


## Notable Achievements


### Administration - Engineering


- Over 300 permits processed in 2021.
- Brought a coop student onboard for 8 months of the year.



Pavan Dhillon, Coop Student Extraordinaire

Engineering







## Notable Achievements

### Transportation

- Renewed over 49,087 m<sup>2</sup> of asphalt road surface.
- Added 4.0 kms of bike lanes/cycle tracks.
- Added 2.2 kms of sidewalks.
- 2021 Institute of Transportation Engineers (ITE) Achievement Award – Complete Streets.
- Completed review and update of Pedestrian Prioritization Planning process.
- Additional \$700,000 from Council will:
  - Enhance 8 pedestrian crossings within the City, and
  - Address accessibility barriers at 10 Traffic Signals and 20 Transit Stops.



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## Notable Achievements Transportation

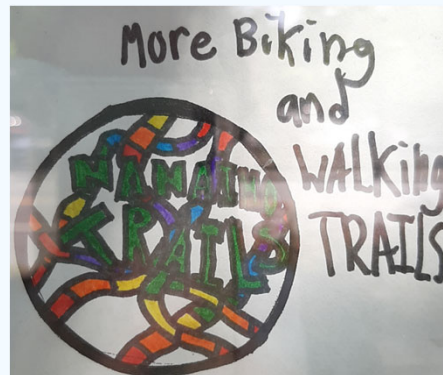
- Constructed several major projects including Metral Drive Phase 1 and Front Street Cycle Track.
- Completed 4 Traffic Calming projects.
- Completed 100+ Development reviews by mid-year, to assess impacts of proposed development on the transportation networks.
- Engaged in multiple large scale land redevelopment master plan reviews.



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## 2022 Considerations & Opportunities Transportation

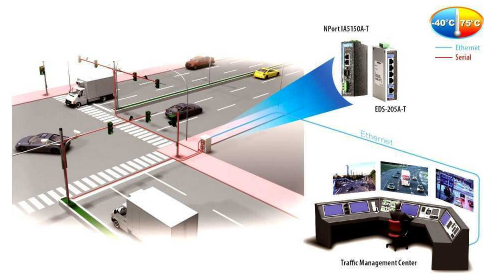
- REIMAGINE - Active Transportation – All mobility.
- REIMAGINE - Road safety - Vision Zero Policy and Goals.
- Changed and uncertain travel patterns.
- A road condition level of service pavement condition survey.



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## 2022 Initiatives Transportation

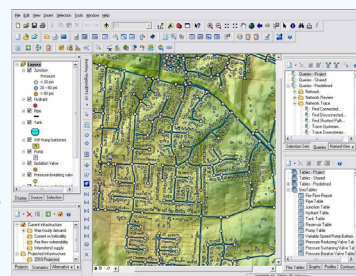
- Traffic signal management system design and implementation.
- Accessibility improvements (pedestrian unallocated).
- Testing and implementation of revised sidewalk and crossing evaluation guidelines.
- Update guidelines for traffic impact assessments to better address multi-modal needs.



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## Notable Achievements Municipal Infrastructure

- Completed major update of the city wide water model.
- Sanitary and storm sewer studies.
- Maintained and expanded Sewer Flow, Storm Drainage Flow and Rainfall Monitoring program for city wide sewer and storm drainage model calibration.
- Video inspection and condition assessment of 33.2 km of sewer pipe and of 12.6 km of drainage pipe.
- Conducted a review of establishing Storm Water Utility.
- Completed 100+ Development reviews by mid-year, to assess impacts of proposed development on underground utilities.



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## 2022 Considerations & Opportunities Municipal Infrastructure

- Continue development of City Wide Water Distribution Master Plan with updated model.
- Complete a Sanitary Sewer Master Plan of Brechin catchment.
- Complete a Drainage Master Plan of Departure Bay catchment including Departure Creek.
- Further develop a Storm Water Utility funding model.





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## Major Capital Projects

<p>Started in 2020 and completed in 2021</p>	<ul style="list-style-type: none"> <li>• Metral Drive Phase 1</li> <li>• Millstone Trunk Sewer Replacement (Pryde Golf Course and Comox Road Sections)</li> <li>• SARC Renovations</li> </ul>
<p>Started in 2021, completed or underway by the end of 2022</p>	<ul style="list-style-type: none"> <li>• Metral Drive Complete Streets Phase 2</li> <li>• Bowen Park Trailway and Utility Upgrades</li> <li>• Front Street Complete Streets</li> <li>• Fourth Street Complete Streets – Harewood Road to Pine Street</li> </ul>
<p>Designed in 2021 and will start construction in 2022</p>	<ul style="list-style-type: none"> <li>• Midtown Gateway</li> <li>• Terminal Avenue Upgrades – Esplanade to Commercial Street</li> <li>• Haliburton Street Sidewalk</li> <li>• Albert Street Complete Streets – Pine Street to Dunsmuir Street</li> </ul>

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## Notable Achievements Capital Projects

- Metral Drive Phase 1 - the first project using the new Transportation Standards.
- Adapted to new regulations for Engineers under the *Professional Governance Act* which came into effect July 1, 2021.
- 63 projects with a value of \$57 Million Dollars were completed in 2021 or are underway.
- Developed a Negotiated Request for Proposal document for procurement of construction services.

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## Delayed Projects

Several projects were delayed due to delays in obtaining required permits:

- White Eagle Sanitary Sewer
- Strongitharm Sanitary Sewer
- White Street Utility Upgrade

The *Commercial Bastion Intersection Upgrade* project was delayed so that the Commercial Street Master Plan can be completed first.

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## 2022 Considerations & Opportunities

### Capital Projects

- Leverage the City's new negotiated request for proposal document to ensure best value is received on major upcoming construction projects.
- Complete significant projects such as Midtown Gateway, Terminal Avenue Upgrades and Albert Street Complete Streets.
- Enhance ability to support other City Departments with project management.



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## Notable Achievements

### Facilities Asset Management

- Transferred Facilities Asset Management from Parks, Recreation, and Culture to Engineering & Public Works, including two existing FTEs, and hired a new manager.
- Continued with detailed condition assessments of our major corporate and recreational facilities. These findings will be presented to Council at a later date.
  - 30 Facilities complete; 8 major facilities remaining.
  - Updated the reconstruction values of the portfolio.
  - Began indexing the major facilities based on the condition assessments and their reconstruction values (Facility Condition Index).
- Started a framework for a Facility Asset Strategy.




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## Notable Achievements Facilities Asset Management

- Completed an electrical service upgrade at Beban Complex.
- Completed an Elevator upgrade at the Art Gallery.
- Completed the second phase of the reroofing at NAC.
- Seismic and building enclosure upgrade and interior renovation at the Harewood Activity Centre.
- Implemented energy savings initiatives for an expected savings of \$55,100 annually.
- Identified and are initiating plans to reduce annual Green House Gas Emissions by 2,149 tonnes.
- Secured \$133,754 in grants and incentives to offset the capital cost of energy reduction strategies.



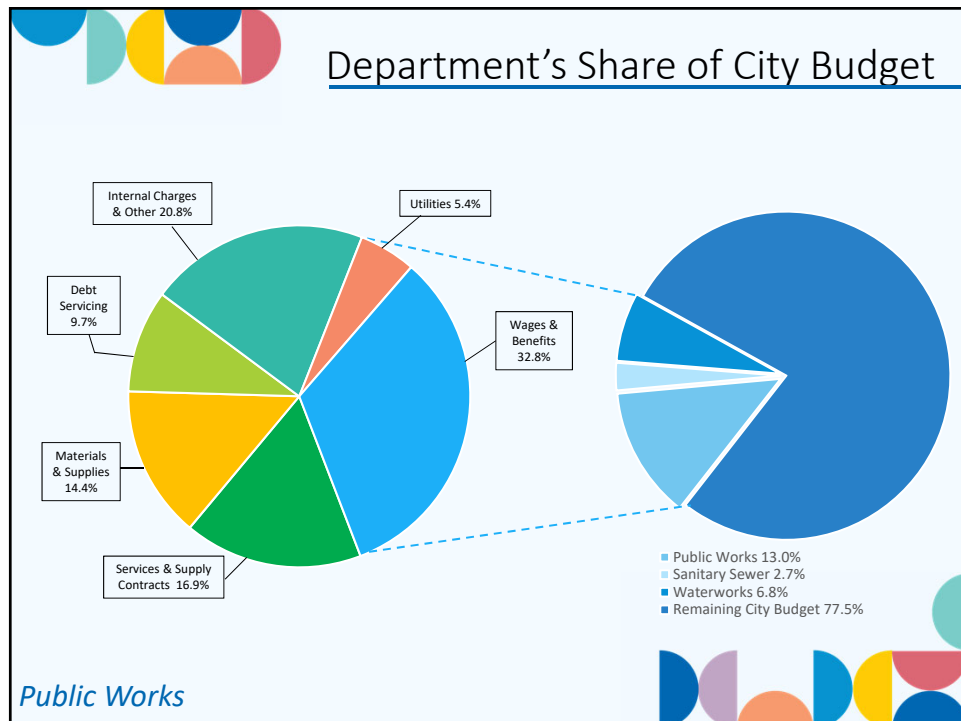
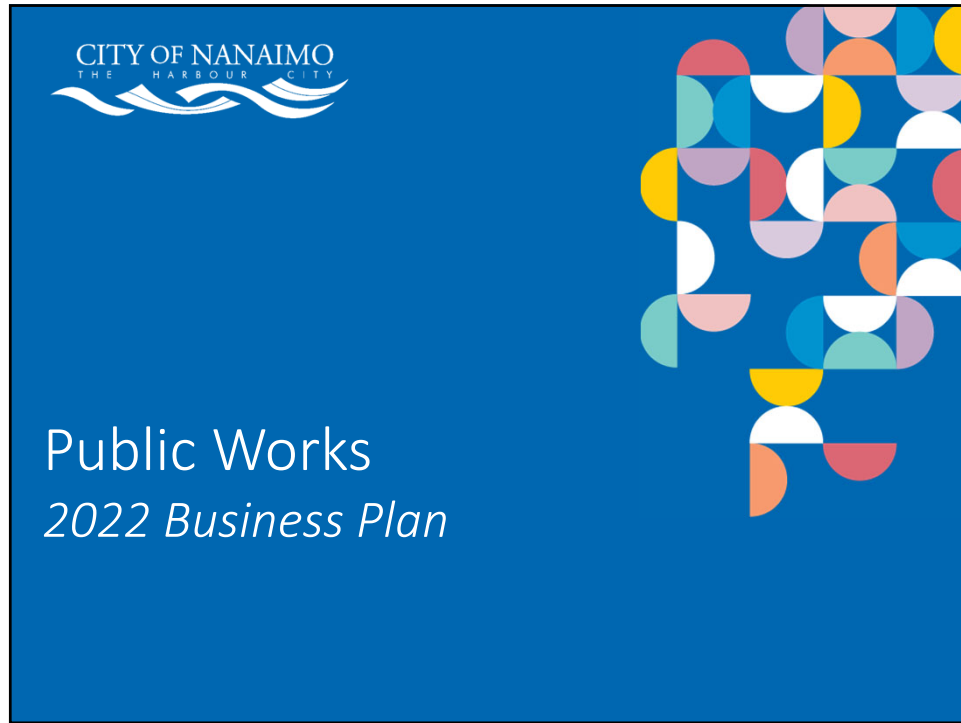
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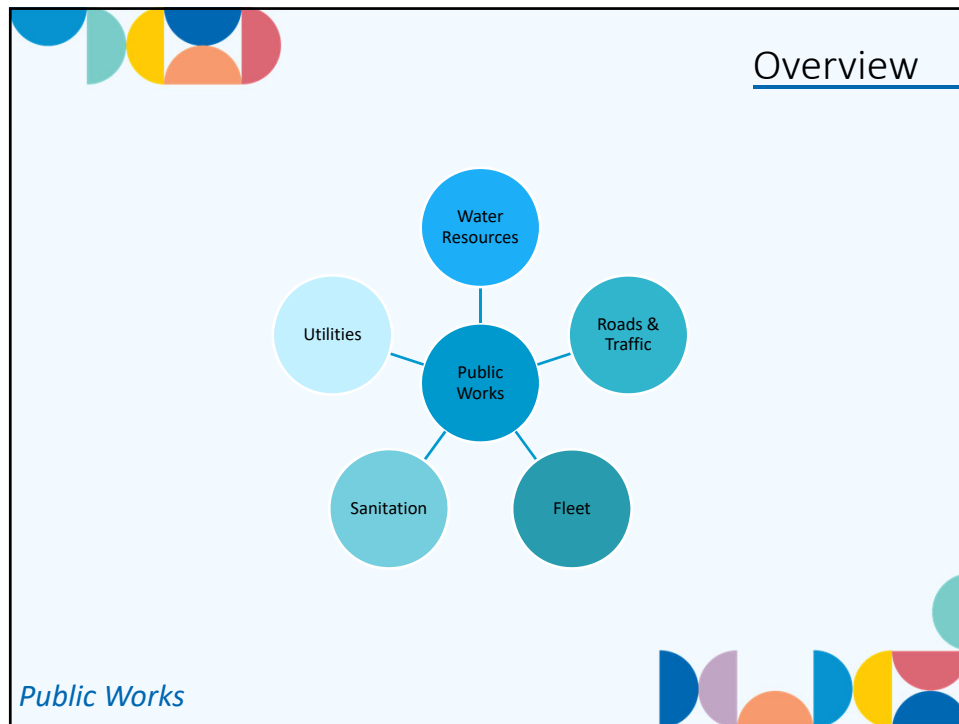
## 2022 Considerations & Opportunities Facilities Asset Management

- Capitalize on energy and emissions saving opportunities as part of ongoing facility renewals.
- Continue to source and optimize grant and other external funding opportunities for energy and emission reduction within facilities.
- Complete design work to significantly reduce GHG at the Nanaimo Aquatic Centre; Nanaimo's largest contributor to GHG emissions.
- Complete a DRAFT Facility Asset Strategy
- Develop a prioritization process for facility renewals within recommended funding levels.



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Notable Achievements  
Administration

- Majority of calls from the public are resolved by administration staff
- 46,231 calls in 2020
- 25,591 calls by end of July 2021
- 7,418 work orders in 2020
- 4,400 work orders by end of July 2021

Public Works

## 2022 Considerations & Opportunities Administration

- Continue to provide personal service to resident inquiries
- Continued security presence on-site outside of normal business hours to prevent break-ins and theft
- Support Corporate Asset Management System (CAMS) initiative and implementation

Public Works

## Notable Achievements Roads and Traffic

- Filled the newly created Traffic Signal Technician position
- Completed significant paving repairs to extend the life of degraded roads
- Installed over 100 new bus stop signs for RDN Transit
- Supported other City departments in achieving their goals

Public Works



## 2022 Considerations & Opportunities

### Roads and Traffic

- City roads are deteriorating faster than they can be rehabilitated
- Increased demand for boulevard maintenance
- Development of Operations and Maintenance plans for complete streets



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## 2022 Initiatives

### Roads and Traffic

- Asphalt Level of Service public consultation
- Boulevard maintenance level of service review
- Continued improved SNIC communication and planning with Parks, Recreation & Culture



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## Notable Achievements

### Water Supply and Distribution

- REIMAGINE - Water Supply Strategic Plan will continue
- Daily water consumption reduced 20% overall over the last 10 years
- Updated Business Continuity Plan for South Fork Water Treatment Plant

Public Works

## 2022 Considerations & Opportunities

### Water Supply and Distribution

- Re-prioritized capital plan to expedite replacement of Bowen Rd. supply main and develop Mid-Town Water Supply Phased Plan.
- Approximately \$3.6M of the system, with a value of \$60M, is at, or near, the end of life. The most critical projects are within the 5 year project plan.

Public Works



## 2022 Initiatives

### Water Supply and Distribution

- Continued system expansion to accommodate growth and development
- Rebuild City-wide water model
- Continued implementation of Cross Connection Control program

Public Works

## Notable Achievements

### Sanitary Sewer

- Video inspection and condition assessment of 13.3km of sewer pipe
- Upgrade of remote data acquisition for pump stations

Public Works

## 2022 Considerations & Opportunities

### Sanitary Sewer

- Approximately \$1M of sewer infrastructure, with a value of approx. \$25M is at, or near, end of its useful life. The most critical projects are within the 5 year project plan.
- Operational funding challenges with infrastructure growth rate.

Public Works

## 2022 Initiatives

### Sanitary Sewer

- New CCTV video van and updated video management software
- Continued efforts to reduce infiltration and inflows of storm and groundwater into sanitary sewer system

Public Works

## Notable Achievements

### Rainwater (Drainage)

- Video inspection and condition assessment of 10.1km of pipe
- 10,500 catchbasins cleaned of sediment and debris
- Cleaned and rehabilitated portions of Departure Creek
- Replaced storm outfalls at Stewart Ave., below Chestnut St. and at Shoreline Dr.

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## 2022 Considerations & Opportunities

### Rainwater (Drainage)

- Impacts of climate change contributing to increasing storm intensity, stressing system capacity
- Staff turnover expected to increase due to retirements
- Operational funding challenges with infrastructure growth rate

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## 2022 Initiatives

### Rainwater (Drainage)

- Increased education to private drainage infrastructure owners about maintenance best practices
- Continue to monitor and maintain natural watercourses
- Continue to work toward creation of Storm Water Utility


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## Notable Achievements

### Fleet

- Procurement of 17 vehicles (2 of which are electric) and 4 pieces of equipment
- Completed approximately 40 vehicle inspections
- Collaboration and input to planning and design of future fleet facility and NOC



Public Works



## 2022 Considerations & Opportunities


### Fleet

- Increasing complexity of fleet, with addition of EV's, CNG, alternative fuel vehicles, and new vehicle technologies
- Continue to implement the Green Fleet Strategy and exploring alternate fuel solutions to reduce GHG emissions and fuel consumption

CITY OF NANAIMO GREEN FLEET STRATEGY 2020

Public Works





## 2022 Initiatives

### Fleet

- Continue with technical training of staff to meet new technologies
- Upgrade facilities to meet the needs of new vehicle technologies



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## Notable Achievements

### Solid Waste Management

- Successful program optimization implementation to balance organics, recycling and landfill waste collections
- Continued improvement in solid waste diversion rates
- Continued support to Bylaw and RCMP for encampment and public space cleaning



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## 2022 Considerations & Opportunities

### Solid Waste Management

#### Collected Materials – By Stream

**Per H/H Collection by Stream**



	2016	2017	2018	2019	2020
Recyclables	115	118	126	126	135
Organics	123	127	182	247	294
Landfill Waste	144	140	169	191	228

**Total Collection by Stream**



	2016	2017	2018	2019	2020
Recyclables	3,138	3,277	3,541	3,592	3,917
Organics	3,365	3,522	5,141	7,059	8,537
Landfill Waste	3,928	3,877	4,768	5,467	6,633

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## 2022 Considerations & Opportunities

### Solid Waste Management

- Continued pre-pandemic increase in collection demands (growth outstripping capacity)
- Landfill tipping fees increases
- Need for a permanent community clean team to respond to public space sanitation
- Continued reduction to injury rates through Automation
- Equipment being overworked

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## 2022 Initiatives

### Solid Waste Management

- Contamination Remediation Plan to be implemented to reduce recycling contamination to acceptable levels
- Review opportunities to improve public space waste collection and diversion
- Zero Waste and Circular Economy Plans Development



**SORT TOSS ROLL**

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