

# A Review of the Rossland Road Expansion plan

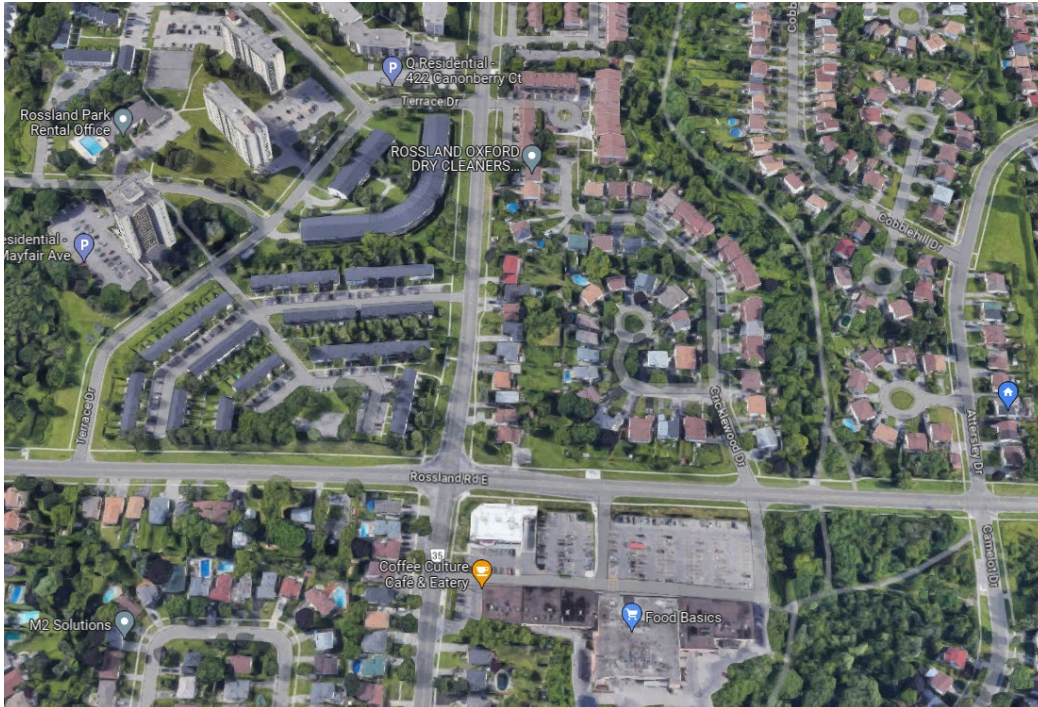
# The Current Plan

- The current design calls for widening of Rossland Road from 2 to 3 lanes to 4 to 5 lanes between Harmony and Ritson
- This creates a planned over capacity, as Rossland West of Ritson, and Ritson itself, are already highly congested 4-lane roads, with regular residential access
- Accordingly, bottlenecks exist at all entrances to the Project area, and the 5-lane capacity will not be realized
- Additionally, the 4-lane section is centered in the project area, between Central Park and Wilson, an area with regular residential and side street access, creating an additional capacity bottleneck
- This over capacity will lead to excessive speeding if the project moves forward as planned, with no effect on overall commute times or traffic.
- This is furthermore a very costly plan, including multiple bridge and culvert redesigns, impacting commuters and costing taxpayers.

# 4+ lanes vs 3-lane roads

- The US Department of Transportation released [Summary Report: Evaluation of Lane Reduction "Road Diet" Measures and Their Effects on Crashes and Injuries: Federal Highway Administration Research and Technology](#)
- “Under most average daily traffic (ADT) conditions tested, [3-lane roads in comparison to 4-lane roads] have minimal effects on vehicle capacity, because left-turning vehicles are moved into a common two-way left-turn lane”
- The report states 3-lane roads
  - handle capacities up to 20,000 average daily users
  - “reduce vehicle speeds and vehicle interactions during lane changes, which potentially could reduce the number and severity of vehicle-to-vehicle crashes”
  - “Pedestrians may benefit because they have fewer lanes of traffic to cross, and because motor vehicles are likely to be moving more slowly”
  - The Federal Highway Administration (FHWA) report Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations found that pedestrian crash risk was reduced when pedestrians crossed two- and three-lane roads, compared to roads with four or more lane

# Neighborhood context



## Rosland and Wilson

- Rosland has to be crossed for residents of the Terrace drive community to walk to the Rosland Square Shopping Center
- Pedestrians must walk along Rosland to connect to Harmony Creek



## Rosland and Harmony

- Pedestrians must walk along Rosland to connect to Harmony Creek
- Rosland has to be crossed for residents to walk to the Rosland Square Shopping Center
- Rosland must be crossed for children to visit friends in neighboring community



# Road Crossings are made more dangerous



- Bus stops at Rossland and Gladfern/Harmony Creek Co-op entrance
- Crossing using the nearest signaled intersection, at Harmony, adds 350m
- Surrounding area is medium density and lower income, with a high number of DRT users and children crossing at a regular basis

# Road Crossings are made more dangerous



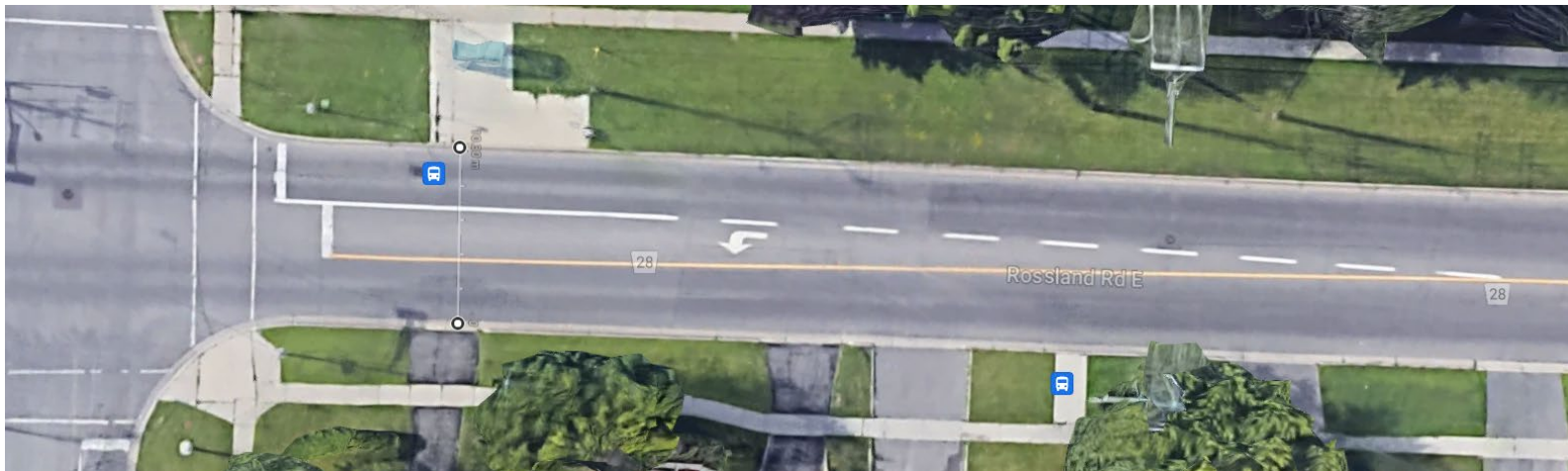
- Bus stops at Rossland and Terrance Dr./Brentwood Ave
- Crossing using the nearest signaled intersection, at Wilson, adds 530m
- Surrounding area is High density Terrace Drive community to the North, and the Brentwood Ave Community to the South

# Pre-existing Discussion with Project Coordinator

- I have communicated via email with Barry Hodson
- He was unable to provide information around how bottle necks in the area will influence the used capacity of the road as this “Falls outside the limits of the MCEA”
- States that “The provision of a separate two-way left-turn lane, will address operational and safety concerns by providing a refuge for vehicles making left-turns into residential or commercial driveways, along this corridor.” but was unable to make clear why this would not be needed between Wilson and Central Park
- Was unable to state that in his professional opinion the current design would be safe or efficient, although did emphasize that the current under-sized road is more dangerous.



# Existing lanes are 5m wide and allow a Shared Left Turn Lane



- Rossland Road lanes between Wilson and Ritson are excessively wide
- At no point is the road width less than 10m
- Room exists to add a 4m center turning lane, wide enough to ensure emergency Vehicles have clear right of way
- Still provides 3m lane width in each direction
- The [B.C. Community ROAD SAFETY TOOLKIT](#) states “Reducing urban vehicle lanes widths to between **2.75 to 3.0 metres** has numerous safety and practical benefits” including causing drivers to slow down. One study found that where lanes had been narrowed from 12 feet (3.66 metres) to 9 to 11 feet (2.75 to 3.36 metres), there were fewer fatal and injury crashes



# Benefits of a 3-lane design

- As stated, handle ADUs up to 20,000 users
- Increase allow rapid response of Emergency Vehicles
- Can be done at only the cost and time of lane repainting, in comparison to the major construction project of road and bridge widening
- Increases the safety of all road users, both drivers and pedestrians
- Reduces speeding
- Durham is currently planning no Road diets while jurisdiction such as Toronto, Waterloo, and Peel all identify points of over capacity. Instead, we are adding to our expanses and reducing street safety by building over capacity. This expansion was first planned almost 50 years ago, urban design best practice have changed and the design should change with it.