



Wellington Road Master Action Plan

Final Report Presentation
Roads Committee Meeting

January 11, 2022

COUNTY ROADS
Connecting Communities



Agenda



Study Purpose

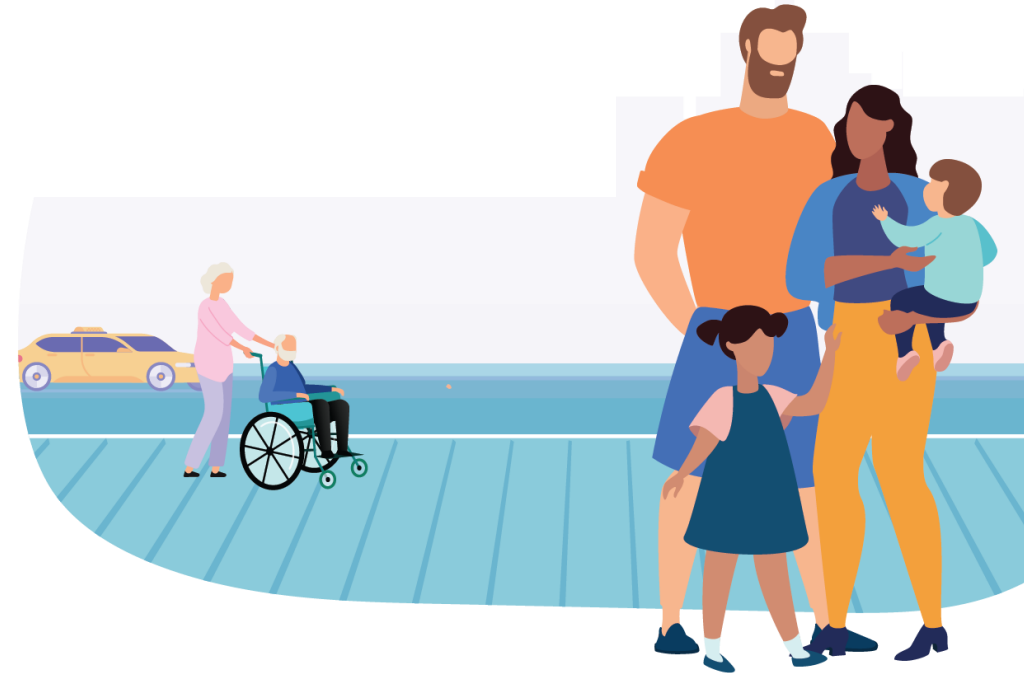


Approach and Key Recommendations

- MCEA and Engagement Review
- Vision and Goals
- Existing Conditions and Forecasted Growth
- Problem and Opportunity Statement
- Long-term Improvements
- Short-term Improvements
- Implementation Plan



Next Steps



Study Purpose

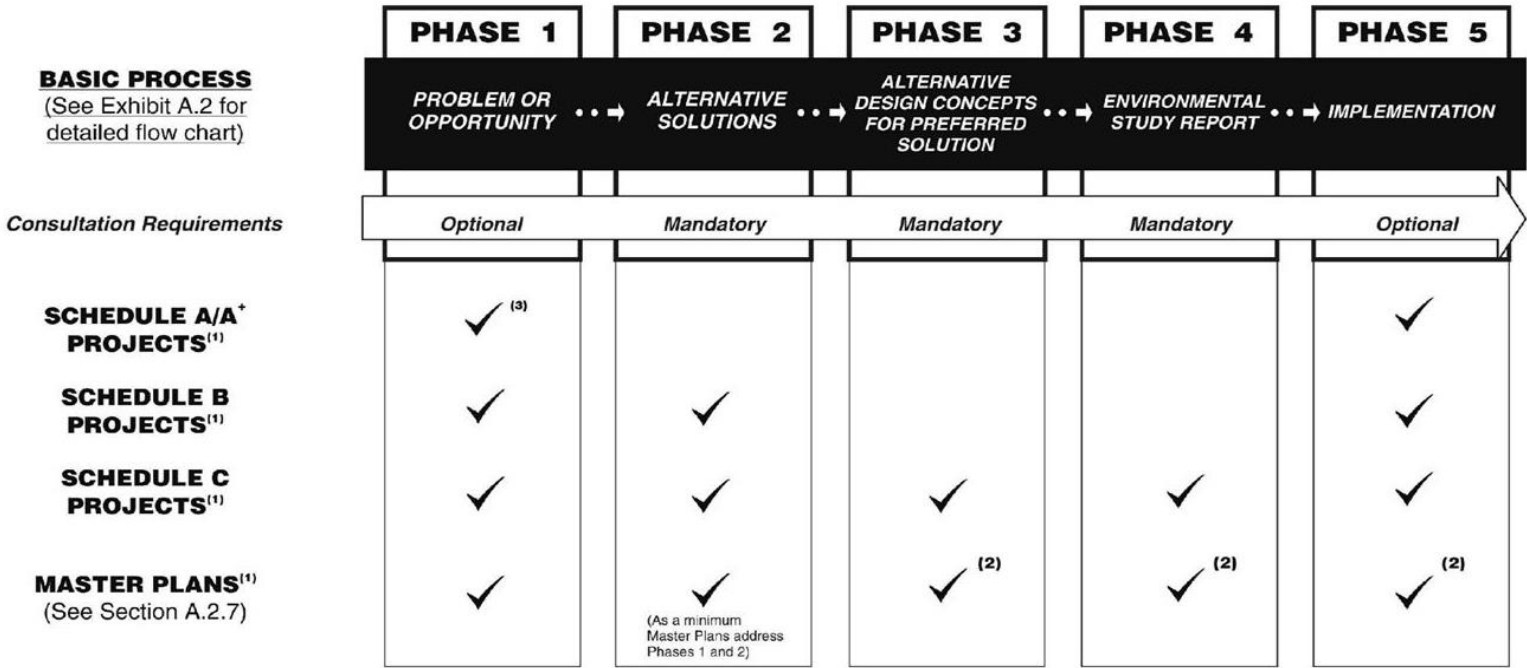
1. Identify long-term County road network needs to support area growth
2. Provide input into other County plans and studies that will help make decisions on how to pay for improvements to the County road network
3. Identify and recommend measures to address concerns with the County roads including safety and speed
4. Identify opportunities to better connect the County to neighbouring municipalities and the broader region through an integrated transportation planning approach



MCEA and Engagement Review

Municipal Class Environmental Assessment (MCEA) Process

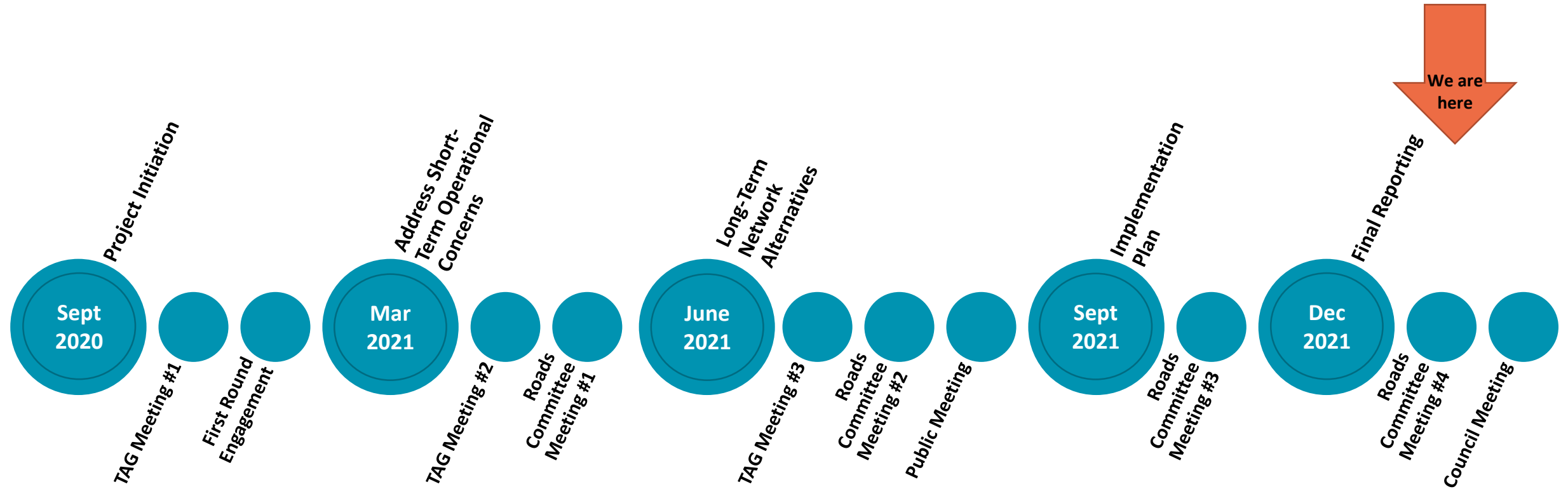
EXHIBIT A. 1 KEY FEATURES OF THE MCEA



- NOTES:
- ✓ Actions required during relevant phase
 - (1) Schedule A, A*, B and C projects and Master Plans can also be integrated with the requirements of the Planning Act (See Section A.2.9)
 - (2) Complete Phases 3 and 4 for any Schedule C projects included in the Master Plan prior to implementation
 - (3) For Schedule A* projects, public to be advised. See Section A.1.2.2.

- The Master Plan is prepared at the conclusion of Phases 1 and 2 of the MCEA process
- The Master Plan becomes the basis for, and used in support of, future investigations for the specific Schedule B and C projects identified within it

Engagement and Timing



Engagement Summary



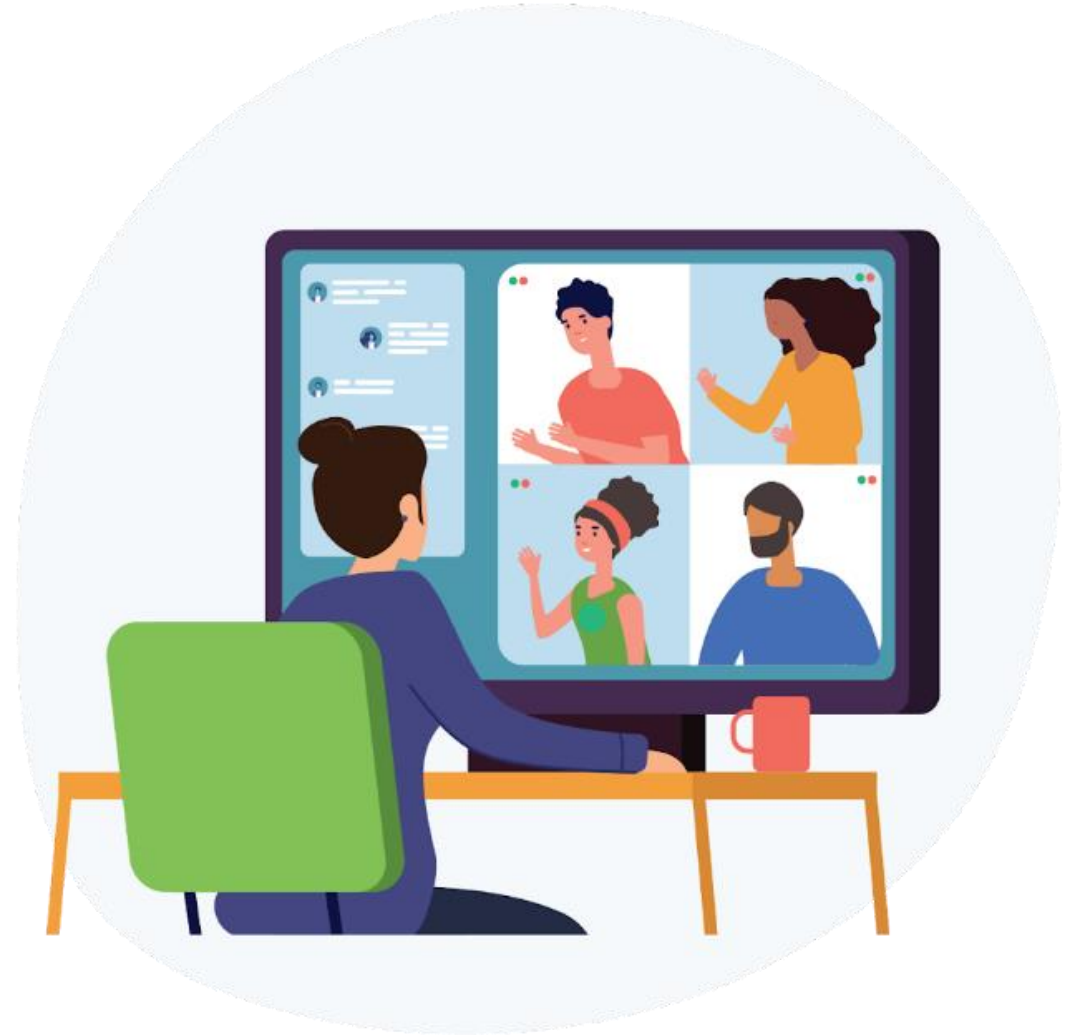
Roads Committee meetings

- 5 committee report updates
- 5 presentations
- 10 information reports



Technical Advisory Group meetings

- 3 meetings
- Representatives from all the local municipalities, Wellington OPP, MTO and the City of Guelph



Engagement Summary



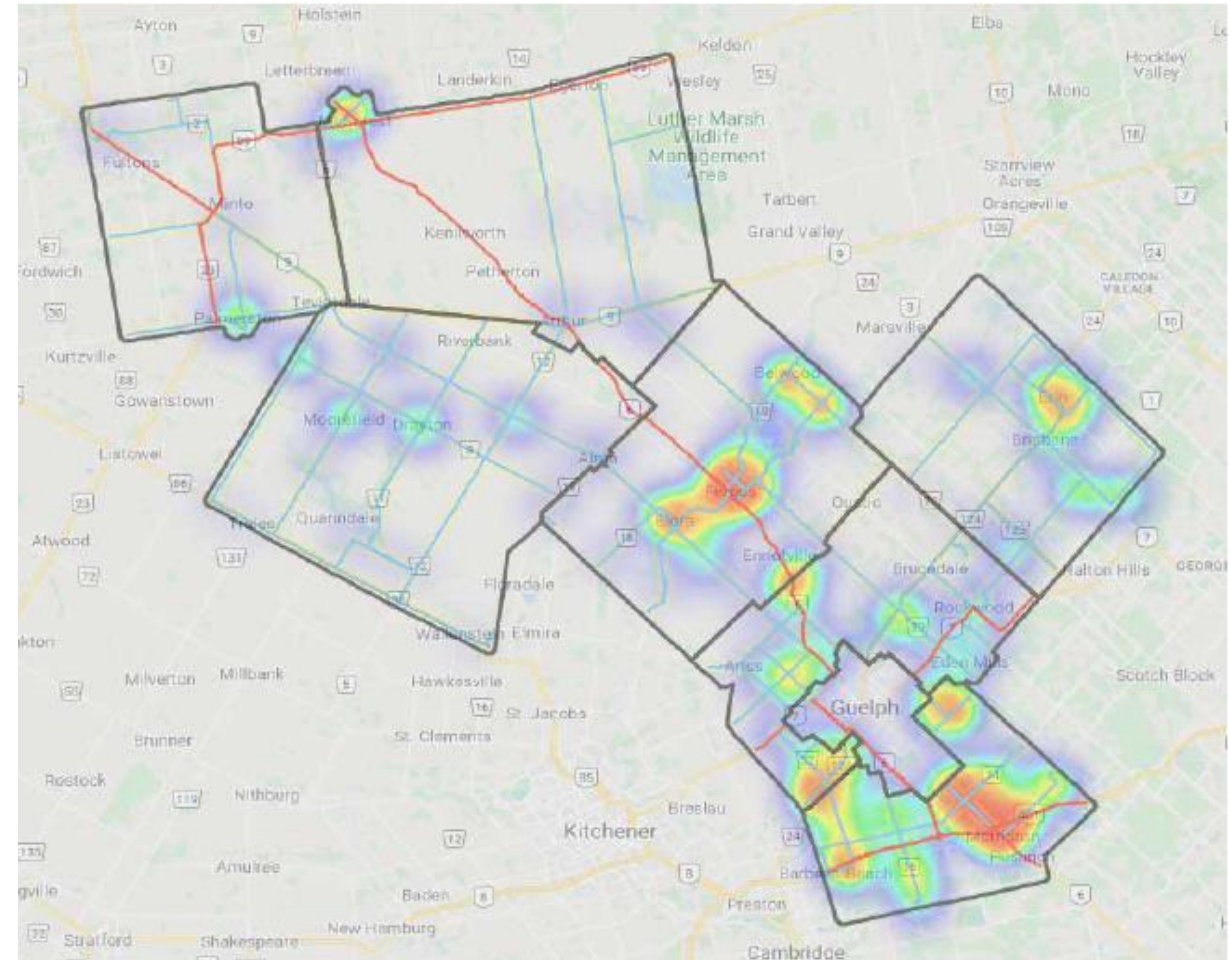
Engagement Round 1

- Online Survey #1: Vision and Values
 - 103 comments with 75% in support of the Vision
- Social Pinpoint Mapping Activity
 - 3,967 visits and 601 comments



Engagement Round 2

- Virtual PIC
- Online Survey #2:
 - About 350 respondents participated





Vision and Goals

Vision and Goals



Vision

To connect people and goods across the County safely, conveniently, efficiently and sustainably



Goals

1. Create a Transportation Network with a Focus on Safety
2. Provide Sustainable and Equitable Mobility Options that Connect Communities
3. Be Proactive in Planning for Future Expansion of the County Road Network based on Complete Streets Principles while Considering the Quality of Life of Residents
4. Make Investment Decisions that are Environmentally Responsible
5. Support Economic Development
6. Be Fiscally-Responsible When Making Investment Decisions
7. Develop Transparent Policy Tools that Guide Investment Decisions in the Transportation Network
8. Create a Culture of Collaboration with Municipal Stakeholders where the County Transportation Network Intersects with Areas of Local Importance



Existing Conditions and Forecasted Growth

Existing Conditions and Forecasted Growth

Existing Context

- Primarily rural area with small urban centres
- Primary mode of travel is personal vehicles
- Long travel distances
- Certain County Roads already approaching capacity
- Speeding and safety concerns identified on a number of County Roads
- Limited travel options for persons that do not have access to an automobile
- Growing traffic volumes on County Roads through urban areas

Future Conditions

- Population will grow by 45% by 2041
- Five corridors will be over capacity
- County focus on safety and reducing transportation impact on climate change
- Concerns that traffic growth will have on quality of life in urban areas





Problem and Opportunity Statement

Problem and Opportunity Statement

1. Address the future (2041) significant capacity constraints on portions of County Roads

Exceed Practical Capacity by 2041 (Significant Delay)

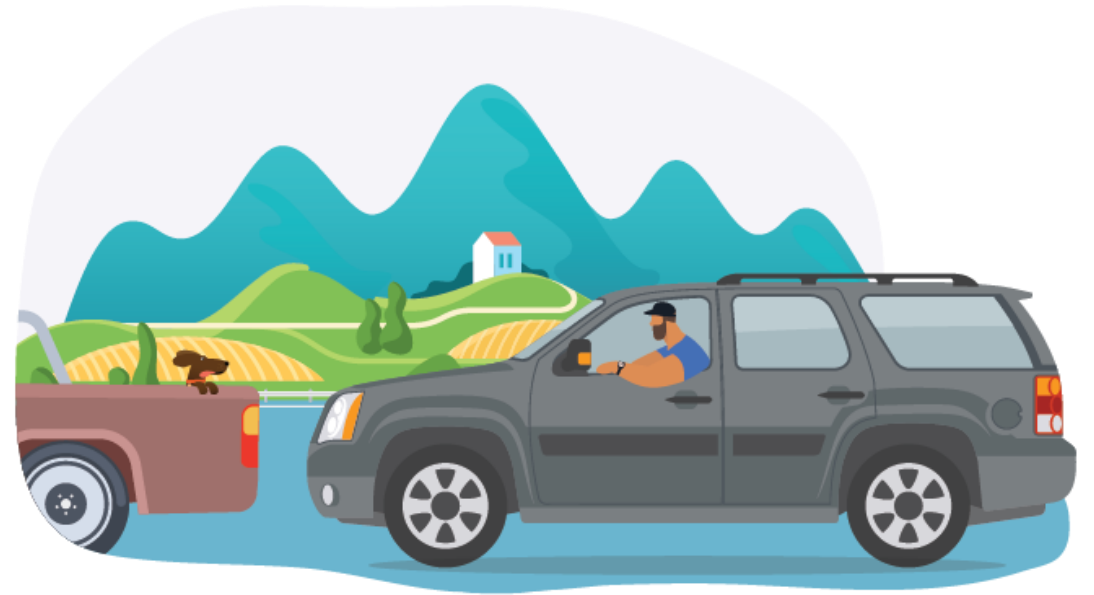
1. **Wellington Road 7**
 - Between Elora/Salem and the Highway 6 junction
2. **Wellington Road 18**
 - Between Wellington Road 21 (Elora) and Wellington Road 43 (Fergus)
 - Wellington Road 18 between Elora and Fergus will experience Level of Service F
3. **Wellington Road 32**
 - Between Wellington Road 124 and Highway 7, with Level of Service F
4. **Wellington Road 46**
 - Between Maltby Road and Wellington Road 34, with Level of Service F
5. **Wellington Road 124**
 - Between the Region of Waterloo boundary limits and the City of Guelph boundary limits

Approach Practical Capacity by 2041 (Moderate Delay)

6. **Wellington Road 21**
 - Between Wellington Road 7 (Elora) and the Region of Waterloo boundary limits, with Level of Service E
7. **Wellington Road 86**
 - Between Wellington Road 10 and Wallenstein, with Level of Service E

Problem and Opportunity Statement

2. Improve connectivity of the active transportation network
3. Identify opportunities to improve equitable mobility through expansion of transit
4. Reduce Greenhouse Gas emissions
5. Address short-term safety and speeding issues

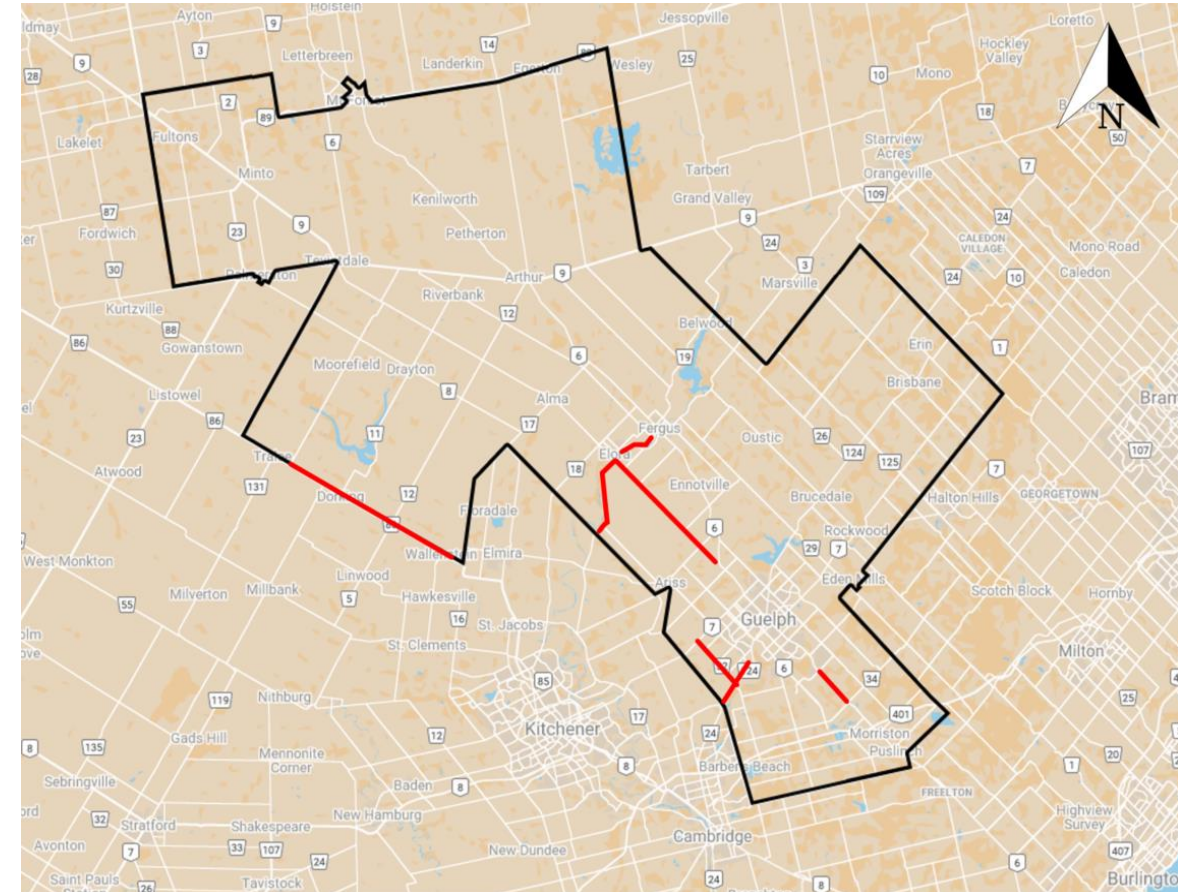




Long-term Improvements

Long-term Transportation Needs (Methodology)

- Transportation assessment undertaken to determine impact of growth on road network
- Growth components
 - External, non-County trips travelling through the network
 - General population and employment growth to 2041
 - Specific Secondary Plan developments (e.g. Clair-Maltby)
- Account for planned long-term network improvements
 - Hanlon Expressway improvements (MTO), including Morriston By-Pass
- Capacity issues identified on seven roadway corridors – will approach or exceed practical capacity by 2041
- Alternatives identified and evaluated for each of the seven corridors



Alternative Strategies to Address Network Deficiencies

Overview	Travel Demand Management (TDM)	Transportation System Management (TSM)	Increase the Supply of Infrastructure
Solutions Description	<ul style="list-style-type: none">• Modify travel behaviour and reduce vehicle use (shift to other modes)	<ul style="list-style-type: none">• Optimize infrastructure to improve performance• Improve the quality of the roadway• Use of technology• Add turning lanes	<ul style="list-style-type: none">• Expand existing infrastructure• Add new infrastructure
Anticipated Effectiveness to Address Capacity Issues	Low	Medium	High

Evaluation Criteria

Factor / Criteria Group	Support Project Goals	Sub Factor / Criteria
Transportation	<ul style="list-style-type: none"> • Focus on Safety • Sustainable and Equitable Mobility Options • Proactive Planning for Future Expansion based on Complete Streets Principles 	<ul style="list-style-type: none"> • Network Connectivity to Provincial Roads • Network Connectivity/Service to Regional Area • Network Connectivity/Service to Local Area • Maintain/Enhance Capacity of network • Safety - Collision Potential • Support Movement of Goods • Noise Impacts • Support Active Transportation • Residences Directly Impacted
Natural Environment	<ul style="list-style-type: none"> • Investment Decisions that are Environmentally Responsible 	<ul style="list-style-type: none"> • Natural Hazard Areas Impacted • Air Quality (Sensitive Receptors) • Climate Change – Reduce GHG • Species at Risk/Habitat Impacted • Water Courses Crossed • Woodlands and Woodlots Impacted • Wildlife Habitats and Movement/Corridor Crossings • Wetlands Impacted • Provincially/Regionally Significant Wetland Impacted

Evaluation Criteria

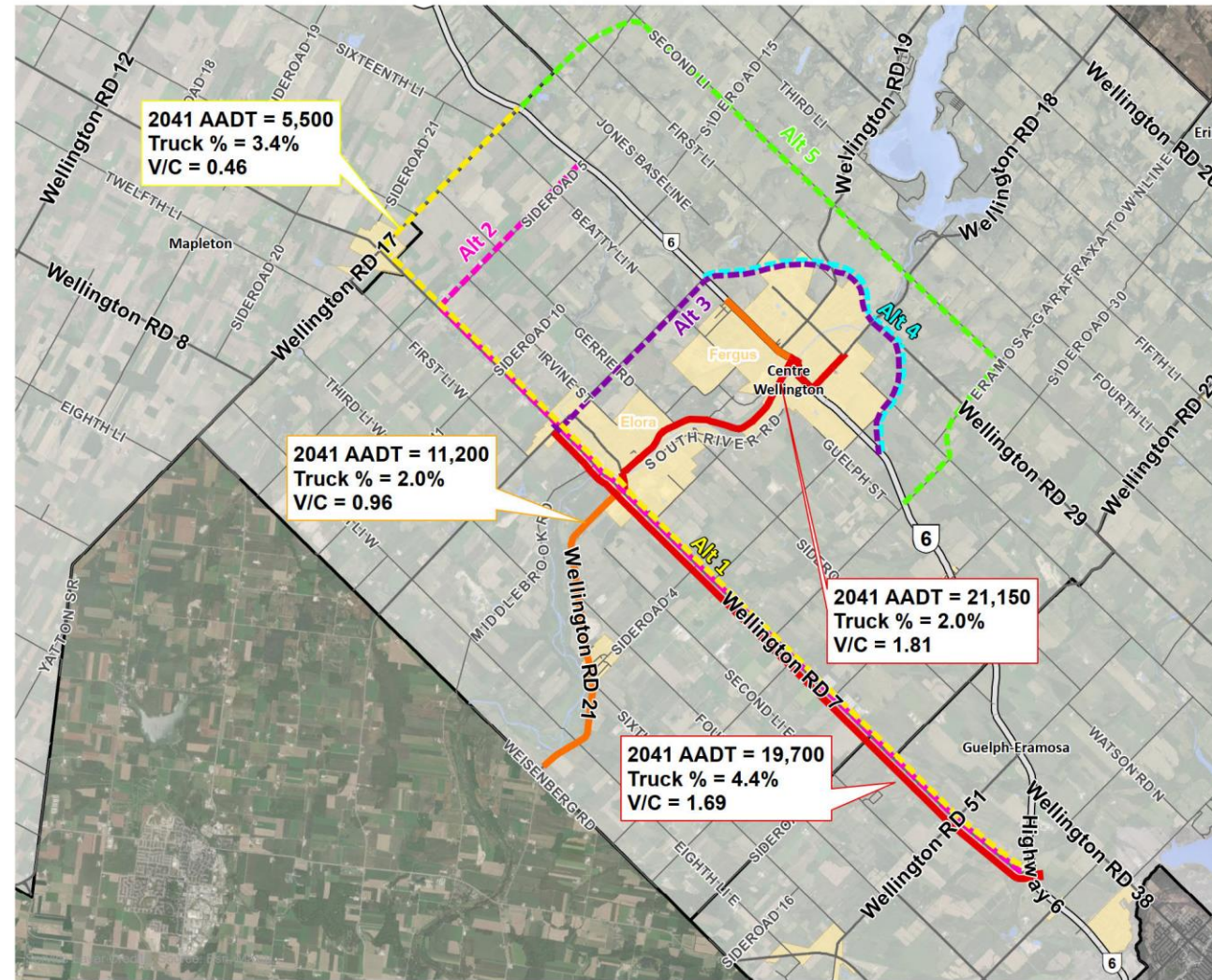
Factor / Criteria Group	Support Project Goals	Sub Factor / Criteria
Cultural Environment	<ul style="list-style-type: none"> • Culture of Collaboration • Transparent Policy Tools that Guide Investment Decisions 	<ul style="list-style-type: none"> • Heritage Property or Buildings Impacted • Impact to Heritage Landscape Features (fence rows, tree lines, etc.) • Cemeteries Impacted • Sites of Archaeological Potential • Utility Corridors Impacted • Potential for Ride Well (transit) and business partnership • Compatibility with Provincial, County, and City policies and GRCA framework standards
Socio-Economic Environment	<ul style="list-style-type: none"> • Support Economic Development 	<ul style="list-style-type: none"> • Farming Activity Impacted • Businesses Impacted • Existing Businesses and Industry and Opportunities for New Businesses and Industry – Access • Opportunity for Communities to Draw New Businesses • Support / Improve Tourism
Cost	<ul style="list-style-type: none"> • Fiscally-Responsible 	<ul style="list-style-type: none"> • Capital Cost • Operational and Maintenance Costs • Funding opportunities through grant

Summary of Recommendations and Timing

Project	Limits	Improvements	Years
Wellington Road 124	Region of Waterloo boundary and City of Guelph boundary	Maintain recommendation from approved WR 124 EA	0 to 5
Wellington Road 18	WR 21 (Elora) and WR 43 (Fergus)	Transportation Systems Management and Expansion of Infrastructure <ul style="list-style-type: none"> • Restricted parking and centre left turn lane between Metcalfe Street and Kertland Street • Additional lane per direction between Kertland Street and Canrobert Street • Additional lane per direction between Highway 6 and WR 43 	6 to 10
Wellington Road 46	Maltby Road and WR 34	Expand Infrastructure <ul style="list-style-type: none"> • Additional lane per direction 	10 to 20
Wellington Road 7	Elora/Salem and the Highway 6 Junction	Expand Infrastructure <ul style="list-style-type: none"> • Additional lane per direction for road and bridge 	10 to 20
Wellington Road 21	WR 7 (Elora) and Region of Waterloo	Transportation Systems Management <ul style="list-style-type: none"> • Paving/widening shoulders 	10 to 20
Wellington Road 32	WR 124 and Highway 7	Transportation Systems Management <ul style="list-style-type: none"> • Paving/widening shoulders • Provision of auxiliary left turn lanes where necessary 	10 to 20
Wellington Road 86	WR 10 and WR 85	Transportation Systems Management <ul style="list-style-type: none"> • Paving/widening shoulders • Provision of auxiliary left turn lanes through Hamlet of Dorking 	10 to 20

By-pass Assessment

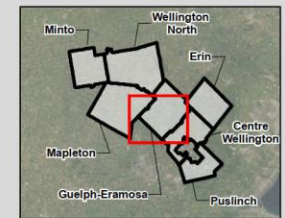
- Problems identified in the Elora/Fergus area on WR 7, WR 18 and Hwy 6
- Several alternatives were assessed, and new alternatives added based on public feedback
- Alternatives included those previously identified in Centre-Wellington Transportation Master Plan
- Involvement of three jurisdictions in a sub-area requires a more focused area transportation study to identify opportunities and impacts to the community



WELLINGTON COUNTY ROAD MASTER ACTION PLAN

URBAN BY-PASS FERGUS BY-PASS / ELORA BY-PASS

- Identified Concern
- Identified Problem
- Infrastructure Alternatives
- Alt 1
- Alt 2
- Alt 3
- Alt 4
- Alt 5
- Road Network
 - Provincial
 - Arterial
 - Collector
 - Local; Rural
 - Waterbody



SCALE: 1:50,000
0 1 2 3 4 km

MAP DRAWING INFORMATION
DATA PROVIDED BY: WELLINGTON COUNTY; MNRF; DILLON CONSULTING
MAP CREATED BY: GDM
MAP CHECKED BY: JE
MAP PROJECTION: NAD 1983 CRS UTM ZONE 17N

PROJECT: 20-0207
STATUS: DRAFT
DATE: 2021-12-10



Active Transportation

- Build on the County of Wellington Active Transportation Plan (ATP)
- Key Recommendations:
 - For each recommended road improvement, pave any gravel shoulders during construction
 - Shoulders should be 2.5 to 3 m wide with a delineated edge marking
 - Add to active transportation facilities in the Active Transportation Plan
- Addresses the RMAP Goals of Safety, Equitable Mobility and Complete Streets



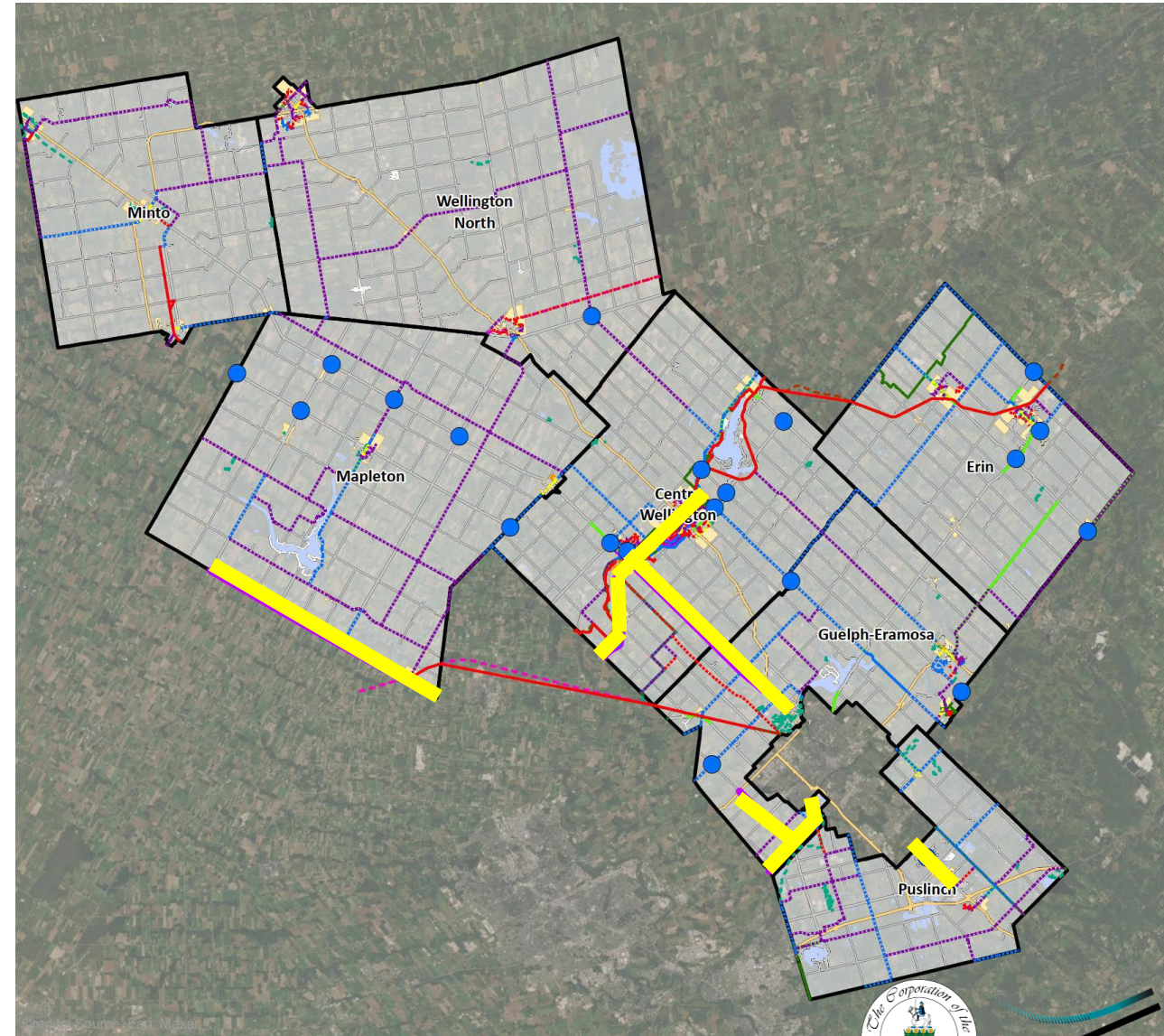
Active Transportation

1. Pave gravel shoulders with roadway improvement and designate as Active Transportation corridor:

- WR 7 between Elora/Salem and Highway 6 junction
- WR 21 between WR7 and Region of Waterloo
- WR 32 between WR124 and Hwy 7
- WR 124 between Region of Waterloo and City of Guelph
- WR 86 between WR 10 and WR 85
- WR 46 between Maltby Road and WR 84

2. Maintain and enhance paved shoulder for cyclists with road improvement

- WR 18 between WR 21 and WR 43

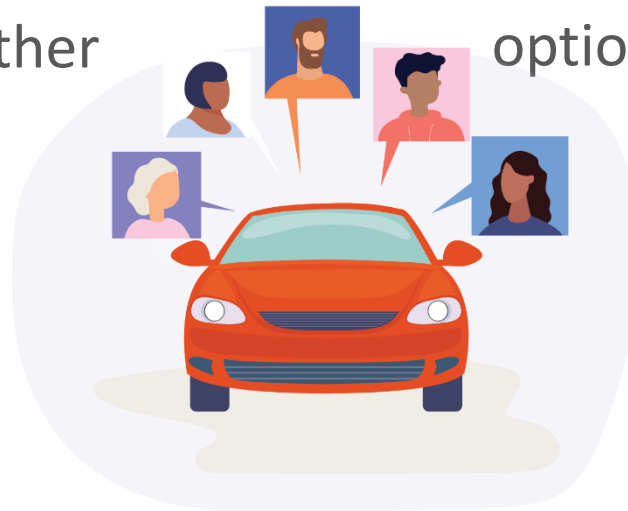


Existing Context

- Primary objective to improve equitable mobility by providing service to all residents in the County
- Ride Well began in 2019
- Ridership steadily growing, but still below typical rural systems
- Provincial funding set to expire in 2025
- Need to make a decision on whether transit should be permanent

Importance of Transit

- Many newcomers used to transit
- Supports and aging population
- Supports economic development (existing challenge attracting workers that don't have access to a vehicle)
- Provides mobility for youth
- Moves towards equitable mobility options for all residents



Transit Options Assessed

RMAP Goal	Dedicated On Demand Service (e.g. Ride Well)	Non-Dedicated On Demand Service (e.g. Uber)	Dedicated Fixed-Route Service (e.g. Denny Bus)	Community Care Partnerships (e.g. VON)
Description	Existing Ride Well service providing demand-responsive service to everyone in the County	Partner with taxis or ridesharing, primarily focused in the south	Corridor service on a schedule connecting urban hamlets	Provide funding to community care for seniors and persons with disabilities
Goal 1: Focus on Safety	✓ ✓ ✓	✓ ✓ ✓	✓ ✓	✓ ✓ ✓
Goal 2: Sustainable and Equitable Mobility Options	✓ ✓ ✓	✓ ✓	✓	✓ ✓
Goal 4: Decisions that are Environmentally Responsible	✓ ✓	✓	✓ ✓ ✓	✓
Goal 5: Support Economic Development	✓ ✓	✓ ✓	✓ ✓ ✓	✓
Goal 6: Be Fiscally-Responsible	✓ ✓	✓	✓	✓ ✓ ✓

Transit Recommendations

Short-term Recommendations

1. Continue to operate and expand Ride Well service as ridership grows
2. Integrate Ride Well with fixed-route services (GOST service from Owen Sound and the Denny Bus Line Service)
3. Set a maximum cap on fares to make the service more affordable,
4. Purchase accessible vehicles through capital funding grants

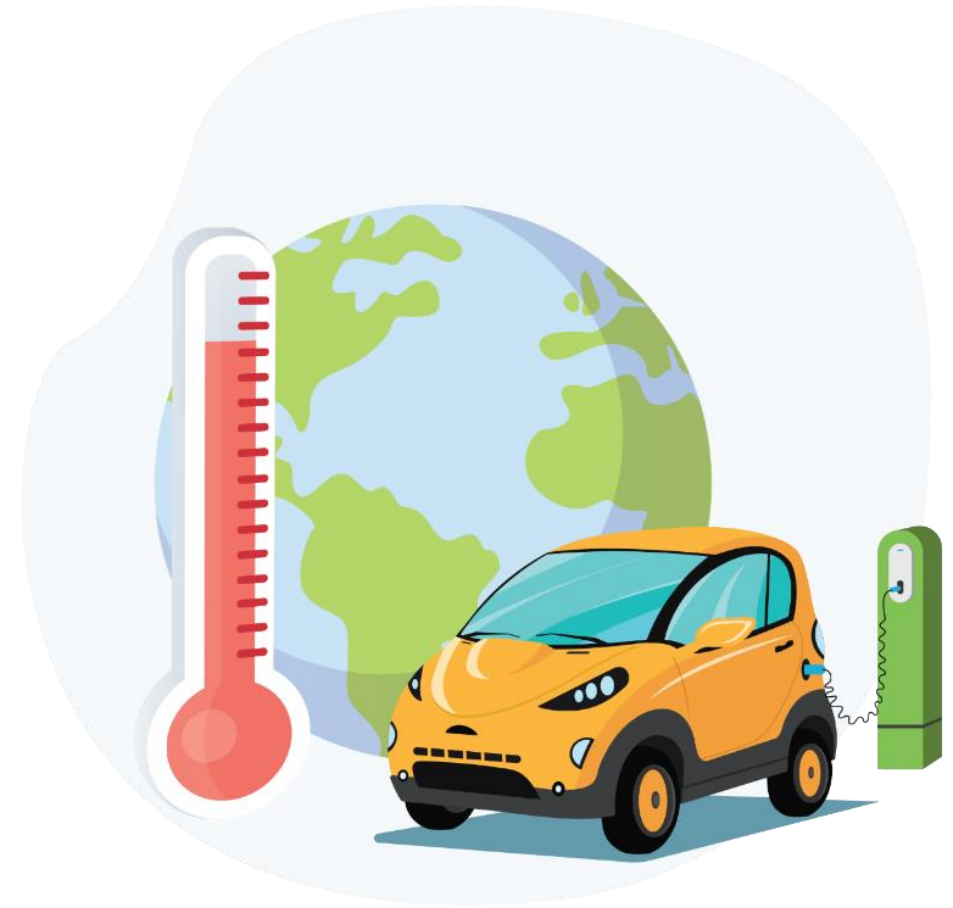
Long-term Recommendations

1. Establish fixed-route service on Highway 6
2. Integrate On Demand trips with fixed-route corridor
3. Continue to expand the On Demand service model based on ridership demand
4. Initiate Partnership with Non-Dedicated Providers
5. Continue Coordination with Community Care Agencies
6. Connect to fixed-route services between Guelph and the Region of Waterloo



Climate Change

- County's Climate Mitigation Plan focuses on climate change mitigation, specifically the reduction of greenhouse gas (GHG) emissions
- Transportation accounts for 70% of GHG emissions from fossil fuels in the community
- Recommendations in RMAP will not see a dramatic shift in more sustainable modes to offset GHG emissions due to the rural nature of County
- Climate change focus is to transition to the use of more zero-emission vehicles (ZEV)



Climate Change – Summary of Recommendations

Zero-Emission Vehicle (ZEV) Adoption

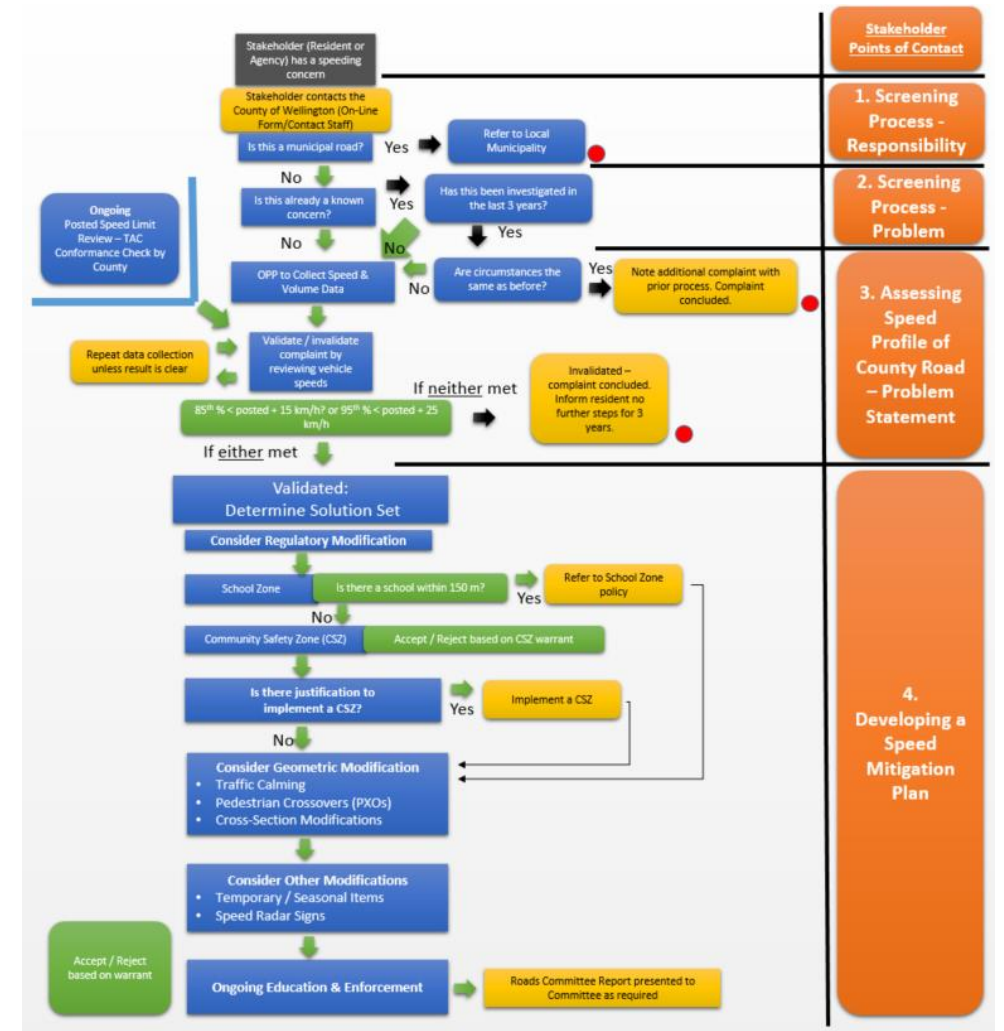
- Start with the County's fleet (snow plows, maintenance vehicles, Ride Well)
- Communicate financial and regulatory incentives
- Seek funding to support infrastructure
- Develop new policy tools and by-laws for development approval process
- Provide incentives (priority parking for ZEV vehicles)
- Improve ZEV's infrastructures and build charging network
- Increase public awareness of ZEV

Other Actions to Reduce Climate Change

- Improve transit service and increase efficiency along key corridors
- TDM strategies to reduce single occupant vehicle travel
- Adopt low GHG road construction and maintenance techniques
- Marketing and communication opportunities
- Undertake a Climate Change Adaption Plan

Policy Framework

- Goal to improve transparency in decision making
- Strategic policies and assessments developed and approved as part of the RMAP include:
 - Data Driven Safety Strategy (approved)
 - Speed Management Guidelines (approved)
 - Traffic Impact Study Guidelines (approved)
 - Update to Official Plan Policies
 - Level of Service Conditions Criteria
 - WR 46 Strategic Traffic Analysis
 - Urban Area By-Pass



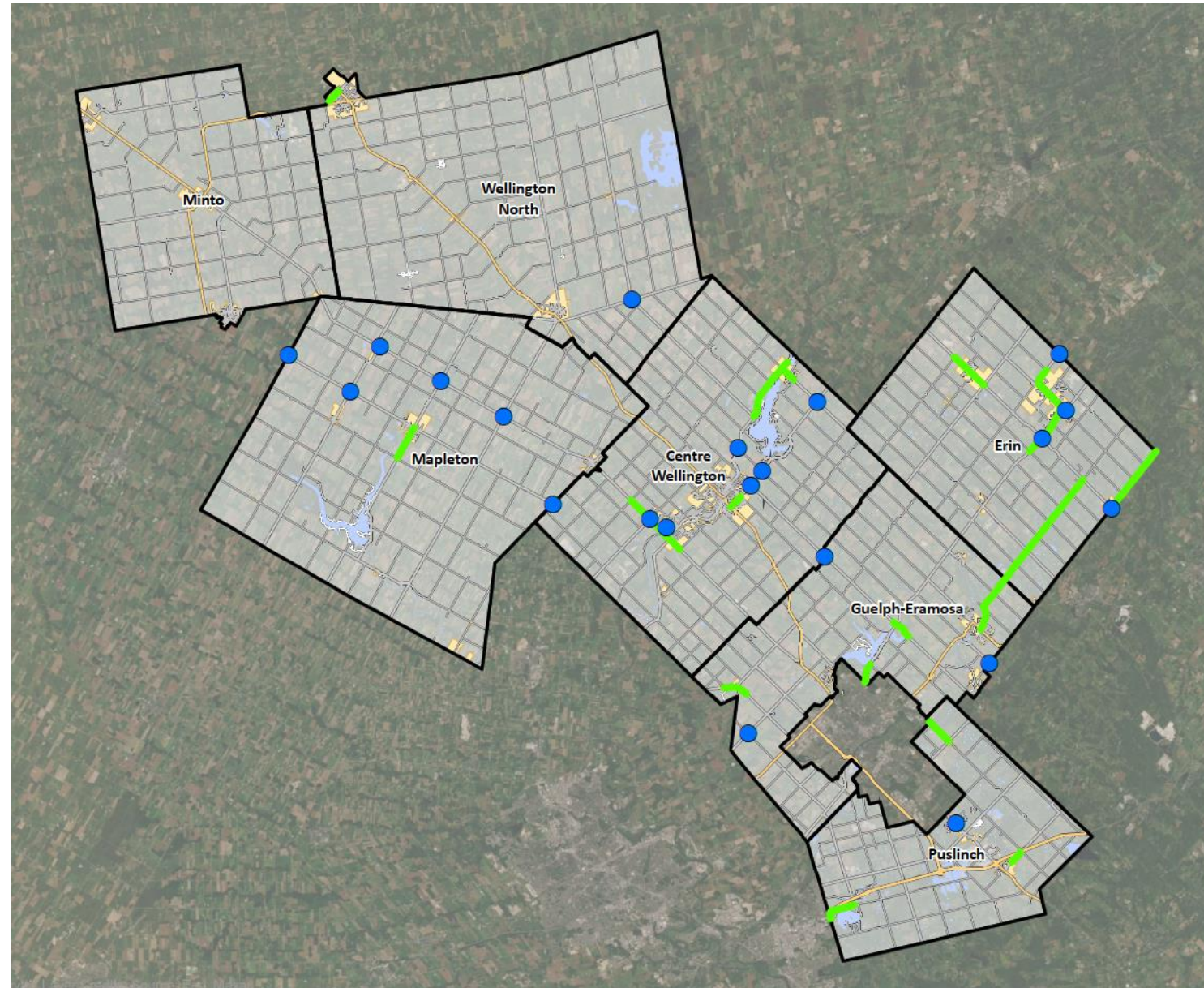
Sample from Speed Management Guidelines



Short-term Improvements

Short-term Operational and Safety Improvements

- **Roadway Safety and Speed Management**
 - Reviewed 16 corridors using approved Speed Management Guidelines
- **Intersection Assessment**
 - Conducted geometric and safety review of 22 intersections corridors using approved speed management guidelines
- Recommendations made in each to be reviewed by County staff with improvements individually brought to Committee and Council





Implementation Plan

Implementation Plan - Short-Term Capital Cost Estimates (0 to 5 years)

Project	Description	Costs
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	\$15,800,000
Operational Improvements	Annual project expense for Intersection improvements and speed management initiatives ¹	\$10,600,000
Transit	Purchase three to four accessible Ride Well vehicles and lease to operator (assumed 80% covered through Grant Funding)	\$48,000
Planning Studies	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)	\$650,000
Total	Estimated total of short-term costs	\$27,098,000

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.

Implementation Plan - Mid-Term Capital Cost Estimates (6 to 10)

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

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.

Implementation Plan - Long-Term Capital Cost Estimates (over 10 years)

Project	Description	Costs
Wellington Road 7	Expand Infrastructure between Salem and the Highway 6 Junction (total of 15.9 km of widening, intersection improvements and bridge replacement)	\$77,800,000
Wellington Road 21	TSM between WR 7 (Elora) and Region of Waterloo	\$3,700,000
Wellington Road 32	TSM between WR 7 (Elora) and Region of Waterloo	\$2,800,000
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)	\$9,800,000
Wellington Road 86	TSM between WR 10 and WR 85 (addition of 18.8 km of paved shoulders and intersection improvements)	\$8,800,000
Operational Improvements	Annual project expense for Intersection improvements and speed management initiatives ¹	\$2,000,000
Transit	Purchase one to two additional accessible mini-vans for the On Demand service (assumed 80% covered through Grant Funding)	\$24,000 ¹
Planning Studies	1. Studies (Local area transportation studies, update to Active Transportation Plan, Transit Master Plan (3 x \$100,000) 2. Update to RMAP (\$300,000)	\$600,000
Total	Estimated total of long-term costs	\$105,524,000
TOTAL		\$161,364,000

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

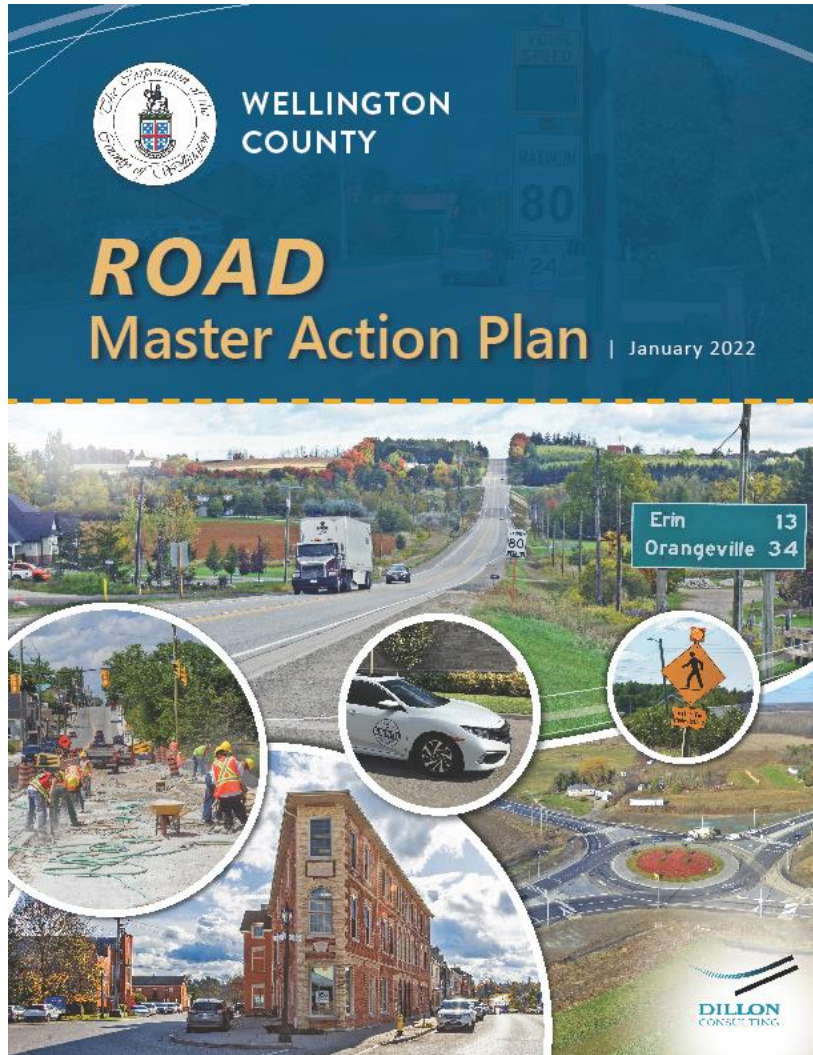


Next Steps

Next Steps

- Present final report to County Council
- Following Council approval:
 - Issue Notice of Completion
 - 30 day consultation period
- Future project specific Municipal Class Environmental Assessments, Area Studies
 - Public consultation and engagement
 - Detailed study, assessments and evaluation of alternatives, preliminary design
 - Detailed design
- Implement Operational Improvements
 - Prioritize through future Capital Budgets for Speed Corridor and Intersection Improvements
 - Utilize and monitor Speed Management Guidelines
- Future Updates to Transportation Master Plan
 - Based on future growth projections and changes to goals

Final Report



[Road Master Action Plan - Roads - Wellington County](https://www.wellington.ca/en/resident-services/rd-road-map.aspx)

<https://www.wellington.ca/en/resident-services/rd-road-map.aspx>

Thank you

COUNTY ROADS
Connecting Communities

