



COUNTY OF WELLINGTON

COMMITTEE REPORT

To: Chair and Members of the Roads Committee
From: Don Kudo, County Engineer
Date: Tuesday, January 11, 2022
Subject: **Road MAP: A Road Master Action Plan – Final Report**

Background:

The Road Master Action Plan (Road MAP) is a multi-faceted master transportation plan that has reviewed both current and future transportation network needs. Dillon Consulting was hired to undertake the Road MAP in August, 2020. The final report for the Road MAP has been completed. The project webpage ([Road Master Action Plan - Roads - Wellington County](#)) provides all the study documentation including a complete final report and technical appendices. The attached presentation provides a summary on the final Road MAP report.

The final report consists of the following sections with supporting technical appendices:

- 1.1 Study Purpose
 - 1.2 Consultation and Engagement
 - 1.3 Vision and Goals
- 2.0 Study Context
 - 2.1 County Structure and Area
 - 2.2 Policy Framework
- 3.0 Existing Conditions
 - 3.1 Roadway Network
 - 3.2 Active Transportation
 - 3.3 Public Transit
 - 3.4 Goods Movement
 - 3.5 Travel Patterns
 - 3.6 Performance Assessment
- 4.0 Future Conditions
 - 4.1 Forecasted 2041 Transportation Demand
- 5.0 Problem Identification
 - 5.1 Context
 - 5.2 Problem and Opportunity Statement
- 6.0 Long-Term Network Improvements
 - 6.1 Corridor-Specific Problem Statements
 - 6.2 Alternatives
 - 6.3 Evaluation Framework
 - 6.4 Evaluation and Recommended Solutions
- 7.0 Active Transportation
- 8.0 Transit Solutions
 - 8.1 Growth in Demand

- 8.2 Service Options
- 8.3 Recommendations
- 9.0 Climate Change
 - 9.1 Implications from the Long-term Road Network
 - 9.2 Greenhouse Gas Emissions from Transportation
 - 9.3 Opportunities for Wellington County
- 10.0 Recommended Policy Framework
 - 10.1 Data Driven Safety Strategy
 - 10.2 Speed Management Guidelines
 - 10.3 Traffic Impact Study Guidelines
 - 10.4 Official Plan Policy
 - 10.5 Roadway Hierarchy
 - 10.6 Level of Service Conditions Criteria
 - 10.7 Urban Area By-Pass - Approach
- 11.0 Short-Term Operational and Safety Improvements
 - 11.1 Roadway Safety and Speed Management
 - 11.2 Intersection Assessment
 - 11.3 Wellington Road 46 – Strategic Traffic Analysis
- 12.0 Implementation and Priority Plan
 - 12.1 Policy Framework
 - 12.2 Roadway and Active Transportation Network
 - 12.3 Short-term Operational Issues
 - 12.4 Transit (Ride Well)
 - 12.5 Capital Cost
 - 12.6 Review of Development Charges Eligible Items
 - 12.7 Updated Schedules
 - 12.8 Monitoring Plan

Throughout the Road MAP, reports and presentations were provided to Committee and Council for both information and approval as detailed in the following list:

- Consultation and Engagement
- Vision and Goals
- Data Driven Safety Strategy
- Speed Management Guidelines
- Roadway Safety and Speed Management
- Intersection Assessment
- Wellington Road 46 – Strategic Traffic Analysis
- Forecasted 2041 Transportation Demand
- Long-Term Network Improvements
 - Corridor-Specific Problem Statements
 - Alternatives
 - Evaluation Framework
 - Evaluation and Recommended Solutions
- Traffic Impact Study Guidelines
- Level of Service Conditions Criteria

Other items included in the Road MAP report will be used to inform other County studies, budgets and initiatives:

- Active Transportation
- Transit (Ride Well)
- Climate Change
- Official Plan Policy - Updated Schedules
- Capital Cost
- Review of Development Charges Eligible Items
- Monitoring Plan

Long Term Network Improvements

The future County transportation network requirements were reviewed to 2041. Preliminary recommendations were presented to the Committee and public in June, 2021. Public input received with respect to the preliminary recommendations was considered by the project team along with detailed technical evaluations to complete the Road MAP final recommended alternatives.

Seven road segments were found to exceed or approach capacity limits by 2041. A recommended alternative was determined for each road segment including estimated cost and timing as summarized below:

1. Wellington Road 124: Between the Region of Waterloo boundary limits and the City of Guelph boundary limits
 - Recommended Alternative: Improvements will be as per recommendations from approved WR 124 EA between Region of Waterloo and City of Guelph boundary limits
 - Estimated Cost: \$15,800,000
 - Estimated Timing: 0 to 5 years
2. Wellington Road 18: Between Wellington Road 21 (Elora) and Wellington Road 43 (Fergus)
 - Recommended Alternative: Transportation System Management (TSM) and Expansion of Infrastructure between WR 21 (Elora) and WR 43 (Fergus)
 - Estimated Cost: \$17,500,000
 - Estimated Timing: 5 to 10 years
3. Wellington Road 46: Between Maltby Road and Wellington Road 34
 - Recommended Alternative: Expand Infrastructure between Maltby Road and WR 34 (total of 2.1 km of widening and addition of paved shoulders and auxiliary lanes)
 - Estimated Cost: \$9,800,000
 - Estimated Timing: beyond 10 years
4. Wellington Road 7: Between Elora/Salem and the Highway 6 Junction
 - Recommended Alternative: Expand Infrastructure between Salem and the Highway 6 Junction (total of 15.9 km of widening, intersection improvements and bridge replacement)
 - Estimated Cost: \$77,800,000
 - Estimated Timing: beyond 10 years
5. Wellington Road 32: Between Wellington Road 124 and Highway 7

- Recommended Alternative: TSM - Paving/widening shoulders, provision of auxiliary left turn lanes where necessary between WR 124 and Highway 7
 - Estimated Cost: \$2,800,000
 - Estimated Timing: beyond 10 years
6. Wellington Road 21: Between Wellington Road 7 (Elora) and the Region of Waterloo boundary limits
- Recommended Alternative: TSM between WR 7 (Elora) and Region of Waterloo
 - Estimated Cost: \$3,700,000
 - Estimated Timing: beyond 10 years
7. Wellington Road 86: Between Wellington Road 10 and Wallenstein
- Recommended Alternative: TSM between WR 10 and WR 85 (addition of 18.8 km of paved shoulders and intersection improvements)
 - Estimated Cost: \$8,800,000
 - Estimated Timing: beyond 10 years

The majority of these study results and recommendations are consistent with previous transportation related reviews that have been completed by the County including four Development Charges Background Studies undertaken since 2002 and the Guelph Wellington Transportation Study completed in 2005. Only two new projects (Wellington Road 21 and Wellington Road 86) were added to the previous recommended growth related roads that would be approaching capacity by 2041 based on the Road MAP transportation analysis.

By-Pass Assessment

In addition to the long term network improvements recommended for Wellington Road 7 and Wellington Road 18, a number of transportation related issues (truck traffic, safety and speed, noise, capacity) were identified in the Elora/Fergus area. The Road MAP review assessed several alternatives including alternatives previously identified in the Township of Centre Wellington's 2019 Transportation Master Plan. Following the June 2021 public meeting, the Road MAP final report includes revisions to the preliminary findings and added new alternatives based on public feedback and further evaluation that included non-transportation impacts of natural environment, socio-economic, cultural heritage, and cost factors.

Revisions include the removal of the proposed extension of Wellington Road 29 along Anderson Street. The revised alternative and mapping are consistent with Centre Wellington's Transportation Master Plan and consists of protecting the opportunity to use a corridor east of existing residential area on undeveloped lands and with a new connection to Highway 6 south of Fergus. An additional alternative of improving Second Line east of Fergus has been included as an alternative. Another bypass alternative that has been added is the improvement of Eighth Line to the west of Elora.

The final Road MAP report recommends that all of these identified by-pass alternatives be further assessed along with the recommended improvements to Wellington Road 7 and Wellington Road 18 as part of a detailed Area Wide Feasibility Study. This future study is recommended to be completed in coordination with the Ministry of Transportation, Township of Mapleton, Guelph Eramosa Township and Township of Centre Wellington to confirm area needs and alternatives including County, Township

and Provincial roads that may help to mitigate east-west and north-south area future road network issues.

Implementation Plan and Financial Impacts

The estimated total cost to implement the Road MAP projects, studies and initiatives is \$161,364,000. This amount covers not only the long term road improvements noted in this report but also operational improvements with respect to intersections, speed management and additional studies. As the Road MAP is a long term plan to meet the County's transportation needs to 2041, the various project items and estimated costs have been planned as follows:

- Short Term Costs (0 to 5 years) \$27,098,000
- Mid Term Costs (5 to 10 years) \$28,742,000
- Long Term Costs (beyond 10 years) \$105,524,000

Roads staff will be working with Treasury staff on future Capital Budgets and Development Charges Background Studies with respect to financing the implementation of the various aspects of the Road MAP.

Next Steps

The Road MAP assessment of future transportation network is being undertaken in accordance with the master planning requirements detailed in the Municipal Class Environmental Assessment (MCEA) process. By providing a high level strategic overview of transportation infrastructure needs, the study will provide background information for future detailed project review, analysis and consultation.

A Monitoring Plan is also recommended as the study is intended to be reviewed every five years and updated if necessary. Future Road MAP updates will review transportation growth projections and may contain recommendations on new industry and community changes with respect to technology and initiatives.

As part of the MCEA requirements, a Notice of Completion must be issued and a 30 day public review period must occur to allow for concerns to be expressed.

Recommendations:

That the "Road MAP: A Road Master Action Plan – Final Report" Committee report and presentation be received for information;

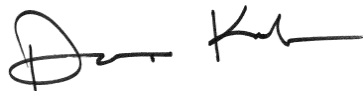
That the County of Wellington Road Master Action Plan dated December 2021 by Dillon Consulting be approved as outlined in the Committee report;

That staff be authorized to issue the Municipal Class Environmental Assessment Notice of Completion for the County of Wellington Road Master Action Plan dated December 2021 by Dillon Consulting;

That the County of Wellington Road Master Action Plan dated December 2021 by Dillon Consulting be available for the mandatory 30 day public review period;

And that upon completion of the public review period, staff proceed with implementing the study recommendations.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Don Kudo". The signature is fluid and cursive, with a large initial "D" and a long horizontal stroke at the end.

Don Kudo, P. Eng.
County Engineer

Attachment: Wellington Road Master Action Master Plan - Final Report Presentation