# 2016 TTS Technical Scope, Work Plan, Timelines

2016 TTS Info Workshop June 19, 2015

# Agenda

- Background
- Objectives of Procurement
- Survey Description
- Survey Procedure
- Survey Questions
- Quality and Productivity Control
- Post Survey Processes
- Governance Structure
- Responsibilities of Outside GTHA Partners
- Survey Deliverables
- Major Timelines
- Cost Mitigation Strategies

# **Background**

- Since 1991, DMG was requested by the Transportation Information Steering Committee (TISC) to manage TTS
- Due to the absence of a principal investigator from the University of Toronto, DMG cannot undertake the overall administrative responsibility for the 2016 TTS
- ❖ TISC has decided to issue one contract to a selected Consultant for the delivery of 2016 TTS through a RFP process
- MTO will lead the RFP procurement, manage the budget and expenditures, and administer all accounting activities
- DMG will support TISC by providing direction and recommendations to the Consultant on day-to-day survey management

### **Objectives of Procurement**

- Goal of 2016 TTS procurement is to replicate as closely as possible the survey methodology from the 2011 TTS
  - Provide a consistent time-series data-set from 1986-2016
  - Provide a solid base of travel data to compare pilots and field tests of new survey methods against
- Survey description in the following slides closely mimics the methodology for the telephone-based interview component from the 2011 TTS
- ❖ TISC intends to provide some flexibility for consultants in the RFP to mitigate price risk (see last slide)

### **Survey Description**

- Collect travel data from ~5% of the total households within the survey area via telephone interviews
- Proposed survey area:
  - Cities of Barrie, Brantford, Guelph, Hamilton, Kawartha Lakes, Orillia, Peterborough and Toronto
  - Counties of Brant, Dufferin, Peterborough (partial), Simcoe and Wellington (partial)
  - Regional Municipalities of Durham, Halton, Niagara, Peel, Waterloo and York
  - Town of Orangeville
- **Estimated to be 167,300 samples**

### **Survey Procedure**

- Up to 2 interview phases: September to December of 2016 and 2017
- Staffing and setup for each phase: 120 interview stations, 8 monitoring stations, 8 call-in stations, 10 coding stations on a local area network
- ❖ Interviewing hours: Weekdays 5:30 p.m. to 9:30 p.m., Saturdays - 10:00 a.m. to 4:00 p.m.
- ❖ Daytime interview team: scheduled call-backs, respondent call-ins, visual review of completed interviews
- Geocoding: translate all geographic locations into map coordinates

# **Survey Questions**

| Household                                       | Person   | Trip   |
|---|--|--|
| Home Location                                   | • Age  | <ul> <li>Origin &amp; Destination Locations</li> <li>Purpose</li> <li>Start time</li> <li>Mode of Travel</li> <li>Details of Transit Trips: Access, Egress &amp; Routes</li> <li>Details of Auto Driver Trips: Use of Hwy 407 &amp; Carpool</li> </ul> |
| <ul> <li>Received advance<br/>letter</li> </ul> | Gender     License to Drive                                  |  |
| • # of People                                   | <ul><li>Licence to Drive</li><li>Transit Pass</li></ul>      |  |
| • # of Vehicles                                 | Employment & Student   |  |
|   | Status   |  |
|   | <ul> <li>Work and School<br/>Locations</li> </ul>            |  |
|   | Occupation   |  |
|   | <ul> <li>Availability of Free<br/>Parking at Work</li> </ul> |  |
|   | <ul> <li>Work at Home on Survey</li> <li>Day</li> </ul>      |  |

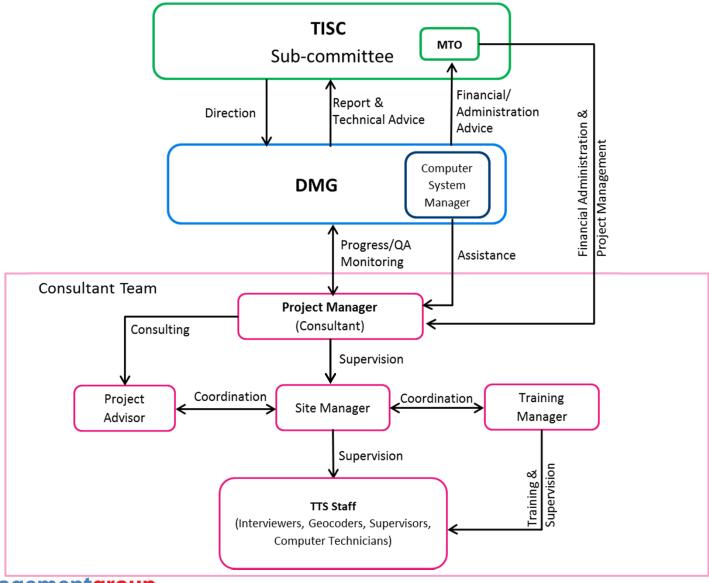
# **Quality and Productivity Control**

- ❖ Built-in logic checks in interview and geocode software
- Silent telephone and visual monitoring during the interviews
- Validation checks run nightly
- Interviewer performance reports produced nightly
- Geocoder performance reports produced nightly
- Team performance reports produced nightly
- Survey status report produced nightly
- Visual review of printouts of completed interviews
- ❖ Built-in logic and validation checks on completed database

### **Post Survey Processes**

- Extensive logic and validation checks processed on completed database
- Expand the data using Canada Census
- ❖ Validate data with external sources e.g. school enrollment, transit ridership, employment data, etc.
- Compare data with results from previous TTS
- Two types of reports to be produced:
  - 1. Describe the survey process (survey procedures on hiring, training and quality control, technical reports on expansion and validation, technical manuals on software design and operation, description of final data base, etc.)
  - 2. Summarize and compare results to previous TTS at different geography

### **Governance Structure**



# **Responsibilities of Outside GTHA Partners**

- Assist in the preparation of the pre-interview letter by obtaining officials' signatures
- ❖ Participate in the survey information meeting as in previous TTS to receive updates on the progress of the survey
- Support data validation for survey results by providing necessary data such as transit ridership

# **Survey Deliverables**

- Daily and weekly staff performance and survey status reports
- Monthly survey progress reports
- ❖ A final data base consisting of household, person, trip and transit tables with expansion factors compatible with previous TTS
- A report detailing the expansion and validation processes (Data Expansion and Validation Report)
- ❖ A report detailing the conduct of the survey (Conduct of the Survey Report)
- ❖ A report detailing the structure of the final data base and codes used for each variable (Data Guide)

# Survey Deliverables (cont'd)

- A report summarizing the findings for all participating jurisdictions and comparing the results to previous TTS (Travel Survey Summary Report)
- ❖ A report summarizing the findings for all local municipalities in the GTHA and comparing the results to previous TTS (Travel Summary Report for the GTHA)
- A report summarizing the findings by wards in the GTHA (Summaries by Ward report)
- ❖ A set of origin-destination matrices by time period and travel mode (Origin-Destination Matrices)

# **Major Timelines – Survey Preparation**

- ❖ Approval in Principle by all Participants: End of August 2015
- \* RFP Released: September 2015
- Consultant selected: Jan 2016
- Letters of Agreement for TTS and Pilot Contributions signed by all Participants: Jan 2016
- Advance letter approved (with signatures) and printed: July 15, 2016 & 2017
- ❖ Survey site set up: August 15, 2016 & 2017
- Sample purchase and preparation: July October, 2016 & 2017

# **Major Timelines – Call Centre Operation**

- Survey site ready: August 15, 2016 & 2017
- ❖ Site set up: August 1 August 15, 2016 & 2017
- ❖ Staff recruitment: August 1 Oct 15, 2016 & 2017
- ❖ Staff training: August 15 Oct 31, 2016 & 2017
- ❖ Interviewing: September December of 2016 & 2017 (Wednesday after Labour Day to mid December)
- Geocoding: September December of 2016, September 2017 to February 2018 (starts one week after interviewing)

# **Major Timelines – Post Survey Processing**

- ❖ Data processing and correction: March to April of 2018
- **Expansion and validation:** May to June 2018
- ❖ Final database: July 2018
- Reports: August 2018

# **Cost Mitigation Strategies**

- ❖ 2016 TTS is estimated to cost \$4.2M at a 5% sample rate including inflation and built-in contingency amounts.
- ❖ TISC has directed DMG to include potential cost mitigation elements in the RFP to support price certainty for funding partners, without impacting data quality.
- ❖ 2016 RFP will be tightly scoped and will replicate survey process of 2011
- Cost control through project management and active monitoring and involvement
- ❖ The following measures are proposed for the RFB:
  - 1. Sample Rate: Quotes to be provided for 3%, 4%, and 5% sample.
  - 2. Survey Location: Flexibility for multiple sites; and sites outside GTA.
  - 3. Interview phases: Flexibility for 1 or 2 survey years.
- Above measures are being evaluated for technical feasibility in by DMG