

40 Avenue Interchange Assessment

This attachment presents Administration’s initial comparison of three options for the 40 Avenue / Terwillegar Drive interchange. Please note the following assumptions made in the assessment:

- **Cost:** Conceptual costs are provided with an accuracy of +/- 50%.
- **Operations:**
 - LOS is a measure of the user experience on the facility, defined by delay, reduction of speed or density. The LOS can range between A to F, where A represents uncongested, free-flowing conditions and F represents stop-and-go conditions. The City’s typical standard is to provide LOS of E or better in peak periods.
 - Lifespan is the year in which the signal LOS reaches F.
- **Community Impacts:** This criteria considers noise, visual impacts and potential scale and duration of construction.

Criteria	Option A: Traffic Signal on northbound Terwillegar Drive	Option B: Basketweave Bridge	Option C: Signalized At-Grade Basketweave
Cost	\$ 60 million	\$ 110 million	\$ 70 million
Operations	LOS D (traffic signal of northbound Terwillegar Drive) Lifespan: 2035	LOS: Not assessed (bridge is free-flowing) Lifespan: 2050+ Freeway will experience congestion first.	LOS: C (traffic signal on at-grade basketweave) Lifespan: 2040
Community Impacts	Noise: less than Option B and similar to Option C. Increase from today. Visual: similar to Option C and less than Option B. Similar to today. Construction: Potentially 2 years	Noise: more than Options A and C, more than today due to basketweave bridge. Visual: more than Option A and C and today due to basketweave bridge Construction: Potentially 3 years	Noise: less than Option B and similar to Option A. Visual: similar to Option A and less than Option B. Similar to today. Construction: Potentially 2 years