




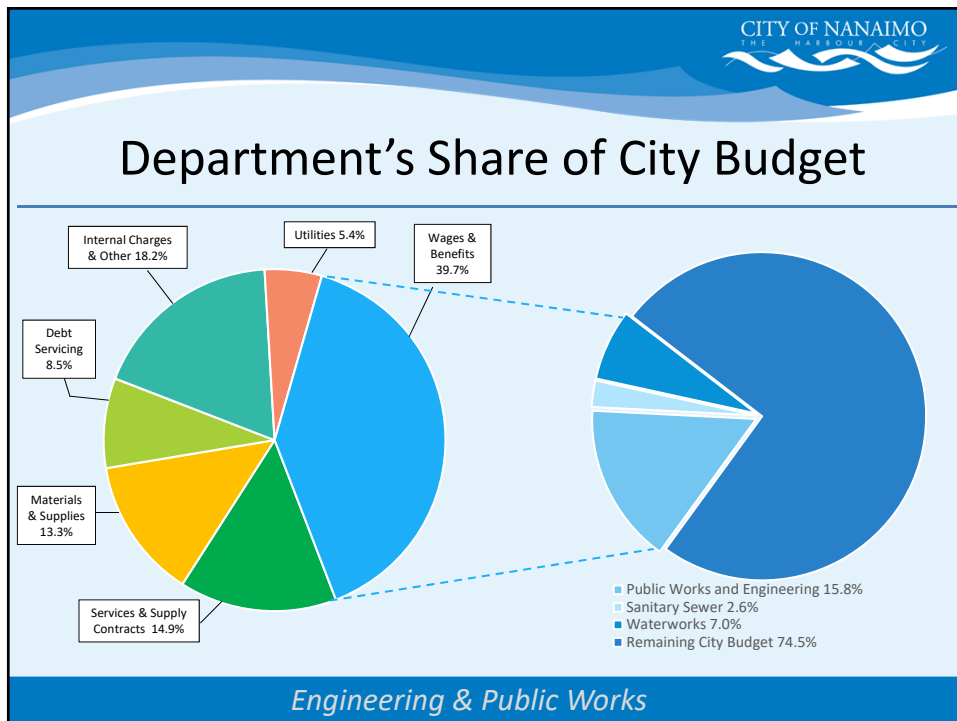
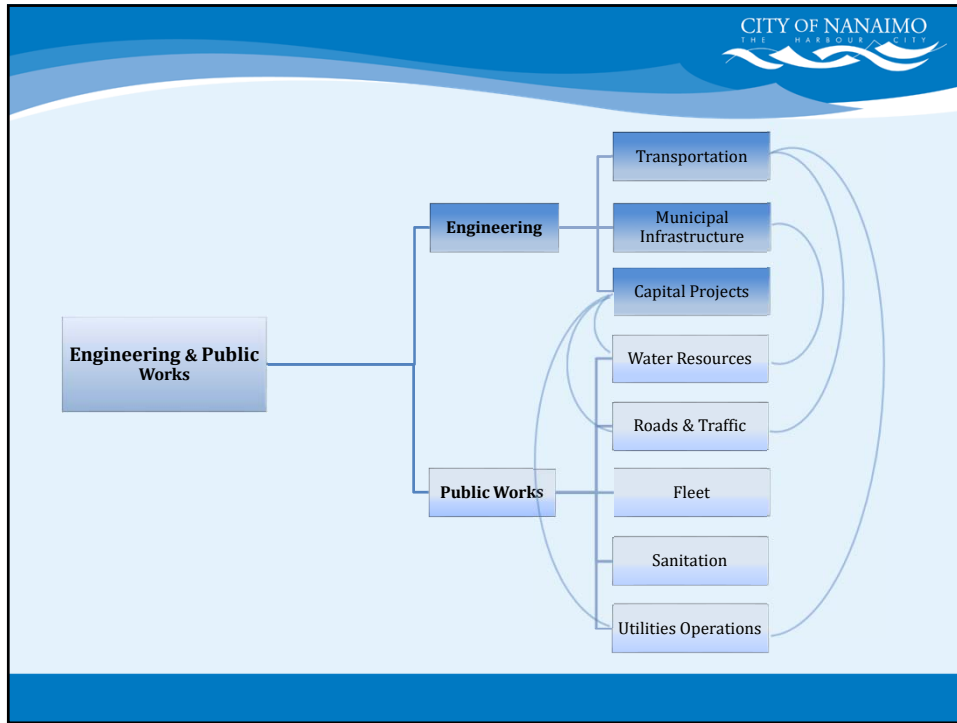
CITY OF NANAIMO
THE HARBOUR CITY

Overview

- Engineering & Public Works
- Integrated between Engineering and Public Works:
 - Administration
 - Transportation
 - Water Supply/Distribution
 - Sanitary Sewer
 - Drainage
- Provided by Public Works
 - Solid Waste Management
 - Fleet
 - Cemeteries
- Provided by Engineering
 - Infrastructure Planning
 - Capital Projects



Engineering & Public Works



Administration

Key Challenges

- Call volumes
- Level of service
- Security concerns at Public Works Yard



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Transportation

Notable Achievements

- Road clearing for prolonged snowfall
- Road Standards/Complete Streets
- Downtown Mobility Study engagement
- Major projects:
 - Jingle Pot and Westwood Roads, Bruce Avenue, Georgia Greenway, Hammond Bay Road widening, access to the Port lands and the Bastion Street Bridge
 - Asphalt rehab, new sidewalks, cycle lanes and mulituse pathways.
- Phase 2 LED Street Light Conversion



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Transportation

Key Challenges

- Increasing demand for higher service levels
- Increasing transit ridership
- Road rehabilitation asset management
- Signal operations and maintenance
- Traffic medians and boulevard maintenance
- Keeping roads and sidewalks clean
- Rail crossings and cost
- Growth in infrastructure and workload



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2020 Key Initiatives

- Active and Sustainable Transportation Masterplan
- Centralized traffic signal management system
- South Nanaimo Mobility Study (Cranberry Connector)
- Rapid Bus Corridor and Frequent Transit Network systems
- Review and update inventory of traffic medians, islands and roundabouts

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Water Supply and Distribution

Notable Achievements

- Declining per capita consumption
- Emergency Water Pump Station
- Emergency Plans and Wildfire Protection updated
- Water Rates Bylaw updated
- Upgraded/Replaced/Installed Jump Creek Spillway, South Fork Dam Log Booms
- Towers Pump Station upgrades

City of Nanaimo Average Daily Water Production

Average Daily Water Produced (Million Litres / Day)

Year

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Water Supply and Distribution

Key Challenges

- Water Supply Strategic Plan
- Growth in Infrastructure and Workload
- Aging watermains and service pipes
- Revenue

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2020 Key Initiatives

- Update Water Supply Strategic Plan
- Update Nanaimo River Flood Inundation Plan
- Update to South Fork Seismic review & conceptual design
- Rebuild of City Wide Water Model

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Sanitary Sewer

Notable Achievements

- Cleaning and inspection of up to 125km of sewer pipe.
- Protection Island Odor and Gas Control project

Key Challenges

- Capacity, growth, and condition
- Climate Change



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2020 Key Initiatives

- Sanitary Sewer Catchment Master Plan
- New flow monitoring stations for Cilaire and Northfield catchments
- Update video equipment and software

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Rainwater (Drainage)

Notable Achievements

- Video inspection and condition assessment of 13.5 km of drainage pipe
- 10,257 catchbasins cleaned

Key Challenges

- Infrastructure condition, lifespan, funding
- Climate Change
- Educating residents on their role


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2020 Key Initiatives

- Hazard assessment, adjustments to storm system design
- Funding model
- Continue to work closely with RDN on source control issues and monitoring
- Upgrade CCTV mobile equipment

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Fleet

<p>Notable Achievements</p> <ul style="list-style-type: none"> • New CNG garbage truck and spares • Green Fleet Strategy • Joined E3 Fleet (Energy, Environment, Excellence) Program. • commercial vehicle inspections • 15 vehicle and mobile equipment ordered 	<p>Key Challenges</p> <ul style="list-style-type: none"> • Technological advancements • GHG reductions • Fleet Services facility • Climate change • Sourcing alternative fuel vehicles/equipment solutions • Vehicle accidents and incidents • Insurance premiums increase
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2020 Key Initiatives

- E3 (Energy, Environment, Excellence) Green Fleet review
- Corporate Green Fleet strategy
- Explore alternative fuels to reduce costs and GHGs
- Share specifications and procurement solutions with other municipalities

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Solid Waste Management

Notable Achievements

- Over 90% reduction in worker injuries
- Approx. 50% reduction in work orders
- Diversion rate 65% (up 1%)
- Overall landfill down 3%

Key Challenges

- Acquiring new equipment
- Population growth
- Landfill tipping fees
- Illegally dumped waste



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2020 Key Initiatives

- Improve inventory management
- Improve routing efficiencies
- Waste diversion initiatives
- Reduce recycling contamination
- Accelerate Zero Waste initiatives

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Infrastructure Group

Notable Achievements

- Watermain condition pilot program
- Annual monitoring program
 - Sewer flow
 - Storm drainage flow
 - Rainfall



Key Challenges

- Workload

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Capital Projects

Notable Achievements

- 54 projects with a value of \$50.6 million
- Capital Project Framework and Capital Projects Policy

Key Challenges

- Workload/staff resources
- Public consultation and communication
- Equipment limitations



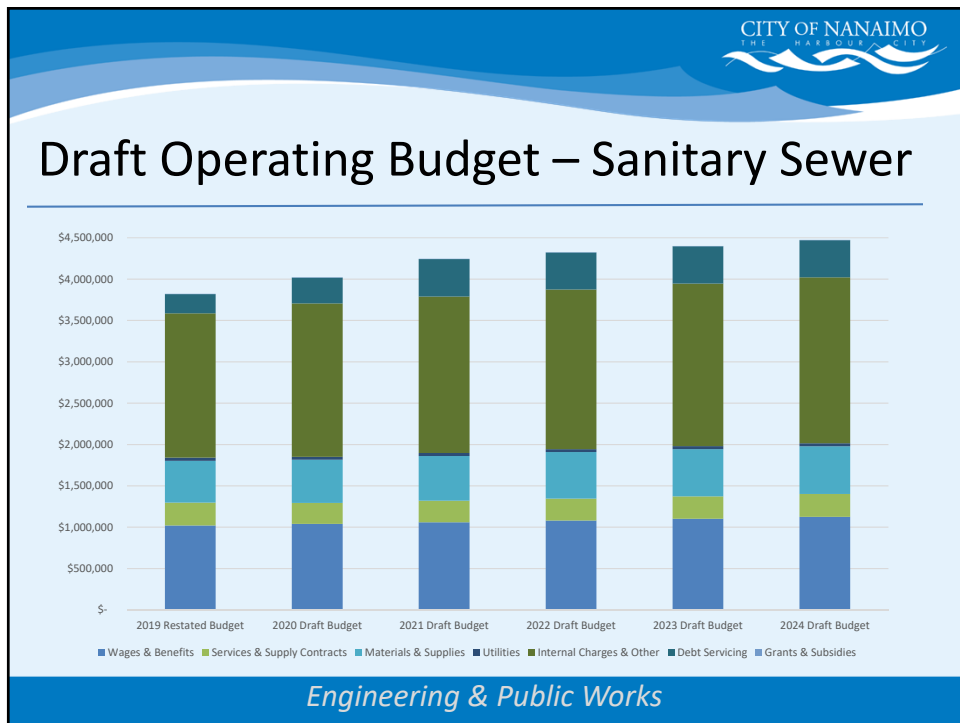
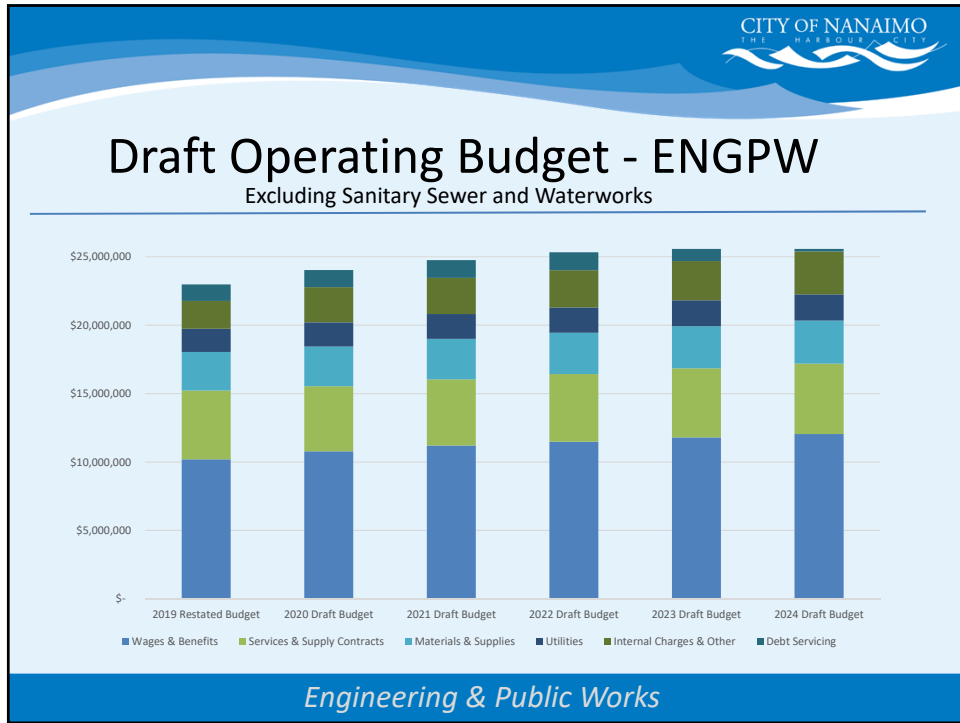
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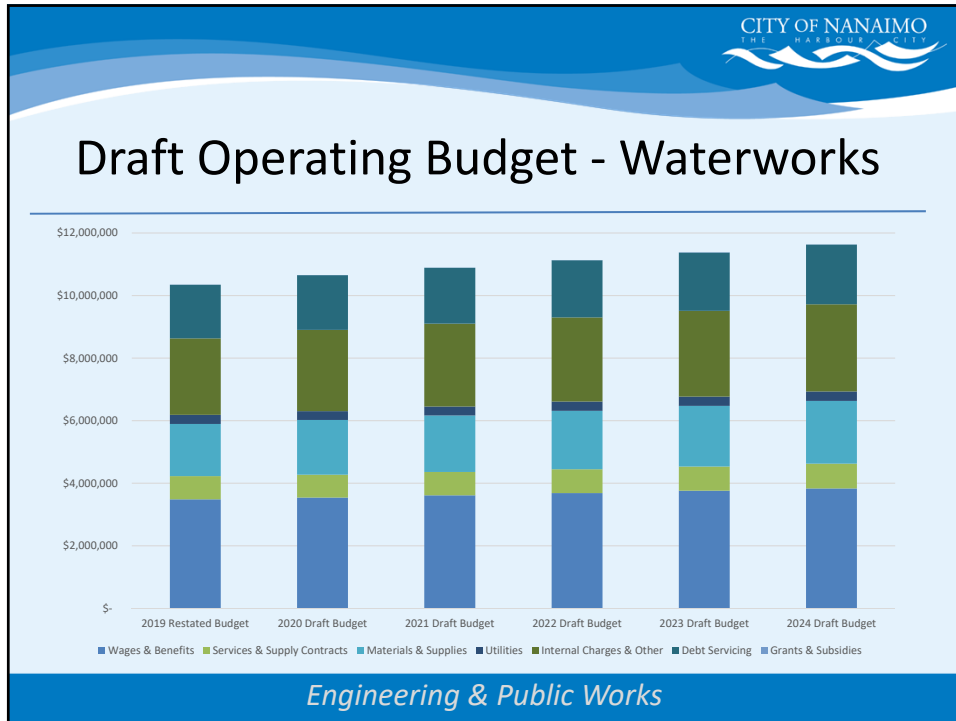
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2020 Key Initiatives

- Review and update the City's standard construction contract
- Capital Project Management Framework
- Capital project communications!

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Proposed Changes to Budget

- Business Case
 - Traffic Signal Technician
- As part of July 2019 Organizational Structure:
 - Manager, Facility Assets – 2021

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Changes Not Included in Draft Budget

- **Municipal Services Inspector**
 - To keep up with increasing developer and capital projects and to reduce cost of external consultants
- **Project Engineer**
 - To keep up with increasing level of renewal projects and to reduce cost of external consultants

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