Public Works

Infrastructure and Environment

operations | engineering | climate & energy | facilities | waste services | forest



Public Works Department

- Overall Net Change = \$1,546,000 (8.48%)
- Full year of 3 positions added in 2023
- Administration and Office increased \$610,675 (51.66%)
- Transfer from Reserves increased \$546,220 (96.59%)
- Budget includes one additional staff



SUPPORTING STRATEGIC PLAN 2023-2026



Climate and Environment:

- 1. Establish the County as a leader in climate action
- 2. Enhance and conserve Dufferin's Natural Environment

Investment included in the 2024 DRAFT budget:

Studies/operational plans

- Operations portion of new position to develop/implement fleet protocols \$30,000
- Engineering Infrastructure Climate Risk Assessment \$75,000
- Climate & Energy & GGS (Office of the CAO) Resiliency Hub Study \$30,000
- Climate & Energy Corporate Climate Plan \$50,000, Climate Lens Training \$32,500
- Climate & Energy Net-zero Pathways for Community Housing \$350,000
- Facilities Energy audits of County buildings \$50,000
- Waste Waste Audit \$60,000

SUPPORTING STRATEGIC PLAN 2023-2026



Governance:

- 1. Identify opportunities to improve governance and service delivery
- 2. Improve the County's internal and external communication

Investment included in the 2024 DRAFT budget:

Studies/operational plans

- Engineering Implementation processes for Road Rationalization Plan \$55,000
- Operations South Operations Centre siting/conceptual design/costing \$500,000
- Facilities Comprehensive Building Condition Assessments \$150,000
- Waste Mobile HHW environmental approvals, etc. \$25,000

Operations



Key Team Members

- Scott Martin Manager of Operations
- Bruce Hilborn CET CRS Assistant Manager of Operations



Key Functions

- 24/7 County Road maintenance per Minimum Maintenance Standards (O.Reg.239/02)
- Road, bridge, culvert, roadside drainage/ditch maintenance
- Roadside vegetation removal, tree trimming, grass cutting
- Road signs (approx. 3,300) annual reflectivity compliance inspections
- Traffic signals (11) and 4-way flashing beacons (10)
- Corporate Fleet passenger vehicles (36), snowplows (12), tractor, grader, loaders, backhoe, excavator
- Monitor and maintain roadway cameras (9) and weather stations (3) used during weather events, etc.

Operations

Challenges

- Capacity Constraints:
 - Staff capacity related to several areas of responsibility notably within fleet management function
- Primrose Operations Facility:
 - Insufficient space resulting in outdoor equipment storage and use of temporary office/staff trailers
 - Increased road maintenance needs in southern Dufferin resulting in delayed response times
- Winter Maintenance:
 - Recruitment challenges due to scarcity of experienced plow operators
- Supply Chain and Market Pressure:
 - Increasing costs of vehicles, equipment, fuel, and materials

On the Horizon

- Southern Operations Facility Phase 1 includes determining optimal location
- Fleet Management Fleet electrification and optimization
- Former rail corridor trail development completion of southern portion

Engineering

Key Team Members

Mike Hooper CET – Manager of Engineering



Key Functions

- Road/large structure Capital program planning, design, contract administration
- 10-year capital plan through the lens of asset management
- Permitting road occupancy, entrances, oversized loads, municipal consent
- Development review, comment, approval of applications, including site plan, severance, private utility, etc.
- Utility locates County owned buried infrastructure
- Data collection traffic volume and composition
- Public inquires

Engineering

Challenges

- Ensuring balance between aging infrastructure and limited funds
- Capacity to respond to infrastructure needs related to climate adaptation, growth, and active transportation
- Recruitment of qualified technical staff for development review, project design, site inspection, etc.

On the Horizon

- Capital road and bridge projects
- Biennial OSIM bridge/structure inspections
- Detailed design of Dufferin Road 3, 23, 109 and 2nd Line improvements related to ongoing Environmental Assessment
- Further planning related to capacity review and build out of Dufferin Road 109 resulting from Transportation Master Plan

- Revenues:
 - OTHER REVENUES nearly status quo at \$690,000 includes: allocation of staff time to capital projects (\$253,000), winter maintenance revenues (\$70,000), aggregate royalties (\$80,000)
- Expenditures:
 - SALARIES AND BENEFITS increase of \$371,000 includes:
 - Cost of living and step increases, changes in staff responsibilities, onboarding overlap related to pending retirement of key personnel, full year salary of 2023 approved position
 - ADMINISTRATIVE AND OFFICE increase of \$132,000 includes:
 - Consulting Fees increase of \$41,000 due to several projects including; biennial OSIM bridge/structure inspections (\$75,000), development review support (\$45,000), implementation of the Road Rationalization Study (\$55,000), infrastructure climate risk assessment (\$75,000)
 - Legal fees essentially status-quo (\$25,000) primarily related to agreements and legal review associated with developments and utilities
 - Insurance increase \$42,000 due to industry changes in insurance costs

2024 Budget Highlights - continued

- Expenditures continued:
 - SERVICE DELIVERY Increase of \$198,000 related to shift from capital to operating for bridge maintenance (\$37,500), service contracts and materials related to roadside maintenance (\$74,000) and hardtop maintenance (\$211,500), supply and delivery of sand and salt (\$1,060,000), pavement marking (\$325,000), lighting and traffic signal maintenance (\$175,000)
 - FACILITIES Increase of \$16,600 related to property insurance
 - VEHICLES AND EQUIPMENT Increases in fuel (\$20,000) and maintenance (\$20,000)
 - TRANSFERS FROM RESERVES increase of \$56,000 related to rising vehicle and equipment replacement costs (\$50,000) and transfer of funds for the infrastructure climate risk assessment (\$75,000), implementation of the Road Rationalization Plan (\$55,000), and required municipal drain work (\$75,000)

2024 Budget Highlights - continued

- Additional Staffing Request Operations Division:
 - CIVIL ENGINEERING TECHNOLOGIST OPERATIONS
 - This role will advance centralized fleet management and improve long-term efficiency in the division. The position will take on primary responsibility for coordinating operations and maintenance of the fleet across the organization. Other key functions include developing and implementing standard operating procedures to promote current best practices in operations and fleet management. Future savings in vehicle maintenance and operational efficiencies will serve to offset some of the cost going forward. Inclusion of this role will assist to limit potential future liability with improvements to policies, record keeping and maintenance practices.
 - FINANCIAL IMPACTS
 - The 2024 cost for this position is \$96,000 (salary and benefits), plus \$4,500 in support costs for year one and \$2,000 thereafter (training, laptop, etc.). The annualized cost is \$125,000. Please see the Organizational Planning Report to Committee for full 4Ps document.

2024 Capital Work Plan Highlights – Capital Asset Fund

- Contributions:
 - GOVERNMENT TRANSFERS Decrease of \$596,000 due to reductions in gas tax (-\$400,000) and OCIF funding (-\$196,000)
 - DEBT FINANCING \$3,000,000 for the southern operations centre land
 - OTHER REVENUE Increase of \$1,235,000 due to developer funded road works (\$1,175,000) and includes funds to support Operations equipment replacement (\$750,000), and sale of outgoing plow unit (\$50,000)
 - TRANSFERS FROM RESERVES Decrease of \$926,000 primarily due to Rail Trail resurfacing completed in 2023

2024 Capital Work Plan Highlights – Work Plan

- LAND \$3,000,000 new southern Operations facility land purchase
- LAND IMPROVEMENTS \$475,000 decrease due to 2023 Rail Trail resurfacing work with \$250,000 remaining for 2024, includes funds for guiderail installation on Dufferin Road 19 (\$75,000) and continuation of County entry/wayfinding sign program (\$200,000)
- BUILDINGS \$495,000 increase (includes 2023 carryover of \$200,000) for siting/design of new south Operations Centre (\$500,000), includes Primrose Operations Centre electrical upgrades (\$200,000) and washroom/changeroom upgrades/renovation (\$50,000)
- EQUIPMENT AND MACHINERY \$46,000 increase related to box drag to maintain Rail Trail surface (\$50,000) and replacement of survey equipment (\$49,000)
- VEHICLES \$376,000 decrease due to single 2024 plow replacement (\$430,000) and replacement of two pickup trucks (\$60,000 each)

2024 Capital Work Plan Highlights - Work Plan - continued

- ROADS \$103,000 increase due to nature of 2024 projects:
 - Dufferin Road 109 (SAR By-pass) resurfacing (\$1,320,000) and Environmental Assessment (\$600,000)
 - Dufferin Road 109 & 2nd Line realignment detailed design and property acquisition (\$1,050,000) and carryover to complete related Environmental Assessment (\$20,000) and interim temporary intersection improvements (\$650,000)
 - Dufferin Road 124 resurfacing (\$4,000,000)
 - Dufferin Road 18 culvert replacement (\$90,000)
 - Several preventative maintenance projects (\$250,000);
- BRIDGES & CULVERTS Increase of \$826,000 to \$2,598,000 due to the nature of 2024 projects including two significant shared Simcoe/Dufferin bridge rehabilitations with combined contribution of \$2,038,000 with remaining work related to smaller rehabilitation and future project design

2024 Capital Work Plan Highlights -Work Plan - continued

- Recommendations:
 - ROADS:
 - Dufferin Road 109 (SAR By-pass) resurfacing (\$1,320,000) and Environmental Assessment (\$600,000)
 - *Reduce \$1,320,000 project scope by \$1,070,000 to \$250,000*
 - BRIDGES & CULVERTS:
 - Increase of \$272,000 for two projects:
 - Culvert No. 501 (004-0901) rehabilitation increase from \$177,000 to \$320,000
 - Bridge No.1 (004-0142) rehabilitation increase from \$137,000 to \$266,000
 - Net Reduction of \$798,000

Key Team Members

• Sara MacRae - Manager of Climate and Energy



Key Functions

- Develop and implement strategies to enhance climate resilience in the community and municipal operations
- Maintain a greenhouse gas inventory, setting reduction targets and tracking emission reduction progress
- Develop climate related policy and advocate for sustainable practices in line with municipal climate and energy goals

Challenges

- Limited staff capacity and resources to fulfil commitments outlined in the Dufferin Climate Action Plan and the Climate Adaptation Plan
- Institutionalizing and embedding climate action within corporate operations, plans, and strategies
- Coordination efforts amongst various stakeholders with limited data and need for focused technical expertise and knowledge to inform decisions and policy
- Securing funds for climate resiliency initiatives considering budget constraints, complex funding resources, grant management, etc.

On the Horizon

- Tri-County Green Development Standards
- BetterHomes Dufferin Residential Retrofit program
- Corporate Climate Strategy
- Updated Rural Water Quality program

- Revenues:
 - OTHER REVENUES \$650,000 increase due to funding for the residential energy retrofit program (\$500,000) and Net-Zero Pathways for Community Housing project focused on infrastructure and energy sustainability for County Housing buildings (\$175,000 to be matched by the County via reserve transfer)
- Expenditures:
 - SALARIES AND BENEFITS \$89,000 increase due to full year of 2023 position
 - ADMINISTRATIVE AND OFFICE \$335,000 increase for consulting fees related to several projects:
 - \$15,000 resiliency hub study
 - \$50,000 Corporate Climate Plan
 - \$350,000 Net-Zero Pathways for Community Housing
 - \$50,000 carryover feasibility study of vacant 200-acre land in north Grand Valley
 - \$32,500 corporate climate training program for managers and key personnel
 - SERVICE DELIVERY \$515,000 increase primarily due to outflow of funds for residential energy retrofit program (\$500,000)

- Transfers:
 - TRANSFERS FROM RESERVES \$153,000 increase due to offset costs of:
 - \$175,000 Net-Zero Pathways for Community Housing project
 - \$50,000 carryover feasibility study of vacant 200-acre land in north Grand Valley
 - \$27,500 to offset corporate climate staff training
 - \$50,000 to offset overall divisional costs

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Key Team Members

• Stephen Ducharme - Facilities Manager



Key Functions

- Asset management related to County buildings
- Pursuit of energy conservation related to County buildings
- Support a positive experience for facility users/occupants with respect to cleanliness, safety, etc.
- Establish and follow efficient workflow and building management processes

Challenges

- Balancing tenant/occupant needs with best practice and sustainable systems
- Becoming more proactive in responding to needs of aging infrastructure
- Material and product availability and lead time impacting timeliness of repairs resulting in lost revenues due to vacancy loss
- Budget forecasting due to volatile industry pricing

On the Horizon

- Service Level Agreements with stakeholders/tenants/occupants to refine expectations and response
- Review of accessible housing units to develop standards in line with best practice
- Improve asset inventory data to enhance asset management practices
- Building safety enhancements in line with corporate security review/standards

- Revenues:
 - RENT REVENUES \$75,000 decrease related to reduced recoverable costs/rent from MAG and vacant space at Edelbrock Centre
- Expenditures:
 - SALARIES AND BENEFITS \$71,000 increase resulting from full year cost of 2023 position
 - ADMINISTRATIVE AND OFFICE \$135,000 increase due to consulting fees related to corporate Building Condition Assessment and energy audits
 - VEHICLES AND EQUIPMENT \$26,000 increase resulting from increases including:
 - \$22,000 vehicle maintenance
 - \$38,400 vehicle fuel
 - \$5,000 for maintenance of EV charging stations

2024 Capital Work Plan Highlights – Capital Asset Fund

- Contributions:
 - OTHER REVENUE \$140,000 increase to \$1,000,000 from MAG to fund Courtroom 204 repairs which now includes for scope changes as decided by MAG.

2024 Capital Work Plan Highlights – Work Plan

- LAND IMPROVEMENTS \$412,000 for Courthouse parking lot resurfacing
- BUILDINGS \$372,000 increase to \$1,498,000 includes:
 - \$42,000 Edelbrock Centre security upgrades
 - \$260,000 roof replacement for 1988 Courthouse addition
 - \$20,000 various Courthouse windows
 - \$36,000 HVAC repairs, replacements, upgrades

Key Team Members

Melissa Kovacs Reid - Manager of Waste



Key Functions

- Managing curbside collection contract with GFL for garbage, recycling, source-separated organics (SSO), yard waste, bulky items and white goods, bi-annual batteries collection
- Operating Household Hazardous Waste and Electronics Recycling events
- Waste diversion and reduction education
- Policy and Planning related to Waste and in response to full-producer responsibility

Challenges

- Contract/Service cost increases related to CPI and growth
- Coordinating special waste programs (batteries, electronics, household hazardous, etc.) in parallel with transition to full-producer responsibility for designated materials
- Monitoring impacts of 2023-2025 Blue Box transition
- Increasing promotion, education, and customer service due to ever changing needs and areas of focus including increasing green bin usage and HHW diversion

On the Horizon

- Household Hazardous Waste Mobile Depot project resulting from program review
- Seasonal waste audits to help focus campaigns and service response
- 2025 Long-Term Waste Management Strategy Update
- Engagement and Customer Service

- Revenues:
 - OTHER REVENUES \$758,000 decrease due to termination of Blue Box funding resulting from transition to full-producer responsibility
- Expenditures:
 - ADMINISTRATIVE AND OFFICE \$229,000 includes consulting fees for waste audits (\$60,000) and approvals potential for mobile HHW depot (\$25,000)
 - SERVICE DELIVERY \$428,000 decrease to \$4,895,000 includes items related to the County's waste collection and processing contracts and:
 - \$110,000 loose leaf collection for Orangeville and Shelburne
 - \$880,000 savings related to Blue Box transition to producers, partially offset by increase to new collections contract of \$180,000
 - \$203,500 mobile HHW depot annual operating costs
 - TRANSFERS \$228,000 increase includes:
 - \$228,500 to offset mobile HHW depot
 - \$60,000 to offset waste audits
 - \$13,000 to offset summer student

2024 Capital Work Plan Highlights – Capital Asset Fund

- Contributions:
 - TRANSFER FROM RESERVES vehicle replacements to be offset by Waste reserve

2024 Capital Work Plan Highlights – Work Plan

• CAPITAL WORK - \$60,000 for vehicle replacement



Key Team Members

Caroline Mach RPF - County Forest Manager

Key Functions

- Forest Management
 - Sustainable timber harvest
 - Invasive species control
 - Preserve ecological value
 - Increase resilience to climate
 - Ensure sustainable regeneration
- Recreational Use Management
 - Respond to public inquiries and provide onsite contact with Forest users
 - Monitor recreational activities and collect user data
 - Monitor and maintain signs and arrange maintenance/replacement for gates
- Public Relations & Education
 - Community outreach and education



Challenges

- Ongoing vandalism, littering, and equipment theft
- Managing increasing recreational activity
- Managing increasing communication and enforcement needs arising from increasing recreational activity
- Balancing recreational use with forest management activities

On the Horizon

- Internal Oak Wilt Policy
- Implement and expand Invasive Species Management Plan
- Implementation of Outdoor Recreation Plan 2024 sign program

- Expenditures:
 - SALARIES AND BENEFITS \$46,000 increase primarily resulting from full-year of 2023 approved position
 - ADMINISTRATIVE AND OFFICE \$2,000 increase primarily due to training and development for 2023 position
 - SERVICE DELIVERY \$5,000 increase due to animal-proof waste containers (\$7,500)
 - TRANSFERS Forest Reserve Fund nearly depleted because of increasing costs and lower timber sales.

2024 Capital Work Plan Highlights – Capital Asset Fund

- Contributions:
 - CAPITAL LEVY \$7,000 increase for work associated with Council approved Outdoor Recreation Plan and future vehicle and equipment replacement

2024 Capital Work Plan Highlights – Work Plan

- LAND IMPROVEMENTS \$4,000 includes replacement of signs and gates
- EQUIPMENT AND MACHINERY \$10,000 included to purchase trailer for ATV for maintenance, inspection, etc. within the County Forest and Rail Trail

Questions?

Scott Burns, P. Eng., C.E.T Director of Public Works and County Engineer sburns@dufferincounty.ca

