Appendix E
Transportation Concordance Analysis
MEMO

TO: Ann Joyner
FROM: Claudio Covelli
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DATE: August 2, 2006
SUBJECT: Input into the evaluation of the “Support and Range of Transportation Choices” for the Background Planning Studies for West Whitby –

OUR FILE: 05-4559-1300

Evaluation Outcome

The evaluation was for the transportation component (minus the cost) using a Concordance Analysis process. In this process, all three criteria were weighted equally. The result of this process produced the following results.

Table 1 - Concordance Analysis – Options Ranking

<table>
<thead>
<tr>
<th>Weight</th>
<th>Criteria</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.333</td>
<td>Network</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>0.333</td>
<td>Transit</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>0.333</td>
<td>Capacity</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1.00</td>
<td>Total</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

The result of the evaluation was confirmed through a logic test to help understand tradeoffs between options. This is documented below.

Options 1 through 3 are considered the best options from a network and transit perspective, but are the worst options from a residual capacity perspective. For the first three options, the better transit serviceability and network connectivity are a result of the Hwy 407 link being located on the edge or outside of the study area. This minimizes pedestrian crossings over the Hwy 407 Link, increases the potential of roadway linkages (i.e. Hall Road), and reduces ‘deadheading’ on transit routes.

Options 4 though 6 have the Hwy 407 Link running through the middle of the West Whitby development lands. This concept is generally worse from a transit and road connectivity perspective since the Hwy 407 Link can be seen as a barrier to local travel (by pedestrians) and can minimize the number of north-south local/collector roads due to the large tract of land being utilized by the Hwy 407 Link.

These three options are also more employment oriented due to the exposure from the highway corridor. Employment land uses of this type generally generate less traffic than residential land uses. The majority of employment related traffic also travels against the peak direction of travel, where there is sufficient capacity in West Whitby to accommodate growth in traffic volumes. Therefore, the residual capacity for Options 4 through 6 is generally better than the residential dominated options (Option 1 through 3).