

# DETROIT RIVER INTERNATIONAL CROSSING STUDY

## *Walpole Island First Nations*

February 23rd, 2007

## Agenda

- Summary of PIOH #4
- Air Quality Monitoring Station Findings; first quarter
- Piers in the River
- WIFN Workplan

## Summary of PIOH #4

## PIOH #4 Summary

### Date/Venue

### Total Attendance

### Written Comments Received

December 6, 2006 Windsor Holiday  
Inn, Windsor, ON

334

36

December 7, 2006, Ciaciario Club,  
Oldcastle, ON

176

7

Total Comments received via  
fax/mail

N/A

10

Total

510

46



Comments made regarding preliminary analysis completed on the Seven Major Evaluation

Factors:

**1. Air Quality**

- Present in an easy to understand format
- Will not vary with any of the aboveground alternatives
- Can be determined only after proposed construction is complete

**2. Community and Neighbourhood Impacts**

- Dirt, dust and noise
- Fewer homes and families displaced with a tunnel
- Community impacts associated with Plaza A are very high
- Carefully consider construction staging
- Crossing C impacts to Sandwich Towne

**3. Land Use Impacts**

- Minimize land use impacts by constructing a tunnel
- Expropriation of properties will take years to complete and will be costly
- Place ramps as close to the new freeway as possible

**4. Cultural Resources Impacts**

- Concerned with impacts to historic Sandwich Towne

**5. Natural Resources Impacts**

- Plazas A and B will further erode environmentally sensitive areas
- Do not destroy trees
- Protect natural habitats; restore areas that are affected by construction staging



## 6. Regional Mobility

- Improve Malden Road to deal with increased traffic
- Maintain access to South Windsor arena
- Implement ITS on Canadian side of project

## 7. Cost and Constructability

- Constructing partial tunnels in residential areas will reduce tunnel cost
- Tunneling is cost prohibitive; costs will continue to rise if project is delayed
- Concerned with cost of tolls at the other crossings

## Report on Air Quality Monitoring Station Findings

- Two air quality monitoring stations installed on HCR/Hwy 3 Corridor
- Monitoring began October 1, 2006

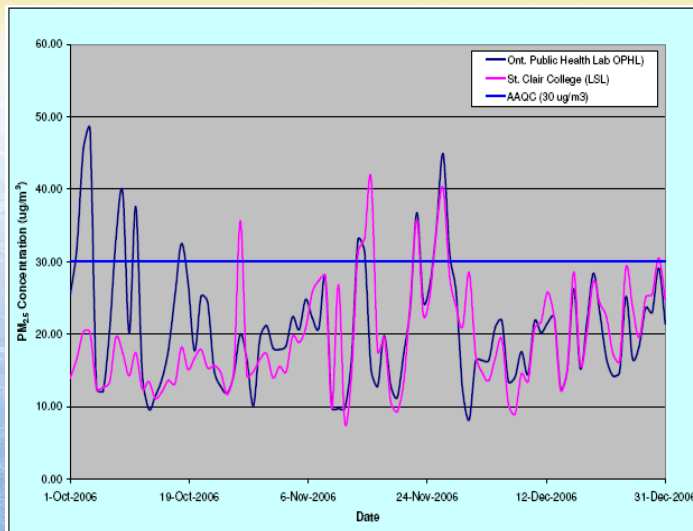


### POLLUTANTS BEING MEASURED

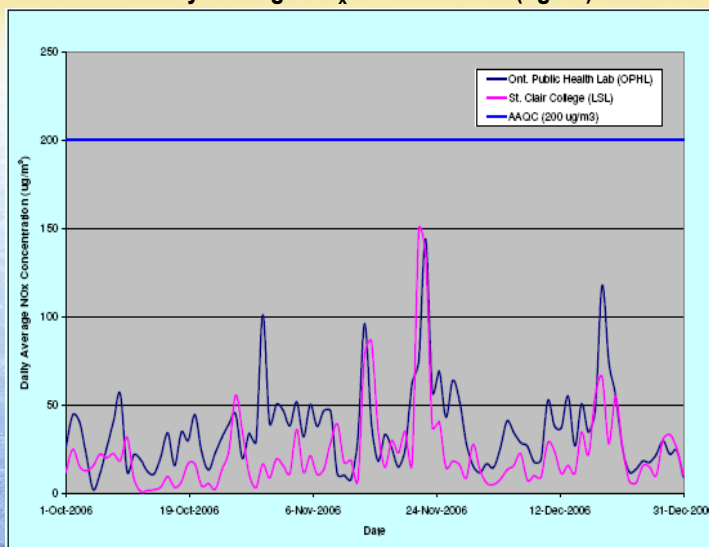
- Measuring selected air pollutants from transportation sources
  - Nitrogen Oxides (total NO<sub>x</sub>, NO, NO<sub>2</sub>)
  - Fine and coarse particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>)
  - Selected air toxics:
    - Benzene
    - Acrolein \*
    - Formaldehyde \*
    - Acetaldehyde \*
- Meteorology
  - Wind speed and direction
  - Temperature

\* Provides the smell of diesel exhaust

## Daily Average PM<sub>2.5</sub> Concentration (ug/m<sup>3</sup>)



## Daily Average NO<sub>x</sub> Concentration (ug/m<sup>3</sup>)





**Preliminary Results - VOCs October to December 2006**

Pollutant	Monitoring Station	Minimum Concentration (ug/m3)	Maximum Concentration (ug/m3)	Average Concentration (ug/m3)	MOE AAQC (ug/m3)
Formaldehyde	OPHL	2.1	5.0	3.1	65
	SCC	2.5	5.7	3.5	
Acetaldehyde	OPHL	0.6	2.4	1.5	500
	SCC	0.5	2.4	1.5	
Acrolein	OPHL	0.1	1.2	0.6	9.6*
	SCC	0.1	1.1	0.5	
Benzene	OPHL	0.4	1.0	0.6	NS
	SCC	0.4	3.1	0.8	

\* converted to 24 hour from former 1 hour AAQC

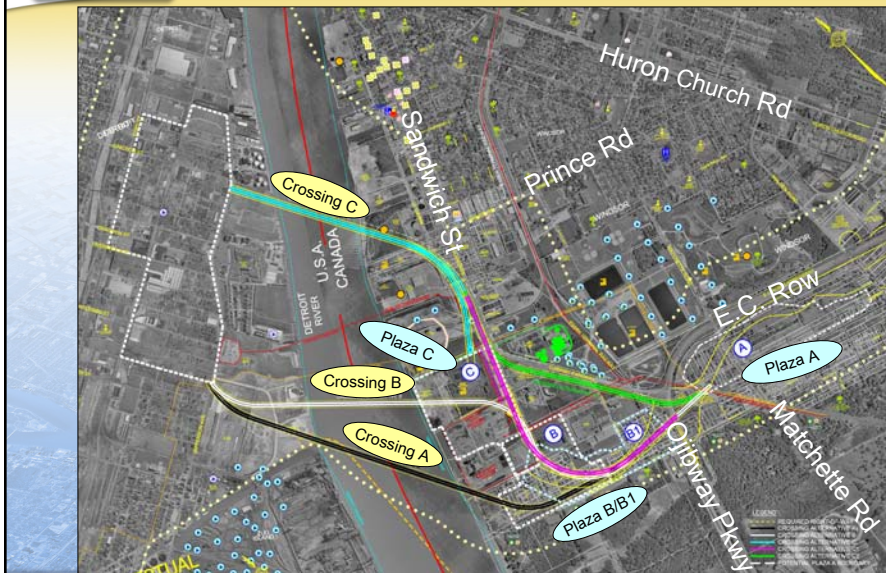
**Next Steps:**

- Verify monitoring results to date (MOE to conduct QA)
- Continue monitoring for a 12-month period (to end of September 2007)
  - Next Quarterly Report-May 2007
- Incorporate results of local MOE monitoring stations over same time period
  - Data not available yet
- Reflect results in our dispersion modeling as appropriate

- Continuing to model dispersion for the access road, plaza and crossing alternatives, as well as future no-build scenarios
- Once results are obtained, these will be interpreted for the assessment to distinguish changes in air quality among the alternatives as compared to the no-build scenario

## Piers in the River





Sunshine Skyway Bridge, Florida



Sunshine Skyway Bridge, Florida

## WIFN Workplan