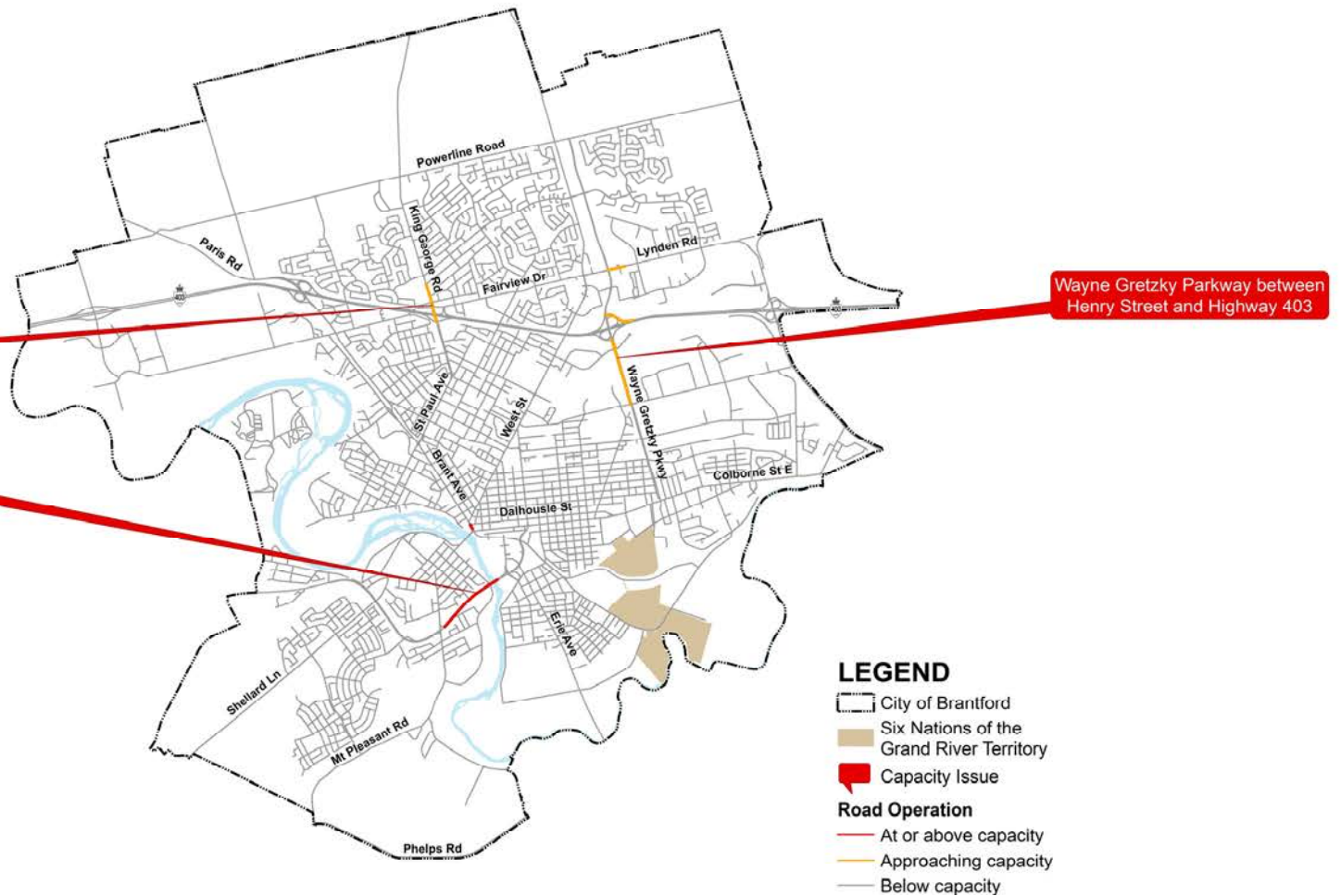


2018 Network Performance

This map displays Brantford's existing road network and highlights specific areas where the network is experiencing capacity issues (delays) during the PM peak hour.

The colour of the road segment indicates how that segment is operating during the existing PM peak hour. Red segments are congested (at capacity), orange segments are operating with some congestion (approaching capacity), and grey segments are operating well (below capacity).

EXISTING NETWORK



HOW IS THE NETWORK PERFORMING?

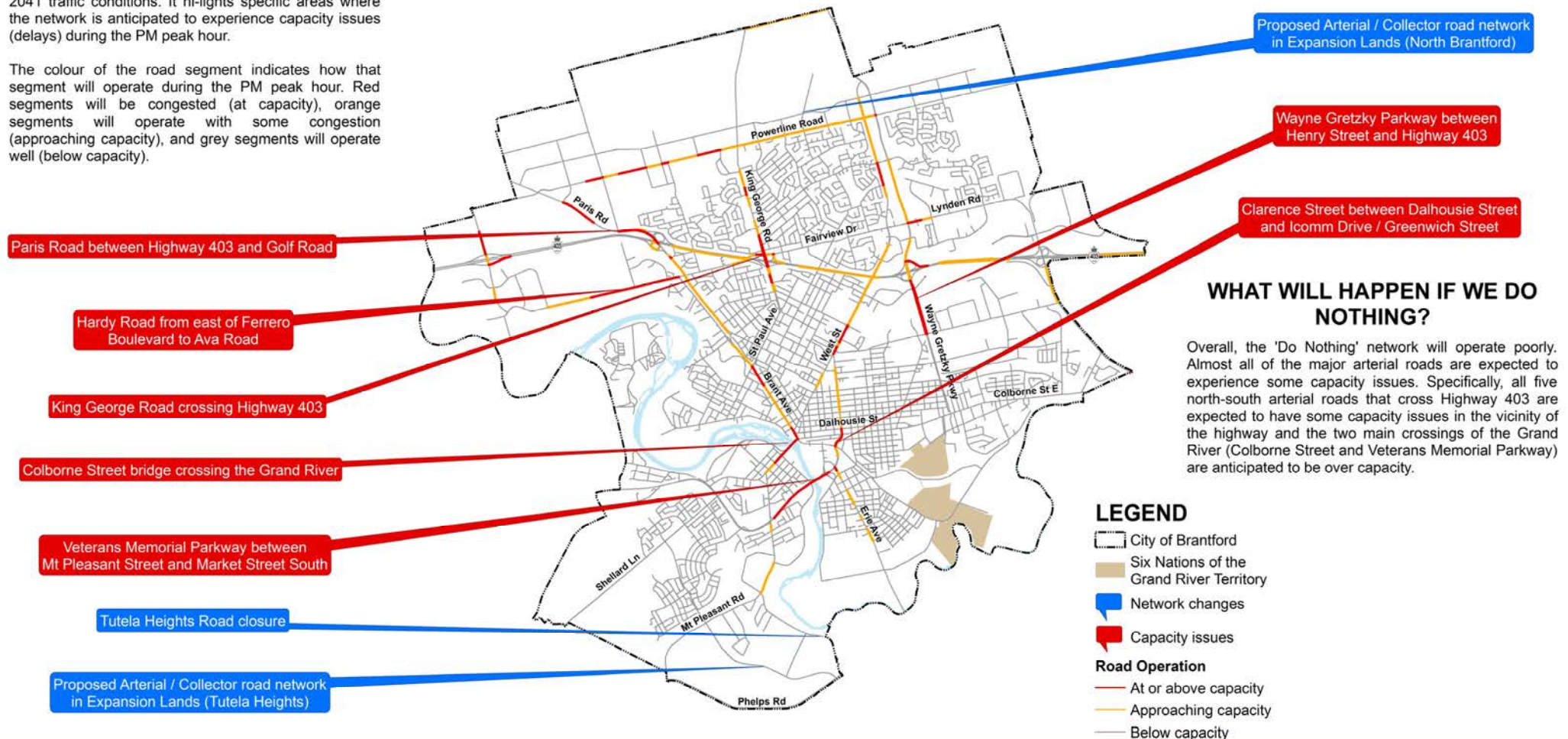
Overall, the existing network is operating well. The three areas of concern are: King George Road and Wayne Gretzky Parkway in the vicinity of Highway 403 and the Veterans Memorial Parkway crossing of the Grand River.

2041 Network Performance

This map displays Brantford's existing road network, including short term committed improvements, under 2041 traffic conditions. It highlights specific areas where the network is anticipated to experience capacity issues (delays) during the PM peak hour.

The colour of the road segment indicates how that segment will operate during the PM peak hour. Red segments will be congested (at capacity), orange segments will operate with some congestion (approaching capacity), and grey segments will operate well (below capacity).

DO NOTHING NETWORK



2041 Network Performance

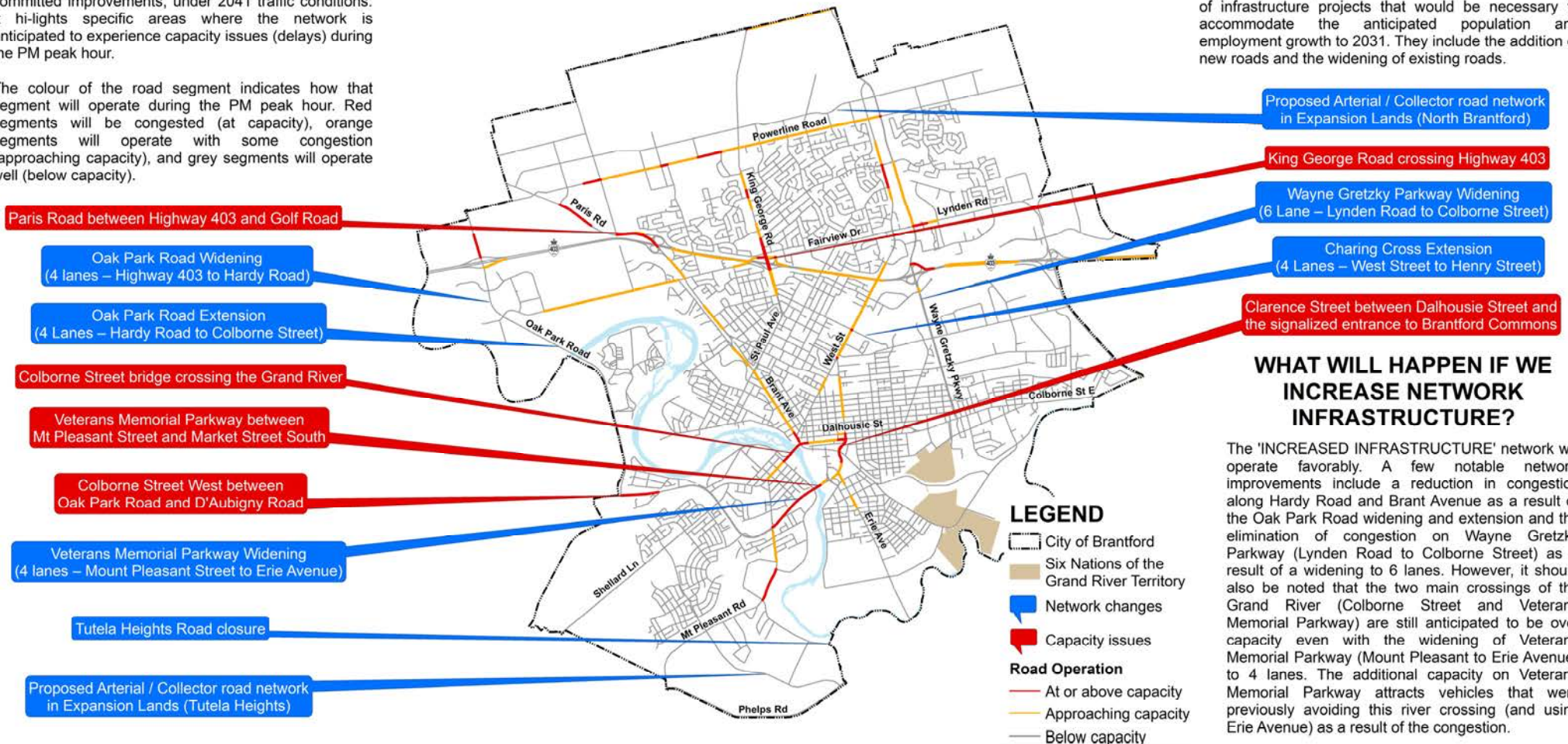
This map displays Brantford's 'INCREASED INFRASTRUCTURE' road network, including short term committed improvements, under 2041 traffic conditions. It highlights specific areas where the network is anticipated to experience capacity issues (delays) during the PM peak hour.

The colour of the road segment indicates how that segment will operate during the PM peak hour. Red segments will be congested (at capacity), orange segments will operate with some congestion (approaching capacity), and grey segments will operate well (below capacity).

INCREASED NETWORK INFRASTRUCTURE

WHAT INFRASTRUCTURE?

The 2014 Transportation Master Plan outlined a series of infrastructure projects that would be necessary to accommodate the anticipated population and employment growth to 2031. They include the addition of new roads and the widening of existing roads.



WHAT WILL HAPPEN IF WE INCREASE NETWORK INFRASTRUCTURE?

The 'INCREASED INFRASTRUCTURE' network will operate favorably. A few notable network improvements include a reduction in congestion along Hardy Road and Brant Avenue as a result of the Oak Park Road widening and extension and the elimination of congestion on Wayne Gretzky Parkway (Lynden Road to Colborne Street) as a result of a widening to 6 lanes. However, it should also be noted that the two main crossings of the Grand River (Colborne Street and Veterans Memorial Parkway) are still anticipated to be over capacity even with the widening of Veterans Memorial Parkway (Mount Pleasant to Erie Avenue) to 4 lanes. The additional capacity on Veterans Memorial Parkway attracts vehicles that were previously avoiding this river crossing (and using Erie Avenue) as a result of the congestion.

2041 Network Performance

This map displays Brantford's 'MANAGE TRAVEL DEMAND' road network, including short term committed improvements, under 2041 traffic conditions. Emphasis has been placed on reducing the number of vehicles using the network. It highlights specific areas where the network is anticipated to experience capacity issues (delays) during the PM peak hour.

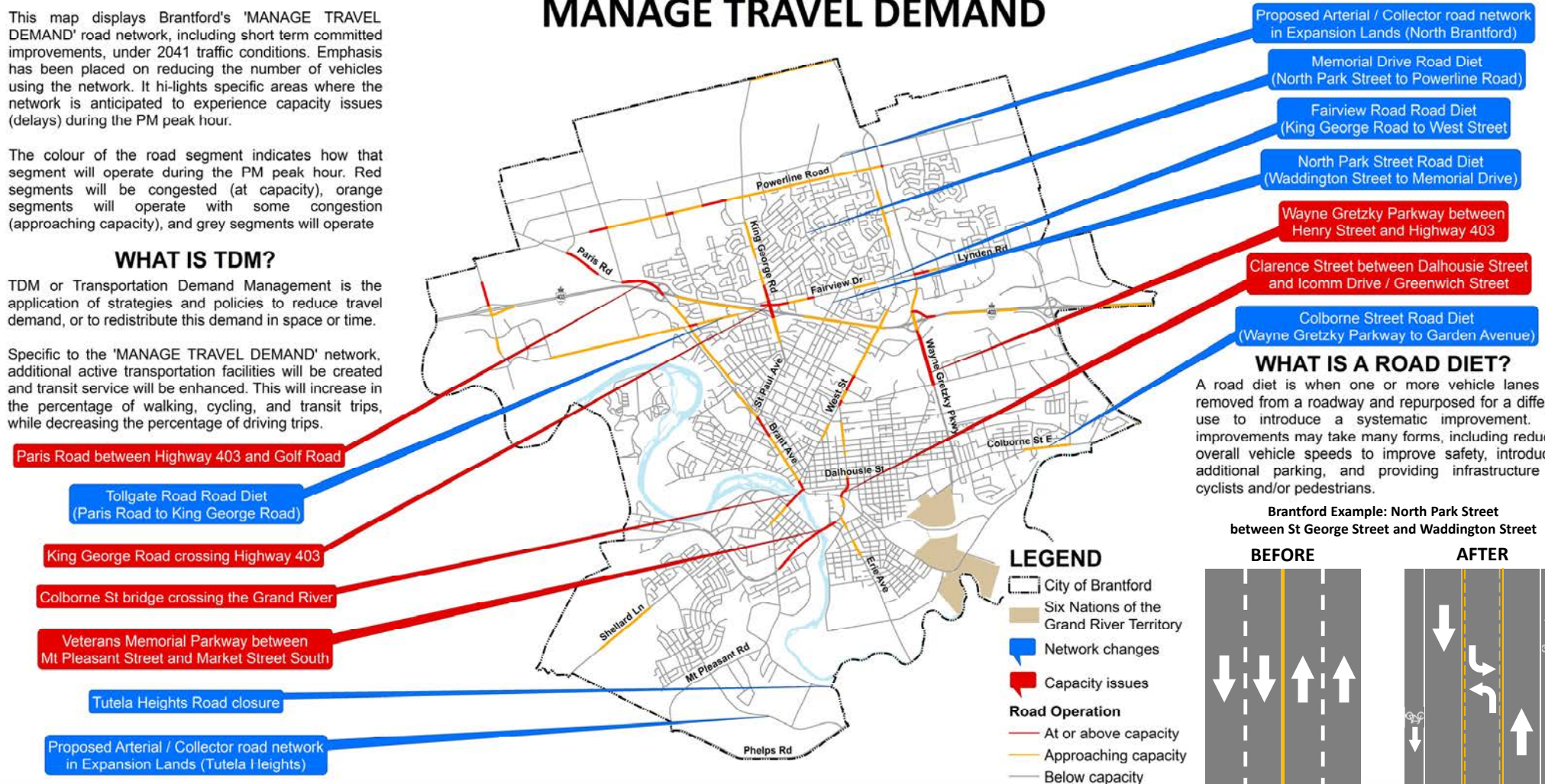
The colour of the road segment indicates how that segment will operate during the PM peak hour. Red segments will be congested (at capacity), orange segments will operate with some congestion (approaching capacity), and grey segments will operate

WHAT IS TDM?

TDM or Transportation Demand Management is the application of strategies and policies to reduce travel demand, or to redistribute this demand in space or time.

Specific to the 'MANAGE TRAVEL DEMAND' network, additional active transportation facilities will be created and transit service will be enhanced. This will increase in the percentage of walking, cycling, and transit trips, while decreasing the percentage of driving trips.

MANAGE TRAVEL DEMAND

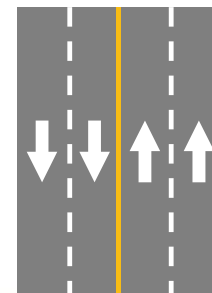


WHAT IS A ROAD DIET?

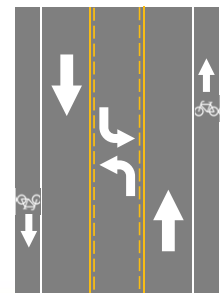
A road diet is when one or more vehicle lanes are removed from a roadway and repurposed for a different use to introduce a systematic improvement. The improvements may take many forms, including reducing overall vehicle speeds to improve safety, introducing additional parking, and providing infrastructure for cyclists and/or pedestrians.

Brantford Example: North Park Street between St George Street and Waddington Street

BEFORE



AFTER



Network Performance Measures

Scenario	2018 Existing	2041 "Do Nothing"	2041 Increased Network Infrastructure	2041 Manage Travel Demand
VKT (km)	143,900	258,500	260,200	243,700
VHT (hours)	2230	4790	4590	4360
Average Travel Time (minutes:seconds)	04:22	05:56	05:41	05:55
Percent of network at or approaching capacity	0.44%	6.08%	5.16%	5.15%

VEHICLE KILOMETRES TRAVELLED (VKT)
The total kilometers travelled by all vehicles in the network during the PM peak hour.

VEHICLE HOURS TRAVELLED (VHT)
The total time spent travelling by all vehicles in the network during the PM peak hour.

WHAT DOES THIS MEAN?

With population growth, there will be an increase in demand on the road network. This means an increase in VKT, VHT, average travel time, and the percent of the network that is at or approaching capacity. However, increasing network infrastructure and managing travel demand will help accommodate the additional demand.

IF WE...

INCREASE NETWORK INFRASTRUCTURE

- Insignificant change in VKT
- ↓ 4% decrease in VHT
- ↓ 15 sec decrease in average travel time
- ↓ 15% reduction of network at or approaching capacity

MANAGE TRAVEL DEMAND

- ↓ 6% decrease in VKT
- ↓ 9% decrease in VHT
- Insignificant change in average travel time
- ↓ 15% reduction of network at or approaching capacity

Increasing Network Infrastructure (increasing supply) and Managing Travel Demand (decreasing demand) are on the opposite ends of the spectrum when managing the performance of a transportation network. The ultimate solution will likely be a hybrid of the two scenarios.