



## Exhibit A

### Cost Proposal for Origin/Destination (O/D) Study Boardman Lake Avenue Traverse City, MI

URS Corporation (URS) is pleased to submit this proposal for traffic engineering services for the above-referenced project. Included in this letter is our proposed scope of services and cost estimate.

#### PROJECT UNDERSTANDING

The City of Traverse City is in the process of designing a new road along the west side of Boardman Lake. The new road—Boardman Lake Avenue—has been under considering for many years. The City desires to understand the potential volumes that might use Boardman Lake Avenue, should the new road be built. It is anticipated that some traffic currently using roads like Cass Street, Union Street, and Lake Avenue would be diverted to Boardman Lake Avenue. An origin/destination (O/D) study is required in order to better estimate the amount of traffic that could be diverted to Boardman Lake Avenue.

#### WORK PLAN

##### Task 1 – Tube Counts

URS will collect the following tube counts:

- SB Cass Street (north of 14<sup>th</sup>)
- NB Cass Street (south of 8<sup>th</sup>)
- SB Cass Street (south of 14<sup>th</sup>)
- NB Cass Street (south of 14<sup>th</sup>)
- SB Union Street (north of 14<sup>th</sup>)
- NB Union Street (south of 8<sup>th</sup>)
- SB Lake Avenue (south of 8<sup>th</sup>)
- NB Lake Avenue (south of 8<sup>th</sup>)
- EB 14<sup>th</sup> Street (west of Union)
- WB 14<sup>th</sup> Street (west of Union)
- EB 8<sup>th</sup> Street (west of Boardman)
- WB 8<sup>th</sup> Street (west of Boardman)

These counts will allow URS to determine:

- The volume of traffic entering and leaving the study area on key streets.
- The Average Daily Traffic (ADT) of these streets.
- The morning and afternoon peak volumes and times (e.g. 7:30-8:30 AM and 4:00-5:00 PM).
- The percentage of daily traffic that occurs in the morning and afternoon peaks, respectively.

##### Task 2 – Collect O/D Data

The tube counts from Task 1 will be processed in order to determine the peak hour times (e.g. 7:30-8:30 AM and 4:00-5:00 PM). O/D data will subsequently be collected during these morning and afternoon peak hours.

License plate information will be collected at the following ten (10) locations:

- WB-to-SB left at 8<sup>th</sup>/Union
- WB-to-SB left at 8<sup>th</sup>/Cass
- SB-to-WB right at 14<sup>th</sup>/Union
- SB-to-WB right at 14<sup>th</sup>/Cass
- EB-to-NB left at 14<sup>th</sup>/Cass
- NB-to-EB right at 8<sup>th</sup>/Union
- NB-to-EB right at 8<sup>th</sup>/Cass
- NB thru at 14<sup>th</sup>/Union
- NB thru at 14<sup>th</sup>/Cass



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The last three or four digits of a license plate will be spoken into a tape recorder. URS will process the data by assigning a time stamp to each license plate. License plates will then be matched to determine the amount of "through" traffic on Cass Street and Union Street—traffic that would be likely to divert to Boardman Lake Avenue. The morning and afternoon volumes that are "divertable" to Boardman Lake Avenue will be extrapolated to a daily volume.

### Task 3 – Turning Movement Counts

Peak-hour turning movement counts will be collected at the following intersections on the same day that the O/D data is collected:

- 8<sup>th</sup>/Cass
- 8<sup>th</sup>/Union
- 14<sup>th</sup>/Cass
- 14<sup>th</sup>/Union
- 8<sup>th</sup>/Lake

### Task 4 – Intersection Level of Service

URS will determine peak-hour Level of Service at the five intersections listed in Task 3 under existing conditions and with "traffic diverted" conditions. URS will develop peak-hour turning movement volumes at 8<sup>th</sup>/Boardman Lake Avenue, 14<sup>th</sup>/Boardman Lake Avenue and at the five intersections listed in Task 3 to develop the "traffic diverted" conditions.

### Task 5 – Memo and Schedule

URS will assemble a draft memo and provide to the City of Traverse City within three (3) weeks of completion of the O/D counts. URS will provide a final memo within one (1) week of receiving comments from the City.

URS will attend up to one (1) meeting with the City Commission to present the results of the findings.

### CONDITIONS AND FEES

URS proposes to perform the scope of work described above for a lump sum fee of **\$12,500**.

If additional locations need to be counted or if additional meetings are necessary, additional services and compensation will be negotiated. Additional meetings will be billed at \$1200 per meeting.