



Highway 7&8 Transportation Corridor Planning and Class EA Study

PIC #4 Presentation
January 17 & 18, 2011



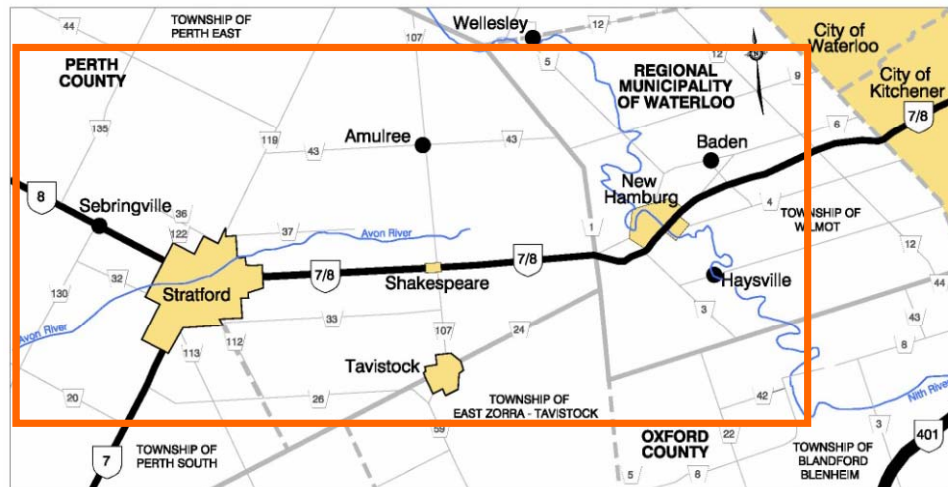


Today's Presentation

- Provide brief overview of:
 - Study purpose
 - Recently completed work
 - Purpose of PIC #4
 - Material available for review
 - Next steps after PIC #4
- Introduce study team members

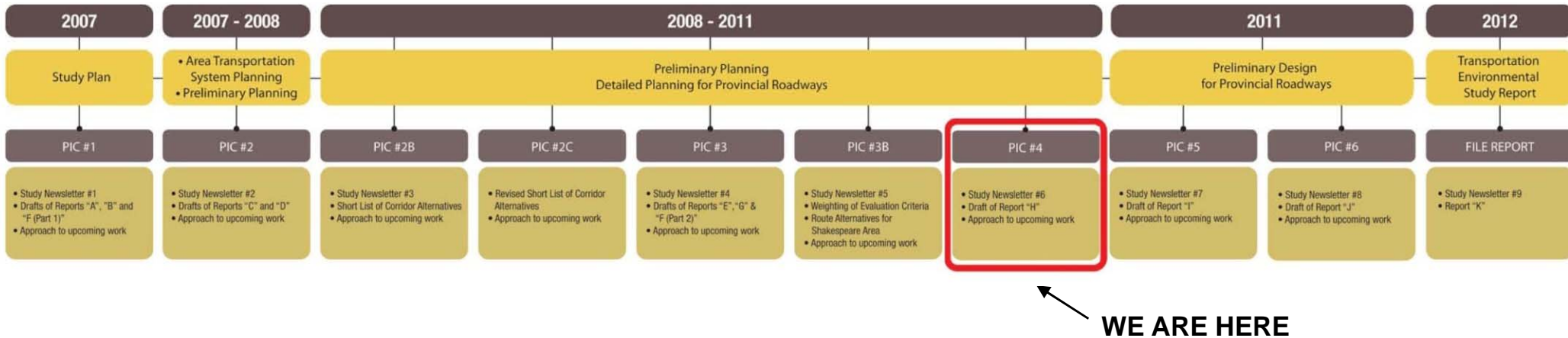
Study Purpose

- Develop a plan that addresses long-term (2031) transportation needs for Analysis Area for movement of people and goods



- Prepare a preliminary design for provincial roadway components of recommended plan

Study Update



- PIC #3B held in July 2010
 - Broader range of route alternatives for Shakespeare area
 - Refined factors, sub-factors, criteria and indicators for route selection
- Assessment and evaluation of route alternatives completed
- Preferred route selected



Purpose of PIC #4

- Present and obtain information and input on the following key elements:
 - Route alternative assessment and evaluation results
 - Preferred Route Alternative for entire study area

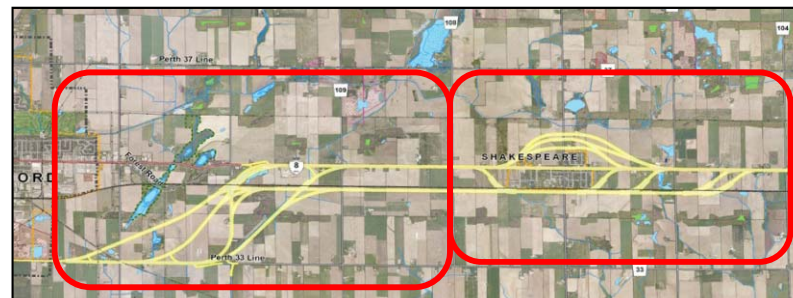
Overview of Assessment and Evaluation Process

Study Area divided into six sections for route assessment and evaluation:

- Single route alternative for four sections (Sections 1, 2, 5 and 6)
 - Note: Widening alternatives for these sections to be developed and evaluated during Preliminary Design phase as evaluation indicators for Preliminary Design alternatives are at a higher level of detail that better addresses concerns expressed
- Multiple route alternatives for two sections (Sections 3 and 4)

Section 3: East of Stratford to East of Perth Line 109

Section 4: Shakespeare Area East of Perth Line 109 to East of Road 106



Route alternatives connecting to existing Highway 7&8

Route alternatives connecting to a new route alternative south of the railway corridor

North by-pass route alternatives

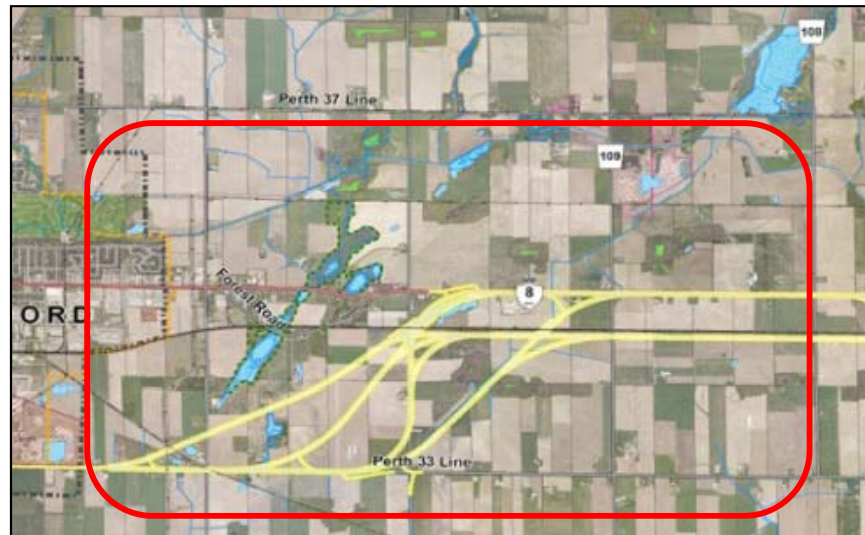
Route alternative using existing Highway 7&8

South by-pass route alternatives

Overview of Assessment and Evaluation Process (Cont'd)

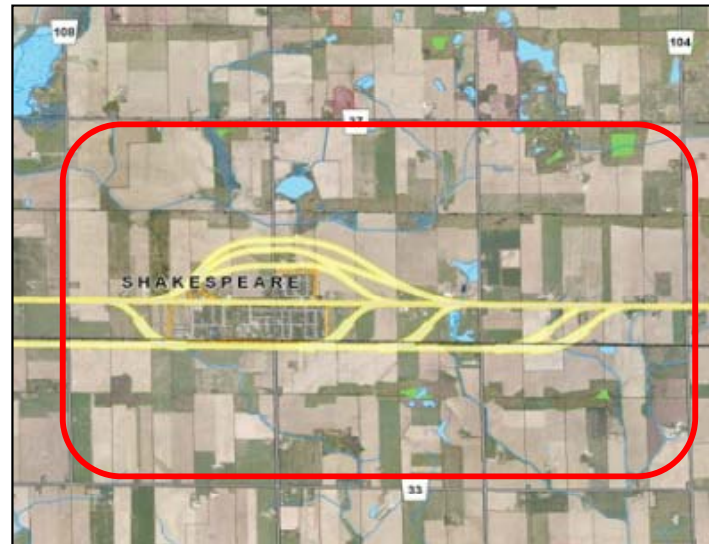
Route alternative assessment and evaluation was completed in steps:

- For Section 3 (east of Stratford):
 - Route alternatives connecting to new route alternative south of railway corridor evaluated to identify preferred alternative
 - Route alternatives connecting to existing Highway 7&8 evaluated to identify preferred alternative
 - Preferred alternative east of Stratford dependent in part on preferred alternative for Shakespeare area



Overview of Assessment and Evaluation Process (Cont'd)

- For Section 4 (Shakespeare area):
 - North by-pass route alternatives evaluated to identify preferred alternative
 - South by-pass route alternatives east of Shakespeare evaluated to identify preferred alternative
 - Preferred north and south by-pass alternatives and the existing Highway 7&8 alternative evaluated to identify preferred route alternative for Shakespeare Area



Evaluation Results

Evaluation Summary

Factor Area	Alternative	Alt 1	Alt 2	Alt 3	Alt 4
Natural Environment		●	●●	●	●
Land Use / Socio-Economic Environment		●●	●	●	●
Cultural Environment		●●	●●	●●	●●
Transportation		●●	●	●	●

Grade of Preference



Reasoned Argument Evaluation Results

Highway 7&8 Transportation Corridor Planning and Class EA Study EVALUATION OF ROUTE ALTERNATIVES				
Note – Evaluation of the route alternatives is based on a qualitative assessment of each route (high, medium or low). Relevant and site-specific information for each criterion/row is provided to justify the high, medium or low assessment.				
BEST OF SHAKESPEARE AREA ALTERNATIVES				
Factor / Sub-Factor	Criteria	Indicator for Route Selection	Route Alternative	
			Best of A plus E A3 = E; 1-2-4-7-10-12-14	Best of A plus F A3 = F; 1-2-4-7-10-12-15
1. NATURAL ENVIRONMENTAL FACTORS				
1.1 Fisheries and Aquatic Ecosystems				
1.1.1 Fish Habitat	Potential and significance of: <ul style="list-style-type: none"> enrichment, severance, displacement, long term alteration / disruption as applicable to the following: <ul style="list-style-type: none"> critical fish habitat features riparian areas habitat rehabilitation goals 	Low potential to affect fish and fish habitat. <ul style="list-style-type: none"> 2 permanent warmwater and 1 permanent coolwater crossings of Homer Creek containing low to medium quality habitat supporting warmwater fish species 	Low potential to affect fish and fish habitat. <ul style="list-style-type: none"> 2 permanent warmwater and 1 permanent coolwater crossings of Homer Creek containing low to medium quality habitat supporting warmwater fish species 	Low potential to affect fish and fish habitat. <ul style="list-style-type: none"> 2 permanent warmwater and 1 permanent coolwater crossings of Homer Creek containing low to medium quality habitat supporting warmwater fish species
1.1.2 Fish Community	Potential and significance of: <ul style="list-style-type: none"> enrichment, severance, displacement, long term alteration / disruption as applicable to the following: <ul style="list-style-type: none"> fish species at risk (vulnerable, threatened or endangered fish species) fish movement/migration critical fish life stage processes (spawning, rearing, nursery, feeding) long-term fish community management goals 	Low potential to affect fish and fish habitat. <ul style="list-style-type: none"> 1 permanent coolwater crossing of the North Woodstock River containing low to medium quality fish habitat. Fish communities and habitats present are considered to be moderately resilient to disturbance and show evidence of historical channel alignments or modifications. Fish movements are likely localized between feeding and spawning areas which are abundant within the reaches outside of the study area. There are no critical habitat types within reaches associated with the route alternative. There are no SAR within the route alternative. Expected impacts include temporary disturbance to fish and fish habitat associated with construction, potential for short term impacts to water quality during construction. Impacts can be mitigated and/or compensated. 	Low potential to affect fish and fish habitat. <ul style="list-style-type: none"> 1 permanent coolwater crossing of the North Woodstock River containing low to medium quality fish habitat. Fish communities and habitats present are considered to be moderately resilient to disturbance and show evidence of historical channel alignments or modifications. Fish movements are likely localized between feeding and spawning areas which are abundant within the reaches outside of the study area. There are no critical habitat types within reaches associated with the route alternative. There are no SAR within the route alternative. Expected impacts include temporary disturbance to fish and fish habitat associated with construction, potential for short term impacts to water quality during construction. Impacts can be mitigated and/or compensated. 	Low potential to affect fish and fish habitat. <ul style="list-style-type: none"> 2 permanent warmwater and 1 permanent coolwater crossings of Homer Creek containing low to medium quality habitat supporting warmwater fish species Fish communities and habitats present are considered to be moderately resilient to disturbance and show evidence of historical channel alignments or modifications. Fish movements are likely localized between feeding and spawning areas which are abundant within the reaches outside of the study area. There are no critical habitat types within reaches associated with the route alternative. Expected impacts include temporary disturbance to fish and fish habitat associated with construction, potential for short term impacts to water quality during construction. Impacts can be mitigated and/or compensated.
1.2 Terrestrial Ecosystems				
1.2.1 Wildlife	Potential and significance of: <ul style="list-style-type: none"> enrichment, severance, displacement, long term alteration / disruption as applicable to the following:	Low potential to affect wildlife and their habitat. <ul style="list-style-type: none"> No special concern, endangered or threatened wildlife species 	Low potential to affect wildlife and their habitat. <ul style="list-style-type: none"> No special concern, endangered or threatened wildlife species 	Medium potential to affect wildlife and their habitat. <ul style="list-style-type: none"> 1 threatened amphibian species was reported within or adjacent to

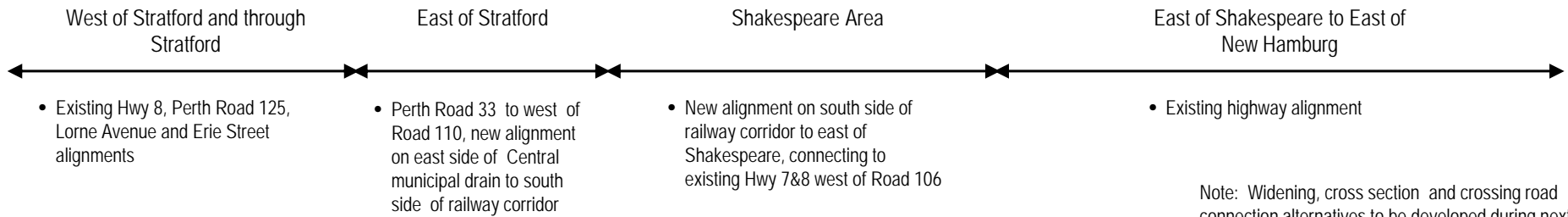
LEGEND				
MOST PREFERRED	MODERATELY PREFERRED	LEAST PREFERRED	NO DIFFERENCE	SELECTED ROUTE

Arithmetic Evaluation Results

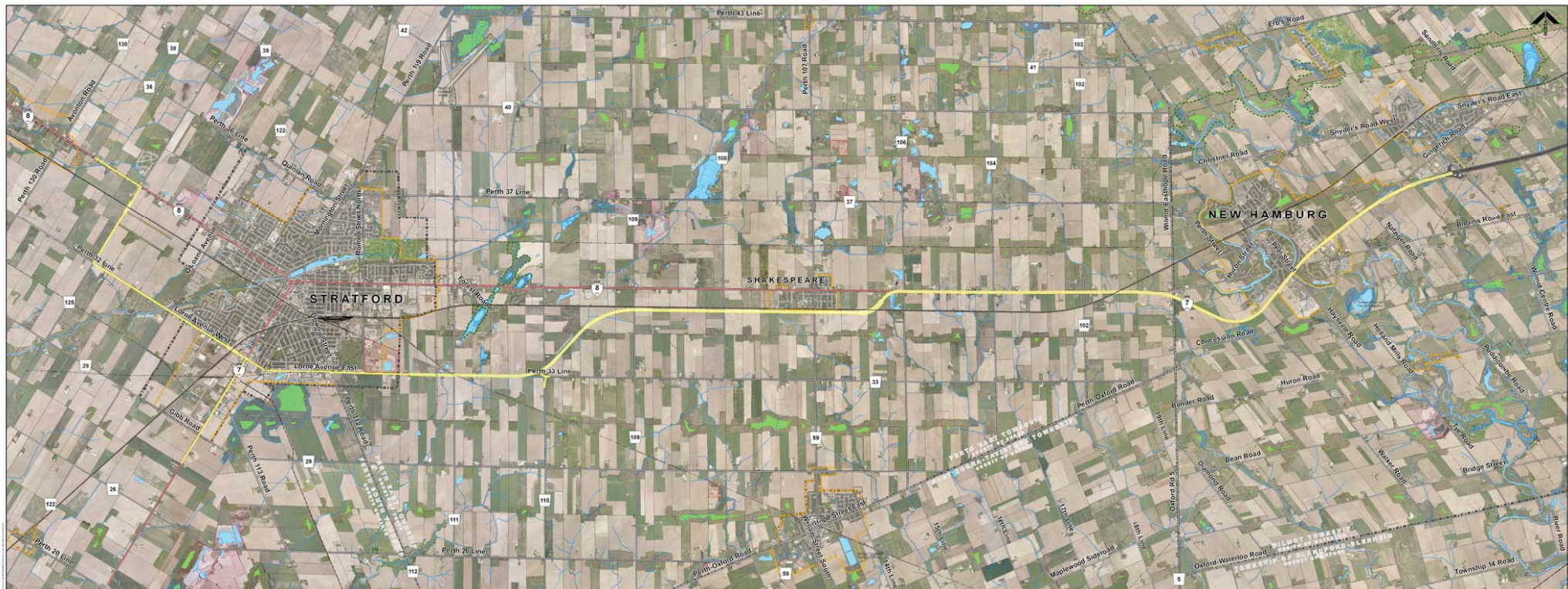
NATURAL ENVIRONMENT WEIGHTS TABLE - BEST OF SHAKESPEARE AREA ALTERNATIVES										
Name / Sub-Area / Criteria	Indicator	No Effect	Weighting	Assessments						
				1	2	3	4	5		
1. NATURAL ENVIRONMENT										
1.1 Fisheries and Aquatic Ecosystems										
1.1.1 Fish Habitat										
1.1.1.1 Fish Habitat	Potential and significance of: <ul style="list-style-type: none"> enrichment, severance, displacement, long term alteration / disruption as applicable to the following: <ul style="list-style-type: none"> critical fish habitat features riparian areas habitat rehabilitation goals 	High	0.08							
1.1.1.2 Fish Community	Potential and significance of: <ul style="list-style-type: none"> enrichment, severance, displacement, long term alteration / disruption as applicable to the following: <ul style="list-style-type: none"> fish species at risk (vulnerable, threatened or endangered fish species) fish movement/migration critical fish life stage processes (spawning, rearing, nursery, feeding) long-term fish community management goals 	High	0.08	0.07	0.07	0.07	0.07	0.07	0.07	
1.2 Terrestrial Ecosystems										
1.2.1 Wildlife										
1.2.1.1 Wildlife	Potential and significance of: <ul style="list-style-type: none"> enrichment, severance, displacement, long term alteration / disruption as applicable to the following:	High	0.08	0.07	0.07	0.07	0.07	0.07	0.07	
Weighted Score										
30.00 12.00 12.00 12.00 12.00										

ALTERNATIVE WEIGHTINGS
1. Best of A plus E = 12.00 (0.08)
2. Best of A plus F = 12.00 (0.08)
3. Best of B = 12.00 (0.08)
4. Existing Highway 7&8 Alignment = 12.00 (0.08)

Preferred Route Alternative



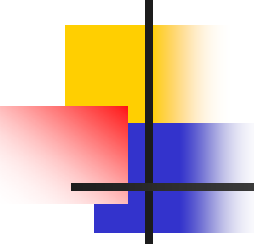
Note: Widening, cross section and crossing road connection alternatives to be developed during next phase.





Next Steps

- Respond to comments received through PIC #4 consultation process
- Confirm Preferred Route Alternative for entire study corridor
- Initiate Preliminary Design, including generation of preliminary design alternatives for:
 - Highway widening / cross-section
 - Crossing road connections (interchanges, overpasses / underpasses, at-grade intersections)
- PIC #5 – Late Spring 2011
 - Present preliminary design alternatives



Thank you for your attention.
Please direct your questions and
comments to the Study Team
members at the display boards.