

Markham Road – Highway 401 to Progress Avenue

Markham Road from Highway 401 to Progress Avenue is located in the Scarborough District. The existing speed limit on Markham Road is 60 km/h. There are traffic controls signals at both Highway 401 ramps and at Progress Avenue. North of Progress Avenue through the ramps, Markham Road is under the jurisdiction of the Minister of Transportation for Ontario.



Looking North on Markham Road
from Highway 401



Looking South on Markham Road
from Highway 401



Looking North on Markham Road
from Progress Avenue



Looking South on Markham Road
to Progress Avenue

Discussion of Issues

This signals are operated fixed time but with callable and extendable side-street and left-turn phases.

The corridor is normally not congested but during sporadic random evenings that seem related to recent programme expansions at the nearby Centennial College, southbound congestion occurs, causing queues to back up the ramps onto the Highway 401 collector lanes.

History of Actions / Background

In the past few years enquiries have been received to allow the east to south ramp to flow directly into the southbound lane at Progress Avenue but this is not feasible since it would cause weaving movements which is hazardous.

At Progress Avenue, various enquiries have been received in recent times to adjust signal timings – pedestrian crossing timings were increased to conform to current practice.

In 2011 special construction signal timings were implemented for a resurfacing project but normal timing was restored upon completion. During this construction, special high-friction "DFC" pavement was installed in the Progress Avenue intersection to enhance safety.

In 2012 a safety review was conducted at the Progress Avenue intersection.

Data and Analysis

Traffic Volume Information – 24 Hour Summary along Markham Road Corridor between Highway 401 and Progress Avenue

Total 24 hour vehicle volume: 58186, which is well above the minimum of 20,000 for the Major Arterial classification

Options for Consideration & Potential Benefits

Immediate Actions

- None at this time since various improvements have been recently implemented, including upgraded pedestrian minimum timing and installation of high-friction "DFC" pavement in the Markham Road and Progress Avenue intersection

Near term recommendations

Longer Term recommendation

- Implementation of a queue detection system on the Highway 401 ramps to detect when the sporadic random southbound congestion occurs so as to automatically implement a special southbound signal timing plan at Markham Road and Progress Avenue to flush out the queue. This will require co-ordination with the MTO since such plant would be within their jurisdiction. This system could also trigger special way finding signage that would advise motorists on the ramps of the alternate way to get to Centennial College via Markham Road northbound and Milner Avenue
- Installation of new CCTV camera south of Progress Avenue looking northbound to monitor and record traffic conditions to determine when the sporadic random southbound congestion occurs during PM peak periods and to see if it is indeed correlated to programming at Centennial College

| Costs | Funding Source (Operating/Capital) |
|-----------|------------------------------------|
| Immediate | N/A |

| | |
|------------|----------------|
| Short Term | N/A |
| Mid Term | N/A |
| Long Term | Capital MTO |