

**I-80**  
**Ridge Road to US 30**  
**Will County**

**2050 Sensitivity Analysis**

On December 18, 2018, the Chicago Metropolitan Agency for Planning (CMAP) provided 2050 build condition average daily traffic (ADT) projections for the I-80 project from Ridge Road to US 30. From the provided data, ADT projections were compared between the 2040 (provided in December 2017) and 2050 years for the build scenario. These comparisons were split between mainline I-80 roadway segments, as well as intersecting roadways within the project area. The 2040 to 2050 ADT projections are included in the attached Tables 1 and 2.

As can be seen from the 2050 ADT projections, the ADT along mainline I-80 changes very little from the 2040 ADT projections. Along the project corridor, there is an increase in projected traffic from 2040 to 2050 (13.4%) from Ridge Road to I-55. There is a decrease in projected traffic from 2040 to 2050 (3.8% to 5.6%) from I-55 to Larkin Avenue and a decrease in projected traffic from 2040 to 2050 (14.1% to 22.5%) from Larkin Avenue to US 30.

The changes between the 2050 ADT projections and 2040 ADT projections along the intersecting roadways throughout the project corridor are similar to the mainline. Along the project corridor, I-55 and Richards Street both mark increases in projected traffic from 2040 to 2050, with a 9.0% increase on I-55 north of I-80, a 21.5% increase on I-55 south of I-80, a 4.8% increase on Richards Street north of I-80, and an 8.4% increase on Richards Street south of I-80. Houbolt Road is mixed, with an 18.8% decrease in traffic north of I-80 and a 1.0% increase south of I-80. The rest of the intersecting roadways mark a decrease in projected traffic from 2040 to 2050, ranging from 6.0% to 27.5%. The only outlier is Meadow Avenue south of I-80, which marks a decrease of 60.6%, however the ADT along Meadow Avenue is less than 10,000 vehicles per day.

Based on the analysis described above, it is recommended that the current proposed roadway geometry for the I-80 project remains as previously proposed. The minimal increases and overall decreases in projected traffic volumes between a 2040 design year and a 2050 design year does not warrant a redesign, due to the fact that the build condition was designed to accommodate the projected 2040 traffic volumes.

Due to the relatively small magnitude in change between the 2040 traffic volumes and the 2050 traffic volumes, it has been determined that a re-evaluation of the noise analysis for this project will not be required.

**YEAR 2040 to 2050 ADT PROJECTIONS - I-80 from Ridge Road to US 30, Build Condition**

<b>Table 1. Existing Average Daily Traffic Volumes – I-80 Mainline</b>				
<u>Location</u>	<u>Existing ADT (2017)</u>	<u>2040 ADT (2018)</u>	<u>2050 ADT (2018)</u>	<u>Percentage Change</u>
I-80 West of Ridge	42,300	47,600	55,900	17.4%
I-80 between Ridge & I-55	60,500	64,900	73,600	13.4%
I-80 East of I-55 & West of Houbolt	61,900	87,200	83,900	-3.8%
I-80 between Houbolt & Larkin	60,100	89,500	84,500	-5.6%
I-80 between Larkin & Center	69,500	119,600	92,700	-22.5%
I-80 between Center & Chicago	85,400	133,100	114,300	-14.1%
I-80 between Chicago & Richards	73,800	128,300	104,400	-18.6%
I-80 between Richards & Briggs	71,100	118,400	96,600	-18.4%
I-80 between Briggs & US 30	67,900	111,300	87,700	-21.2%
I-80 East of US 30	71,400	112,000	106,300	-5.1%

<b>Table 2. Existing Average Daily Traffic Volumes – Intersecting Roadways</b>				
<u>Location</u>	<u>Existing ADT</u>	<u>2040 ADT (2018)</u>	<u>2050 ADT (2018)</u>	<u>Percentage Change</u>
Ridge Road North of I-80 (2015)	12,800	23,700	20,200	-14.8%
Ridge Road South of I-80 (2015)	17,800	28,900	22,000	-23.9%
I-55 North of I-80 (2017)	93,500	104,700	114,100	9.0%
I-55 South of I-80 (2017)	71,100	82,800	100,600	21.5%
Houbolt Road North of I-80 (2018)	14,900	27,600	22,400	-18.8%
Hollywood Road (Empress/ Houbolt) South of I-80 (2018)	9,050	20,600	20,800	1.0%
Larkin Avenue North of I-80 (2017)	28,600	51,300	43,000	-16.2%
Larkin Avenue South of I-80 (2017)	13,400	30,000	23,600	-21.3%
Center Street North of I-80 (2016)	10,400	18,700	15,000	-19.8%
Meadow Avenue South of I-80 (2015)	3,600	9,900	3,900	-60.6%
Chicago Street North of I-80 (2017)	18,100	21,200	19,300	-9.0%
Chicago Street South of I-80 (2017)	29,300	44,700	42,000	-6.0%
Richards Street North of I-80 (2016)	8,800	12,400	13,000	4.8%
Richards Street South of I-80 (2016)	8,800	16,700	18,100	8.4%
Briggs Street North of I-80 (2016)	13,600	24,400	17,700	-27.5%
Briggs Street South of I-80 (2018)	11,200	26,100	21,000	-19.5%

