




CITY OF NANAIMO
THE HARBOR CITY

Overview

- 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

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THE HARBOR CITY

Engineering & Public Works

- COVID19 – Essential Services
 - Redeployed staff success!
- Asset Management
 - Corporate AM System
 - Update the plan
 - Facilities transition
- **REIMAGINE** Nanaimo
 - Active Transportation Plan
 - Water Supply Strategic Plan Update
- Recruitment



reimagine
NANAIMO

Our City, Our Voices.
GetInvolvedNanaimo.ca

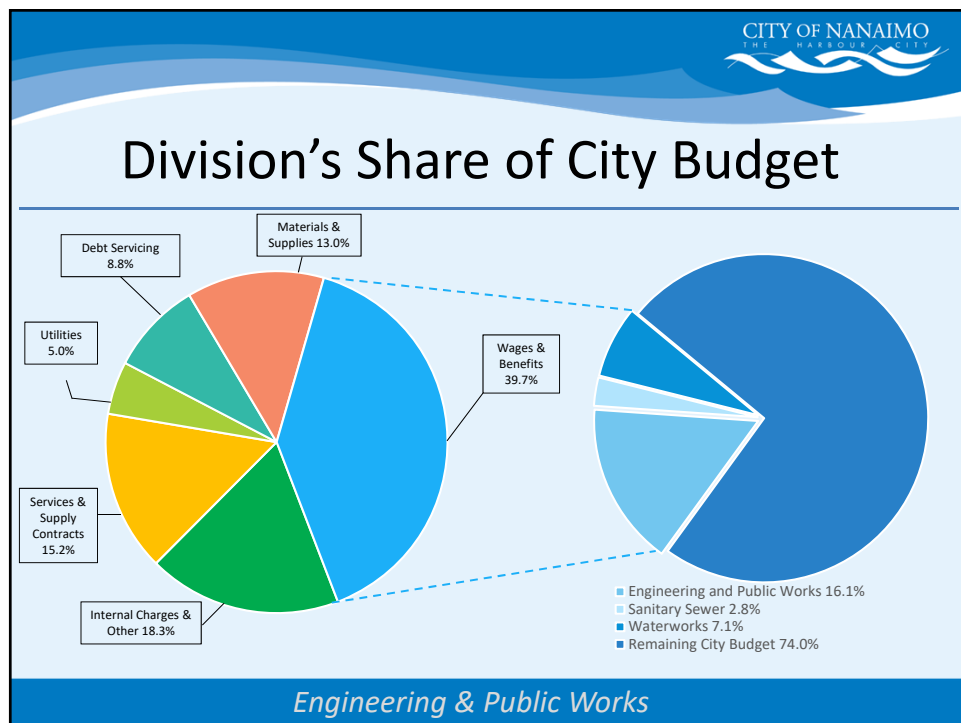
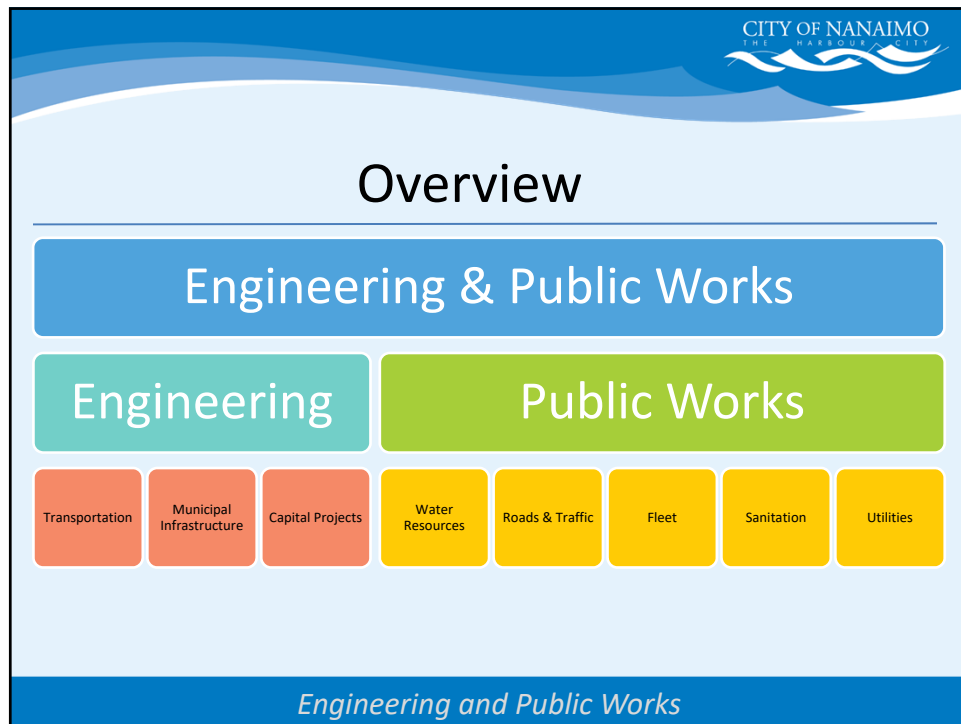
Engineering & Public Works

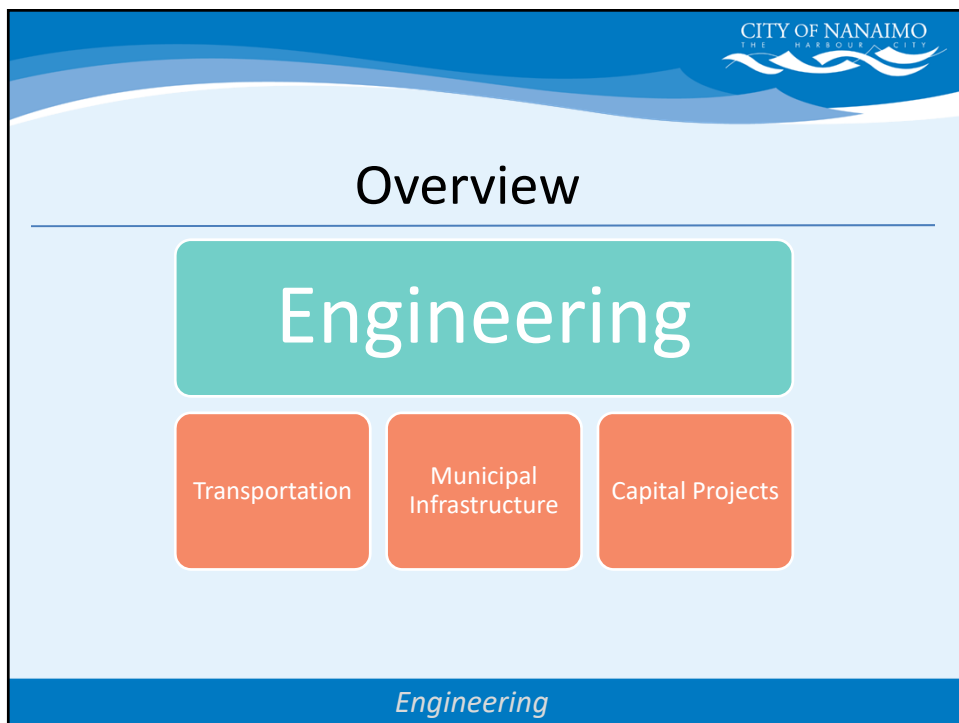
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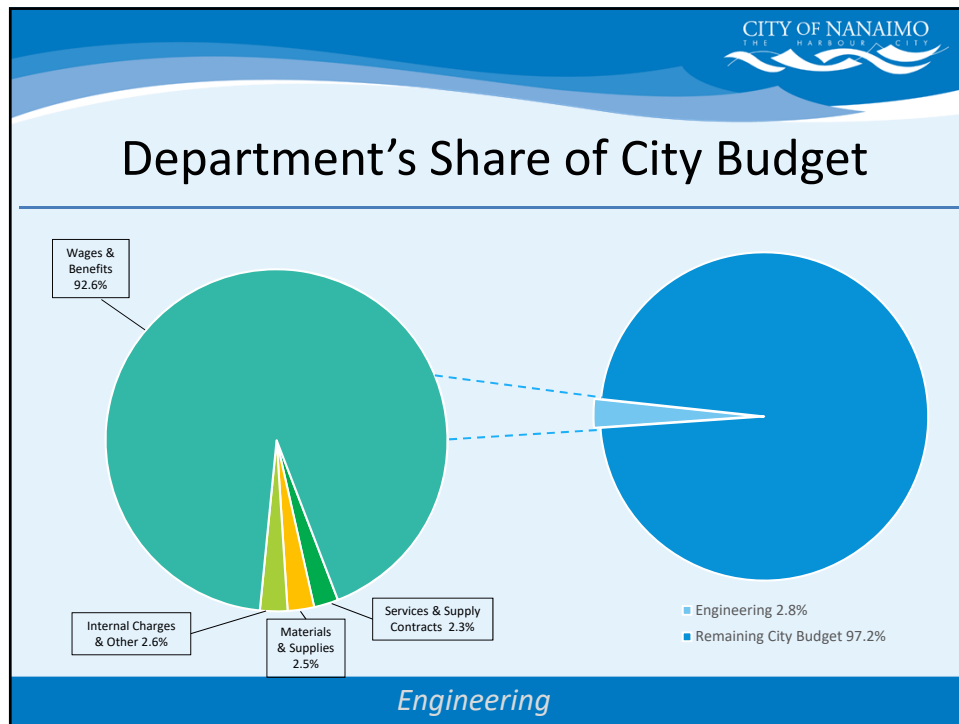
Sustainable Service Delivery A corporate effort!



Engineering & Public Works







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Administration - Engineering

Notable Achievements

- COVID-19 response
- Over 200 permits processed YTD
- Self serve drawing retrieval system

2021 Opportunities and Initiatives

- Maintain high level of customer service

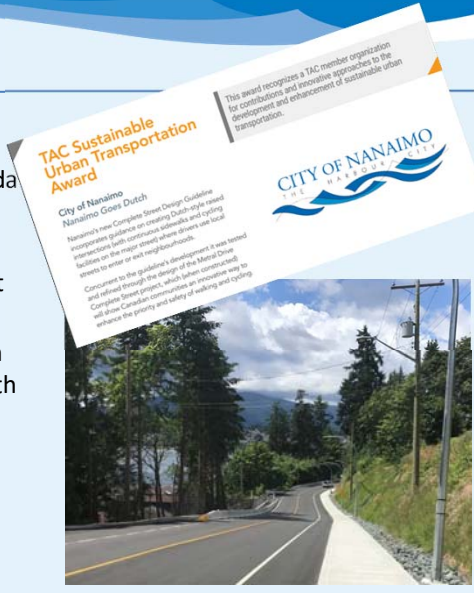


Engineering

Transportation

Notable Achievements

- Transportation Association of Canada Sustainable Urban Transportation Award
- Renewed over 49,000 m² of asphalt road surface
- Added 3.0 kms of bike lanes, 0.5 km of sidewalks, 0.9 km of multiuse path
- Enhanced 5 pedestrian crossings
- 4 traffic calming projects
- 72 development reviews YTD




Engineering

Transportation

2021 Opportunities and Initiatives

- COVID 19
- REIMAGINE (Active T!)
- Transportation web app
- Speed management
- Addressing changing trends
- Transit exchanges
- Level of Service Study





Engineering

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Municipal Infrastructure

Notable Achievements

- MoESS, Edition No. 13
- City-wide water model
- 2 Utility Master Plan Studies, 1 Drainage Study
- 40km of sewer pipe and of 15km of drainage pipe assessed
- 72 Development reviews

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Municipal Infrastructure

2021 Opportunities and Initiatives

- Update CCTV Management Software system
- City-Wide Master Plan – water model
- Sanitary Sewer Master Plan - Brechin catchment
- Drainage Master Plan - Cottle Creek catchment.
- **Storm Water Utility** feasibility assessment

Engineering




Capital Projects

Notable Achievements

- COVID-19 response
- 18 construction tenders
- 33 active construction projects with value of \$40M
- Update to City's standard tender document



Engineering



Capital Projects

Major projects	
<p>Started in 2019 and completed in 2020</p>	<ul style="list-style-type: none"> • Bastion Bridge Seismic Upgrade • 7th Street Pumpstation & Forcemain • Hammond Bay Road Upgrades • Chase River Forcemain & Haliburton Street Road Upgrades
<p>Started in 2020, completed or underway by the end of 2020</p>	<ul style="list-style-type: none"> • Metral Drive Complete Streets Phase 1 • Millstone Trunk Sewer Replacement (Pryde Golf Course and Comox Road Sections) • Bowen Road Upgrades
<p>Designed in 2020 and will start construction in 2021</p>	<ul style="list-style-type: none"> • Front Street Rehab and Cycle Track • Metral Drive Complete Streets Phase 2 • Millstone Trunk Sewer Upgrades (Bowen Park & Pearson Bridge Sections)

Engineering

Delayed Projects

- Improvement in reducing delayed projects:
- 2018-2019 \$9 Million delayed
- 2019-2020 \$0.7 Million delayed
- 2020-2021 \$1.9 Million delayed
- Two projects cancelled:
 - Towers Reservoir \$4.5 to fund Mid Town Water Supply
 - Stewart Avenue \$1.5 M


Capital Projects

2021 Opportunities and Initiatives

- Professional Governance Act
- MoESS revision implementation




Engineering



Proposed Changes Included in Draft Budget

- Manager, Facility Assets – effective 2021
 - Approved as part of July 2019 reorganization and included in 2020 – 2024 Financial Plan

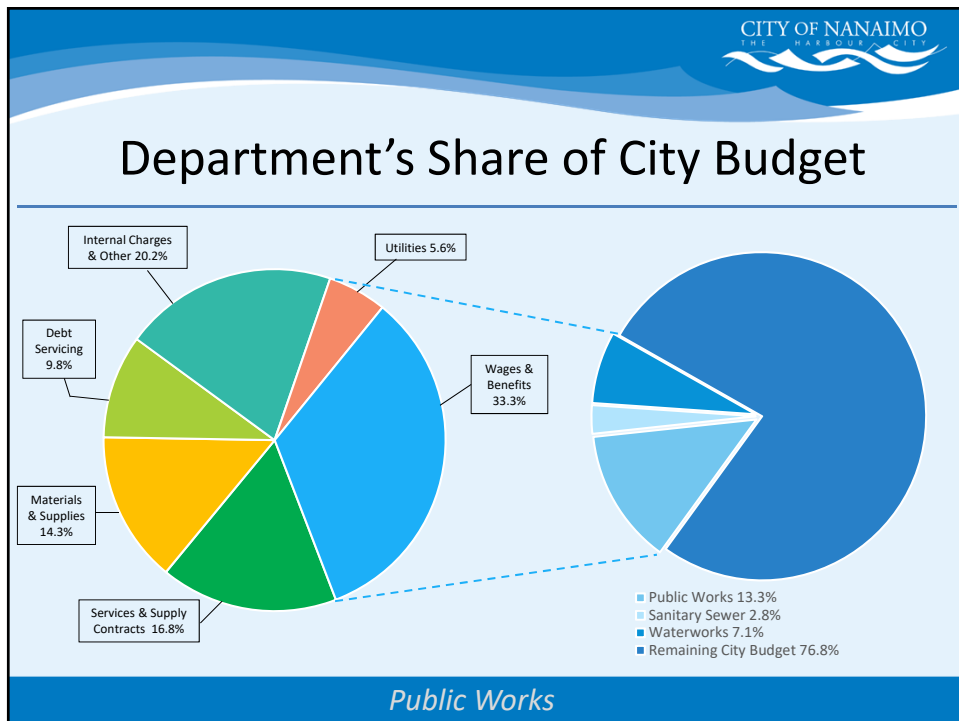
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Business Cases Developed - Not Currently in Draft Budget

- EBikes Rebates – as requested by Council
 - Annual grant program to provide rebates when an Ebike is purchased
- Municipal Services Inspector
 - To keep up with increasing developer and capital projects and to reduce costs of external consultants
- Project Engineer
 - To keep up with increasing level of renewal projects and to reduce cost of external consultants

Engineering



CITY OF NANAIMO
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Overview

Public Works

- Water Resources
- Roads & Traffic
- Fleet
- Sanitation
- Utilities

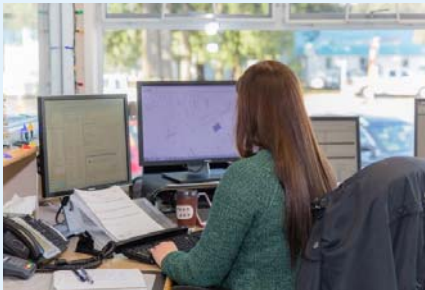
Public Works

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Administration

2020 Notable Achievements

- COVID-19 response
- 9,000+ Calls for Service including creating, dispatching and closing of related work orders
- Participation in Corporate Records Management project
- Participation in City Works implementation project



Public Works

Administration

- Administration of 24/7 security and after hours inquiries.
- Implementation and administration of online carts request and payment

2021 Opportunities and Initiatives

- Supporting curbside collection optimization plan
- Supporting City Works signage asset management program

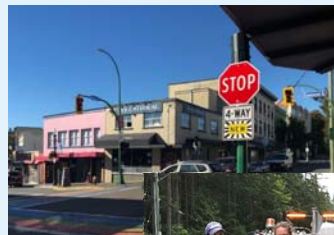


Public Works

Roads and Traffic

Notable Achievements

- COVID-19 response
- Annual paving program
- Jingle Pot Rd rail crossing upgrade
- 100+ new bus stop signs
- Pothole and sidewalk repairs
- Sidewalk replacement and paving repairs following underground utility work
- Street banner program, Christmas decorations and Hub City Walls mural event
- Commercial and Bastion 4-way stop
- Traffic calming program support




Public Works

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Roads and Traffic

2021 Opportunities and Initiatives

- Complete Streets Standards
- Road Rehabilitation Asset Management
- Rail Crossings and Cost
- Traffic Signal Technician
- Traffic Medians and Boulevard Maintenance
- Temporary infrastructure
- LED Streetlighting – BCH and City owned




Public Works

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Opportunities and Initiatives

- Road Rehab along with Complete Streets
- Provide 24/7 snow & ice control and emergency response
- Review and assess road conditions after winter season
- New CityWorks CAMS implementation for Traffic Unit
- Support Transportation with traffic count program
- Coordination between Engineering and PW




Public Works

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Water Supply and Distribution

Notable Achievements

- Bowen Road water supply main break
- Water conservation (215 L/p/day)
- Cross Connection Control bylaw
- Emergency Water Pump Station
- Water Rates Bylaw review
- Towers Pump Station replacement
- Bulk water fill stations – projected revenue \$ 120,000
- Rock scaling and rip-rap at South Fork and Jump Creek Dams
- \$86,000 electricity revenue at Reservoir No. 1 Energy Recovery Facility
- 4 - Year South Fork Water Treatment Plant membrane age study with UBC




Public Works

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Water Supply and Distribution

2021 Opportunities and Initiatives

- Water Supply Capital Plan
- Aging Watermain Infrastructure
- Nanaimo River Flood Inundation Plan Update
- 13.9 billion litres of treated water produced per year
- Mid-Town Water Supply Upgrades
- Annual Dam Safety Inspections
- 24/7 Emergency Response



Public Works

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2021 Opportunities & Initiatives

- Water Supply Strategic Plan update in concert with **REIMAGINE** Nanaimo
- Mid-Town Water Supply Upgrades
- Annual Dam Safety Inspections
- Valve exercising equipment
- 24/7 Emergency Response to water distribution system




Public Works

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Sanitary Sewer

Notable Achievements

- COVID-19 response
- Annual sewer flow and rainfall monitoring program
- 39.6 km of sewer pipe inspected and assessed
- 105 service repairs/upgrades, 15 services replaced
- 130 kms flushed
- 53 development servicing reviews
- 27 subdivision servicing reviews
- Brookwood Pump Station



Public Works

2021 Opportunities and Initiatives

- New CCTV Van
- Updated CCTV Software
- Ongoing Inflow & Infiltration Reduction
- 24/7 Emergency response to sewer main & service issues
- Mobile Technology to record & display maps, dwgs and upgrades to sanitary sewer



Public Works

Rainwater (Drainage)

Notable Achievements

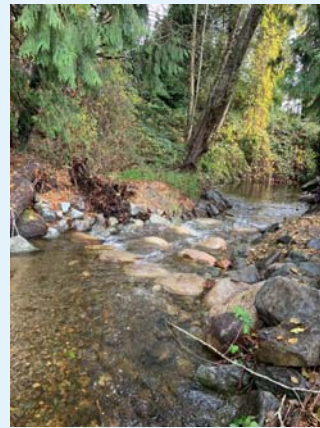
- COVID-19 response
- 14.9km of drainage pipe inspected and assessed
- Annual storm drainage monitoring program
- 8,820 catchbasins cleaned
- Departure Creek restoration
- Storm drain infrastructure inventory
- 104 m of failed corrugated steel pipe replaced



Public Works

2021 Opportunities and Initiatives

- Climate change
- Water Quality Testing at Swim beaches
- Environmental Regulations
- 24/7 Emergency Response to Storm Flooding Events & Oil Spills
- Storm Water Utility
- Mobile Data Collection Tools
- Ground Water Recharge



Public Works

Fleet

Notable Achievements

- COVID-19 response
- Procurement and deployment of 12 new vehicles
- Green Fleet Strategy
- Awarded Silver rating for E3Fleet (Energy, Environment, Excellence) Program
- 60 commercial vehicle inspections
- Space needs assessment

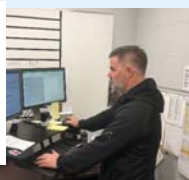


Public Works

2021 Opportunities and Initiatives



- Implement Fleet Asset Management System
- Refine Vehicle Replacement Plan
- Modify and streamline vehicle procurement process
- Green Fleet Strategy
- Develop preliminary design for new fleet shop
- Enhance security system at the entrance and perimeter of the Public Works yard



Public Works

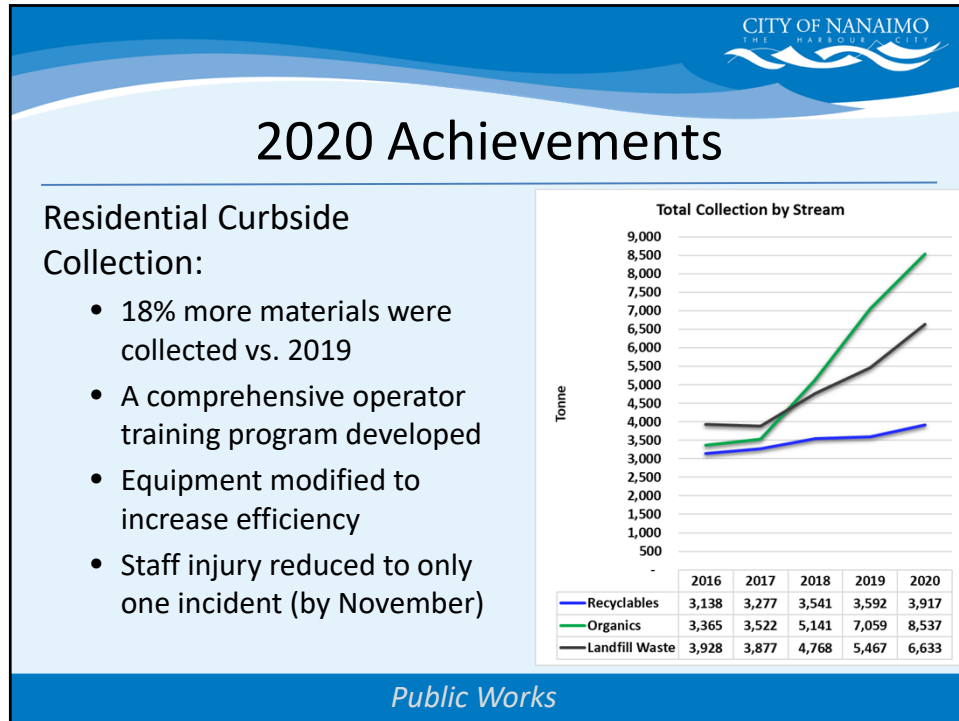
Solid Waste Management

Notable Achievements

- COVID-19 response
- Over 90% reduction in worker injuries
- Approx. 50% reduction in work orders
- Social Disorder Response Team
- Formalized Training Program for Drivers



Public Works






2020 Achievements

Waste Reduction

- Checkout Bag Regulation Bylaw No. B7283 approved.
- At Province for Ministerial sign-off



Public Works



2021 Opportunities and Initiatives

- Optimized collection program in January
- Conducting waste composition study (post pandemic)
- Waste reduction education campaign (post pandemic)
- Carts Inventory Management
- Enhanced public space cleanliness in summer
- Checkout Bag Regulation July.

Public Works

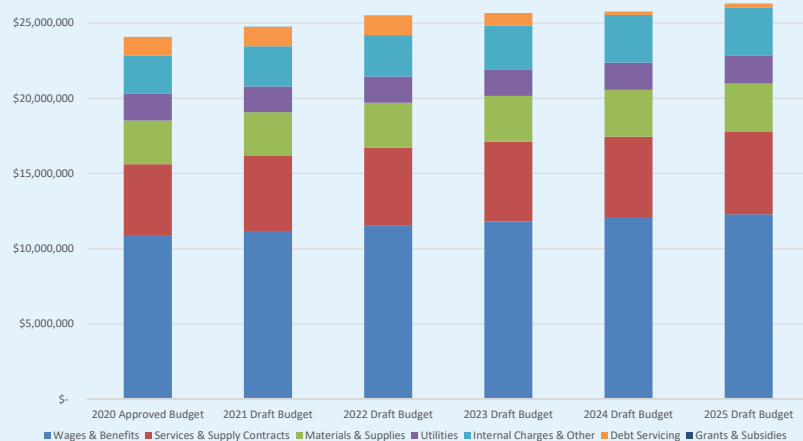
Business Cases Developed - Not Currently in Draft Budget

- Community Clean Team (formerly the Social Disorder Response Team)
Allow for the effective and efficient use of resources with a dedicated team focused on increasing the cleanliness of public spaces in downtown and parks and prevent accumulations of waste and growth of major encampments.

Public Works

Draft Operating Budget - ENGPW

Excluding Sanitary Sewer and Waterworks



Engineering & Public Works

