

## A.4 Kitchener

### A.4.1 Service and Infrastructure

**Table A-3: Kitchener Service and Infrastructure**

	Scenario 1 (Do Minimum)	Scenario 2 (Two-Way All-Day)	Scenario 3 (10-Year Plan)	Scenario 4 (Full Build)	Scenario 5 (Optimized)
Services: All-day Contra-Peak, Off-Peak	No service	1 train per hour Kitchener–Union of which approximately 80% are operated by D1BL12 and 20% are operated by DBL6.	4 trains per hour Mount Pleasant–Union D1BL12 [2 x VIA daytime services to and from Kitchener]	2 trains per hour Kitchener - Union (express Bramalea–Union) of which approx. 64% operated by EMUBL4 and 36% operated by EMUBL8  4 trains per hour Mount Pleasant–Union of which approx. 62% operated by EMUBL4 and 38% operated by EMUBL8	4 trains per hour Bramalea–Union of which approx. 62% operated by EMUBL4 and 38% operated by EMUBL8
Services: Weekend	No service	1 train per hour Kitchener–Union D1BL6	1 train per hour Mount Pleasant–Union D1BL6 [VIA service to and from Kitchener]	2 trains per hour Kitchener–Union EMUBL4 (express Bramalea–Union) 4 trains per hour Mount Pleasant–Union EMUBL4	4 trains per hour Bramalea–Union EMUBL4
Services: Three-hour peak 2024	5 trains Kitchener–Union D1BL12 1 train Mount Pleasant–Union D1BL12 2 trains Georgetown–Union D1BL12 2 trains Bramalea–Union D1BL12  Total of 10 trains (increase of 2 trains over 2014) and 18,500 seats. Trains added from	Per Scenario 1	6 trains Kitchener–Union D1BL12 10 trains Mount Pleasant–Union D1BL12  Total of 16 trains (increase of 8 trains over 2014) and 29,600 seats. Trains can be added from	6 trains Kitchener–Union EMUBL8 (express from Bramalea) 12 trains Mount Pleasant–Union EMUBL8 5 trains Georgetown–Union stopping E1BL12  Total of 22 trains (increase of 14 trains over 2014) and 25,864 seats. Trains added as demand	6 trains Kitchener–Union D1BL6 (express Bramalea–Union)  12 trains Bramalea–Union EMUBL8 4 trains Georgetown–Union D1BL12  Total of 21 trains (increase of 13 trains over 2014) and 26,976 seats. Trains added as demand

	Scenario 1 (Do Minimum)	Scenario 2 (Two-Way All-Day)	Scenario 3 (10-Year Plan)	Scenario 4 (Full Build)	Scenario 5 (Optimized)
	Bramalea as demand grows. No potential to add trains from beyond Bramalea		Mount Pleasant or Bramalea as demand grows. No potential to add trains from beyond Mount Pleasant. 1 x VIA p.m. Peak service serving Malton, Brampton, Georgetown, Guelph & Kitchener	grows.	grows.
Services: UP Express (Two-Way All-Day)	4 trains per hour DMU3	4 trains per hour DMU3	4 trains per hour DMU3	4 trains per hour EMU3	4 trains per hour EMU3
Infrastructure	Station modifications (Mount Dennis and Kitchener)	Per Scenario 3 plus: Passing tracks between Georgetown and Kitchener 2 new tracks from Mount Pleasant to Georgetown Credit River grade separation over CPR Halton Sub Modify 1 additional stations (Georgetown)	Per Scenario 1 plus: New (3 <sup>rd</sup> /4 <sup>th</sup> ) tracks Union to Mount Pleasant New track and tunnel under Highway 401 Torbram Road grade separation Layovers: Heritage (8 consists); Kitchener Shirley Av. Modify 5 additional stations (Etobicoke North, Malton, Brampton, Mount Pleasant)	Per Scenario 3 plus: 33 miles double track from Georgetown to Kitchener. 2 new tracks from Mount Pleasant to Georgetown Credit River grade separation over CPR Halton Sub Modify 3 additional stations (Georgetown, Acton, Guelph) Electrification to Kitchener	Per Scenario 3 plus: Electrification to Bramalea

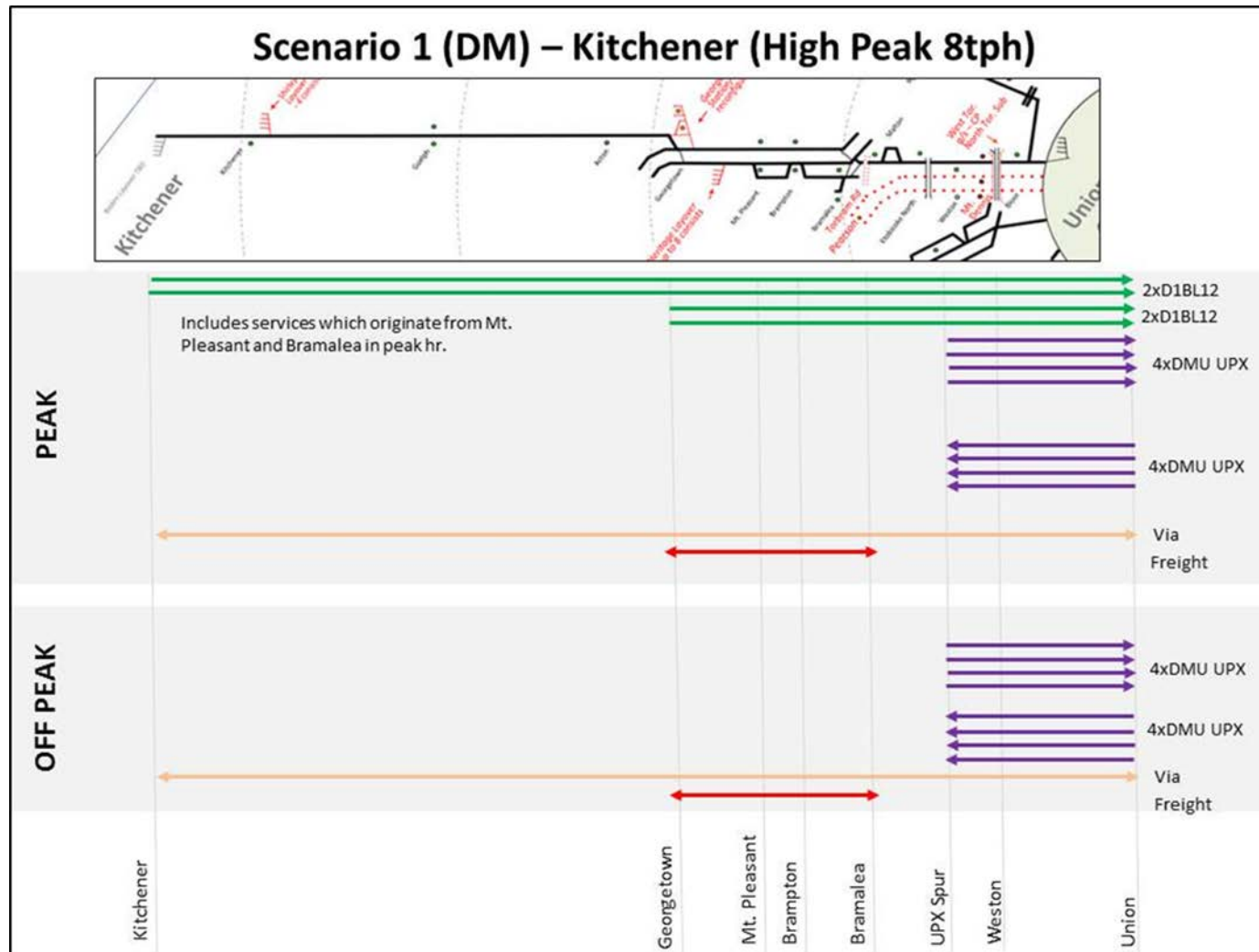


Figure A-12: Kitchener Scenario 1 (Do Minimum) High Peak Hour



## GO Regional Express Rail Initial Business Case

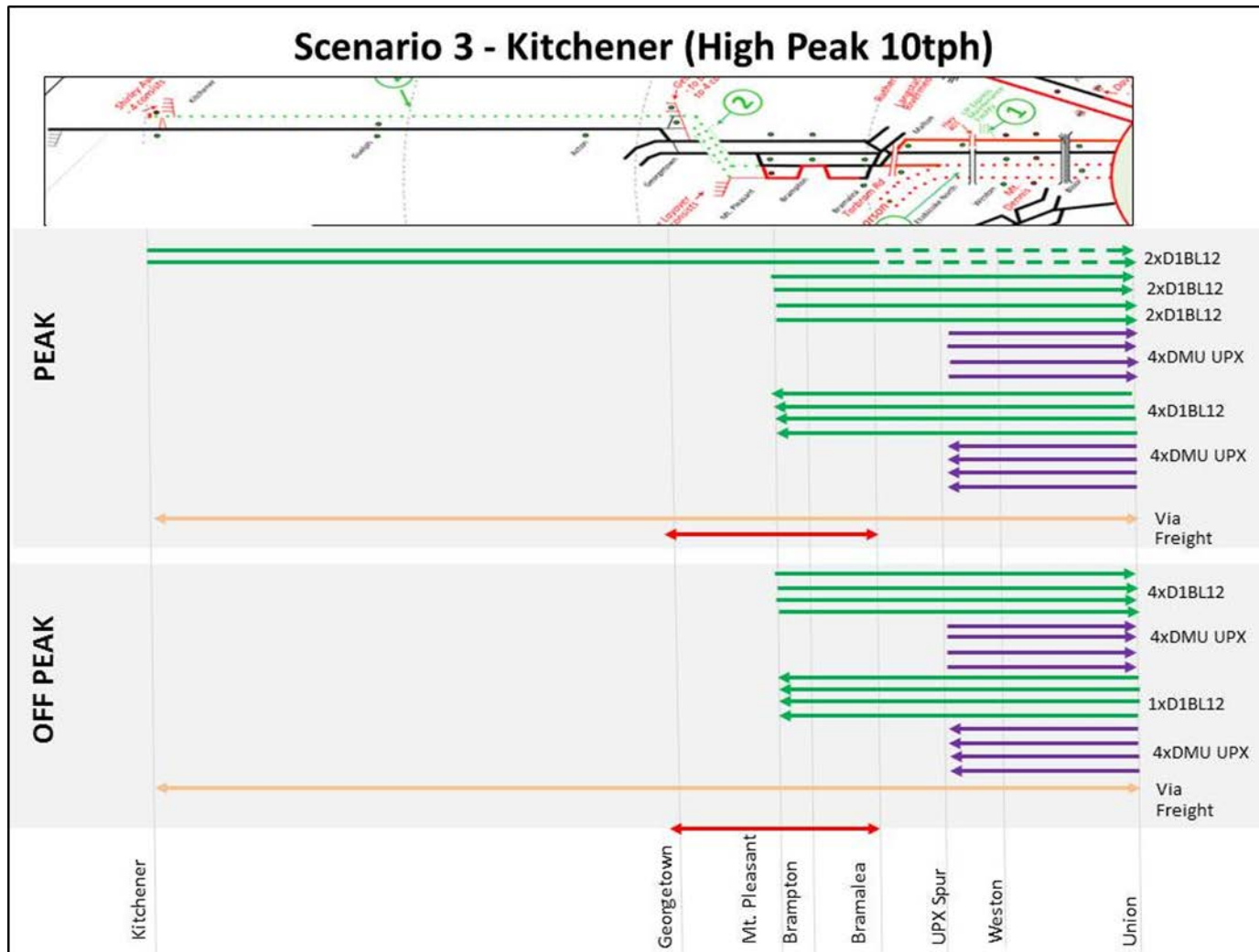


Figure A-14: Kitchener Scenario 3 (10-Year Plan) High Peak Hour

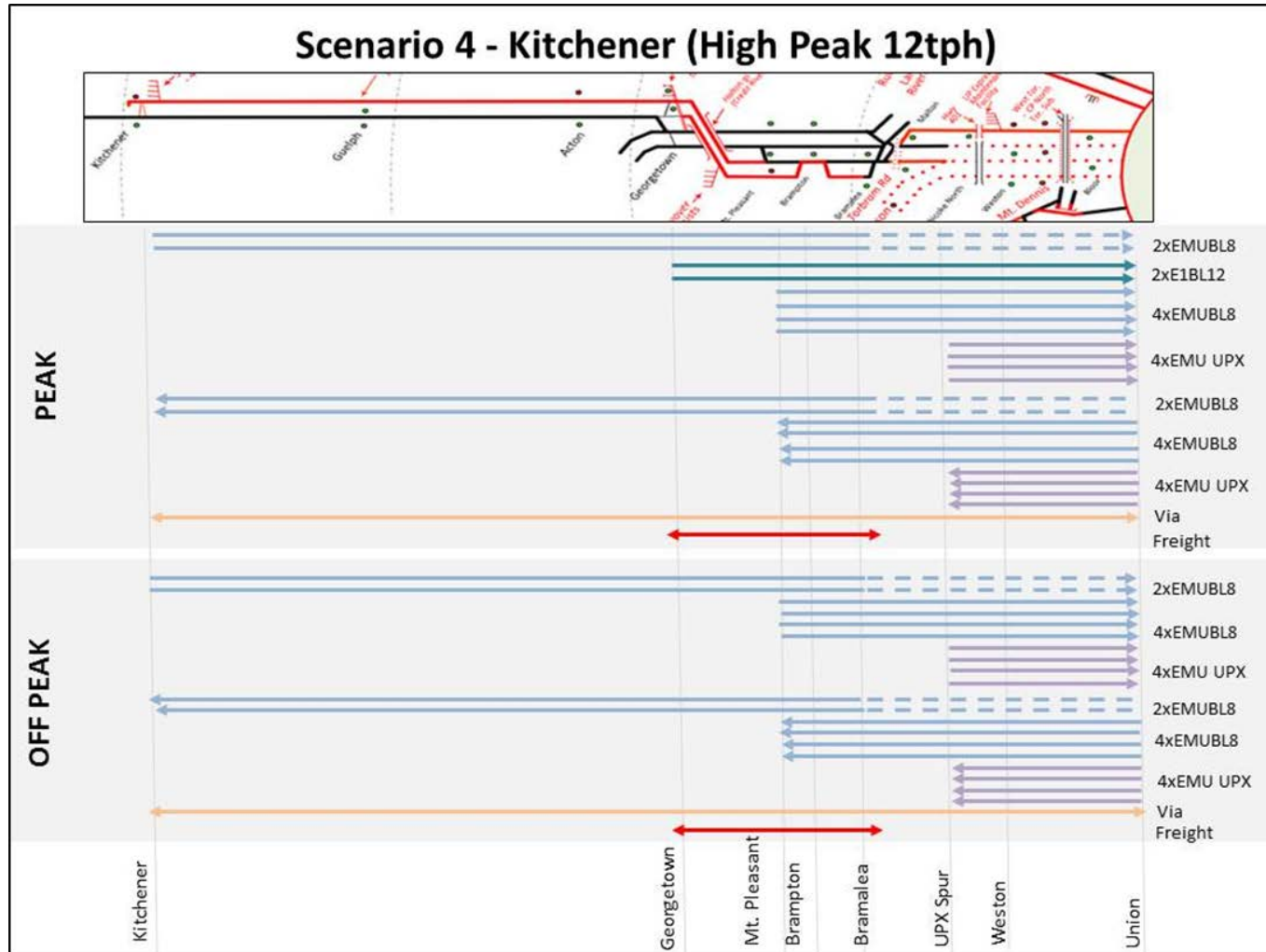


Figure A-15: Kitchener Scenario 4 (Full Build) High Peak Hour

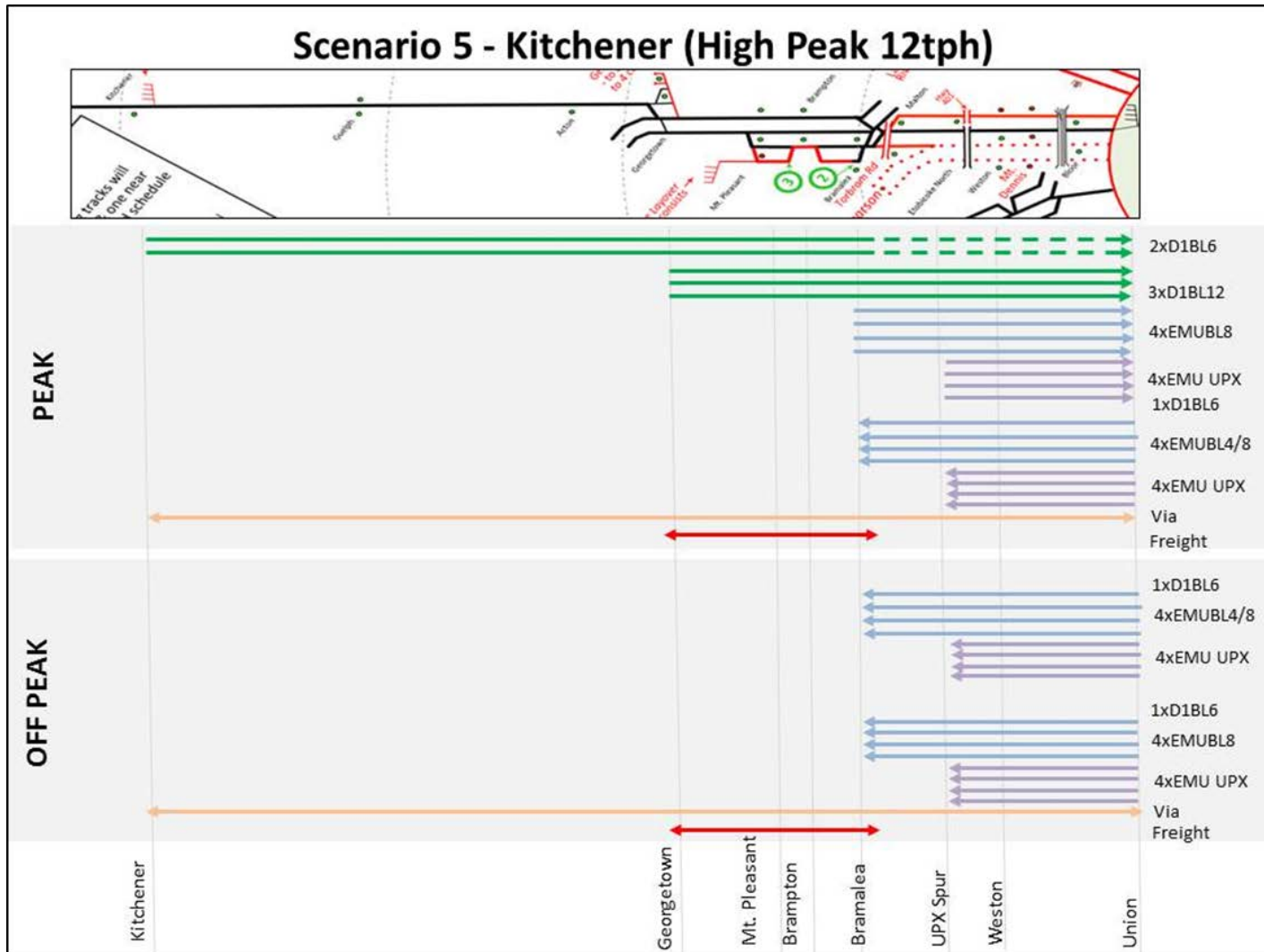


Figure A-16: Kitchener Scenario 5 (Optimized) High Peak Hour

#### ***A.4.2 Options for Further Study***

- Lower level of off-peak service: two trains per hour Mt. Pleasant-Union, two trains per hour Kitchener-Union (express Brampton-Union).
- Line-speed improvements Georgetown-Kitchener.

#### ***A.4.3 Freight Considerations***

- Frequent all-day double-stack services over the corridor from Georgetown to Hal West junction (Bramalea). There are general freight deliveries to industrial customers along the corridor.
- General freight to industrial customers, but can be limited to night time. Double-stack clearance not required.

#### ***A.4.4 Inter-city, HSR and Passive Provision Assumptions***

- Four trains per hour inter-city/high speed from London (may operate over new line Kitchener-Limehouse).
- Bolton service TBD (potentially diesel commuter rail).

#### ***A.4.5 Challenge and Opportunity Areas***

- New stations at Liberty Village and Mount Dennis.
- Line speed improvements, particularly on Georgetown-Kitchener section.
- Complexity and duration of new tunnel under 401 may drive schedule for introduction of frequent services and electrification beyond Mount Dennis.
- SmartTrack elements.