates are 2.0 and 3.4 cents per kwh, respectively. Because we subsidize our local rates with surplus power revenues, most retail customers do not cover the cost of their delivered power. Retail electric sales in 2018 were only \$53 million of our \$387 million in revenue (roughly 14% of revenue). External pressures on our main source of revenue (the wholesale power market) means we need to reassess how we cover electric system costs.

¹2.7 cents per kWh of electricity used plus a \$7.50 monthly base charge.

²1990 – 2017 Average Price by State by Provider (Energy Information Administration 861).

Electric Rates per Kilowatt Hour (2017)



Decisions about electric rates fall into two categories: rate design and mitigation for potentially large rate increases. Due to the changing demographics of Chelan County and the lengthy period since the last rate change, there is a need to better match costs to cost recovery. Concern was expressed about a potential negative impact for low-income customer-owners from such a change, and Chelan PUD will analyze this concern.

The Topic Team discussed the possibility of increasing electric rates at approximately the rate of inflation to avoid the risk of large rate increases in later years. While low rates are a top priority and primary community benefit of Chelan PUD, the team recognized that rising costs and shrinking supplemental revenues would require rate adjustments. The team expressed a preference for small, incremental increases over time (every year or two) as needed. Cost containment also was important to the team, which made some recommendations in its report about what to consider in rate design.

In addition to electric service, Chelan PUD currently serves 6,100 water and 500 wastewater customers. We also provide wholesale broadband service to retail service providers, who then serve over 16,500 customers. These systems do not cover their own costs.

With regard to water and wastewater, the Topic Team recommended that these businesses work their way toward being self-sustaining over a five-year period,

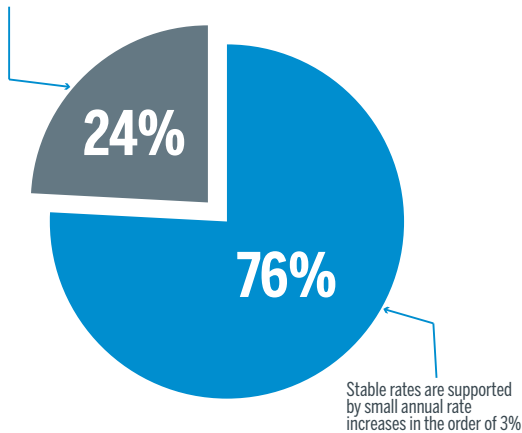
with some support for subsidized capital costs over that period. The team's report highlights concern around potential inequities of using wholesale power revenues to support services for a relatively small subset of customer-owners. They also supported the concept of updating system development charges, which are used to offset the impact of growth and development on Chelan PUD's infrastructure.

The Topic Team recommended that the fiber business also work toward self-sustainability over a five-year period (excluding the fiber expansion plan we are funding through the Public Power Benefit program). Again, they expressed some support for subsidized capital costs. The team also suggested that fiber rate adjustments should consider market rates and conditions.

Electric Rates

A significant majority of our customer-owners (76 percent) support smaller, annual rate increases rather than deferring rate increases and taking a risk that drastically higher rate increases may be needed in the future. We will use this input to begin crafting a long-term electric rate plan at Chelan PUD.

No rate increases in the short term, with the understanding that there is a higher potential for major (10%+) annual increases in the future

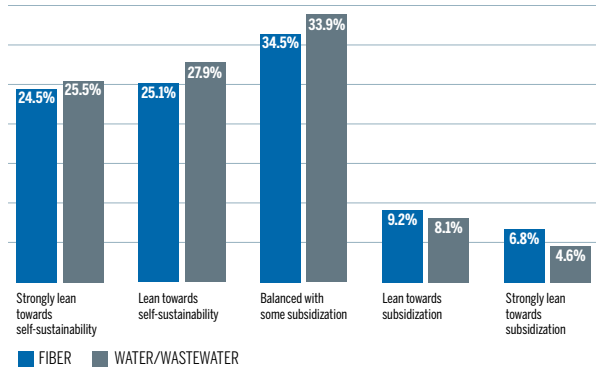


Water, Wastewater and Fiber Rates

How financially self-sustaining should the water, wastewater, and fiber systems be? Respondents could select from the following choices:

Strongly Lean Towards Self-Sustainability	Lean Towards Self-Sustainability	Balanced with Some Subsidization	Lean Towards Subsidization	Strongly Lean Towards Subsidization
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Our customer-owners are interested in seeing our water, wastewater and fiber business lines become more self-sustainable versus continued or increased subsidization by wholesale energy sales. Most of our customers selected either “Strongly Lean Towards Self Sustainability” or “Lean Towards Self-Sustainability.” These percentages were 49 percent for the fiber system and 53 percent for the water and wastewater systems. Another sizeable group (about 34 percent for both) selected the “Balanced with Some Subsidization” option.



Based on these results, we will continue to put our fiber, water and wastewater systems on the path to financial sustainability while keeping our rate increases modest. As a public power utility charged with serving rural areas, we recognize that these systems may occasionally require capital investments. Over time, our goal will be to make investments for long-term self-sustainability.

WHOLESALE VS. RETAIL SALES AND ECONOMIC DEVELOPMENT

While wholesale markets represent over 80 percent of our revenue, they also are volatile. Through this strategic planning process, we explored whether we should diversify this risk by allocating more surplus power to spur local economic growth.

In this strategic planning process, we asked our customer-owners whether we should reduce our emphasis on wholesale marketing and focus more on growing retail loads and local economic development. Many customers noted that Chelan County PUD's low electric rates can help stimulate economic growth in this community. At the same time, depending on rate structures, local load growth can come at a cost for existing customer-owners (currently, Chelan PUD requires all new loads to pay for extensions from the distribution system to the home or business).

The Topic Team considered two key questions:

1. Should Chelan PUD continue with its policy of "growth pays for growth," supportive of lower rates for existing customers, or lean more toward economic development, supportive of more jobs in the community?
2. Should Chelan PUD reduce emphasis on wholesale marketing and focus more on growing retail loads and local economic development?

In general, Topic Team members favored slightly higher electric rates if it would lead to greater economic development in Chelan County. The team also developed a set of principles with which to evaluate economic development opportunities. These included consideration such as cost recovery (rates for some types of new

industrial loads should have only a modest impact on existing customers) and stability (new growth should help diversify Chelan PUD sales).

Among their recommendations, the Topic Team asked Chelan PUD to investigate whether other utilities have successfully established rate structures to spur economic development, and to identify costs and risks associated with rebalancing our portfolio. The team encouraged Chelan PUD to be creative in developing rate structures that could support economic development, such as an industrial hub concept with location-specific, discounted rates. One suggestion was for Chelan PUD to dedicate an employee as an economic development point of contact to liaison with economic development entities and potential large load customers.

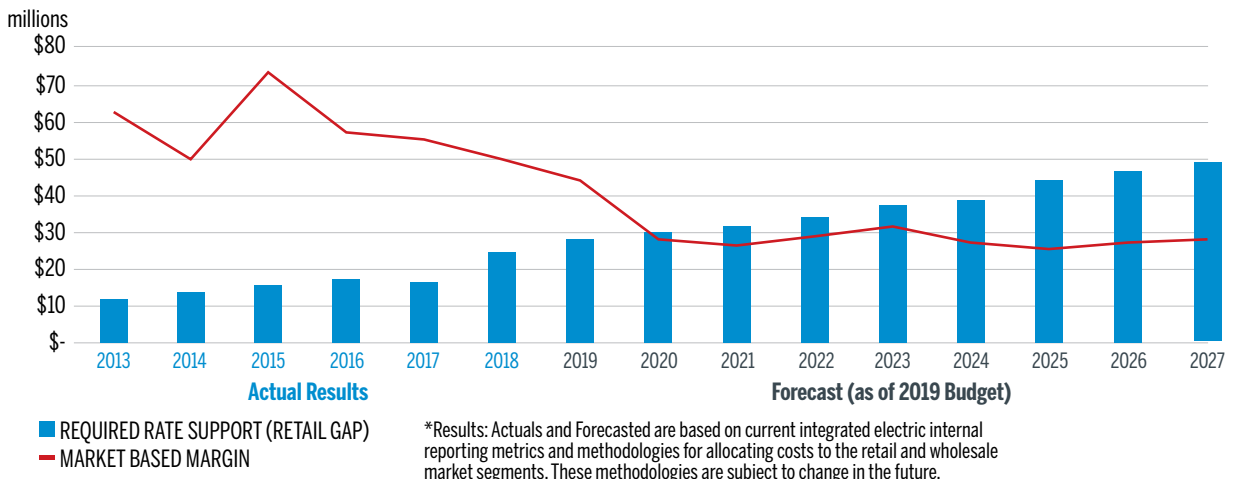
Chelan PUD also asked our customer-owners about economic development. Our survey asked:

How strongly do you support local economic development (jobs, services, property taxes)? Please indicate how much of an increase in your monthly bill you are willing to accept to support local economic development efforts.

According to the results, over 60 percent of our customer-owners are supportive of economic development and would like to see a greater emphasis on local electric load growth. However, how much

Retail Electric Support vs. Wholesale Margin

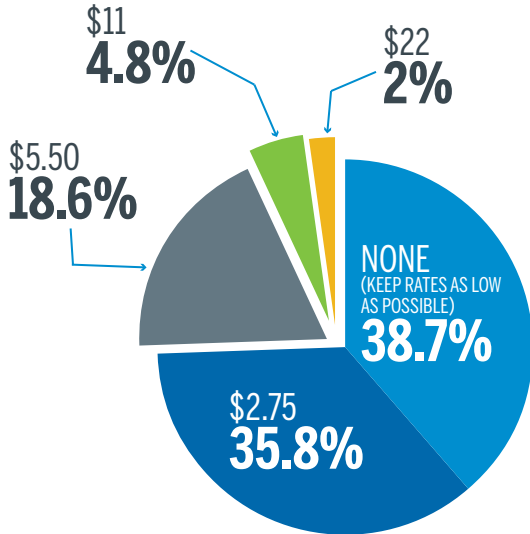
(Forecast as of 2019 Budget)



they were willing to spend in the form of increased power rates varied significantly. About 36 percent indicated they were willing to spend about \$2.75 per month. About 38.7 percent of customer-owners do not support a potential increase in electric rates to support economic development.

Support for Economic Growth Trade-Off

PERCENTAGE OF RESPONDENTS FOR EACH MONTHLY INCREASE



Chelan PUD recognizes that it is common for electric utilities as infrastructure providers to support economic development, even though it may lead to increased costs and rates. What is unique about Chelan PUD is the potential magnitude (percentage increase) in rates due to retail load growth. This is in part due to our existing rate structure and in part due to the unusually large amount of wholesale versus retail sales in the current Chelan PUD business model. Through our survey instruments, our customer-owners have expressed an inclination to lean toward actions that support economic development as long as the incremental rate impact is modest (below 5% cumulative impact from economic development activities). Given the importance of this, we have added a strategic objective that speaks directly to Chelan PUD engagement with countywide growth planning and job creation efforts when the rate impacts are modest.

AESTHETIC CONSIDERATIONS

When replacing damaged or aging power lines, Chelan PUD’s policy has been to exchange new overhead lines for existing overhead lines, and new underground lines for existing underground lines. Undergrounding distribution power lines can increase costs 2 to 10 times compared to above-ground lines. This is due primarily to much higher construction costs and a much shorter life expectancy (only 30 years for underground lines versus 70 for overhead lines). In addition, the duration of outages associated with underground lines is significantly higher.

While underground lines present financial and maintenance challenges, they do look better. In 2018, Chelan PUD formed a Community Advisory Group to discuss how Chelan PUD could improve stakeholder outreach on distribution system projects. Nine customers from different areas throughout Chelan County participated. The group recommended that Chelan PUD staff identify long-term strategic concepts for undergrounding or improving the aesthetics and siting process for large infrastructure. Before taking that step, we decided to conduct a professional survey of our customer-owners for the 2020-2024 Strategic Plan. We posed this question:

Who pays for aesthetic improvements (e.g. undergrounding of power lines) when that can increase costs by 2-10 times compared to above-ground facilities – all customer-owners, or just those who benefit?

Rather than form a Topic Team for this subject, a research firm, along with Chelan PUD staff, developed, tested and conducted the survey of 600 respondents, which took place March 8-21, 2019. The survey found that a minority of customers are concerned about aesthetics; many of those with concerns have second homes in the area. Most respondents believed that those who directly benefit from power line conversion should pay for it. Overall, customer-owners put a higher priority on affordability and reliability than aesthetics. They value low rates and reliability over aesthetic improvements. A majority (57%) are not willing to pay higher rates to convert overhead lines to improve views.

PUBLIC POWER BENEFIT PROGRAM

The introduction of a new Public Power Benefit program was a defining feature of the 2015–2019 Strategic Plan. This initiative allows Chelan PUD to bring the public power legacy of service into the 21st century by investing in projects that enhance quality of life in Chelan County and are within the statutory authority of Chelan PUD. Since 2015, our Board of Commissioners has included the PPB program in its annual budgeting process. After Chelan PUD has met all of its financial metrics, we decide how much of our discretionary revenue (generally about 10 percent) we can make available for the PPB program each year.

The PPB Topic Team met three times during February and March of 2019. They considered these questions:

- Should the PUD continue to fund the PPB program?
- Should the PUD revise or refine the criteria for funding PPB projects?
- What activities should be considered for funding?
- How should these activities be prioritized?

The team evaluated both financial and statutory considerations. First, to remain good stewards of our utility assets, the PPB program must remain affordable. We base affordability on our liquidity forecast, which takes into account the ending cash balance after meeting our financial metrics, debt obligations and capital expenditures. In addition to future liquidity, Chelan PUD uses a portion of prior year actual results – above our financial metrics - to calculate possible PPB funding levels.

Second, Chelan PUD can only fund projects that are within its existing statutory authority, as codified in Washington State RCW Title 54. Further, because we are a public entity, the PPB cannot violate the provisions of the Washington State Constitution that Chelan PUD cannot simply gift monies to an entity or project.

The team agreed that the PPB provides community value and should continue as long as it is financially feasible. In light of changing finances and

the potential need to borrow capital in the future, the group recommended that Chelan PUD financial staff revise the PPB funding criteria to help ensure the program can continue for the long term.

The team also brought forward possible PPB project categories. This project category list was used to create survey questions that Chelan PUD used to get feedback from our customer-owners on the future priorities of the PPB. In the survey, we asked our customer-owners to weigh in on how we should use these categories to prioritize PPB projects.

Survey results indicate that 58% of our customer-owners ranked economic development investments as their first or second choice. Projects that support environmental stewardship were the first and second choice of 43 percent of our customer-owners, while recreational opportunity projects were chosen first or second by 36 percent. Based on these results, we expect to prioritize these types of projects in our PPB program.

ROCK ISLAND RELICENSING

The federal operating license for the Rock Island Hydroelectric Project expires in 2028. We intend to seek the longest license possible that also addresses stakeholder interests and preserves the Rock Island Project's ability to be cost effective in the western power markets. We are making substantial physical improvements associated with the Rock Island Project, including rehabilitation of both powerhouses. We estimate the total value of this ongoing work to exceed \$710 million by 2029.

In 2017, the Federal Energy Regulatory Commission (FERC) issued a policy statement that set the default license term at 40 years and allowed some credit for early investments. However, the hydropower industry needed more clarity on the topic and in 2018, Congress enacted a new law that directs FERC to give equal weight to early investments when deciding how long a new license will be. This decision is especially significant for Chelan PUD as we prepare to relicense the Rock Island Project.

In this strategic planning process, we asked our customer-owners about using the early action option. The Rock Island Relicensing Topic Team

met three times this year and considered these questions:

- Should the District pursue recreational or environmental projects as early actions before relicensing?
- If so, what type of projects should be considered that support recreation or environmental enhancements?
- What should the District and customer-owners receive in return for these early investments?

The Topic Team identified a series of pros and cons associated with pursuing recreation and environmental projects as early actions before relicensing. The consensus was that the Chelan PUD should pursue early action in advance of a final relicensing decision. However, they noted that in exchange for such investments, benefiting stakeholders should provide support for a 50-year license term. They also devised a set of criteria by which Chelan PUD could evaluate potential early action investments. These criteria consider factors important to the regulator (FERC), the operator (Chelan PUD) and our customer-owners.

Next, we surveyed our customer-owners, asking respondents what types of early action investments they would most value. Our customer-owners strongly support Chelan PUD making environmental and recreational investments along the Rock Island Project prior to formal relicensing and in support of a 50-year license, with 82 percent signifying their approval of the concept.

CONCLUSION AND PLANNED IMPLEMENTATION ACTIONS

Our customers expect us to be good stewards of Chelan PUD resources. This means taking care of what we have, making it last and ensuring we can adapt to the future. With this in mind, we will continue to reinvest in our physical assets and people. As the electric utility industry transforms, we will prepare for the future by enhancing our capabilities, innovating and becoming more resilient. We are committed to carrying out the legacy of public power by enhancing the benefits we deliver

in response to community preferences. This 2020 – 2024 Strategic Plan describes our decision-making on six key topics. These decisions reflect the preferences of our customer-owners based on more than 2,700 customer-owner surveys and other outreach efforts. They will affect our decision-making through at least 2024. Planned actions that implement this document and support the key topics and findings are included below and are organized by topic:

Long-Term Rate Planning

- Chelan PUD will implement a roughly 3% annual electric rate increase and update electric rate design to increase base rates and reduce the energy usage charge in separate years beginning in 2020. Collected funds will be held to stabilize rates over the long term consistent with customer-owner input.
- The fiber business line should be financially self-sufficient by the end of the 5-year rate implementation period with 3% annual rate increases planned (note: PPB-funded expansion efforts to continue).
- Chelan PUD water rates will strongly lean towards self-sustainability, with annual rate increases of around 4% planned between 2020-2024.
- The wastewater rate structure will lean towards self-sustainability, with annual rate increases of around 4% planned between 2020-2024, along with an estimated \$1.5 million contribution from the electric business. We will work to better understand the costs of the Dryden Wastewater Project.
- The low-income rate assistance and energy efficiency programs will be concurrently reviewed to assure there are mitigation alternatives for low-income customers who could be negatively impacted by a change in rate design and rate increases.
- The existing incentive program for distributed solar projects also will be reviewed to create a complementary approach to existing energy efficiency programs, as both reduce retail load, creating opportunities for wholesale marketing.

Growth (wholesale/retail sales) and Economic Development

- We will maintain our policy for line extensions (paid for the requestor). We will consider developing a policy for assessing a standardized proportional share of infrastructure needs (substations/transmission) as part of line extension costs.
- To support economic development, we will perform additional analysis of the impacts of wholesale sales versus retail sales while seeking retail pricing arrangements that can grow load with minimal rate impacts to existing retail customers. For example, we will actively explore solar/wind power purchases that could meet customer interest in supporting new carbon free generating resource development, where the full cost is paid by the new load.
- We also will explore expanded use of the high density load rate, which is closely tied to our cost of production.
- We will explore the development of “industrial hubs” that could be used for industrial load growth while minimizing the risk of stranded assets.
- We will pursue the establishment of an liaison position to facilitate discussions with new potential large load customers and economic development entities.

Aesthetics

- We will retain the existing policy for undergrounding distribution infrastructure. Under this policy, undergrounding can occur when the incremental costs compared against above-ground facilities are paid by those that the facilities will benefit.

Public Power Benefit Program

- The PPB program will be retained and offered as long as Chelan PUD has the financial resources to support the program.
- The existing criteria for determining whether the PPB program will be offered on an annual basis will be updated to allow for maintaining the program should the Chelan PUD reenter the capital borrowing market. This is justified

because Chelan PUD has achieved its debt ratio target and is in good financial health.

- Chelan PUD will use the existing list of potential PPB projects and will supplement with a solicitation of new ideas in 2020.
- New ideas must cross an initial hurdle of having a nexus with Chelan PUD’s statutory mission as discussed and documented by the PPB topic team.

Rock Island Relicensing and Early Action

- We will pursue the identification of actions that could result in early action credit toward a 50-year license for Rock Island Dam.
- Any such actions must be identified with commitments by 2023 to align with the relicensing schedule.
- Hydropower early actions will be identified through the normal business planning process.
- We will solicit for potential recreational and environmental early actions in 2020.
- We are willing to put up limited funding (approximately \$125,000 total) to evaluate/develop potential early actions.
- We will require commitments from project sponsors that they will support a 50-year license term.

We believe this Strategic Plan reflects the preferences of our customer-owners while preserving the long-term financial stability of Chelan County PUD. We thank our customer-owners for their participation in the strategic planning process, and look forward to your continued input.

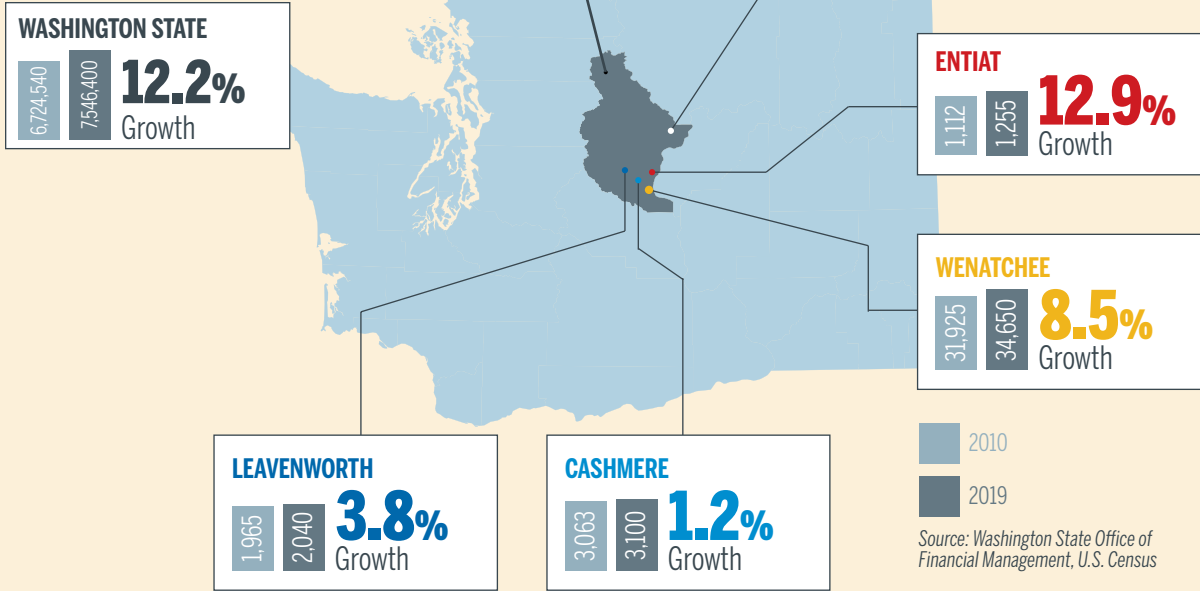




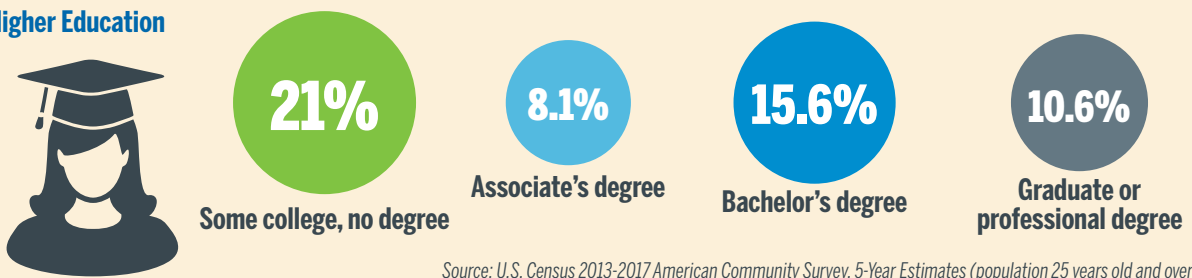
APPENDIX A

"Our Customer-Owners"
a demographic profile of Chelan County

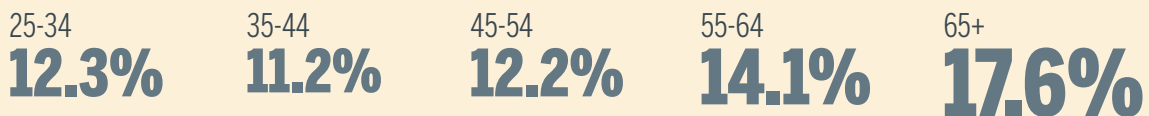
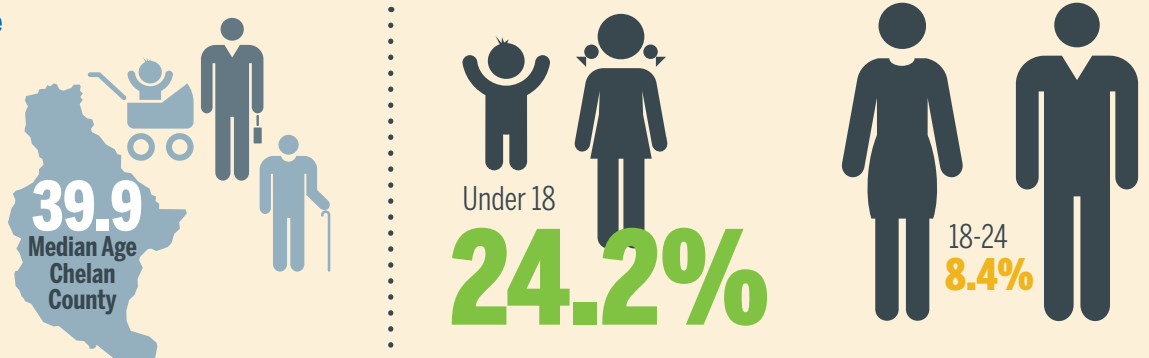
Population Growth



Higher Education



Age



Source: U.S. Census 2013-2017 American Community Survey, 5-Year Estimates

Household Income

MEDIAN HOUSEHOLD INCOME



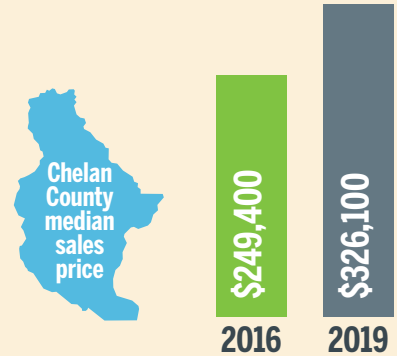
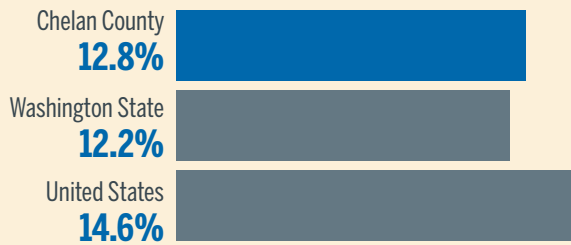
Housing



In Wenatchee between July 2016 and July 2018 median home sale prices increased

20.4%

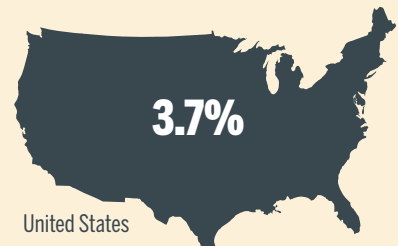
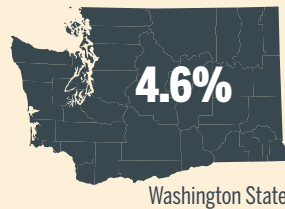
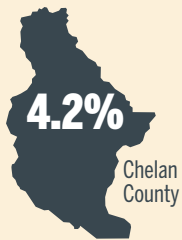
POVERTY RATE



Source: U.S. Census 2013-2017 American Community Survey, 5-Year Estimates

Sources: Pacific Appraisal Associates, Chelan County Comprehensive Plan, Seattle Times, Washington State Center for Real Estate Research

Socio-Economic - UNEMPLOYMENT RATES (JUNE 2019)



Source: Wa. Employment Security Department

LARGEST EMPLOYERS BY SECTOR

23.7%
Agriculture, forestry and fishing

14%
Health services

12%
Local government

10.7%
Accommodation and food services

10%
Retail trade

29.6%
All other industries

THE TOP FIVE CHELAN COUNTY INDUSTRIES IN 2017 IN TERMS OF PAYROLLS

16.1%
Agriculture, forestry and fishing

21.4%
Health services

16.1%
Local government

6.7%
Wholesale trade

7.4%
Retail trade

32.3%
All other industries



Unemployment in Chelan County is consistently higher than the state average. This is most likely due to the seasonal nature of the largest employer, agriculture.

Source: U.S. Census 2013-2017 American Community Survey, 5-Year Estimates

Infrastructure and Wholesale/Retail

Introduction:

Topic Teams bring PUD employees and community members together to discuss key strategic questions and to explore a variety of perspectives as we plan for the future. This Topic Team believes Chelan County PUD can aid in stimulating economic growth, within its authority, for the community. In addition to the low-cost, reliable electrical service the utility provides, Chelan PUD is a source of innovation within the community with the Hydro Research Institute as an example. With this perspective in mind, the Topic Team addressed two related questions that have a considerable impact on Chelan County's economy.

1. Chelan PUD requires that all new loads pay for extensions from the distribution system to the home or business. Should Chelan PUD continue with this policy of “growth pays for growth,” supportive of lower rates for existing customers, or lean more toward economic development, supportive of more jobs in the community?

2. Chelan PUD retail rates are subsidized by wholesale power revenues. Should Chelan PUD reduce emphasis on wholesale marketing and focus more on growing retail loads and local economic development?

In order to provide Chelan County PUD's Board of Commissioners perspectives on these questions, the Topic Team met four times. Chelan PUD also sent two surveys to customers to obtain broad countywide feedback. Views of the Topic Team favored expenditures by Chelan PUD to support and enhance the economic vitality in Chelan County. The team was generally more willing than the average customer (from survey results) to pay slightly higher electric rates if it leads to greater economic development in Chelan County. The survey results of customers showed that in general, customers were willing to pay slightly more to support economic development activities. The Topic Team used the survey results, the following principles, and team members' individual viewpoints to develop this report for Board of Commissioner consideration.

Principles:

Several principles were identified to guide development of recommendations for Board consideration. These principles are categorized into five areas:

- **Cost Recovery:** Rates for new industrial loads should have, at most, a modest impact on rates for existing customers (zero to small rate increases for existing retail customers), and not have much of an impact on the PUD's financial position
- **Collaboration:** Consider customer survey results (see Appendix A) in all recommendations

- **County Enhancement:** Strike a balance to achieve additional tax base with limited impact to electric rates
- **Responsive:** Reduce the amount of time to build infrastructure to serve new customers
- **Improve/Maintain Stability:** Actions should support continuing a diversified Chelan PUD sales portfolio considering additional non-subsidized retail sales to achieve sustainable growth in Chelan County and continued low rates

In general, these principles were used as a lens through which the following recommendations were developed. However, other perspectives are captured under Appendix B.

Top Recommendations for the Board of Commissioners

The following recommendations for each question below are the results of input provided by the Topic Team members. This is not the whole list of items the team members felt were important, but these are the items that received the most votes. The team believes all the ideas have merit and a full list is included in Appendix B.

Question 1: Should Chelan PUD continue with this policy of “growth pays for growth,” supportive of lower rates for existing customers, or lean more toward economic development, supportive of more jobs in the community? Team recommendations:

1. Establish an internal “lead” or “ombudsman” position for economic development projects, who can serve as a primary point of contact for the Port and other economic development entities. **(4 votes of 6 responses).**
2. Consider establishing a Public Power Benefit program fund using a small portion of wholesale revenues and periodically replenishing this fund, that can be used to help pay for new electrical infrastructure to serve new businesses recruited into the county. Use of the fund would be guided by criteria, developed with input from stakeholders in the county. **(3 votes of 6 responses).**

Question 2: Chelan PUD retail rates are subsidized by wholesale power revenues. Should Chelan PUD reduce emphasis on wholesale marketing and focus more on growing retail loads and local economic development? Team recommendations:

- **Analyze and recommend industrial retail rate structures that (5 votes of 6 responses):**
 - » Consider how other electric utilities have developed or implemented ‘economic development rates’ and see if Chelan PUD could adopt something similar
 - » Identify costs and impacts of growing retail loads versus



wholesale sales

- » Identify and quantify risks associated with growing retail loads or low market prices
- » Identify and quantify potential impacts to revenues based on market gains and losses
- The Topic Team encourages Chelan PUD to be creative about potential development of additional rate structures to support economic development which could include **(4 votes of 6 responses)**:
 - » A hybrid renewable resource (combining hydro, wind, solar, etc.) - based rate
 - » An initial rate structure that would transition to a full cost of service rate over time
 - » A hub concept, looking into location-specific discounted rates
 - » A creative development-friendly rate – combination of 2nd and 3rd bullet above

Conclusion:

Chelan PUD has a positive impact on the economy and standard of living in Chelan County. This Topic Team grappled with questions associated with when and how infrastructure is funded, and what is the right mix of wholesale and retail power sales to support the county's economic vitality. By using guiding principles as a lens through which to view ideas, and by incorporating the results of a countywide survey as a backdrop, the Topic Team developed the above mentioned recommendations for Board consideration. We thank the community members who participated in discussions and made recommendations around these complex topics.

Community members participating were:

Craig Larsen, Business Development director, Chelan County Port
 Lilith Vespier, Development Services manager, Leavenworth
 Steve King, Economic Development director, Wenatchee
 Steve Croci, Director of Operations, Cashmere
 Craig Gildroy, Planning Director, Chelan
 Kaylin Bettinger, Executive Director, Upper Valley MEND
 Selina Danko, Outreach Specialist, Link Transit
 Steve Keene, chairman, Peshastin Community Council
 William Gaines, Consultant, Port of Chelan County
 Jordan McDevitt, owner, McDevitt Land Co., Leavenworth
 Paul Moore, council member, Entiat

Appendix A

Countywide Survey Results

Survey Findings

A professional survey of PUD customers supplemented the Topic

Team discussion. Cocker Fennessy, a Seattle research firm, developed, tested and conducted the survey to gain customer perspectives. The survey took place March 8-21, 2019, with results presented to the Board of Commissioners on April 29, 2019. (Note: Questions about infrastructure aesthetics were included in the survey and are discussed in a separate report.)

Survey characteristics:

- 600 respondents randomly selected from PUD customer database
- 76% responded online, 24% reached by phone
- Survey questions were provided in English and Spanish
- Data was weighted by age and gender to reflect county population

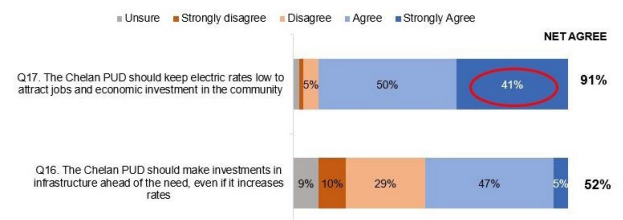
Key findings

- Few customers expressed familiarity with the PUD's role in economic development.
- Customers overwhelmingly believe the PUD should keep rates low to attract jobs and investment in the community.
- A slim majority think the PUD should make investments in infrastructure ahead of needs, even if it increases rates.
- The median amount customers would be willing to pay for building infrastructure ahead of need is about \$2 a month, on top of their current bills.
- When asked to recommend priorities for the PUD, affordability and reliability come out on top.

Breakdown of survey results

When asked if the PUD should keep rates low to support economic development, respondents were strongly in favor. However, a related statement in the survey about making investments ahead of need had weaker support. A majority supported the statement, but only a slim majority, and almost one-third were neutral.

An overwhelming majority (91%) want the PUD to keep rates low. A slim majority (52%) support infrastructure investments ahead of need, even if it increases rates.



Researchers asked what, if anything, people would be willing to pay to cover advance buildout of infrastructure – building ahead of actual need. The scale was \$0-\$5 per month.

Infrastructure and Wholesale/Retail cont.

The median amount customers are willing to pay is \$2/month to cover the cost of building out infrastructure in advance of an actual increase in energy demand. 23% don't want to pay anything.

Q18 - If Chelan PUD had to raise rates to cover the costs associated with building out infrastructure prior to an actual increase in energy demand, what is the most you would be willing to pay, in addition to your current costs, to cover this expense?



Topic Team Survey Results

Topic Team members were given a chance informally to take the portion of the survey related to economic development, and compare results. Their answers, juxtaposed with the official survey responses, are below.

1. How familiar are you with Chelan PUD?

Countywide survey says:		Topic Team members survey says (9 responses):	
Unfamiliar	2%	Unfamiliar	0%
Familiar	97%	Familiar	100%
Unsure	*	Unsure	0%
* = under 1%			
37% said they were "somewhat familiar," 34% said "familiar" and 26% said "very familiar." Only 2% were "not at all familiar."			

2. What is the one thing you value most about Chelan PUD?

Countywide survey says:		Topic Team members survey says:	
Affordable electric rates	64%	Affordable electric rates	22%
Reliable electric service	20%	Reliable electric service	44%
Parks and rec/RR center	5%	Parks and rec/RR center	0%
Fiber connectivity	3%	Fiber connectivity	11%
Energy efficiency rebates	3%	Energy efficiency rebates	0%

Service/Customer service	1%	Service/Customer service	0%
Water-related (dams, sewer)	*	Water-related (dams, sewer)	0%
All of the above	2%	All of the above	0%
Other	1%	Other	22%
Don't know/refused	*	Don't know/refused	0%

3. How familiar are you with the PUD's role in local economic development?

Countywide survey says:		Topic Team members survey says:	
Unfamiliar	71%	Unfamiliar	0%
Familiar	28%	Familiar	100%
Unsure	1%	Unsure	0%

4. To what extent do you agree/disagree with the following statements?

The Chelan PUD should make investments in infrastructure ahead of the need, even if it increases rates.

Countywide survey says:		Topic Team members survey says:	
Agree	52%	Agree	67%
Disagree	39%	Disagree	11%
Unsure	9%	Unsure	22%

The Chelan PUD should keep electric rates low to attract jobs and economic investment in the community.

Countywide survey says:		Topic Team members survey says:	
Agree	91%	Agree	78%
Disagree	6%	Disagree	11%
Unsure	2%	Unsure	11%

5. If Chelan PUD had to raise rates to cover the costs associated with building out infrastructure prior to an actual increase in energy demand, what is the most you would be willing to pay, in addition to your current costs, to cover this expense?



Countywide survey says:		Topic Team members survey says:	
\$0	23%	\$0	0%
\$1-2	29%	\$1-2	78%
\$3-5	39%	\$3-5	22%
Unsure	9%	Unsure	0%

6. To summarize your opinions, we'd like you to allocate a total of \$10 across several potential Chelan PUD priority areas:

Countywide survey says:	
Affordable rates	\$3.07
Reliable service	\$2.51
Parks & Rec	\$1.25
Fiber connectivity	\$1.20
Support of job creation	\$0.71
Energy efficiency and rebates	\$0.62
Visual appeal of utility infrastructure	\$0.58
Other	\$0.06
Total	\$10

To summarize your opinions, we'd like you to rank several potential PUD priority areas, with 1 as your highest and 7 as your lowest.

Topic Team members survey says:	
Affordable rates	#2
Reliable service	#1
Parks & Rec	-
Fiber connectivity	-
Support of job creation	#3
Energy efficiency and rebates	-
Visual appeal of utility infrastructure	-
Other	-

In June 2019, all PUD customers received a mailing inviting them to weigh in on planning for 2020-2024. More than 2,700 surveys were returned to the PUD. Responses related to economic development are summarized here.

- List of 7 criteria that were developed by Topic Teams
- Customer-owners asked to rank criteria in order of preference
 - Economic Development
 - Environmental Stewardship
 - Recreation Opportunities
 - Furthers Education and Job Readiness
 - Serves an Area or Population that is Underserved
 - Complements Other Efforts/Collaboration with another Entity
 - Supports Diversity and Inclusiveness

How strongly do you support local economic development (jobs, services, property taxes)? Please indicate how much of an increase in your monthly bill you are willing to accept to support local economic development efforts.

Selection	Percent Selected
0% - Keep my bill as low as possible	38.7%
5% (\$2.75)	35.8%
10% (\$5.50)	18.7%
20% (\$11.00)	4.9%
40% (\$22.00)	2.0%

A majority - 61.3% of respondents support local economic development, even if it impacts rates, but their appetite is moderate (less than 7% favor 20% increases or greater)

Infrastructure and Wholesale/Retail cont.

Would you like to leave any additional comments?

Theme	Responses
Appreciation for PUD, survey, recreation, service, communication, collaboration, etc.	223
Maintain low rates, no rate increases (electric), consider rate impacts to low-income, fixed-income, implement assistance programs	68
Desirable of fiber expansion, etc.	55
Limit cryptocurrency impacts, prevent mining, limit rate impacts, etc.	34
Implement high environmental stewardship, address impacts to fish, make habitat improvements, be a leader in conservation and sustainability	22
Promote energy efficiency and conservation, rebates, develop/facilitate more solar and wind	18
Promote economic development, tie economic development to job creation	16
Be a leader in clean energy, carbon free economy, addressing climate impacts	13
Pay down debt, limit debt	10

Appendix B-Full List of Topic Team

Considerations and Ideas

Question 1: Should Chelan PUD continue with this policy of “growth pays for growth,” supportive of lower rates for existing customers, or lean more toward economic development, supportive of more jobs in the community?

1. Establish an internal “lead” or “ombudsman” position for economic development projects, who can serve as a primary point of contact for the Port and other economic development entities.
2. Investigate different methods to ensure repayment of capital including LUDs, rate riders, etc. Identify pros and cons as well as use cases.
 - Work with stakeholders and internal staff to identify one or two locations, conduct analysis on gaps at sites and (feasibility level?) cost to install infrastructure to those locations.
 - » Locate/design industrial park location/hub - Complete as much infrastructure development as possible in advance (planning, permitting, etc.)
 - » Identify an anchor tenant for any location before building infrastructure prior to need
 - » Specifically, consider Big Y intersection for development

3. Shorten the timelines and reduce the cost of “system impact studies” conducted by the PUD to determine any new electrical infrastructure that may be required to serve a new customer.
4. Consider advance procurement of long-lead-time equipment needed to serve new customers (such as substation transformers), and how such a policy could complement the PUD’s need to maintain an inventory of spare equipment.
5. Consider advance procurement of real property needed for future electrical infrastructure based on reasonably foreseeable need and likely development patterns.
6. Consider early initiation of necessary permitting processes for substations and other electrical facilities, and develop an inventory of pre-permitted sites.
7. Instead of always following the “growth pays for growth” philosophy, provide new electrical infrastructure funding for desirable economic development prospects.
8. Consider establishing a Public Power Benefit program fund using a small portion of wholesale revenues and periodically replenishing this fund, that can be used to help pay for new electrical infrastructure to serve new businesses recruited into the county. Use of the fund would be guided by criteria, developed with input from stakeholders in the county.

Question 2: Chelan PUD retail rates are subsidized by wholesale power revenues. Should Chelan PUD reduce emphasis on wholesale marketing and focus more on growing retail loads and local economic development?

- Analyze and recommend industrial retail rate structures that:
 - » Address how other electric utilities have developed or implemented ‘economic development rates’ and see if Chelan PUD could adopt something similar
 - » Identify costs and impacts of growing retail loads versus wholesale sales
 - » Identify and quantify risks associated with growing retail loads or low market prices
 - » Identify and quantify potential impacts to revenues based on market gains and losses
- Analyze the financial impact of various rate components and total rates for new large loads and existing customers.
- PUD staff should continue development/work on rate models to analyze and communicate the impact of various rate components and total rates for new large loads and existing customers.



- » Use model to show impacts for various 'what if' scenarios
- » Topic Team recommends staff to perform study and report results back to Topic Team
- » Conduct industrial rate comparisons with other utilities statewide, in the Northwest and the U.S.
- For a more sustainable PUD financial position, move all rates toward cost of service. (This one did not have total Topic Team consensus.)
 - » Set expectations among customers for this move toward cost of service
- Work with the Port and other economic development entities to provide an understanding about the conditions under which the High Density Load rate could be further utilized to promote new business development.
- The Topic Team encourages Chelan PUD to be creative about potential development of additional rate structures to support economic development which could include:
 - A hybrid renewable resource (combining hydro, wind, solar, etc.) - based rate
 - An initial rate structure that would transition to a full cost of service rate over time
 - Investigate a hub concept, looking into location-specific discounted rates
 - Work on a creative development-friendly rate – combinations of 2nd and 3rd bullet above

Additional Input from Community Team Members:

1. I do have concern about the guiding principles. I think there is generally disagreement about rates, cost recovery, and tax base. Question #2 demonstrates this discussion point. Disagreement doesn't mean bad... it means that there are transitioning thought processes around the topic and I think people are beginning to realize that the subsidized wholesale power situation is not ultimately a sustainable model. I do expect the public when asked about rates, will definitely say keep rates low. Ultimately, the bottom line is that there is a tolerance level for cost of services including taxes. Most people consider their water and power bills essentially a tax... a monthly fixed cost. If the PUD does not collect the rates, then some other organization will, i.e. taxes, other utilities, etc. I don't think the public thinks about this aspect. I also think if you asked the question about how much you pay in your power bill versus quality K-12 education, you might get a different answer. It is a difficult concept to convey although Quincy has demonstrated it well.

2. Also, I'd love to see a comment in the document related to the PUD itself as an economic engine. There are two points to make here... The PUD's investment in this valley has economic impact. One of the most exciting opportunities is the Hydro Research Institute. I think what Avista is doing also is very innovative, improving their long-term rate model as well as keeping themselves relevant in the community by partnering with the universities and pushing for local power sales as well as elevating the capacity of their future rate payers. The second point is that energy markets are dynamic. I really am impressed with the changing revenue models and how does hydro maintain relevancy. I think that there are new niche markets like balancing power in a future energy market that is going to come down hard on fossil fuel or carbon-source energy markets. Being very proactive in these new markets seems like a great opportunity and keeps the target off the PUD. The opportunity cost of losing relevancy is major. I keep hearing about dam breaching on the lower Snake because their cost of production is too high. Hydro power cost of production will only increase in the future and energy rates will likely decrease or at least remain level as technology continues to advance alternative sources. I worry about the PUD's future over the next 50 years or so. I think that low rates only exacerbate that problem. I would say that by analogy, our locally owned power utility needs to invest in infrastructure, local markets, and technology that improves the PUD's relevancy in future energy markets.
3. Question: Should the PUD be focused narrowly on benefits within its own purview and control, or should the focus be broader and include the benefits that accrue to the community through the creation of more and better-paying jobs, an increased tax base and the associated funding increases for government and education?
4. Chelan County residents are well acquainted with the PUD's low-cost power, less so with the PUD's current or potential role in economic development. The team encourages the PUD and its commissioners to consider this when interpreting poll results (Appendix A).

Public Power Benefit

Introduction:

Topic Teams bring PUD employees and community members together to discuss key strategic questions for future value to customer-owners and to explore a variety of perspectives for each question.

The Topic Team addressed four questions related to the Public Power Benefit (PPB) program:

1. Should the PUD continue to fund the PPB program?
2. Should the PUD revise or refine the criteria for funding PPB projects?
3. What activities should be considered for funding?
4. How should these activities be prioritized?

Team members representing the community included the following: Adele Wolford, Kevin Powers, Mary Murphy, John Alt II, Cory Wray, Vicki Malloy, Teresa Zepeda, Bruce McCammon, Kristen Lodge, Stacy Luckensmeyer, Bob Bugert and Deb Miller.

Staff members from the Chelan PUD included Mike Coleman, Felicity Saberhagen, Ryan Baker, Carolina Becerra, Teneille Hatmaker and Sheila Salmon.

After the kickoff meeting on February 7, the team met for three sessions on February 28, March 14 and March 28.

What did we learn?

As the team addressed the four questions, consistent themes emerged which reflected a desire by the team to include the following as we further develop the Public Power Benefit (PPB) program:

1. Provide value to the customer-owners and meet unfilled needs in the community
2. Focus on community access to parks and the river
3. Continue to incorporate environmental stewardship
4. Consider local and native history, the diversity and multicultural background of our population
5. Include educational opportunities, job training/readiness and economic development factors in our decision making
6. Consider partnerships -- the PUD doesn't have to do it all

Background information:

To facilitate a focused and deliberate discussion, implications of the PUD's financial position as well as the statutory limitations are necessary to understand. The team was very interested in learning about statutory limitations and why the PUD cannot fund certain projects. Several team members concurred that this is not well understood in the community.

Financial Considerations: Offering a Public Power Benefit program

should remain affordable to the PUD. To determine long-term affordability of the program, the liquidity forecast is considered because it takes into account the ending cash balance after ensuring that future District financial metrics, debt obligations and capital expenditures can be satisfied. In addition to future liquidity, a portion of prior year actual results above our financial metrics is used to calculate available funding for the program. Looking both forward and backward allows us to determine an affordable recommended funding allocation.

Statutory Considerations: Projects in this program must be consistent with Chelan PUD's existing authority, as codified in RCW Title 54, and cannot violate the anti-gifting provisions of the Washington State Constitution.

In summary, projects must have a sufficient nexus to authority granted by the state. This includes both express and implied authority. We have express authority to generate and deliver electricity and operate our other utilities. Our implied authority includes work necessary to carry out our express authority. An example of implied authority is the operation of our Parks system, which is a condition of maintaining our license to operate our hydro facilities. Without this condition, we do not have authority to own and operate parks.

Should the PUD continue to fund the PPB program?

In summary, the team perspective is that the Public Power Benefit program provides value to the community and the team believes it should continue as long as it is financially feasible. Additionally, the PPB program brings resources that likely would not otherwise be available to the community without a program like this – especially to low-income families.

Should the PUD revise or refine the criteria for funding PPB projects?

In light of changing finances and the potential need to borrow capital in the future, the group recommended the criteria be revised to continue funding the PPB program as long as the PUD is financially healthy and has the availability of funds. Additionally, PUD financial subject matter experts should develop the actual criteria to continue a conservative approach while allowing the PPB program to continue.

What activities should be considered for funding and how should these activities be prioritized?

The team was in general agreement that criteria should include guidance on the selection of projects that honors and builds on the history and mission of the PUD, reflects the changing demographics of the county, and emphasizes the multicultural history of Chelan County. Follow-up discussion led to many suggestions of possible projects that fit with the criteria.

In addition to suggestions for project criteria, the team also brought forward possible project categories:



1. Builds value for customer-owners that are currently underserved
2. Relieves pressure from an existing “problem”
3. Preserves/promotes public access in under-developed areas including the following:
 - Removing financial barriers for use
 - Continue providing day passes at partner-operated PUD owned parks
 - Provide special needs accessibility
 - Access and promotion of educational programs
 - Opportunities for greater access to the water
 - Access/infrastructure to promote family use of trails (biking, walking, etc.)
 - Proactively connect parks/trails to community
 - Creating deliberate access points for kayaking and stand up paddleboard
 - Partnerships to assist with access
 - Increasing security/safety in areas of parks not owned by PUD
 - Ensuring accessible parking
4. Preserves/promotes environmental and/or cultural benefits
 - Opportunities to showcase our diversity and history
 - Partnerships with entities that enhance diversity/community
 - Encourages and supports all socio-economic levels of our community
 - i. Partner with transportation agency as an example
 - Incorporates naming of locations with historically relevant names to pay tribute to our native residents
5. Protects and improves habitat for native plants and animals
 - Enhancement of “critical” areas such as wildlife, plants, water
 - Complementary projects that meet multiple needs
 - i. Water supply & habitat
 - ii. Protect flood plains
 - Partnerships with local government
 - Promoting community involvement in conservation
 - i. Electric vehicles (EV) and chargers
 - ii. Education of youth and community
 - Promote our Habitat Conservation Plan (HCP) no net impact to the species listed
 - i. Next check-in is 2021
 - ii. Interpretive signs at hatcheries, tributary, other
 - Challenging the community and employees to think differently about the environment

- i. Convert PUD fleet to EV
 - ii. Promote EV ownership with car dealerships
 - iii. Improvements on existing issues, such as geese in the parks
 - iv. Provide education on plants, wildlife and the parks
6. Complement/leverage existing plans/programs/efforts
 - Take advantage of, or partner with, existing programs and other agencies
7. Broader economic and community benefits of the proposed enhancement

APPENDIX – additional financial information:

Because our forecast has many variables, different projections based on several potential scenarios are used. The PUD has a strong cash balance and continues to be able to meet our top priority of reinvesting in our assets. We are currently using cash to fund capital programs, but we do expect some amount of borrowing for future projects. This is typical for utilities and beneficial in keeping cash reserves at targeted levels.

Each year, the Board determines the amount of funding available for the program using a financially sound and measured approach. To determine what amount of funding to provide, we perform calculations by looking back to the prior year audited results. The discretionary net revenue represents the amount that actual results exceeded what was needed to meet our financial metrics. Discretionary net revenue is multiplied by 10%. To ensure that current cash is not committed to fund future core projects, we look forward 5 years and take the lowest cash year projection to determine if there is excess cash during our planning horizon. The amount by which the lowest year balance is estimated to exceed our cash target is also multiplied by 10%. The lower of the two amounts is the calculated available funding. Based on this information and other influencing factors, the board will make the final decision on funding levels for PPB. Once the funding for PPB has been decided, it is included in the annual budget.

APPENDIX – statutory authority:

Each year the State Auditor’s office reviews the District for compliance with State statutes. During the audit, they review transactions to determine if the District has spent money consistently within statutory authority and without violating the restrictions. The challenge with the PPB program is understanding and applying the limits and restrictions of PUD spending. The PUD receives many great and valuable ideas to support the community but without sufficient nexus to our authority, these ideas cannot be considered for implementation.

The PUD has two types of authority. The PUD is created by statute, RCW Title 54. The PUD has all of the powers that are expressly granted to us by the statute. The second type of authority is implied authority,

Public Power Benefit cont.



which grows from the express authority. We have the ability to do all things necessary in order to carry express authority. Because we have the express authority to generate electricity, we can own and operate dams in the river that are licensed by the Federal Energy Regulatory Commission and impliedly we have the authority to do all things in the license requirements. Chelan PUD Parks are an example of this. We do not have authority to build and operate parks, but our license requires that we provide recreational access to the river and parks. Where we have parks inside our project boundary we are required by our license to own, operate, and provide public access. In remote areas or locations outside of the project boundaries (determined by FERC) where there is no nexus to the river, we do not have the authority to build a park.

There are two limits on the District's ability to spend money on projects. The Washington State Constitution prohibits the giving of money, lending credit or guaranteeing any kind of loan or financial extension to private individuals, private companies or nonprofit organizations.

There are other specific exemptions written into the constitution for things such as low income, elderly and conservation incentives. The second limit requires the money we spend to have a nexus back to what our authorities are, express or implied. We must find a reason that shows benefit to the District and its operations. We can use creative thinking to pursue opportunities as has been done with the purchasing of land for substations. We do not have the authority to give money to the South Wenatchee improvement efforts but we may be able to assist with improvements such as streetlights or power upgrades. These provide a nexus back to distributing energy and are within our authority. All proposals or expenditures of public dollars must be consistent with why we exist. The PUD exists to provide utilities so our proposals or projects must remain consistent with Chelan PUD's existing authority.

Rock Island Relicensing



Team Members: The Rock Island Relicensing Topic Team was comprised of the following individuals: Mayor Randy Agnew & Charity Duffy, City of Rock Island; Susan Ballinger and Bruce McCammon Audubon Society; Mickey Fleming, CD Land Trust; Anne Gardner, Herb Gardner, Helen Horn and Vicki Malloy, Malaga Community Council; Chelsea Harris, WA State Parks; Kevin Overbay, Chelan County Commissioner; Ann Welz, Trust for Public Land; Mike Kaputa, Chelan County Natural Resources; Mike Mackey, Chelan County Noxious Weed Control; Kris Pomianek; Allison Williams, City of Wenatchee; Mat Lyons WV TREAD; Mayor Jim Fletcher, Cashmere.

PUD Staff: Justin Erickson, Michelle Smith, Tracy Yount and Marty Whiteman.

Meetings: The Topic Team met on February 7, March 7 and March 28. In addition, the Topic Team requested a post-survey meeting that has yet to be scheduled, but may occur in July or August. This meeting may also be eliminated depending on Team preference. If an additional meeting is not held, discussion and correspondence will be done via email.

Summary:

Rock Island was constructed in 1933 and a second powerhouse was added in 1979. It has 19 generators and a nameplate capacity of 624 megawatts. The reservoir is approximately 20 miles in length. The first license received was for 50 years and the second license (that expires on December 31, 2028) was issued in 1988 for 40 years. The District is making substantial physical improvements associated with the Rock Island Project, including

rehabilitation of both powerhouses. The estimated total value of that work exceeds \$700 million.

The District has been planning for a relicensing process that provides the best chance of receiving the longest license term while addressing stakeholder interests and preserving the Rock Island Project's ability to be cost effective in the western power markets. After discussions with the District and others, the Federal Energy Regulatory Commission (FERC) issued a policy statement in 2017 that set the default license term at 40 years and made some allowances for early credit, but greater clarity was still desired. The District then developed and strongly promoted the passage of a new law that we refer to as Credit for Early Action – the provision was part of America's Water Infrastructure Act of 2018 (S. 3021). Early-Action Credit provides a mechanism for licensees to request "credit" towards the next license term for actions they choose to take in advance of relicensing. Chelan PUD will be one of the first licensees to utilize the new provisions.

Under the new law, the Federal Energy Regulatory Commission (FERC) will consider voluntary actions implemented under the prior license on a case-by-case basis when a licensee can demonstrate: 1) the proposed early action investment is the type of investment identified in the statute; and 2) the investment project was not used in developing the existing license term. In determining the term of a new license issued, FERC shall take into consideration, among other things:

"(b)(2) investments by the licensee over the term of the existing license that:

Rock Island Relicensing cont.



Resulted in redevelopment, new construction, new capacity, efficiency, modernization, rehabilitation or replacement of major equipment, safety improvements, or environmental, recreation, or other protection, mitigation, or enhancement measures conducted over the term of the existing license; and

Commission (FERC) Determination – At the request of the licensee, the Commission shall make a determination as to whether any planned, ongoing, or completed investment meets the criteria under subsection (b)(2). Any determination under this subsection shall be issued within 60 days following receipt of the licensee’s request”...

Key Strategic Planning Questions:

The key questions for strategic planning and the Rock Island Relicensing effort have been identified as follows:

1. Should the District pursue recreational or environmental projects as early actions before relicensing?
2. If so, what type of projects should be considered that support recreation or environmental enhancements?
3. What should the District and customer-owners receive in return for these early investments?

Strategic Questions with team perspectives:

Should Chelan PUD advance the newly developed federal policy to take “early actions” in advance of a final relicensing decision?

The Topic Team identified a series of pros and cons (Table 1) associated with pursuing recreation and environmental projects as early actions before relicensing. The overall consensus from the Topic Team was that the Chelan PUD should pursue early actions in advance of a final relicensing decision.

The team also discussed the other projects the District plans to submit to FERC for Early Action consideration. Approximately \$710M in projects will be submitted constituting the bulk of the overall investment package ultimately to be offered to FERC as part of the formal relicensing process. There were discussions about how this large of a submittal alone could influence the duration of the next license.

Table 1. Benefits and Drawbacks of Pursuing Early-Action Investments

PROS OF EARLY ACTIONS	POTENTIAL DRAWBACKS OF EARLY ACTIONS
Benefits are accrued earlier (Figure 1)	Could invest in projects that may not be necessary for relicensing
Allows the District to get in front of environmental requirements/needs	Taking early action may not have the breadth of stakeholder involvement
Potential for lower land and project costs (mitigate likely inflation)	Accrue operation and maintenance costs over a longer period of time
Can be strategic and plan for development prior to need	May be making decisions without the benefit of future projections or long-term planning
Addresses relicensing matters early	Direct cost associated with developing Early Action investments
Encourages and incentivizes investment in existing facilities and programs	Process is untested
Takes advantage of other projects or partnerships within the community for mutual benefit	Regulatory uncertainty
Allows for time to address invasive species or other complex environmental issues	

If so, what actions should be considered that support recreation or environmental enhancements?

The Topic Team included representation from a diverse group of stakeholders from both Chelan County and Douglas County. Considerable time was spent discussing potential enhancements and the District’s responsibilities under the FERC licensure process. Investment criteria that included, but isn’t limited to, project nexus and the District’s statutory authority were also covered in detail. For a description of the District’s statutory authority, please see the Public Power Benefit Topic Team Report. An overview of recreation plans, studies, management plans, etc., that are needed as part of relicensing were discussed and common questions answered.

Rock Island Relicensing cont.

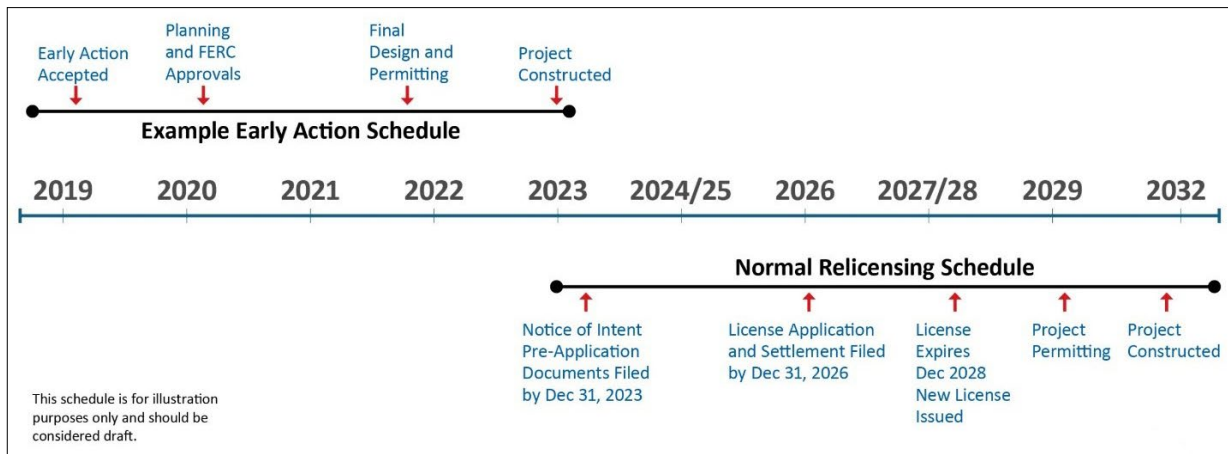


FIGURE 1. Sample relicensing timeframe under normal process and in pursuit of early actions.

Potential Projects

The Topic Team identified the following projects and potential early-action recreational and environmental investments:

1. Horan Natural Area – investments that support a wide range of environmental, cultural and recreational enhancements.
2. Enhancements within the unincorporated community of Malaga including trails, improved access to the Columbia River (with boat launch), sports fields, beach/swim area, etc.
3. Conduct analysis of public access to the shorelines and identify ways to improve access where most needed.
4. Enhancements within the City of Rock Island including trails, connections to Rock Island Ponds, improved access to the Columbia River (with boat launch), sports fields, beach/swim area, etc.
5. Loop trail extension from Wenatchee to Malaga and from Kirby Billingsley Hydro Park to Rock Island.
6. Shoreline restoration and improvements.
7. Interpretive elements that highlight the historical and cultural significance of Rock Island.
8. Preparation and implementation of an aquatic habitat management plan.
9. Homewater Property recreation management (implementation of recreation plan).

It should be noted that the above list is not exhaustive and because the Topic Team did not include all possible stakeholders and was limited by time, additional potential actions and changes to the above list could occur in the future. A logical follow-up action after the Strategic Plan is adopted would be to dedicate additional staff and consultant resources to evaluate these and other potential projects in greater detail.

District staff described project planning documents that are required and the level of analysis that is typically conducted, including Habitat Conservation, Historic Property Management, and Recreation plans.

The District currently exceeds typical FERC licensing recreation requirements with over 397 acres of public park lands including Confluence State Park and Horan Area (200 ac), Walla Walla Point Park (70 ac), Wenatchee Riverfront Park (31 ac), Kirby Billingsley Hydro Park (70 ac), Coyote Dunes Natural Area (26 ac).

What consideration should the PUD and customer-owners receive in return for these early investments?

There was an understanding from the group that early actions carry risk and opportunity and that it is fair to expect a return on such an investment in the form of a longer license term. From a pure monetary perspective, the size and scale of the physical investments in the two powerhouses and related plant and facility improvements appears to provide strong support for a 50-year term. That said, it still may be advantageous to pursue early-action investments and gaining strong community support for a longer-term license which is preferable and aligns with the District's values.

The Topic Team devised a set of criteria by which potential projects could be evaluated and support for a 50-year license is included (see below). The criteria specified under "customer-owner/community project criteria" may not all apply to every project as some projects will have a more focused emphasis. Additionally, it was noted that there are many initiatives underway in the community and the District was encouraged to engage with other entities. So another consideration is that the PUD may not have to "go it alone" on some enhancements, but instead could partner with others in terms of funding, maintenance and operation.



**EARLY-ACTION INVESTMENT CRITERIA
Recreational/Environmental Enhancements**

FERC Criteria:

1. Existence of a project nexus (is there an impact of existing project operations that would be mitigated through this action?);
2. Within Rock Island Project Boundary or FERC approved project nexus to add to Project Boundary;
3. Must fall within credit for early action statutory criteria with pre-approval by FERC; and
4. Appropriate stakeholder support and License Amendment approved by FERC before Jan 2023 (project approved prior to formal relicensing process begins).

PUD Criteria:

1. Action must fall within PUD Statutes authority;
2. Financial, economic and risk analysis is performed and supports expected benefit to customer-owners (District Business Case process);
3. Supports District's Mission, Vision and Values (safety, stewardship, trustworthiness, operational excellence, resiliency and innovation);
4. Extent of community support for specific proposed action;
5. Investment leads to formal support for 50-year license from a recognized entity; and
6. Approved by the PUD Board of Commissioners.

Customer-Owner/Community Project Criteria:

1. Preserves, promotes, and/or supports recreation opportunities and public access;
2. Builds value by serving an area or population that is currently underserved;
3. Supports environmental stewardship, habitat for native plants, animals, etc.;
4. Is complementary to other efforts and supports collaboration with another entity;
5. Supports diversity, multiculturalism, inclusiveness, or provides other cultural benefits;
6. Furthers education and job readiness, other community benefits; and
7. Supports economic development (jobs, services, property taxes, etc.).

Conclusion:

In summary, the Rock Island Relicensing process presents an exciting opportunity to consider early actions that could result in community benefits and provides support for a longer license term. Chelan PUD thanks the community members who participated on this Topic Team. Their ideas and enthusiasm for the process was instrumental in evaluating this strategic topic, refining key issues, and assessing the appropriate questions to ask of our customer-owners as part of the Strategic Plan Survey. We appreciate your contributions to help make this process successful.

Long-term Rate Planning

Introduction:

Topic Teams bring PUD employees and community members together to discuss key strategic questions for future value to customer-owners, and to explore a wide variety of perspectives for each question.

The Long-Term Rate Planning Topic Team was comprised of the following community members: Bart Clennon, Amanda Lundy, Lee De La Torre, Thom Nees, Hassan Shaban, Katie Harmon, Paul Moore, Kara Raftery, John McQuaig, Jim Fletcher.

PUD Staff: John Stoll, Kelly Boyd, Bret Hammond, Charles von Reis, Mario Cantu, Lindsey Mohns, Cathy Melton.

The team's responsibilities included learning about the key questions, sharing perspectives, and reaching out to friends, neighbors and colleagues to include voices beyond the team. The team explored



perspectives, ideas and considerations for the near and long term and discussed a healthy range of perspectives for varied scenarios. The team met on March 28, April 11 and April 18. The deliverable of the team is this report.

Strategic Questions with team perspectives:

After seven years without electric rate increases, (and only 9% rate increase since 2000 while cumulative inflation has been around 40%) Chelan PUD plans to adopt a long-term rate plan. We have questions for our customer-owners. Should this plan:

Include annual electric rate increases at approximately the rate of inflation to avoid the risk of large rate increases in later years

Long-term Rate Planning cont.

Overall Topic Team Perspective:

Low rates are a community benefit and need to remain a top priority. However, this team recognizes that with rising costs and shrinking supplemental revenues, rate adjustments will be necessary and prudent. Preference is for small incremental increases over time, when needed.

Additional perspectives and considerations:

- Low energy costs play a significant role in keeping Chelan County affordable - we don't want to lose that
- There is concern that an automatic annual rate increase would diminish the focus on cost containment. Cost containment should be done before a rate increase.
- It would seem more appropriate to view and communicate this need based on the subsidy decreasing, not just because of cost increases
- Understand the need but the justification should be based on the value provided to the customer, not just because of inflation
- Based on rapid debt repayment accomplishments, look at ways to reinvest in the community
- There is support for annual increases, or possibly every two years, to reflect the increase in cost of producing the power supplied to our customers
- There is also support that there should only be an increase if and when it is needed

Display the hydro financial benefit separately in electric, water and wastewater bills to help customers understand the full cost of services

Overall Topic Team Perspective:

It is important to be able to educate customers so they are aware they receive low-cost power subsidized by wholesale electric power sales from the dams, but the electric bill may not be the best place to do that. PUD should strategically develop messaging around the community benefit of hydropower and the resulting low rates it supports in Chelan County and use a wide variety of channels to get the message out.

Additional perspectives and considerations:

- The communication should be fun, interactive, not overly complex and be distributed in a variety of ways
- Use social media to get the word out, but don't do it so often that it is overdone
- For understandability, providing a comparison of rates on a state-wide level may be helpful - perhaps an interactive communication that pops up the amount your bill would be if you paid the state average rate

- Use a variety of methods to be able to meet the variety of communication preferences of customers including the utility bill
- Perform periodic outreach by talking about the benefits of public power at regional events
- Consider a downtown power museum at the current headquarters site

Specify the balance between funding large water and wastewater system improvements from financial reserves and annual rate increases for water and wastewater

Overall Topic Team Perspective:

Water and Wastewater businesses should work their way toward being self-sustaining, including capital (direct and shared) costs over a 5-year period with some support for capital costs over that period.

Additional perspectives and considerations:

- Express caution for the PUD to consider the unintended impacts to land use and comprehensive planning to areas resulting from subsidized operations
- Concerned with inequities between PUD water and wastewater customers and other city's water and wastewater customers who don't get capital funding for water and wastewater services
- Concerned with inequities in use of wholesale power revenue – when used for electric customers only, it provides the best for the most for the longest
- Support seeking outside grant opportunities to fund projects where possible

Include annual rate increases for the water, wastewater, and fiber business units to meet individual system financial metrics

Overall Topic Team Perspective:

The Fiber business should work its way toward being self-sustaining (excluding the PPB fiber expansion) over a five-year period with some support for shared capital cost over that period. Fiber rate adjustments should include evaluation of market rates and conditions.

Additional perspectives and considerations:

- Any system support provided above should be alongside modest rate adjustments, at least equal to inflation, for water and wastewater customers. Other utility (non-CCPUD) rate actions should be monitored for comparison
- Water and wastewater increases of \$5 - 10 or less per month are generally thought to be reasonable
- Support the concept of updating System Development Charges (SDC) to bring charges in-line with current system cost and provide another revenue source



- Consider impact of rate increases on low-income customer-owners
- The fiber system should work towards being self-sustaining for ongoing operations as the funding provided for initial and expansion capital has already been a significant contribution
- Consider a Public Power Benefit project to upgrade existing infrastructure to the latest fiber technology and equipment to maintain top performance

Change rate design to be responsive to utility industry changes

Overall Topic Team Perspective:

Seems reasonable for ratemaking purposes but concerned with the possible unintended impacts to low-income customer-owners

Additional perspectives and considerations:

- Revisit low-income discount program and consider expanding the program to serve more low-income customers
- Recognize the cost of administration if the PUD were to expand low-income programs
- Consider options for high impact contributions that agencies could leverage to ultimately avoid a customer not being able to pay their PUD bill (example of weighing decision to pay utility bill versus car repair bill.) If program funds were available to pay the electricity bill, then funds would be freed up to pay the car repair bill). It is understood that to be within the PUD's authority, PUD program funds can only be used to pay utility bills.
- Rename/rebrand the low-income discount program so it doesn't negatively label customer-owners
- Increase conservation program efforts to lower bills and decrease need for discounts
- Use geographic data to identify impacts of rate structures to areas where low income is more prominent
- Increase outreach efforts to promote awareness of existing programs
- The current monthly assistance amount of about \$9.25 doesn't seem like enough to provide meaningful help
- Continue to promote additional support efforts like the Federal LIHEAP program that helps with winter bills
- As bills go up in the future, assistance should also go up
- Use data analytics to determine impact of rate design changes and increases to specific customer types
- Try and communicate assistance options on the bill to help connect those in need with available programs

- Consider establishing a Public Power Benefit program amount to assist with low-income funding
- In addition to the District's programs, consider adding other programs and options. A "round-up your bill" program is one example
- Consider tiered electric rates
- An increased base rate could help absorb some of the cost recovery shortfall from second/vacation homes
- Consider allowing a threshold of energy usage with the base charge
- Consider Time of Use rates when technology is in place
- Implement rates or rate structures that will mitigate the cost impacts of second homes
- Consider option of demand charge for power consumption for all types of customers
- Consider base charge adjustments that are reflective of the size of a residence
- Consider a basic rate that applies to everyone, then reductions for specific areas, particularly those of income needs

Conclusion:

We thank the community members who participated on this topic team for their time, perspective and healthy debate. Our strategic planning process helps provide future value to our customer-owners and ensures that we continue to meet the needs and interests of the community. We appreciate your contributions to help make this process successful.

Infrastructure Aesthetics Survey

Introduction:

In 2018, Chelan PUD formed a Community Advisory Group to discuss how the PUD engages stakeholders on PUD projects. The purpose was to identify areas where improved outreach might provide greater benefits. Nine customers representing areas throughout Chelan County participated.

Significant discussion involved the aesthetics (siting and neighborhood views) of PUD infrastructure. Specifically, the group promoted the concept of moving overhead lines underground, and honed in on who should pay. Questions included:

- Is it appropriate for rate increases to pay for undergrounding or other improvements in certain areas, and is there public appetite for these increases countywide?
- Is a hybrid approach to funding for undergrounding in designated areas possible? For example, those who directly benefit pay more, but some portion could be paid via rates.
- Are there other funding mechanisms that might be able to pay for these improvements?

The Community Advisory Group recommended that PUD staff identify long-term strategic concepts for undergrounding or improving the aesthetics and siting process for large infrastructure. Preliminary to that, however, PUD staff recommended taking the pulse of customer-owners through a professional survey, with results to be included in the 2020-2024 Strategic Plan.

The question posed for the 2020-2024 Strategic Plan was, “*Who pays for aesthetic improvements (e.g. undergrounding of power lines) when that can increase costs by 2-10 times compared to above-ground facilities – all customer-owners, or just those who benefit?*”

The survey

Cocker Fennessy, a Seattle research firm, developed, tested and conducted the survey. The survey took place March 8-21, 2019, with results presented to the Board of Commissioners on April 29, 2019. (Note: Questions about customer perspectives on economic development were included in the survey. Those are not included in this report.)

Survey characteristics:

- 600 respondents randomly selected from PUD customer database
- 76% responded online, 24% reached by phone
- Survey questions were provided in English and Spanish
- Data was weighted by age and gender to reflect county population

Key findings

Significant findings were:

- A minority of customers are concerned about aesthetics
 - » Those with second homes are among those more likely to be concerned.
- Most think that those who directly benefit from power line conversion should pay for it.
- If the PUD created an “aesthetic improvement fund,” on average, customers would be willing to spend from \$2 to \$4 a month on top of their current electric bill.
- When asked to recommend priorities for the PUD, affordability and reliability came out on top – not aesthetics.

Breakdown of results

Customers were asked to rate their concern about the look or visual impact of overhead lines and substations.

- Most (64%) are not concerned about this. In fact, 37% said not at all concerned.
- 33% are concerned, with only 12% saying they are very concerned.
- More likely to be concerned:
 - » Leavenworth customers
 - » Those whose primary residence is not in the county
 - » Those with higher income
 - » Chelan/Chelan Falls/Manson customers
 - » Homeowners
- Most aren't willing to pay for conversion of overhead lines
- Chelan Falls/Chelan/Manson customers were more likely to say no – only those who directly benefit should pay.
- Countywide, this is a widely held belief

A majority (57%) are not willing to pay higher rates to convert overhead lines to improve views. Of the 32% willing to pay something, 17% were willing to accept a rate increase to move lines underground countywide, and 15% were willing to pay for conversions that address impacts in their geographical area or to their direct view.

Researchers further explored people's willingness to pay for aesthetics by presenting them with a hypothetical aesthetic improvement fund. They were asked how much more, if anything, they would be willing to pay for aesthetic improvements.



The question was asked twice – first saying that the fund would underground lines that impact direct views. The second scenario said the fund would support conversion throughout the county.

The direct view results are presented on page 37, the countywide scenario is represented in orange. The average (median) amount customers are willing to pay ends up being about \$2 to \$4 – more if the fund supports projects in direct view.

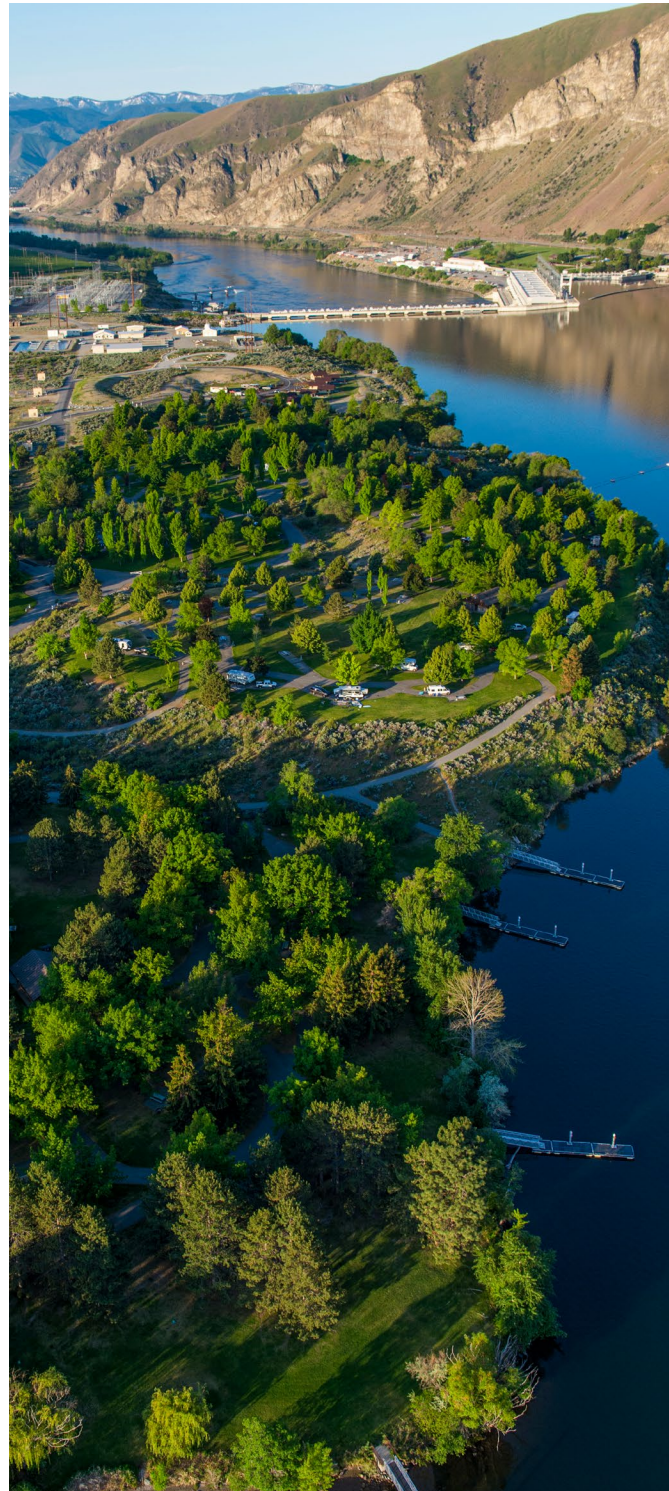
To wrap up the survey, respondents were asked to allocate a hypothetical \$10 across several PUD priority areas. The chart on page 37 shows the average amount allocated to each priority area.

- Affordability comes out on top, followed by reliability, then parks and recreation.
- Little of the hypothetical \$10 was allocated to aesthetics or visual appeal.

Conclusion:

Our existing policy is that customers who benefit from purely aesthetic improvements (like undergrounding a power line) pay for those improvements – the cost is not passed along to all ratepayers. The 2018 Community Advisory Group felt that these types of improvements can benefit society as a whole, and was interested in having the PUD explore alternatives to its current policy, and other options for paying for aesthetic improvements. But the majority of customer-owners surveyed supported the existing PUD policy of having those who benefit from aesthetic improvements pay for those improvements. They value low rates and reliability over aesthetic improvements.

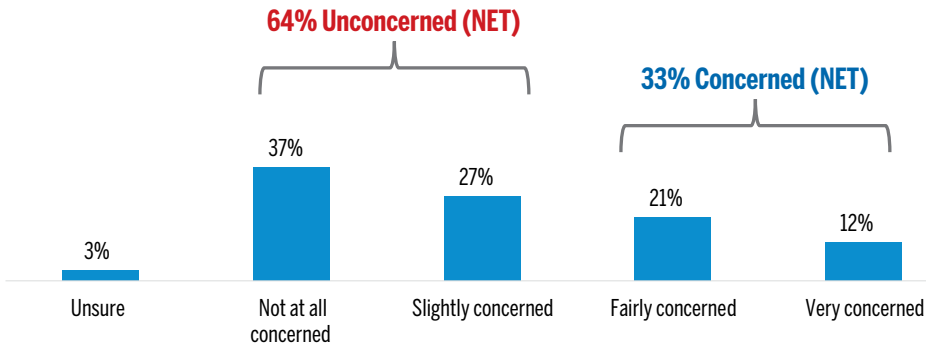
The survey's conclusion is that there is little support for a change in policy at this time.



Infrastructure Aesthetics Survey cont.

Few customers (33%) are concerned about aesthetic issues.

Q11 - How concerned are you, personally, about how overhead power lines and service substations look or impact views in the area?

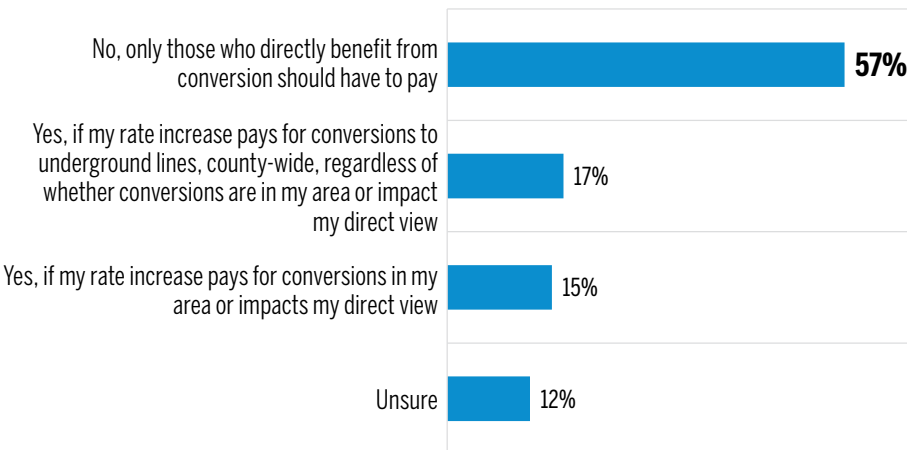


Those who are significantly more likely to be **fairly/very concerned**:

- Leavenworth (46%)
- Chelan County is not primary residence (44%)
- \$100k+ income (41%)
- Chelan Falls/ Chelan/ Manson (38%)
- Homeowner (36%)

A majority (57%) aren't willing to pay higher rates for the conversion of overhead powerlines to improve views.

Q12 - Would you be willing to pay higher rates for your electricity service if it allowed Chelan PUD to convert overhead power lines to underground for the purpose of improving area views?



Those who are significantly more likely to say no:

- Chelan/Chelan Falls/ Manson (66%)
- Those not concerned about aesthetics (70%)

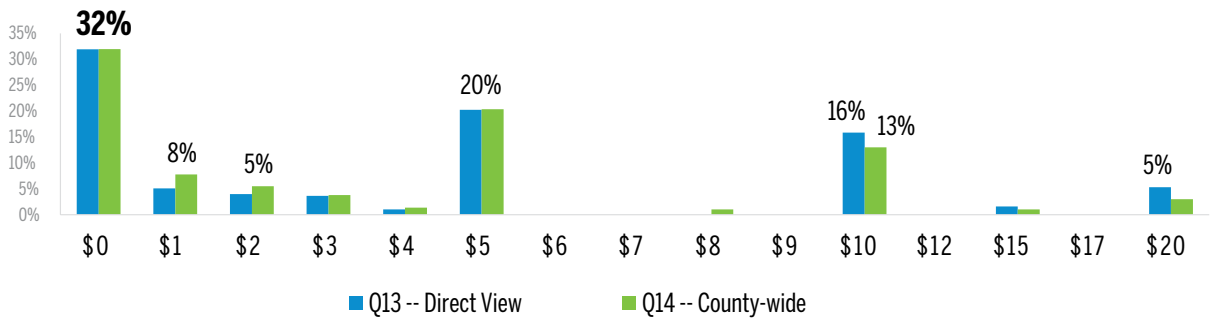


32% aren't willing to pay for an aesthetic improvement fund—whether there's a direct benefit or countywide.

Q13 - What if the Chelan PUD created an "aesthetic improvement fund" that funded the conversion of overhead power lines to underground on community supported and qualified projects that impacted your direct view?

Q14 - What if the "aesthetic improvement fund" funded the conversion of overhead power lines to underground on community supported and qualified projects throughout the county?

How much, if anything, would you be willing to pay into such a fund, if this monthly charge was in addition to your monthly power bill?



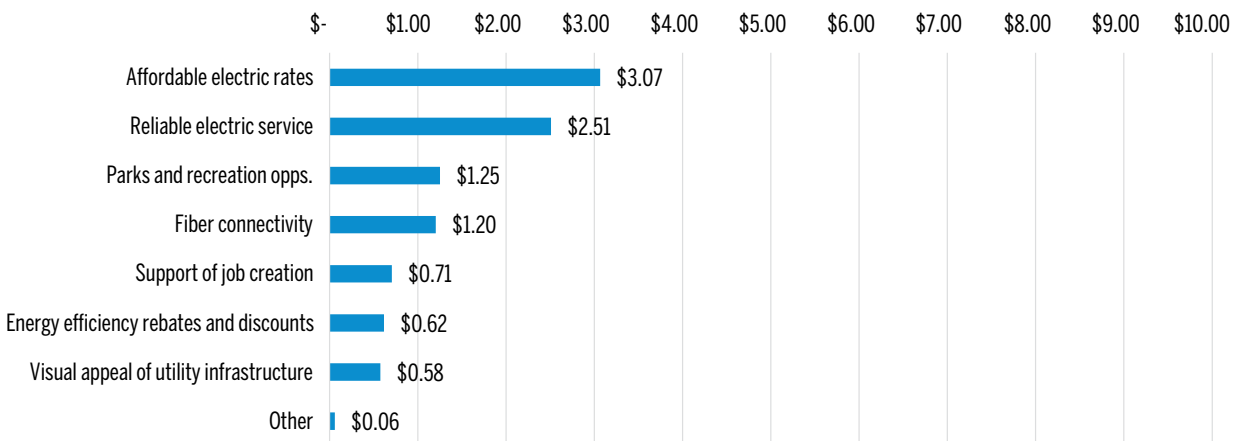
Responses <5% not shown

Average (median): **\$4.00** **\$2.00**

Customers want the PUD to prioritize affordability and reliability. Addressing visual appeal is not a top priority.

Q19 - To summarize your opinions, we'd like you to allocate a total of \$10 across several potential Chelan PUD priority areas:

Average allocated



APPENDIX C

Public Outreach Summary

Strategic Plan Outreach

In November 2018, Chelan PUD began outreach to the community through presentations to city and community councils, service clubs and chambers of commerce. The PUD held its formal strategic plan kick-off event in February 2019, attended by about 100 key community stakeholders, members of the PUD Board of Commissioners and staff.

Throughout the winter and spring 2019, the PUD engaged the community in a variety of ways:

- Five Topic Teams held a series of meetings over a three-month period to review key issues.
- The PUD fielded an aesthetics and economic development survey to 600 community members.
- In May, the PUD mailed a strategic plan survey to about 35,000 customers and employees.
- The utility promoted the survey through several means, including print, radio, TV, digital and movie theater ads.
- A series of press releases and radio interviews provided updates about the strategic plan.
- The PUD created a special website, with informational videos, located at ourpublicpower.org.



November 2018 through June 2019
Presented at

7 CITY/COMMUNITY MEETINGS

11 SERVICE CLUB MEETINGS



600

SURVEYS IN MARCH 2019

Aesthetics & Economic Development Survey
(fielded by Cocker Fennessy)

36,   

**Facebook
impressions
and other social media**

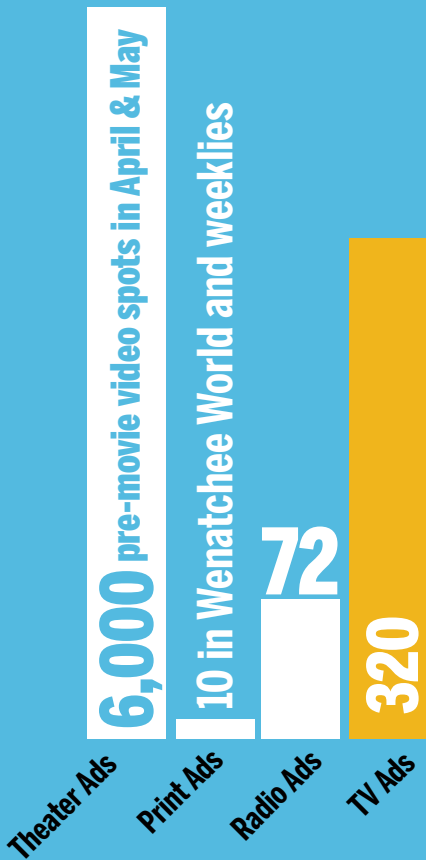
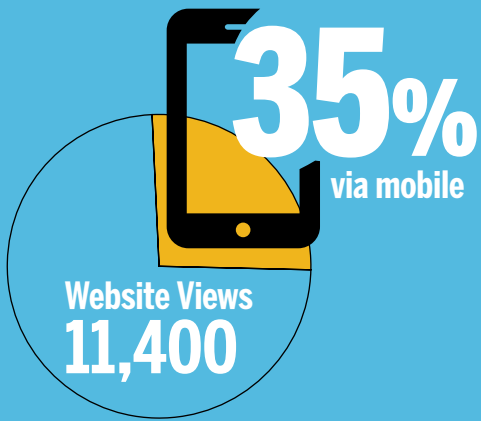
Kickoff event in February 2019

70

**Community
stakeholders**

30

**District staff and
commissioners**



Customer & Employee Emails sent

54,000

with open rate of

32%

STRATEGIC PLAN SURVEY

WE WANT TO HEAR FROM YOU!

Complete our survey to help shape our 2020-2024 strategic plan

WIN A FITBIT

STRATEGIC PLAN SURVEY

Progress bar and survey questions.

35,000
surveys mailed to
customers and employees



Survey Customer
Comments



CHELAN COUNTY