

APPENDIX M

Development Charges



WELLINGTON
COUNTY

Road Master Action Plan



Memo



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From: Paul Bumstead, Dillon Consulting Limited
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Date: December 31, 2021
Subject: Wellington RMAP – Development Charges Review
Our File: 20-3297

The following memo provides an overview of the Development Charges Review process and its relevance to the Wellington County Road Master Action Plan (RMAP). The purpose of the memo is to provide an overview of the changes to Wellington County's road network within the DC study period (2021 to 2041), identify the capital costs associated with improvements and provide direction as to how to apportion the capital expenditures to existing and growth populations within the same study period.

1.0 Background

Development Charges (DC) are a tool for municipalities to ensure that "growth pays for growth". This means that developments that result in growth in the municipality should cover those costs associated with extending municipal services to accommodate this new growth. Through the application of DC, the development community contributes an appropriate share of infrastructure and capital costs (including those for public highways) for necessary growth-related improvements over the ten-year planning period. The Development Charges Act (DCA), 1997, as amended regulates when and how municipalities may collect DC.

2.0 Development Charges Update Study

The most recent Development Charges Background Study Update was completed in 2018. The current by-law will expire at 12:01 AM on June 1, 2022 unless it is repealed by Council at an earlier date.

A summary of the DC Update methodology for roads is provided below:

- Identify amount, type and location of growth;
- Identify servicing needs to accommodate growth;
- Identify capital costs to provide services to meet the needs;
- Deduct:
 - Grants, subsidies and other contributions;

- Benefit to existing development;
- Statutory 10% deduction (soft services);
- Amounts in excess of 10-year historical service calculation;
- DC reserve funds (where applicable);
- Net costs are then allocated between residential and non-residential benefit; and
- Net costs divided by growth to provide the DC charge.

This memo only addresses the DC implications of the capital costs related to the transportation infrastructure.

3.0

RMAP Capital Program

As the RMAP simply addresses the identification of the most recent capital costs for road infrastructure, and not the growth allocation, other County asset capital costs, or applicable grant and other funding elements, the purpose of this section of the plan is to identify whether there is expected to be a significant change in the roads capital cost as a result of the new work performed.

Network deficiencies were identified using the RMAP forecasting model. The 2041 traffic demand forecasts were developed using a similar methodology to the following approach adopted from the 2018 Wellington County Development Charges Update. The steps taken include:

1. Existing Traffic Data:
 - Existing Average Annual Daily Traffic volumes (AADT) was used as the basis, grounding the projections in reality
2. Background Traffic Growth:
 - An allowance for growth in background traffic was added to existing data
3. Development Related Traffic Growth:
 - Projection of development-related traffic growth (municipal area population and employment forecasts, plus specific known secondary plans)
4. Future Traffic Demand (2041)

The 2041 future traffic demands were used to identify capacity issues and assess the timing of the issues. Benchmark unit costs for new and improved infrastructure, operational improvements, and infrastructure costs were used to estimate the capital cost of each road project.

For transit, capital for vehicles are identified starting in 2025 should the County decide to maintain and expand the Ride Well program. Vehicle expenses in 2025 are considered replacement vehicles of the existing contractor vehicles and would not be eligible. For future vehicle expansion, only the municipally-funded portion would be eligible for DC, and any portion paid by government grants would not be. **Table 1** below assumes 80% of capital costs are funded through federal or provincial grant programs.

Based on the recommended solutions and identified priorities, the capital plan has been developed to address the plan objectives. **Table 1** provides a summary of the projected capital cost for transportation infrastructure and services.

Table 1: Capital Cost Estimate – RMAP

<i>Project</i>	<i>Description</i>	<i>Cost (\$000)</i>
Short Term [2021 – 2025]		
Wellington Road 124	Improvements will be as per recommendations from approved WR 124 EA between Region of Waterloo boundary limits and City of Guelph boundary limits	\$15,800
Operational Improvements	Annual Project expense for Intersection improvements and speed management initiatives ¹	\$10,600
Transit	Purchase three to four accessible Ride Well vehicles when the grant funding ends in 2025 and lease to operator to lower the operating rate (assumed 80% covered through Grant Funding) ²	\$48
Planning Studies	<ol style="list-style-type: none"> 1. WR 46 Area Study (\$50,000) 2. WR 46 EA Study (\$500,000) 3. Fergus/Elora Area Study/By-Pass Feasibility Study (\$100,000) 	\$650
	Sub-Total	\$ 27,098

¹ Assumed an average of \$1.92 million in capital costs per year for intersection improvements and \$200,000 per year for speed management improvements.

² Assumed \$60,000 per vehicle, with 80% recovered through funding. This assumes that the County continues with a public transit service as recommended in Appendix D. Replacement of existing contracted vehicles in this horizon are not DC eligible.

<i>Project</i>	<i>Description</i>	<i>Cost (\$000)</i>
Mid Term [2026 – 2031]		
Wellington Road 18	TSM and Expansion of Infrastructure between WR 21 (Elora) and WR 43 (Fergus)	\$17,500
Operational Improvements	Annual Project expense for Intersection improvements and speed management initiatives ¹	\$10,600
Transit	Purchase one accessible cutaway bus to operate on the Highway 6 corridor and add one additional accessible mini-vans for the On Demand service (assumed 80% covered through Grant Funding) ²	\$42
Planning Studies	<ol style="list-style-type: none"> 1. Feasibility Study (\$100,000) 2. Wellington Road 7 EA (\$500,000) 	\$600
	Sub-Total	\$28,742

¹ Assumed an average of \$1.92 million in capital costs per year for intersection improvements and \$200,000 per year for speed management improvements.

² Assumed \$60,000 per each accessible mini-van and \$150,000 for an accessible cutaway bus, with 80% recovered through funding. Budget does not include replacement vehicles.

<i>Project</i>	<i>Description</i>	<i>Cost (\$000)</i>
Long Term [2032 – 2041]		
Wellington Road 7	Expand Infrastructure between Salem and the Highway 6 Junction (total of 15.9 km of widening, intersection improvements and bridge replacement)	\$77,800
Wellington Road 21	TSM between WR 7 (Elora) and Region of Waterloo	\$3,700
Wellington Road 32	TSM - Paving/widening shoulders, provision of auxiliary left turn lanes where necessary between WR 124 and Highway 7	\$2,800
Wellington Road 46	Expand Infrastructure between Maltby Road and WR 34 (total of 2.1 km of widening and addition of paved shoulders and auxiliary lanes)	\$9,800
Wellington Road 86	TSM between WR 10 and WR 85 (addition of 18.8 km of paved shoulders and intersection improvements)	\$8,800
Operational Improvements	Annual Project expense for Intersection improvements and speed management initiatives	\$2,000 ¹
Transit	Purchase one to two additional accessible mini-vans for the On Demand service (assumed 80% covered through Grant Funding) ²	\$24 ²
Planning Studies	<ol style="list-style-type: none"> Studies (Local area transportation studies, update to Active Transportation Plan, Transit Master Plan) – 3 x \$100,000 Update to the RMAP – 1 x \$300,000 	\$600
	Sub-Total	\$105,524
	TOTAL	\$161,364

¹ Assumed \$200,000 per year for speed management improvements

² Assumed \$60,000 per each accessible mini-van, with 80% recovered through funding. Budget does not include replacement vehicles.

Table 2 provides a comparison of the 2018 DC Background Study and the 2021 RMAP capital program cost for roads.

Table 2: Comparison of Capital Costs for Road Program – 2018 DC vs. 2021 RMAP

Road Section	2018 DC (\$000) ^{1.}	2021 RMAP (\$000) ^{2.}
Wellington Road 7 (Elora to Hwy 6; Salem to Elora) ^{3.}	\$17,450 (\$14,450 + \$3,000)	\$77,800
Wellington Road 18 (Fergus to Elora) ^{4.}	\$8,580	\$17,500
Wellington Road 21	\$1,000	\$3,700
Wellington Road 43	\$2,580	NA
Wellington Road 124 (Region of Waterloo to City of Guelph Boundary Limits)	NA	\$15,800
Wellington Road 124 (Wellington Road 52 to Wellington Road 23)	\$7,685	NA
Wellington Road 124 (Guelph to Erin)	\$6,400	NA
Wellington Road 109 (Harriston to Teviotdale)	\$750	NA
Wellington Road 46 (Brock Road) ^{5.}	\$9,995	\$9,800
Wellington Road 32	NA	\$2,800
Wellington Road 86	NA	\$8,800
TOTAL	\$54,440	\$136,200

¹ 2016 dollars.

² 2021 dollars.

³ 2018 DC assumed passing lanes only between Salem and Elora vs RMAP which includes widening both directions.

⁴ Length of section considered for improvement under RMAP recommendation has increased.

⁵ Expand Infrastructure between Maltby Road and WR 34. 2018 DC included elements outside these limits that have since been constructed.

The costs identified in **Table 2** above do not include the short-term operational improvements or planning studies.

4.0 DC Eligible Items

4.1 Infrastructure

The following sections describe the Development Charges Act (DCA) as they relate to the Wellington County road infrastructure elements.

4.1.1 Arterial Roads

- a) New, widened, extended or upgraded arterial roads, inclusive of all associated infrastructure, including temporary works, is included as part of road costing funded through DC net of direct

developer responsibility (local service component) per *Financial Policies for Development* and the *Comprehensive Development Guidelines and Financial Policies Manual, 2017*, or as may be amended from time to time.

- b) Land Acquisition for arterial roads on existing rights-of-way to achieve a complete street: dedication under the Planning Act provisions (s. 41, 51 and 53) through development lands per *Financial Policies for Development* and the *Comprehensive Development Guidelines and Financial Policies Manual, 2017*, or as may be amended from time to time. In areas with limited development, this is included as part of road costing funded through DC.
- c) Land Acquisition for arterial roads on new rights-of-way to achieve a complete street: dedication, where possible, under the Planning Act provisions (s.51 and 53) through development for lands up to the collector standard per *Financial Policies for Development* and the *Comprehensive Development Guidelines and Financial Policies Manual, 2017*, or as may be amended from time to time. Land acquisitions for road widenings and/or oversizing beyond the collector standard, or where located in an area with limited development, are included as part of road costing funded through DC.
- d) Land acquisition beyond normal dedication requirements to achieve transportation corridors as services related to roads including grade separations and infrastructure for the movement of pedestrians, cyclists, public transit and/or railway vehicles are included as part of road costing funded through DC.

4.1.2

Traffic and Transit Control Systems, Signals and Intersection Improvements on Area Municipal Roads

- a) New, widened, extended or upgraded arterial roads, including temporary works, unrelated to a specific development are included as part of road costing funded through DC net of developer responsibility (local service component) per *Financial Policies for Development* and the *Comprehensive Development Guidelines and Financial Policies Manual, 2017*, as may be amended from time to time.
- b) Arterial and non-arterial road improvements related to any private site entrances or entrances to specific development, including any temporary works, are a direct developer responsibility under s. 59 of the DCA (local service component), net of applicable oversizing per *Financial Policies for Development* and the *Comprehensive Development Guidelines and Financial Policies Manual, 2017*, or as may be amended from time to time.
- c) Intersection improvements, new or modified signalization, signal timing and optimization plans, area traffic studies for roads attributed to growth and unrelated to a specific development are included as part of road costing funded through DC as permitted under a. 5(1) of the DCA.

4.1.3

Streetlights

- a) Streetlights on new arterial roads and arterial road improvements are considered part of the complete street and included as part of road costing funded through DC net of direct developer responsibility (local service component).

- b) Streetlights on non-arterial roads external to development needed to support a specific development or required to link with the area to which the plan relates are considered part of the complete street and included as a direct developer responsibility under s. 59 of the DCA (local service component).
- c) Streetlights on non-arterial roads internal to development are considered part of the complete street and included as a direct developer responsibility under s. 59 of the DCA (local service component).

4.1.4

Transportation Related Pedestrian and Cycling Facilities

- a) Sidewalks, multi-use trails, trails, pathways, cycle tracks and bike lanes, inclusive of all required land and infrastructure, including related temporary works and grade separations, located within County arterial road and Provincial highway corridors are considered part of the complete street and included as part of road costing funded through DC, net of direct developer responsibility (local service component) per *Financial Policies for Development* and the *Comprehensive Development Guidelines and Financial Policies Manual, 2017*, or as may be amended from time to time.
- a) Sidewalks deemed to be temporary are considered direct developer responsibility (local service component).
- b) Sidewalks, trails, pathways, multi-use trails, cycle tracks and bike lanes, inclusive of all required land and infrastructure, including related temporary works and grade separations that are located within or linking to non-arterial road corridors internal to development are considered part of the complete street and are a direct developer responsibility under s. 59 of the DCA (local service component) per *Financial Policies for Development* and the *Comprehensive Development Guidelines and Financial Policies Manual, 2017*, or as may be amended from time to time.
- c) Other sidewalks, trails, pathways, multi-use trails, cycle tracks and bike lanes, inclusive of all required land and infrastructure, including related temporary works and grade separations, that are located within non-arterial road corridors external to development and needed to support a specific development or required to link with the area to which the plan relates are a direct developer responsibility under s. 59 of the DCA (local service component) per *Financial Policies for Development* and the *Comprehensive Development Guidelines and Financial Policies Manual, 2017*, or as may be amended from time to time.
- d) Multi-use trails (not associated with a road), inclusive of all land and required infrastructure and including related temporary works and grade separations, that go beyond the function of a (parkland) recreational trail and form part of the County's active transportation network for cycling and/or walking are included in DC calculation as permitted under a. 5(1) of the DCA.

In January 2016, the provincial government enacted changes to the DCA with direct implications for how municipalities plan and fund future transit services.

The new reporting requirements that need to be outlined in the DC background study related to transit include:

- The calculations used to prepare the estimate for the planned level of service for transit services;
- An identification of the portion of the total estimated capital costs related to the transit service that would benefit the anticipated development over the ten-year DC period and after the ten-year DC period;
- An identification of the anticipated excess capacity that would exist at the end of the ten-year DC period;
- An assessment of ridership forecasts for all modes of transit services proposed to be funded, including whether the ridership will be from existing or planned development; and
- An assessment of the ridership capacity for all modes of transit services proposed to be funded by the DC.

The following transit capital costs are eligible to be recovered through the DC process.

1. Expansion vehicles used for public transit, amortized over a 7 year or greater period. This can include transit vehicles used for conventional transit, specialized transit and On Demand transit. Supervisor and maintenance vehicles are also eligible, based on the above noted requirements.
2. Transit technology used for service operation (capital expense only and not ongoing maintenance fees). This can include fareboxes, automatic passenger counters, tablets and On Demand technology.
3. Transit facilities used to store or maintain vehicles.
4. Transit terminals used to facilitate transfers between transit services.
5. Bus stop infrastructure including transit stops, concrete pads and shelters.

The following caveats apply to the above list:

1. Only the expansion portion of capital costs are eligible under the DCA Replacement vehicles and other replacement costs are not eligible.
2. Only the municipally funded portion of the capital expense is eligible. Where capital expenses were funded through an upper tier government grant or fund, only the portion funded by the municipality is eligible to be recovered under the DC.

Expansion vehicles that are included as part of an operating contract and owned by the operator may be eligible for DC recovery as long as the capital cost of the vehicles (amortized over 7 or more years) is clearly delineated from the operating portion of the contract.

Under the 2016 amendment to the DCA, the following reporting requirements and therefore methodology is required to be outlined in a DC background study related to transit:

- Estimate the planned level of service for transit services over a 10-year period. This takes into account the level of service and associated capital expenses required to accommodate for population/employment growth and any planned improvements to the level of service for both existing and future residents (e.g., reduction in waiting time when booking a trip or service to a new area that previously did not have transit service).
- Conduct ridership forecasts for all modes of transit services proposed to be funded, categorized by development types and whether the ridership will be from existing or planned development.
- Calculate the portion of the total estimated capital costs related to the transit service that would benefit existing residents and the portion that would benefit the anticipated development over the ten-year DC period and after the ten-year DC period, based on the ridership forecasts conducted above.
- Identify the anticipated excess capacity that would exist at the end of the ten-year DC period. Excess capacity refers to any excess vehicle capacity that exists in the transit vehicles or facilities that will accommodate future growth beyond the 10-year DC period.
- Report all of the calculations noted above.

Wellington County has a new transit service called Ride Well that was introduced in Fall 2019, after the last DC update in Wellington County was completed. Transit services were not included in the 2018 Wellington County DC Update Study.

The service is funded primarily through the Ontario Community Transportation Grant, and contracted to a third-party provider. This funding will be in place until 2025. Based on the existing contract and operating model, there is no ability to recover any of the transit costs through the DC.

The recommended plan for Ride Well identifies a growth in service that is primarily due to population and employment growth. The secondary source of ridership growth will be from existing residents by adding service to shorten the customer waiting time between trip booking and pick-up. Should the County decide to expand the service as recommended in the RMAP, the following capital expenses should be considered (based on the recommendations in the Ride Well Service Strategy in **Appendix D**).

1. **Expansion Vehicles.** Any expansion vehicles (accessible and/or electric) for both the On Demand and potential fixed-route service could be included in this DC. These vehicles would be leased to the operator, and would need to have a 7+ year lifespan to be eligible.
2. **The On Demand Technology.** Upon the end of the existing contract with the On Demand technology provider, the County could modify the contract to treat the software, where possible, as a capital expense instead of an operating cost. This will allow a portion of this cost to be included in the DC report.

3. **Transit Stops, Pads and Shelters:** If transitioning to a fixed-route service on the Highway 6 corridor, include new transit stops, pads and potential shelters as a DC applicable capital expense.
4. **Tablets and Other Equipment:** The expansion of On Demand services may require tablets to be added to vehicles. This could be treated as a capital expense.
5. **Vehicle Storage:** If an expansion of an existing County facility is required to store and maintain vehicles, this can also be treated as an eligible expense.

For all of the above, any grant funding from upper levels of government should focus first on replacement costs, before allocating them to expansion costs. This will help maximize the amount that can be funded.

4.3 Future Studies

The County's 2018 DC Study included costs to undertake studies in connection with the different Categories of Municipal Services, including Services Related to a Highway and Other Transportation Services. These studies included growth-related studies under Development Related Studies Services and include both service specific studies that pertain to one of the DC eligible services permitted in the DCA and other general growth-related studies that pertain to all services.

With regards to Roads \, only Environmental Assessment Studies were specifically identified. Transportation studies not specifically identified but required at both a planning level and a project implementation level, and that can be classified and included under Development Related Studies, can include Transportation Master Plan, Storm Water Master Plans, County-Wide and Sub-Area Secondary Plans and Long-term Infrastructure Reviews, Sub-Watershed Studies, Development Engineering Standards and Criteria, Updates to the Active Transportation Master Plan, Transit Master Plans or Operational Reviews and other such growth related Engineering and Planning studies.

These studies have been specifically identified in the RMAP Capital Cost table (**Table 1**) and can be added to the DC eligible list.

5.0 Process Considerations

5.1 Complete Streets

A road, and services related to a road, are intended for the transportation of people and goods via many different modes including, but not limited to, passenger automobiles, commercial vehicles, transit vehicles, cycling and walking. A road also consists of all land, services, and infrastructure built to support this movement of people and goods regardless of mode of transportation in pursuit of a complete street.

The RMAP has considered, and in some cases recommends, the need for appropriate road corridor design to mitigate speed and safety issues, and improve the efficiency of the roadway capacity. This

design includes traditional elements of a road to serve its primary role and function while also encouraging a change to embrace all categories of the transportation system users and needs to provide a Complete Street. Complete Streets is a concept that defines a road as a transportation facility that provides safe and comfortable travel for a wide variety of users, regardless of mode, level of ability, and age. Complete Streets allow safe travel for:

- Pedestrians of all ages and ability levels;
- Cyclists;
- Automobiles;
- Transit vehicles; and
- Delivery vehicles.

This approach translates to the planned capital projects and, therefore, the local service policy and the Development Charges process.

5.2 Benefit to Existing

The DCA has a “benefit to existing (BTE)” community provision that allows for a portion of growth-related capital costs identified in DC background studies to be deemed to benefit the existing community. These costs are discounted from the eligible DC capital costs and are essentially paid for by the existing residents and business (the community) through municipal property taxes and/or user fees.

The portion of the capital cost that is attributable to BTE community typically varies by project type or grouping of projects depending on the extent of benefit, i.e., to what extent is the project needed to support growth, bearing in mind the principle that “growth pays growth”.

From the road related infrastructure needs identified for the County, certain improvements will benefit current residents and would comprise the non-growth component of the DC. The improvements required to accommodate higher volumes of traffic and increased demand on the existing infrastructure directly attributable to new developments are eligible for funding through DC. For all road reconstruction projects where there is no widening and the works are done due to the deterioration of the road and not to add capacity, the cost is borne 100% by the existing community. All new road projects have been determined to be 100% growth related; required to meet the needs of new development. Certain portions of future reconstruction, widening and urbanization projects can be recognized as a BTE community component.

Table 3 outlines a proposed percentage allocation, along with a rationale behind attributing all or a portion of an improvement as BTE community for various project types. Projects types have been renamed and redefined from the 2018 DC Update to better align with the range of project types included in the capital plan and with the multi-modal integrated approach to transportation, including Complete Streets.

Table 3: Benefit to Existing Community - Proposed

Project Type	Rationale	Benefit to Existing (%)
Road Resurfacing with no Widening	Where a road is resurfaced due to deterioration and there is no road widening or other infrastructure to support the growth in new development, 100% of the cost is BTE community. These projects should be excluded from the project list.	100%
New Road	No deduction for BTE community as new road links is built to increase capacity needed to serve growth. With the level of service in the overall road network deteriorating, even with construction of the 2021 – 2041 capital program, all of the cost of new road construction should be allocated to growth.	0%
Road Widening	<p>Roads are widened to increase capacity to help accommodate growth. In cases where a road is widened, but not reconstructed, the existing lanes are resurfaced, intersections are improved and traffic signals and other right-of-way features may be upgraded as part of the widening.</p> <p>From past experience, a 15% deduction can be applied to cover the estimated rehabilitation cost of the existing asset. This deduction essentially relates to the net extension of the functional life of the roadway in conjunction with the widening.</p> <p>Higher deductions (up to 50%) should be applied for projects located in mature neighborhoods subject to increased travel demand generated by new growth located elsewhere but impacting the facility (e.g., The role of the WR 46 corridor is long established and developed).</p>	Up to 50%
Road Reconstruction & Urbanization	Road reconstruction and urbanization projects typically serve to improve safety, operation, bring roadway section to urban cross-section and increase the roads capacity (e.g., the addition of a centre left-turn lane). Capacity gains result from improvements in alignment, lane reconfiguration, pavement structure improvements, and in some cases, road damage caused by heavy construction traffic. The project allocation can be location specific and ranges from 15% to 50%, consistent with the Road Widening category above.	15% to 50%

Project Type	Rationale	Benefit to Existing (%)
Traffic System Management (TSM)	Traffic System Management includes projects that are required as a result of increased traffic due to growth. This could include new or modified traffic signals, intersection turn lanes, intersection improvements, roundabouts, traffic calming features, street lighting, and any related land acquisition. The introduction of TSM projects is typically done to address a problem caused by growth (e.g., traffic infiltration) and on balance can reduce travel speeds or increase conflict potential. As such, the benefit to the existing community is very low. Typically, a 5% deduction can be applied to reflect that for some projects where there are geometric improvements or updated traffic signal technology that benefits the existing community. The remainder of the cost would be allocated to growth understanding that the need for improvements is required to help accommodate growth. Land acquisition was 100% attributable to growth.	5%
Major Structures and Grade Separations	<p>These projects include grade separations (structures) for rail, pedestrians, and wildlife and are designed to address capacity deficiencies, safety concerns, and provide opportunities for other users in the road network resulting from growth in traffic. When a structure is driven by growth, benefit to existing is 0%.</p> <p>For rail, where there is an existing level crossing, there is a benefit in the form of improved safety and elimination of delays due to train movements; a maximum 25% deduction has been made in order to address these considerations.</p>	0% - 25%

Project Type	Rationale	Benefit to Existing (%)
Active Transportation	<p>Active transportation includes sidewalks, on-road bicycle lanes, off-road trails, multi-use pathways, bike parking facilities, and crosswalks as well as other amenities and related programs; largely within the shared ROW. They play a complementary role with public transit, traffic system management and transportation demand management infrastructure, amenities and programs aimed at decreasing single-occupant vehicle use. For this reason, active transportation is critical to managing growth in travel demand due to new development and central to direction the County has adopted as part of the Complete Streets vision and approach to managing transportation.</p> <p>Providing TSM level accommodation for active transportation in a problem corridor provides opportunities to reduce conflicts, reduce speeds, increase transportation equity and provide a safe environment for all users. This type of treatment can resolve speed and safety issues without large scale corridor widenings. The BTE is significant as the benefit to future growth. As such a 50% deduction is considered appropriate.</p> <p>Where the active transportation facility is constructed as part of a roadway project, the BTE is that of the underlying road project.</p>	50%
Studies	<p>This includes, but is not limited to, transportation studies, including Transportation Master Plans, and other transportation planning studies, programs and initiatives required to support planned growth.</p> <p>When a study is about future planning it is 0% benefit to existing. Some programs (e.g., cordon counts program) are mostly about future orientation but has some value to existing residents. This has been assigned a benefit to existing of 5%.</p> <p>Where the study is an Environmental Assessment for an individual road project, the cost is included in the road project cost and the BTE is the same as the underlying road project.</p>	0% - 5%

Conclusions and Recommendations

Based on the above, the following conclusions are drawn:

- The County of Wellington capital program projects for the next 20 years, as identified in the RMAP, have not changed significantly since the completion of the 2018 Development Charges Update Study.
- The capital cost of the program has increased significantly. Most notably for:
 - Wellington Road 7;
 - Wellington Road 18; and
 - Wellington Road 124.
- The calculations to be performed for the update to the DC need to cognizant of the significant increase in the capital budget and consideration given for more refined assumptions for infrastructure (BTE) and transit.

Based on the above, the following is recommended with regard to the future DC Review update:

- Infrastructure inclusions and methods:
 - For projects carried over from the previous DC review, the method for calculating DC eligible costs will remain as defined for the previous DC review;
 - For new projects or projects that expand the scope of a project included in the previous DC, calculations should consider modifications to the BTE assumptions and calculation per **Table 3**.
- Transit inclusions:
 - Expansion vehicles are only included when they represent an increase in the existing number of vehicles already in service, or an increase in capacity of an existing vehicle. These vehicles would be leased to the operator, and would need to have a 7+ year lifespan to be eligible.
 - The On Demand technology software could be added if treated as a capital expense during any future procurement process.
 - Transit stops, pads and shelters could be included if transitioning to a fixed-route service on the Highway 6 corridor.
 - Tablets and other equipment would be eligible for expansion vehicles.
- Future Studies planning and engineering studies required for growth related projects, and the infrastructure required to support growth, should be specifically identified within the Roads Service category:
 - Planning
 - Transportation Master Plan Update;
 - Secondary Plan or Area Transportation Study;
 - Corridor Feasibility Study;
 - Operational Reviews;
 - Environmental Assessment Studies;
 - Active Transportation Master Plan Update; and

- Transit Master Plan or Operational Review.
- Engineering
 - Development of Design Standards;
 - Complete Streets Review;
 - Preliminary Design; and
 - Detailed Design.