



Joint Operations Base (JOB) Feasibility/ Needs Study

Engineering and Road Operations

Presentation Overview

1. Department Overview
2. Staffing Complement
3. Current Working Conditions
4. Depot Conditions
5. Current Challenges
6. Looking Ahead
7. Estimated for Alternative to JOB
8. Estimated Future Operating Costs
9. Benefits of a new JOB
10. Challenges of a new JOB
11. Shared Service Opportunities
12. Summary



Public Works Overview - Slide 1

- ▶ The Public Works Department looks after the planning, construction, operation and maintenance of all County infrastructure including roads, bridges, culverts, facilities and waste management sites.
 - ▶ 498 km of roads,
 - ▶ 45 bridges,
 - ▶ 878 culverts,
 - ▶ 32.5 km of storm sewer pipes,
 - ▶ 44 corporate buildings,
 - ▶ 372 affordable housing units,
 - ▶ 132 PW vehicles/ equipment

Public Works Overview - Slide 2

- ▶ Public Works is comprised of the following divisions:
 - Engineering
 - Major Capital Projects, Infrastructure, and GIS and Asset Management
 - Operations
 - Road Operations, Facilities, Waste Operations

Engineering Overview

- ▶ **The Major Capital Projects Division (MCP)** supports large-scale projects. MCP handles planning, design, development, and construction oversight.
- ▶ **The Infrastructure Division** manages the municipal infrastructure capital works program, construction administration, and project management.
- ▶ **The GIS and Asset Management Division** is responsible for managing the County GIS database and the County's Asset Management software.

Operations Overview

- ▶ **The Road Operations Division** is responsible for the summer maintenance, winter maintenance, year-round safety maintenance, surface treatment of municipal roads, fleet management for all County departments with exception to Paramedic vehicles.
- ▶ **The Facilities Services Division** maintains all County facilities and Northumberland Non-Profit Housing Corporation buildings.
- ▶ **The Waste Operations Division** is responsible for the waste management services. The County manages three active disposal sites (one landfill and two waste transfer stations) and maintains 8 decommissioned landfills.

Staffing Complement

- ▶ Engineering has 18 full-time staff and 3 summer students
 - 17 staff at County Headquarters
 - 4 staff at 600 William Street
- ▶ Road Operations has 38 full-time staff, 3 seasonal (winter) and 6 summer students including fleet maintenance staff
 - 2 staff at County Headquarters
 - 18 staff, 3 seasonal staff and 2 summer students at the Veronica St. depot
 - 18 staff and 4 summer students at the Morganston depot

Engineering Current Working Conditions

- ▶ Team split between two locations – results in travel time (meetings, meeting space, plotter, etc.)
- ▶ Staff share workstations, telecommuting is required as not enough space is available.
- ▶ Limited space available for drawing review at 600 William Street.
- ▶ Team works closely with Road Operations and most roads staff are located at either Veronica St. depot or Morganston depot.

Road Operations Current Working Conditions

- ▶ CR 2, CR 28, CR 30 and CR 45 were downloaded to the County in 1997/ 1998 (a total of 151.6 km or 30% of County roads), however no facilities were included with the transfer.
- ▶ Manager of Road Operations is located at County Headquarters due to limited space available at the Public Works Depots.
- ▶ Facilities do not meet AODA requirements.
- ▶ Insufficient sized bays for equipment repairs.
- ▶ Insufficient storage space for equipment and vehicles – many are stored outdoors increasing repair and maintenance cost.
- ▶ Insufficient storage space for repair parts for vehicles – results in delays for repairs and increased downtime for crews.

Veronica Street Depot Conditions

Slide 1

- ▶ 7.29 acres, 7 buildings
 - ▶ Service garage with office (11,003 sf) – 64 years old with additions 43 and 14 years ago
 - ▶ Sand storage dome (10,568 sf) – 44 years old
 - ▶ Service garage (6,076 sf) – 11 years old
 - ▶ General storage Quonset hut (4,000 sf) – 44 years old
 - ▶ General storage building (3,200 sf) – 34 years old
 - ▶ Two salt storage sheds (1,230 sf & 644 sf) – 16 & 34 years old

Veronica Street Depot Conditions

Slide 2

- ▶ Existing facility is overcrowded, lacks space for a code compliant lunchroom and changerooms
- ▶ Existing bays cannot store large equipment
- ▶ Not enough bays for existing equipment
- ▶ Buildings are aging and require major repairs
- ▶ Estimated resale value \$3,000,000



Plainville Depot Conditions

- ▶ 10.44 acres, 2 buildings
 - ▶ Salt storage shed (1,070 sf) – 8 years old
 - ▶ Sand storage dome (8,332 sf) – 45 years old
- ▶ Dome is aging and will require demolition and replacement.
- ▶ This site does not have a garage leaving equipment to be stored outside.
- ▶ Estimated resale value \$450,000 to \$500,000



Roseneath Depot Conditions

- ▶ 8.32 acres, 4 buildings
 - ▶ Service garage with office (3,311 sf) – 60 years old
 - ▶ Salt storage shed (1,073 sf) – 60 years
 - ▶ Sand storage dome (8,332 sf) – 46 years
 - ▶ Storage shed (112 sf) – 39 years
- ▶ Buildings are aging and will require replacement
- ▶ Existing bays are not big enough for large equipment
- ▶ There are not enough bays for existing equipment
- ▶ Office space is not suitable for current winter staff
- ▶ Excessive propane costs for heating
- ▶ Estimated resale value \$541,000 to \$561,000



Morganston Depot Conditions

Slide 1

- ▶ 6.73 acres, 5 buildings
 - ▶ Service garage with office (6,964 sf) – 57 years old with additions 24 and 15 years ago
 - ▶ Service garage (3,000 sf) – 47 years
 - ▶ Sand storage dome (10,568 sf) – 24 years
 - ▶ Salt storage shed (1,223 sf) – 17 years
 - ▶ Storage shed (768 sf) – 57 years

Morganston Depot Conditions

Slide 2

- ▶ Existing bays are not big enough for large equipment and some plow trucks are left outside during the winter.
- ▶ There are not enough bays for existing equipment
- ▶ Buildings are aging and will require significant repairs and replacement
- ▶ Estimated resale value \$855,000



Current Challenges – Slide 1

- Existing facilities are overstretched, with inadequate space and conversions failing to meet operational, environmental, and regulatory standards.
- The original PW depots and additions have exceeded their expected useful life and high capital investment will be required to sustain them.
- Public Works staff are in different offices at multiple locations; which is a challenge for communication and coordination between the staff.

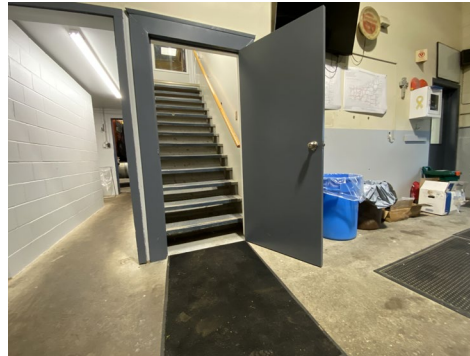
Current Challenges – Slide 2

- Staff are on a work for home rotation due to the limited availability of office space.
- Lack of meeting space for health and safety meetings, training, etc.
- Public works depots do not align with the County's Multi-Year Accessibility Plan.
- Insufficient space to store/ charge equipment.

Current Conditions/Challenges



2nd floor lunchroom



Access stairs to lunchrooms



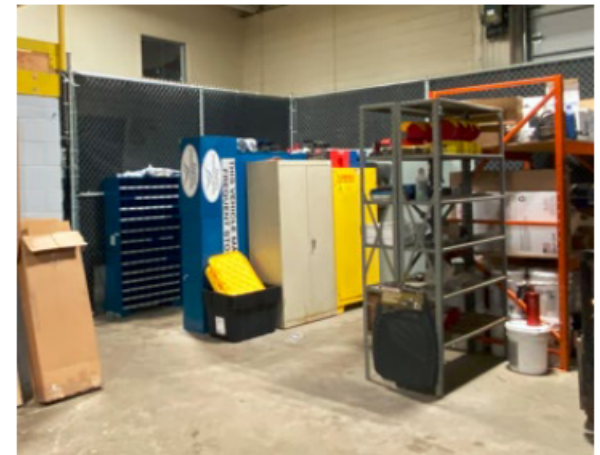
Storage room converted office



Accessibility at entrances



Aging infrastructure



Relocated storage to shop

Current Conditions/Challenges



Storage facilities
overcapacity



Equipment stored
outside



Heavy equipment
storage



Workspace without plows
installed



Snowplow parked
diagonally to fit



Condition of aging
facilities

Looking Ahead

- ▶ Staff complement expected to grow 25% based on projected County population growth (from 66 to 82) by 2051
- ▶ 34% fleet growth from 54 to 72 anticipated in the short to medium term
- ▶ Fleet transition from tandem to tri-axle trucks (two tri-axles this year, with four more in the next two years)
- ▶ The office space and depots do not meet requirements for current staff and equipment even before the projected growth
- ▶ Alternative option if JOB does not proceed – would need to expand existing depots, build a new depot and/ or rent additional office and garage space

Estimated Costs for Alternative to JOB - Slide 1

- ▶ Limited space at depots for expansion
- ▶ Assessed local real estate market, no suitable locations available for lease
- ▶ Current repairs required to sustain existing depots
\$2,460,000
- ▶ Renovation of leased spaces would be required to suit the needs of the department and meet County's standards.
- ▶ Warehouse lease value ~ \$16/ square foot/ month but there is no suitable spaces available in a central location.

Estimated Costs for Alternative to JOB - Slide 2

Veronica St. depot: the service garage needs to be replaced and expanded by 1.5 times, with a new sand dome and site adjustments. This will disrupt fleet maintenance during demolition and reconstruction at the same site. Estimated cost: \$6,290,000

Morganston depot: The service garage will require replacement and expanded 1.5 times along with additional site work to accommodate the relocation from the North to the South side of the site. Estimated cost of \$3,120,000

Estimated Costs for Alternative to JOB - Slide 3



Roseneath depot: The site will require a complete revitalization. Demolition of all buildings and reconstruction of a new service garage, sand dome and salt shed. Estimated cost \$2,925,000

Plainville depot: Replace the sand dome and complete site drainage upgrades to control storm water on site. Estimated cost \$1,100,000

Based on the current aging infrastructure, an alternative to a new Joint Operations Base would cost an estimated \$15,895,000

Estimated Future Operating Cost

Slide 1

Estimating a 15% future cost savings for a new energy-efficient JOB, with additional savings to the road operations department due to central location, involves a structured approach considering various factors:

- 1. Energy Efficiency Benefits:** Energy-efficient features such as LED lighting, efficient HVAC systems, insulation, and energy-efficient windows can significantly reduce utility costs (electricity, heating, cooling). Current estimated savings of \$14,000 annually.
- 2. Maintenance Cost Reduction:** Energy-efficient buildings generally require less maintenance over time, reducing ongoing operational expenditures.

Estimated Future Operating Cost

Slide 2

3. **Operational Efficiency:** Centralized management and coordination streamline operations, improving efficiency and reducing operational redundancies.
4. **Road Operations Savings:** More efficient deployment of resources (personnel, equipment) due to centralization leads to productivity gains and reduced downtime; Consolidating multiple facilities will enable savings in property maintenance, utilities, and administrative costs.

Value of Proposed Decommissioned Facilities

Baayen Real Estate Appraisers and Consultants has completed Market Rate Appraisals on the 3 public works yards that would be decommissioned. This report was not accompanied by an environmental assessment, which may be required depending on what the purchaser intends to do with the subject property.

Market Values:

- Veronica St Depot - \$3,000,000
- Plainville Depot - \$450,000 - \$500,000
- Roseneath Depot - \$541,000 - \$561,000

Total appraised value of decommissioned assets equals
\$3,991,000 - \$4,061,000

Benefits of a JOB – Slide 1

To address the comprehensive needs and objectives outlined for the new JOB, the following key points can be highlighted:

- 1. Functional and Future-Proof Design:** The new facility will address current needs and future growth, incorporating fleet electrification and energy efficiency to ensure long-term sustainability and adaptability.
- 2. Address Health, Safety, and Environmental Concerns:** Consolidating operations into a modern facility will address health, safety, and environmental issues of outdated depots and ensure compliance with codes, including requirements for a post-disaster DOC and EOC.

Benefits of a JOB – Slide 2

3. **Optimize Space and Efficiency:** Relocating Engineering staff to the new JOB will alleviate space shortages and free up office and storage areas at County headquarters and 600 William Street, improving operational efficiency.
4. **Reduce Repair Costs and Extend Equipment Life:** Providing sufficient indoor space for vehicles and equipment will decrease downtime; reduce repair costs, extend the life of vehicles and equipment as well as improve efficiency of winter operations by reducing start up time during winter events.

Benefits of a JOB – Slide 3

5. **Improve Security and Access Control:** The new facility will feature enhanced security measures to prevent unauthorized access, ensuring the safety of assets and personnel.
6. **Improve Communication and Resource Allocation:** Consolidating operations facilities county-wide will streamline communication, supervision, and resource allocation. This centralized approach enhances operational synergy and responsiveness.

Benefits of a JOB – Slide 4

7. **Enhance Service Delivery and Cost Savings:** Reducing the need for driving trucks and equipment between multiple depots, the County anticipates time and cost savings. Consolidation also minimizes duplication of equipment and tools, reduces repair and maintenance expenses, and optimizes utility usage. Eliminates the requirement to get equipment in need of repair/maintenance from Morganston, Roseneath depots to the fleet maintenance garage at Veronica St. Cobourg.
8. **Improve Workplace Inclusivity:** The new facility will be designed to be inclusive and accessible, accommodating diverse needs with features like accessible entrances, workstations, washrooms, changerooms, and lunchrooms. This promotes a supportive and equitable workplace.

Challenges of a JOB - Slide 1

While investing in a new Joint Operations facility for Public Works can bring numerous benefits, there are potential drawbacks and challenges to consider:

- 1. Cost Overruns:** Construction projects, especially large-scale ones like a new facility, can often exceed budget estimates due to unforeseen expenses, delays, or changes in scope.
- 2. Resistance to Change:** Employees may resist transitioning to a new facility due to concerns about commute times, workspace adjustments, or changes in organizational culture.

Challenges of a JOB - Slide 2

3. **Potential for Overcapacity:** If not carefully planned, a new facility could be designed with more capacity than needed, leading to underutilization and inefficiency.
4. **Community Concerns:** Local residents or stakeholders might have objections related to noise, traffic, or visual impact of the new facility in their neighborhood.
5. **Regulatory and Permitting Issues:** Delays or complications in obtaining necessary permits or complying with regulations could slow down the project timeline and increase costs.

Challenges of a JOB - Slide 3

6. **Technology and Infrastructure Requirements:** Upgrading or integrating existing technology and infrastructure with the new facility may require additional investments and expertise.

To address these potential challenges, staff will need to plan accordingly to mitigate risks associated with the implementation of a new Joint Operations Base.

Shared Services Opportunities

- ▶ Construction of a Joint Operations Base would provide the opportunity for shared services with municipalities such as:
 1. **Fleet Maintenance:** With additional space and staff, the County could expand fleet maintenance to include routine maintenance of municipal fleet and equipment. This would come at an additional cost as currently the cost estimates are based on the County's needs only.
 2. **Training:** Joint training of Public Works and other municipal staff could be provided at a new Joint Operations Base.
 3. **Emergency Operations Centre:** An alternate Emergency Operations Centre (EOC) could be provided at the Joint Operations Base to provide an EOC for the County and municipalities away from the populated area.

Summary – Slide 1

Investing in a new Joint Operations facility will enhance services and benefits for the Road Operations and Engineering divisions by consolidating their functions, offering several key advantages:

- 1. Efficiency:** A centralized facility streamlines operations, cuts redundancy, and improves service delivery, resulting in faster response times and better resource management.
- 2. Cost-effectiveness:** Consolidation reduces operational costs and optimizes budgets by leveraging economies of scale and shared resources.

Summary – Slide 2

- 3. Enhanced Service Delivery:** Centralizing functions improves communication and coordination, leading to better planning, maintenance, and management of infrastructure and assets.
- 4. Support for Sustainable Growth:** Eco-friendly practices ensures energy efficiency, supporting long-term growth while upholding environmental stewardship.