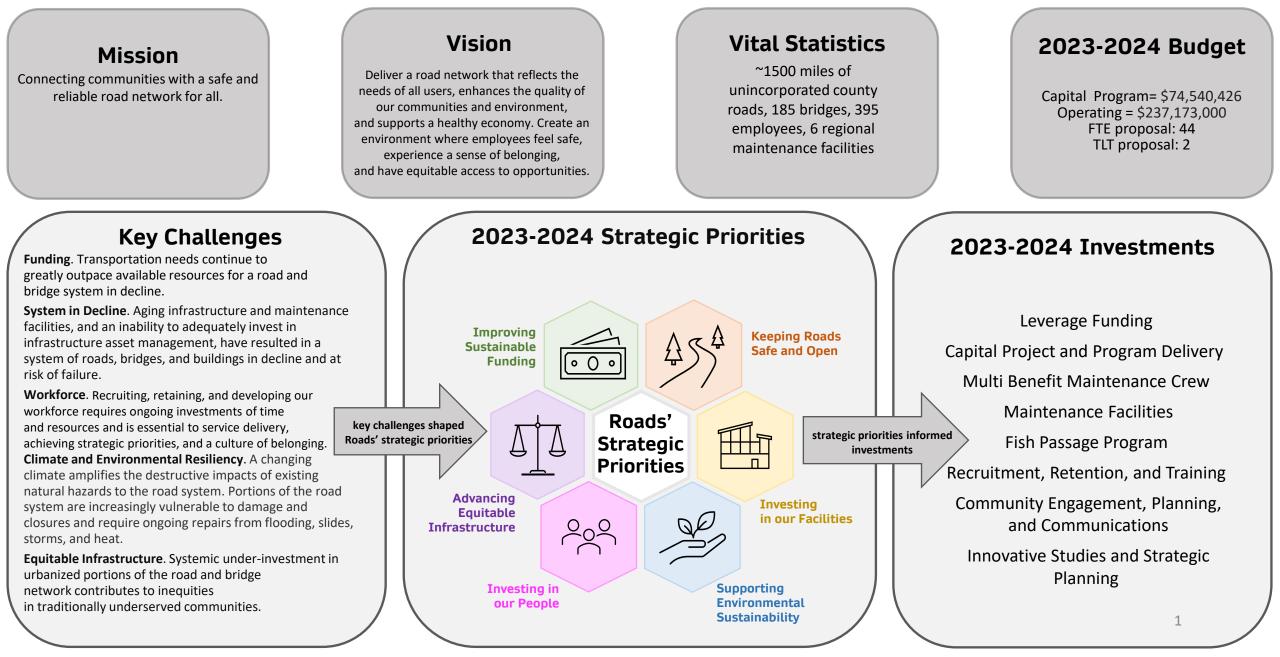
2023-2024 Road Services Division Business Plan



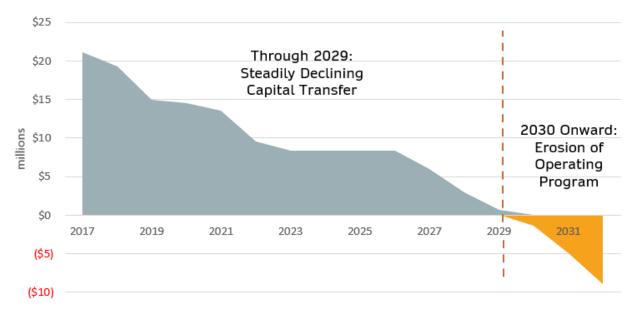
Key Challenges

Key Challenges Addressed by 2023-2024 Investments

Funding

Challenge *Transportation needs continue to greatly outpace available resources for a road and bridge system in decline.*

Operating Program Reduction



Roads Revenue Projection (6/30/22)

- King County continues to experience a structural roads funding crisis. The lack of revenue is significantly impacting the county's ability to maintain and improve roads. The Roads Fund relies on a small tax base relative to the size and age of our unincorporated road network system.
- The structural funding crisis has reached a critical juncture. Dedicated funding for capital projects will be exhausted in 2029 (Figure 1). At that time, Roads will be forced to cut into its operating program, which may include cuts to emergency and storm response, limited repairs to roadway and drainage assets, and reduced bridge maintenance.
- Without additional funding, it is increasingly difficult to monitor, maintain and operate the system of bridges and roads in unincorporated King County.
- Population growth and a thriving economy result in higher traffic volumes and congestion, yet aging road infrastructure is crumbling and cannot met demand. Washington's regressive tax system limits Roads' ability to leverage revenue sources to resolve its funding crisis.

Figure 1 Roads revenue projection

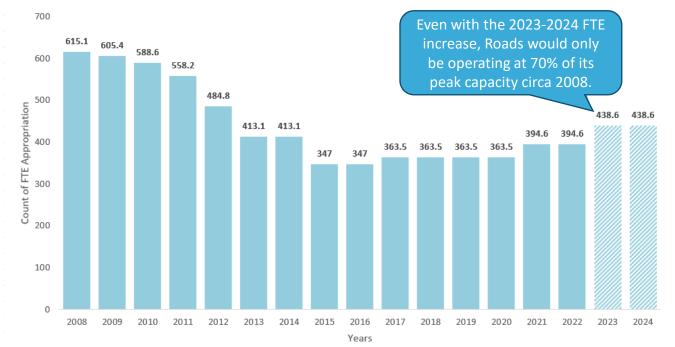
Existing Capital Transfer

Key Challenges Addressed by 2023-2024 Investments

Funding (continued)

Challenge *Transportation needs continue to greatly outpace available resources for a road and bridge system in decline.*

- Roads has spent 15+ years cutting costs, finding efficiencies, identifying new ways to do business, and engaging partners and elected officials in discussions about solving its structural funding crisis. Efficiencies and cost cutting measures modestly mitigate Roads funding gap, they are not solutions to the root causes of the structural funding crisis.
- King County Council has discussed an unincorporated area levy-lid lift ballot measure over the past few years, this funding strategy has not moved forward.
- New federal infrastructure funding provides additional grant opportunities for Roads. Roads operates a successful grants program, but it is at capacity. To increase the number of grants and leverage other funding sources, Roads needs additional staff to prepare competitive grant applications and to successfully deliver on projects.
- Grants alone, even sizable ones, will not be sufficient to address the current and growing volume of unmet road and bridge needs. In addition, grants typically fund capital projects, and external funding is rarely available for maintenance and operations. Local and regional solutions to the Roads funding crisis are still needed.



Council FTE Appropriation 2008-2024

Figure 2 Council FTE Appropriation 2008-2024

System in Decline

Challenge Aging infrastructure and maintenance facilities, and an inability to adequately invest in infrastructure asset management, have resulted in a system of roads, bridges, and buildings in decline and at risk of failure.



Based on PSRC Pavement Preservation Cost Estimating Methodology.

Source: Puget Sound Regional Council Transportation 2040 Update Appendix 5: State of Good Repair, May 29, 2014

Figure 3. Cost of deferred pavement maintenance over time. This chart is illustrative of the consequences of deferred maintenance of other road assets.

- County road, bridge, and maintenance facility infrastructure is reaching or is ٠ well-past the end of its designed life, resulting in deteriorating asset conditions.
- Over time, increased traffic volumes and multi modal uses of the road system accelerate the decline and deterioration of the system.
- Without the resources to perform timely preventative maintenance, Roads is ٠ forced into a more reactive maintenance mode.
- Deferring maintenance leads to an exponential increase in the cost to repair ٠ and sustain roads in the future (Figure 3).
- Water that is not sufficiently managed can damage or destroy roads. Some roads and bridges were originally constructed in locations vulnerable to the destructive impacts of flooding, slides, and other natural hazards and they experience more frequent closures and emergency repairs. These portions of the road system are more costly to maintain and replace.
- A system in decline results in a growing backlog of unmet needs, some of which include: outdated maintenance facilities; weight restricted bridges; failing or undersized road drainage systems; roads in need of reconstruction; existing pedestrian infrastructure with barriers to accessibility; and gaps in pedestrian infrastructure. A complete list of Roads asset categories, including capital and maintenance/operating activities is located at the end of this presentation (Figure 4).

Climate and Environmental Resiliency

Challenge A changing climate amplifies the destructive impacts of existing natural hazards to the road system. Portions of the road system are increasingly vulnerable to damage and closures and require ongoing repairs from flooding, slides, storms, and heat.

- King County is now experiencing more frequent, year-round extreme weather events.
 - Significant storms in fall, winter, and spring require increased emergency response to floods, slides and tidal surges.
 - Severe summer heat leads to pavement cracking, wildfire related road closures, and operational limitations, including restricted use of some mechanical equipment during fire season due to increased fire risks.
- Portions of the unincorporated road network are particularly vulnerable to flooding, slides and/or sea level rise, such as the Snoqualmie Valley and the connecting roads between Vashon and Maury Islands.
- Roads' current climate preparedness and mitigation strategies primarily focus on public safety. These
 strategies include communicating road closures/restrictions to the public to mitigate the impacts of
 intermittent road closures due to floods, slides, or sea water from extreme high tides and storm surges.
- Road's drainage program serves three key purposes: managing safety and damage risks to roads; treating surface water runoff; and removing barriers to fish passage. Many culverts within the county's road rightof-way are undersized and failing, these culverts block fish passage and require repairs or replacement.
- Roads continues to incorporate best available science related to salmon recovery, climate change, and sea level rise into capital planning and delivery processes, in alignment with the King County Clean Water Healthy Habitat Initiative and the King County's Strategic Climate Action Plan.

Photo caption. Southwest Quartermaster Harbor Drive, Vashon Maury Island. January 2022 storm and tidal surge over road.







Key Challenges Addressed by 2023-2024 Investments

Workforce

Challenge *Recruiting, retaining, and developing our workforce requires ongoing investments of time and resources and is essential to service delivery, achieving strategic priorities, and a culture of belonging.*



Photo caption. Road Rangers crew members delivering pothole repair services.

- Difficulty recruiting and retaining skilled staff in a highly competitive hiring market coupled with increasing retirements has resulted in higher vacancy rates.
- Pro-equity recruitment practices are critical to Roads evolving into a healthier, more innovative, more diverse, anti-racism organization. These pro-equity recruitment practices require more time and resources than traditional HR practices.
- Roads lacks the succession planning and career pathway development opportunities to successfully mitigate turnover and retirements.
- A series of FTE reductions over the past fifteen years has left Roads with a workforce insufficiently sized to deliver a level of service that is commensurate with the size and complexity of the unincorporated road network.
- In recent years, Roads has increasingly relied on temporary staff to fulfill critical functions and deliver on service commitments. The instability of temporary positions along with a competitive hiring market make it increasingly difficult to keep qualified employees in TLT positions.
- Roads continues its pro-equity and anti-racism journey which requires investment in training, communications, leadership skills development, and other activities to support a culture of belonging.
- Roads has an ongoing and growing need to reinforce and expand our safety culture.
- Historically, it has been difficult for Roads staff to access opportunities for training and development. Training competes with priority service delivery and work programs. A large number of field employees further increases the complexity of training delivery.

Key Challenges Addressed by 2023-2024 Investments

Equitable Infrastructure

Challenge *Systemic under-investment in urbanized portions of the road and bridge network contributes to inequities. There is a need for restorative infrastructure investment in traditionally underserved communities.*

Community Needs Lists

2000+ community requests and the resulting Community Needs Lists informed the 23-24 budget. Key road related themes from the community:

- improved traffic safety
- speed reduction
- pedestrian improvements
- lighting enhancements
- pavement improvements

- Mobility connects people with opportunities. Whether it is to school, work or play, the ability to safely and efficiently navigate King County is critical for creating an environment for people to thrive.
- Urban segments of the unincorporated road network have some of the oldest infrastructure in the county. This infrastructure was not built to meet current urban standards nor was it built to support multi-modal transportation.
- Investments in these communities were deferred due to anticipated annexations that have not occurred.
- Traditional approaches to community engagement are not always effective due to language, cultural, and economic factors, which may create barriers to participating in the public process.
- Traditional speed and traffic enforcement strategies can disproportionately impact communities of color.
- Historic methods for evaluating and prioritizing infrastructure investments have not centered equity.
- The King County *Roads Americans with Disabilities Act Transition Plan (2021)* establishes priorities to improve the accessibility of existing pedestrian infrastructure within the county's road right-of-way, many of which are located within urban portions of the road system.
- Subarea plans, Community Needs Lists, and participatory budgeting initiatives highlight the needs and opportunities for an enhanced, anti-racism, pro-equity approach to managing and investing in urbanized portions of the road system.

Roads' Strategic Priorities



Advancing Equitable Infrastructure

Engage with communities and make resource allocation decisions that lead to better investment in traditionally underserved communities



Continue our agency's antiracism, pro-equity journey, including investments in our people and their growth and professional development



Supporting Environmental Sustainability

Advance principles of climate and environmental sustainability (such as those in the SCAP and CWHH initiative), through capital and operational activities

2023-2024 Investments

2023-2024 Investments

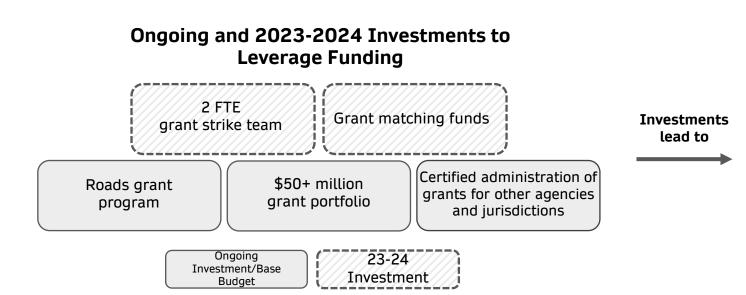
The remainder of this document summarizes eight categories of key investments and how they leverage existing/ongoing work:

- Leverage Funding
- Capital Project and Program Delivery
- Multi Benefit Maintenance Crew
- Maintenance Facilities
- Fish Passage Program
- Recruitment, Retention, and Training
- Community Engagement, Planning, and Communications
- Innovative Studies and Strategic Planning

2023-2024 Investments Leverage Funding

It is anticipated that Washington State will receive an additional \$5 billion for highways and bridges over the next five years from the federal funding package. Additionally, there are other local, state, and federal funding opportunities that Roads currently lacks the resources to successfully leverage. Roads is expecting more grant calls in the next few years, and competition will be high. This investment scales up the revenue generating potential of the highly successful Roads Grant Program, which is currently operating beyond capacity to secure and deliver grant funded projects. The current Roads Grant Program portfolio exceeds \$50 million.

Roads virtuous funding cycle is intended to achieve the following: (1) building capacity to identify, secure, and deploy funding, (2) delivering high quality projects as pledged, (3) ongoing engagement/communication with our customers and community members to demonstrate responsible use of new funds and value to all Roads users.





The strategic priorities in this business plan were introduced in March 2023.

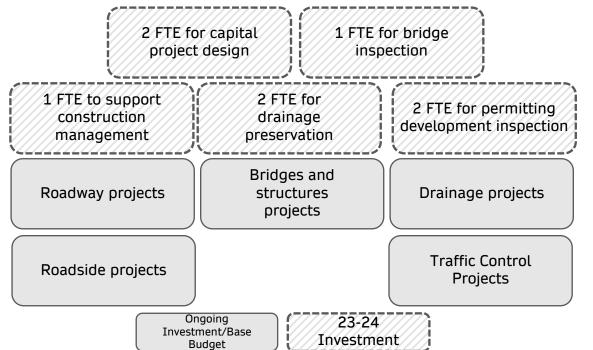
- Increase the amount of grant funds for Roads capital projects.
- Deliver grant funded projects, as pledged, to granting agencies.
- Continue to build trust and credibility with granting agencies and communities, that Roads will deliver high value capital projects.

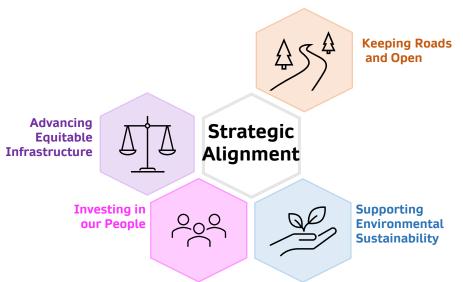
2023-2024 Investments

Capital Project and Program Delivery

This investment adds 8 FTEs to achieve the following: improve capacity to deliver Roads capital projects and programs; ensure compliance with state and federal bridge inspections; deliver timely drainage preservation projects; manage time-limited construction phases that have narrow, regulatory-defined construction windows; and ensure high quality construction of road infrastructure. Six of the FTE requests are conversions of existing TLTs, as their work has evolved to be ongoing, and two are new hires. The investment will promote timely and efficient delivery of the Roads capital program which in turn leads to keeping the road and bridge network open and safe, equitable infrastructure outcomes, environmental sustainability outcomes, and balanced work programs for our workforce which will lead to improved workforce retention and well-being.

Ongoing and 2023-2024 Investments for **Capital Project and Program Delivery**





The strategic priorities in this business plan were introduced in March 2023.

Investment Outcomes

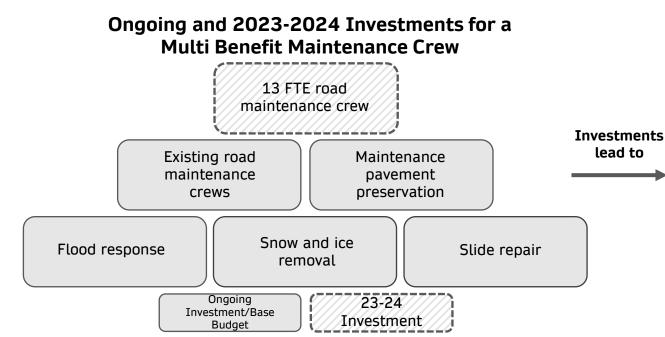
- Successful delivery of high value capital projects and programs within budget and on schedule.
- Investments More timely bridge inspections, conducted in compliance with state and federal requirements and ensuring grant eligibility.
 - Improved response to emergency repairs.

lead to

Improved timeliness of road-related development permit review and inspections.

2023-2024 Investments Multi Benefit Maintenance Crew

A changing climate and corresponding increase in storm events have increased the need for a dedicated Roads crew that works the night shift crew between October and April. Currently, Roads night shift crews are formed by pulling members from existing Roads day shift crews across four of the six Roads maintenance planning areas. Following union contracts, often the night shift crew members are the least senior staff. If staff do not volunteer for this assignment, the lowest seniority staff are re-assigned to night shift, which presents an equity dilemma. This biennial investment will create a dedicated 13-person crew that will work the night shift from Oct-April and serve as a day shift crew from May-Sept. Outcomes from this investment will include improved agency responsiveness, 24/7, to emergent road conditions such as slides, floods, snow and ice removal. Additional benefits from this investment include year-round day shift crews that remain intact in Divisions 1, 2, 3 and 4 and eliminates the need for reassignment. This leads to a more consistent level of operational service delivery across the road network. During spring/summer months, the newly formed multi benefit maintenance crew will complete priority maintenance work for the pavement preservation program, which will lead to an increase of 20 miles/year of improved pavement conditions.





The strategic priorities in this business plan were introduced in March 2023.

- Improved 24/7 responsiveness to emergent needs including:
 - Slide repair
 - Flood response
 - Snow and ice removal
- More consistent level of operational service delivery across the road network.
- 20 miles improved road pavement condition per year.
- 15
- More consistent day shift responsiveness.

2023-2024 Investments Maintenance Facilities

Road maintenance facilities are critical to support the division's mission. The agency's ability to respond to incidents and emergencies 24 hours a day, seven days a week is a critically important part of operating a road network. Maintenance facilities located in the right locations that are in good condition are necessary to support the efficient provision of the many vital services that Roads provides to the traveling public. Most Roads maintenance facilities are between 40 and 60 years old, with a few dating back to the early 1900s. Some facilities have inadequate conditions compromise their ability to support service provision, often during public emergencies. Investment in the highest priority maintenance facilities is necessary for continued delivery of essential safety and routine maintenance services. Two Roads Regional Maintenance Facilities, located in Fall City and Vashon Island, are not sufficient and will be subject to near-term technical work, to advance necessary capital investments.

These investments will be funded through a combination of past and future Roads property sales proceeds. All maintenance facilities strategic planning, design and construction will advance the goals of the King County Strategic Climate Action Plan.



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Facilities strategic	1 TLT to
plan	facilities
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. TLT to support reactive planning

Prelim. work to advance replacement of Vashon and Fall City facilities

Investments

lead to

Ongoing management and maintenance of 18 Roads-owned maintenance facilities/properties, such as regional maintenance shops, material storage sites, snow and ice facilities





The strategic priorities in this business plan were introduced in March 2023.

- Plan for optimal use of existing and future maintenance facilities.
- Safe, efficient and healthy facilities located in the right locations to deliver services.
- Facilities with energy efficient systems and other features that advance King County's Strategic Climate Action Plan.

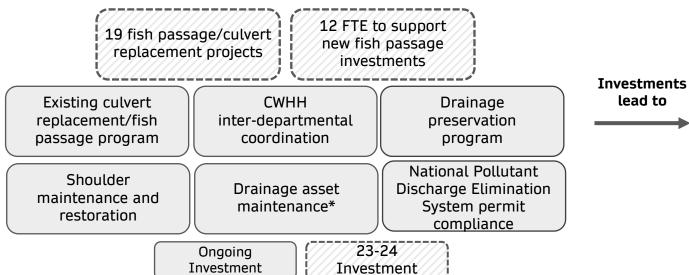
2023-2024 Investments

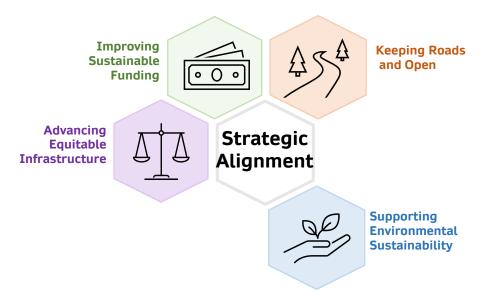
Fish Passage Program

This investment reflects a significant expansion of the Roads Culvert Replacement/Fish Passage Program and was collaboratively conceived with the King County DNRP Fish Passage Program. Roads proposes to add 12 FTE to support delivery of 19 high priority culvert replacement/fish passage projects located within the unincorporated King County road right-of-way.

Roads advances environmental sustainability and improved environmental resiliency outcomes through its drainage program investments and its culvert replacement/fish passage projects are a cornerstone of King County's Clean Water Healthy Habitat Initiative. The 2023-2024 investment builds upon Roads' existing Culvert Replacement/Fish Passage Program which replaces failing culverts and other drainage infrastructure located within the county's road right-of-way. Culverts that are in poor condition or are undersized pose a risk of failure, which often results in collapse of the roadway, slides, flooding, damage to public and private property, and associated risks to life safety. Many of these culverts were not originally designed to be fish passable and currently block access to important upstream salmonid habitat. Roads' Culvert Replacement/Fish Passage Program is foundational for the county's broader fish passage program.

Ongoing and 2023-2024 Investments for the Fish Passage Program





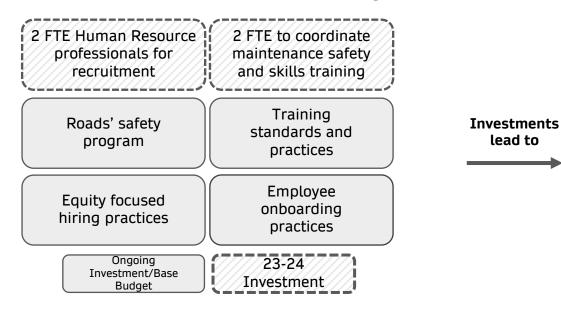
The strategic priorities in this business plan were introduced in March 2023.

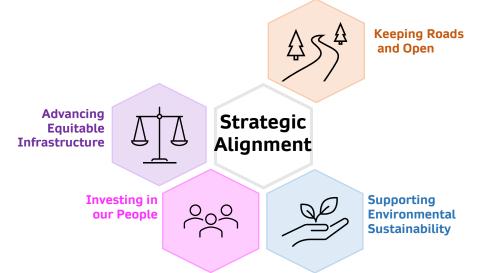
- Increased quantity of accessible habitat available to salmonid species and other species.
- Improved water quality.
- Improved surface water drainage.
- Restored salmon access.
- Lower likelihood of roadway flooding and failure.

2023-2024 Investments **Recruitment, Retention, and Training**

The addition of 4 FTEs will contribute to Roads Human Resources and Maintenance safety and skills training programs, ultimately leading to a more diverse, trained, and equity informed workforce. This investment will improve the efficient delivery of Roads' equitable recruiting processes which will increase workforce diversity and reduce vacancies and turnover. A diverse workforce is a healthy workforce. Additionally, this investment will provide the resources needed to expand training for employees, with a focus on new employee onboarding and safety training, an especially necessary and complex component of the Roads Maintenance Section work program. Improved training and onboarding will lead to an improved culture of safety, well-being, enhanced career pathways through training investments in programs such as the Commercial Driver's License (CDL) program, and lower rates of employee turnover.

Ongoing and 2023-2024 Investments for **Recruitment, Retention, and Training**





The strategic priorities in this business plan were introduced in March 2023.

Investment Outcomes

- Expanded career pathways.
- Improved onboarding, training and retention.
- Lower rate of employee turnover.
- Reduced vacancy rate. .

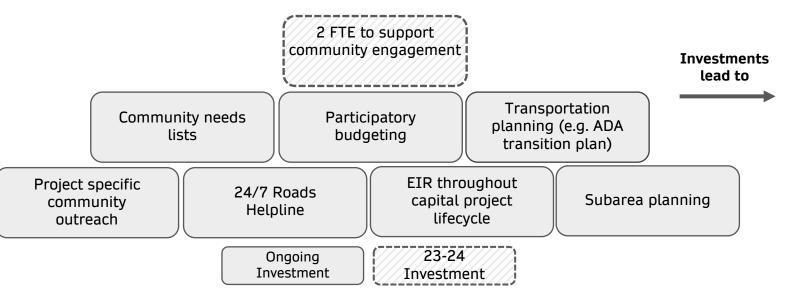
lead to

- Increased culture of safety.
- New Commercial Drivers License (CDL) training program and increased number of licenses.

2023-2024 Investments Community Engagement, Planning, and Communications

This investment will deepen Roads' ability to listen, engage, learn, plan, respond and innovate with diverse community members to understand the needs of all users of the unincorporated King County road network, which in turn will lead to improved equity in agency decision-making and service delivery. This proposal adds 2 FTE to support increased engagement of diverse communities in the planning, design and delivery of capital and maintenance programs. FTE requests are conversiond of existing TLTs within the Roads Communications Program, as their work has evolved to be ongoing. Additionally, this investment will improve responsiveness to customer requests, improve success rates at effectively leveraging funding for traditionally underserved communities and historically under-invested portions of the road network.

Ongoing and 2023-2024 for Community Engagement and Planning Investments





The strategic priorities in this business plan were introduced in March 2023.

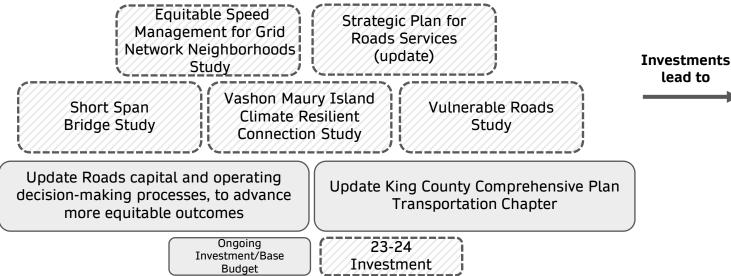
- Roads' capital and maintenance programs emphasize community needs.
- Deeper understanding of all users of the road network.
- Increase funding for traditionally underserved communities.
- Timely and transparent completion of community engagement and planning tasks.

Innovative Studies and Strategic Planning

This biennial investment reflects a prioritization of existing resources/time, not an increase in budget. Roads leverages grants and other resources to continually improve its policies, operations, and capital delivery practices. This investment aims to further align Roads with emerging theory and best practices in the fields of equity, financial sustainability, climate preparedness and infrastructure resiliency. In addition to updating the agency's strategic plan, the following studies are anticipated in the upcoming biennium:

- <u>Equitable Speed Management for Grid Network Neighborhoods Study</u> Evaluate speed management and traffic calming strategies in grid system neighborhoods that lead to pro-equity and anti-racism outcomes. Study areas North Highline and Enumclaw. Study results to inform Transportation Safety Strategic Plan.
- <u>Short span bridge study</u> The Short Span Bridge Study initiates a long-term plan to replace 27 short span bridges that have timber substructure, the study will develop scoping studies for two bridges and will also inform longer-term, sustainable fish passage/culvert replacement program strategies.
- <u>Vashon Maury Island Climate Resilient Connection Study</u> Feasibility Study to determine a climate resilient and cost-effective connection between Vashon and Maury Island. Roads submitted FEMA grant application to support this study.
- <u>Vulnerable Roads Study</u> Update to the 2006 King County Vulnerable Roads Study, which identifies road segments that are vulnerable to flooding, slides, sea level rise/coastal tide surges as well as other natural hazards. FEMA grant application submitted.

Ongoing and 2023-2024 Investments for Innovative Studies and Strategic Planning





The strategic priorities in this business plan were introduced in March 2023.

- Updated strategic priorities that center equity and workforce
- Pro-equity/anti-racism strategies for traffic calming
- Plan to replace bridge infrastructure supporting long term fish passage outcomes
- Plan to achieve a climate resilient road connection between Vashon and Maury₂₀ Islands

Figure 4. Roads Asset Portfolio: Capital and Maintenance/Operations Activities

