

Memorandum

The City of Traverse City
Engineering Department



TO: Timothy J. Lodge, P.E., City Engineer
FROM: Jessica Cichowski, Engineering Technician *JC*
DATE: November 26, 2013
SUBJECT: Level of Service of Eighth St between Lake Ave and Boardman Ave
Existing 4-Lane Cross Section

This memo is to formalize the initial findings of the City Engineering Department with regard to the level of service (LOS) of Eighth St between Lake Ave and Woodmere Ave in its current configuration (four lane road without medians or bicycle facilities).

The LOS was determined using LOS+ (a hybrid traffic analysis method based on the Highway Capacity Manual 2010 and NCHRP Project 3-70) and traffic volume data collected by URS on October 18, 2011. The cross-section of the road was assumed to have 11 foot through lanes. The signal cycle was assumed to provide through traffic green time to be 30% of the cycle length. Using this data the LOS for eastbound traffic and the LOS for westbound traffic on this segment of Eighth St, including bicycle, pedestrian, and transit LOS, was determined. See table below for details.

Eastbound Eighth St: Lake Ave to Boardman Ave Level of Service Summary		
	Lake Ave to Boardman Ave	Boardman Ave to Woodmere Ave
Auto LOS	C	B
Pedestrian LOS	B	B
Bicycle LOS	C	D
Transit LOS	D	D

Westbound Eighth St: Lake Ave to Boardman Ave Level of Service Summary		
	Lake Ave to Boardman Ave	Boardman Ave to Woodmere Ave
Auto LOS	C	B
Pedestrian LOS	B	C
Bicycle LOS	A	D
Transit LOS	D	D

Encl. LOS+ Multimodal Level of Service for Urban Streets Results Summary