

OTTAWA QUEENSWAY

Preliminary Design and Environmental Assessment Study

Public Advisory Committee

Meeting #3

April 7, 2004

Agenda

1. Introduction of Attendees and Role of PAC
2. Project Status Update
3. Project Schedule
4. EA for Bridge Deck replacements (Carling Ave vicinity)
5. Evaluation Methodology
6. Alternatives – Main Line and Interchanges
7. Other Business

Role of PAC

- Facilitate exchange of information between the Project Team and Communities
- Provide an opportunity to discuss issues
- Provide an opportunity to provide comments on evaluation criteria and proposed weighting

Item 2: Project Status Update

Work completed to date

- Environmental inventories
- Traffic Operations Report
- Draft Study Design Report
- Problem Identification
- Development of alternatives at concept level
- Presentation of foregoing to agencies and public
- Development of alternatives at greater level of detail
- Development of evaluation methodology

Work to be completed

- Select Technically Preferred Alternative(s) for mainline and Interchanges (TPA)
- Present TPA to Agencies and PAC for comments
- Revise TPA as may be required
- Present TPA to public at PIC #2 (June 2004)
- Revise TPA as may be required
- Complete Preliminary Design of TPA
- Present Preliminary Design to Agencies and PAC
- Present Preliminary Design to Public at PIC #3 (Fall 2004)
- Complete documentation and file TESR for public and agency review (Winter/Spring 2005)

Item 2: Project Status Update – Traffic Report

Projected Population & Employment

	Inside Greenbelt	West Urban Centre	South Urban Centre	East Urban Centre	Rural Area	Total
Population 2001	517,000	73,000	42,000	88,000	80,000	800,000
2021	588,000	186,000	172,000	131,000	115,000	1,192,000
Growth	71,000	113,000	130,000	43,000	35,000	392,000
Growth Distribution	18%	29%	33%	11%	9%	100%
Employment 2001	403,000	36,000	8,000	15,000	18,000	480,000
2021	514,000	90,000	70,000	45,000	29,000	749,000
Growth	111,000	54,000	62,000	30,000	11,000	268,000
Growth distribution	41%	20%	23%	11%	4%	100%

Traffic Operations Report - Future Conditions Update

- Scope:
 - Travel demand forecasting/traffic volume projections
 - INTEGRATION modelling
 - Operations analysis
- Based on final Ottawa TMP (Sept. 2003)
- Supersedes previous Traffic Operations Report - Future Conditions (Oct. 30, 2002)

Travel Demand Forecasting

- City of Ottawa/TRANS EMME/2 model
- TMP population and employment
- TMP 30% transit mode split
- p.m. peak hour
- Model runs used for volume projections:
 - 2001 base year (existing conditions)
 - 2021 horizon, TMP road network improvements; no Hwy 417 improvements

Increases in demand caused by:

- change in modelling process used by City of Ottawa
- use of 1996 travel survey instead of 1986 survey
- adjustments to work trips to account for increased labour force participation between 1995 and 2021
- adjustments to account for commercial activity (trips not captured in survey and heavy truck counts)
- Higher community to community trip making in 2003
TMP

Decrease in demand caused by:

- Change in overall transit target from 20% to 30%

Results

- No existing screenline capacity deficiencies
- A capacity deficiency (equivalent to 1 lane per direction) will exist on Hwy 417 from Hwy 416 to Innes Road by 2021
- Adding capacity to Hwy 417 attracts trips from City streets
- Minor benefit to Hwy 417 from OTC and/or Interprovincial bridges
- Overall network benefits more significant than Hwy 417 benefits
- *Despite implementation of all transportation upgrades contained in the 2003 TMP, including realization of transit mode share targets, there is still a need to consider improvements to the Queensway*

INTEGRATION

Corridor Performance Results

Time Period	Average Corridor Speed (km/h)			Average Corridor Stops (%)		
	2001	2011	2021	2001	2011	2021
a.m. Peak Period						
06:00-07:00	105.6	106.2	104.9	4.5	4.2	4.6
07:00-08:00	81.7	78.3	72.6	8.3	8.5	9.0
08:00-09:00	64.4	60.4	57.4	10.5	10.2	10.8
p.m. Peak Period						
15:00-16:00	80.7	63.4	58.4	10.3	12.2	13.4
16:00-17:00	68.0	41.8	35.9	11.4	14.7	16.2
17:00-18:00	59.2	30.7	27.4	12.2	16.4	17.7

Basic Lane Needs - Eastbound

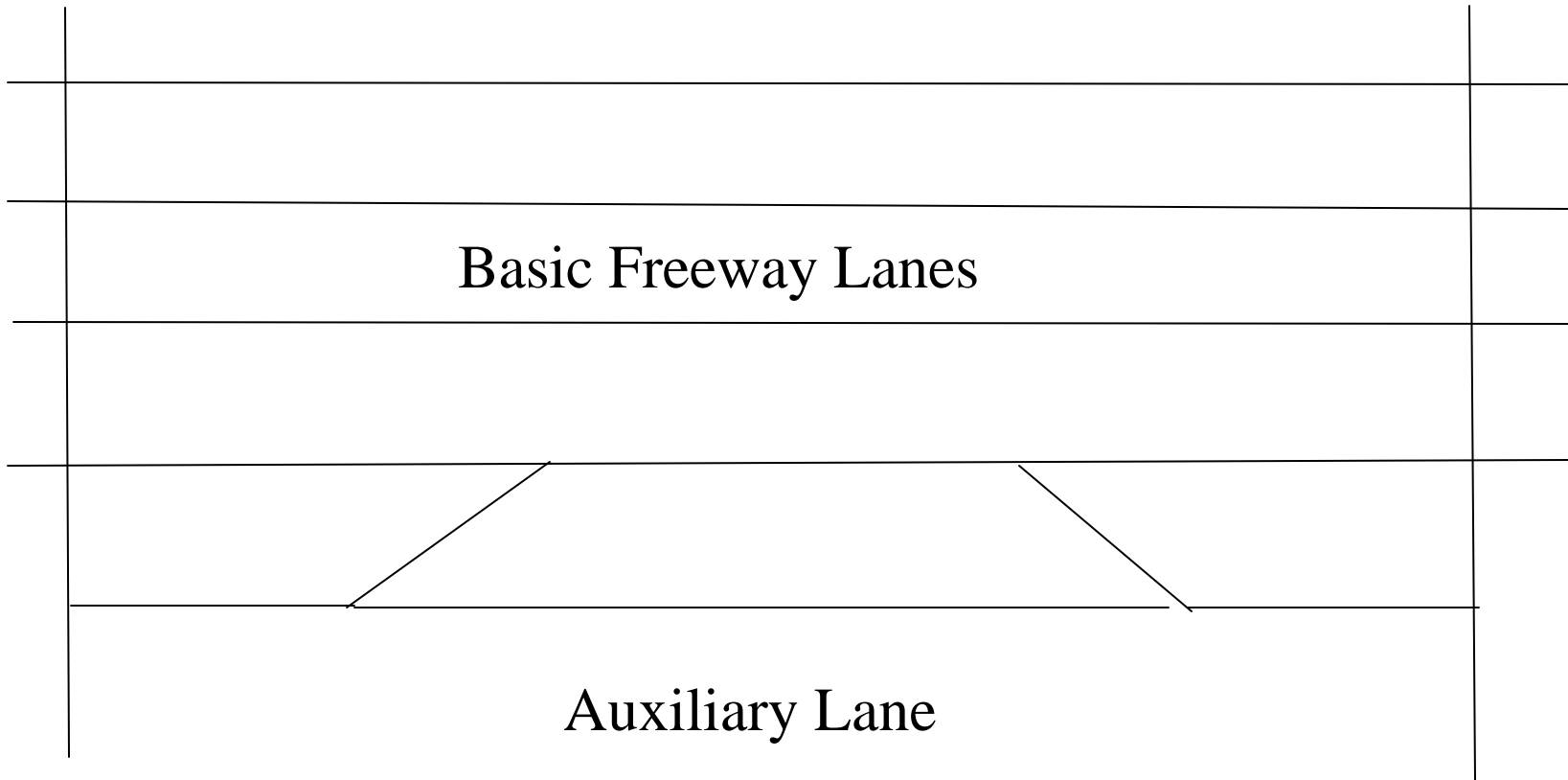
- 2011
 - 3 lanes from 416 to Pinecrest
 - 4 lanes from Pinecrest to Kent
 - 3 lanes from Kent to Metcalfe
 - 4 lanes from Metcalfe to 174
 - 3 lanes from 174 to Walkley
- 2021
 - 4 lanes from 416 to 174 excluding Kent to Metcalfe (3 lanes)
 - 3 lanes from 174 to east limits

Basic Lane Needs - Westbound

- 2011
 - 3 lanes from Hunt Club Interchange to 174
 - 4 lanes from 174 to Pinecrest
 - 3 lanes Pinecrest to 416
- 2021
 - 4 lanes extended to Richmond

Auxiliary Lanes

- In addition to the basic lanes, auxiliary lanes will be required at various locations to improve operations (hence there may be greater than 4 lanes/direction in some areas between interchanges)
 - (Note: An auxiliary lane connects an on-ramp from one interchange to an off-ramp at the next interchange, and are used where interchanges are closely spaced. These lanes are not continuous throughout the study area).



Basic Freeway Lanes

Auxiliary Lane

Interchange

Interchange

Summary

- The update of the traffic report did not significantly change future traffic forecasts for the Queensway
- Despite overall transit targets being achieved, and all upgrades to transportation facilities described in the 2003 TMP being implemented, capacity deficiencies on the Queensway will still be realized resulting in increased congestion, mobility and safety concerns

Item 2: Project Status Update –
High Occupancy Vehicle Study
(HOV)

Results

- Although a demand for HOV lanes can be demonstrated, operational and safety concerns associated with the Queensway corridor within the study limits eliminated HOV lanes from further consideration.

Item 3: Project Schedule

Project Milestone Schedule

- Alternative evaluation – April
- MTO endorsement – mid May
- PAC – early June
- Transportation Committee – early June
- PIC #2 – late June
- Preliminary design complete – Fall 2004
- PIC #3 – Fall 2004
- File TESR – Spring 2005

Item 4: EA for deck replacements

Item 5: Evaluation Methodology

(Details on methodology are contained in Volume 1 of the Preliminary Alternatives Report that was distributed in advance of the meeting)

Evaluation Methodology

- Preliminary Alternatives Report was prepared and outlines:
 - Identified Problems and Opportunities
 - Assessment and Evaluation Methodology
 - Alternatives to the Undertaking
 - Alternative Methods
 - Long List and Short List of Alternatives

Evaluation Principles

- Comprehensive
- Understandable
- Traceable
- Replicable
- Participatory

Evaluation Methodology

- Use both Qualitative (reasoned argument) and Quantitative (arithmetic) with emphasis on quantitative method
- Quantitative method – “Weighted Additive, Multi-Attribute Trade-off Method” includes:
 - Level of importance of each factor/sub-factor (weight)
 - Magnitude of the impact/benefit (score)
- Scores are derived from function forms
- Sensitivity testing carried out to test rigour of preferred alternative
- Evaluation carried out by multi-disciplinary team

Evaluation Methodology

PAC Input

- The project team is looking for input from PAC members in two ways:
 1. Comments on the evaluation factors to be applied (Table 5); and
 2. Input into factor weights to be used in sensitivity testing (handouts)

Note: The evaluation is being carried out at the end of April, so PAC input is required by April 19th.

Item 6: Alternatives

Mainline

Interchanges

(see Volume 2 of 2 –Alternative Plans)

Item 7: Other Business

Thank you.

Additional Background

Slides follow

(see handout)