

Missing Transportation Links within the the Duke Heights BIA

*A research report on improving the transportation network within the
Northern Area of the DUKE Heights BIA*

May 2017



DUKE HEIGHTS BIA

1120 Finch Ave W #205, North York, ON M3J 3H7

Tel: (416) 739-1621

Fax: (416) 739-7816

Email: info@dukeheights.ca

Executive Summary & Recommendations Summary

The Duke Heights BIA has concerns regarding the connectivity of the road network for personal vehicles, trucks and public transit vehicles within the area north of Finch Avenue West. With the area being the home of over 31,000 jobs and an extensive transportation network it is crucial that the road system is adequate for the high levels of use. The BIA is looking to better connect the area through road extensions and improvements to the York University GO Station.

Recommendations

1. Extension of Flint Road:
 - a. Extend Flint Road South to the York University Busway;
 - b. Extend Flint Road South from the York University Busway to Finch Avenue West, connecting with Chesswood Drive;
2. Allow trucks to utilize the York University busway, which extends from Dufferin Street to Keele Street;
3. Extend Tangiers Road North to The Pond Road;
4. Improve access to the York University GO Station by building a pedestrian bridge to connect the station to Flint Road and,
5. Improvements at the intersection of Alness Street and Steeles Avenue West to alleviate congestion.

Prepared by:

Abbas N. Ali
abbas.nazarali@gmail.com

For:

The DUKE Heights Business Improvement Area

1120 Finch Ave W. #205, North York, ON M3J 3H7

Tel: 416-739-1621

Fax: 416-739-7816

Email: info@dukeheights.ca

Introduction

The DUKE Heights Business Improvement Area (BIA) is located in the North part of the city, situated between Keele Street to the West, Dufferin Street to the East, Steeles Avenue to the North and Sheppard Avenue to the South. Over 2,500 businesses are located in this area, with over 31,000 employees working within the office, commercial, and manufacturing sectors. The BIA is also very well connected to major highways including the 401, 400 and 407 highways.

The area is seeing extensive investment in public transit over the next few years along with the already existing connections to public transit. This includes the opening of the Line 1 Subway Extension, which includes three stations within the BIA area, the construction of the Finch West LRT, which terminates at the intersection of Keele Street and Finch Avenue West, and the GO Transit rail line that runs through the BIA. Due to the level of transportation connectivity within the area the Duke Heights BIA is seen as a gateway mobility hub where there is good access by driving, transit, walking and cycling.

Due to the level of employment activity occurring in the area, there is already extensive traffic congestion that occurs on the arterial roads. The high levels of bus and truck traffic increases commuting times in the area. With increased development over the next few years there is a need for a more connected road network through the BIA to ensure efficient traffic flow for personal vehicles, trucks and public transit vehicles. This study will focus on the area north of Finch Avenue and South of Steeles Avenue and examine the current road network in the BIA. The document will conclude with proposed recommendations to improve the connectivity of the transportation network in the study area.



Top: Traffic congestion along Steeles Ave. W in Duke Heights BIA

Map of Study Area



Legend

- ◆ Traffic Lights
- Arterial Roads
- Study Area



Barriers

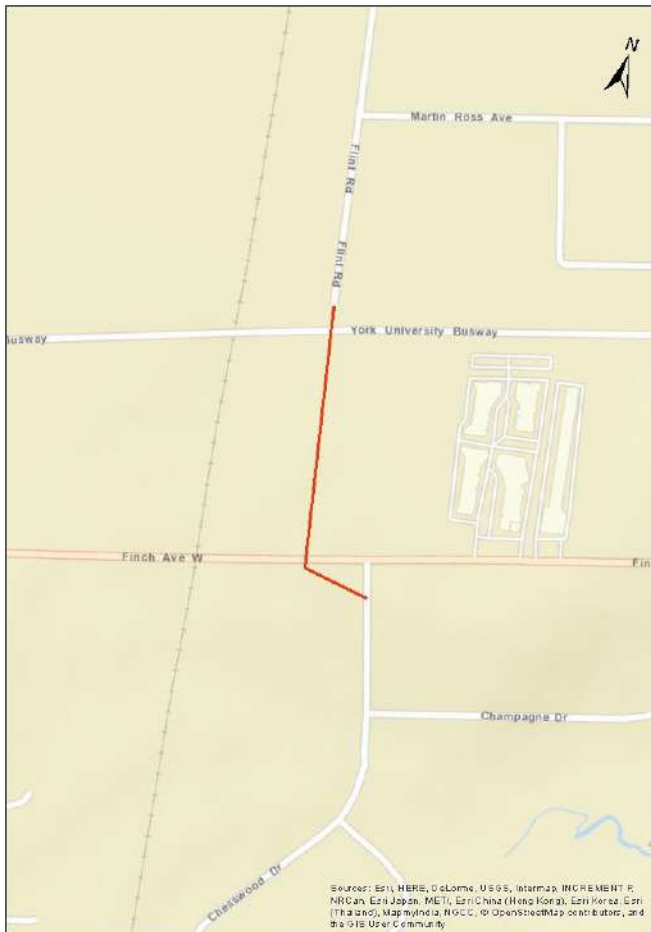
The Duke Heights BIA is a growing employment and transportation hub in North Toronto. With over 31,000 employees working in the community it is essential that efficient transportation networks are built to accommodate for various modes of transportation including by automobile, by public transit, bicycling and by walking. With an unprecedented investment in public transit in the area, the TTC Subway extension of Line 1 and the planned Finch West LRT, there are also many improvements that can be made to improve the experience of both personal and commercial drivers in the area. Below are a few current limitations to the movement of personal and commercial vehicles in the Duke Heights BIA:

- 1. The Rail Line:** The GO Transit rail line that runs north to south in through the BIA is a key rail corridor that provides access to Barrie to the north and downtown Toronto to the south. However the rail line cuts through the centre of the BIA and acts as a divider between the eastern and western portions of the BIA. There are only three crossings within the study area: Steeles Ave. W, Finch Ave. W and an at-level crossing for the York University Busway. The lack of connections within the study area limits movement of personal and commercial traffic. Alternative routes that cross over the railway are needed to better connect the BIA.
- 2. Traffic Congestion on Arterial Routes:** Traffic within the study area is highly concentrated along the major arterials: Finch Ave. W, Steeles Ave. W, Keele St and Dufferin St. With a very high number of employers located within the BIA traffic congestion is extensive along Finch Ave. W and at arterial intersections. Providing alternatives that funnel traffic away from these major arterials and intersections is important.
- 3. High truck traffic:** Due to the high number of industrial employers in the area there is also a high level of truck traffic in the study area. Trucks travelling along the major roads increase congestion and negatively impact the walkability and attractiveness of the local streets for pedestrians and cyclists. Trucks need better options to access the industrial sites in the area.
- 4. Accessibility of York University GO Transit Station:** The York University GO Station is located just east of Keele St. and can only be accessed through a walkway at Canarctic Rd. The lack of accessibility to the GO Station hinders its effective use and is a huge missed opportunity to improve overall accessibility for employees and students in the area. Improved access to the station will encourage more users to use the station as an alternative mode of transportation to the area.

Recommendations

1. The southerly extension of Flint Road, connecting with Chesswood Drive.

- a. Extend Flint Road South to the York University Busway
- b. Extend Flint Road South from the York University Busway to Finch Avenue West, connecting with Chesswood Drive



1.1. Opportunity: Dufferin and Keele Streets are the major arterial roads that run north to south in this area. Both of these roads have shown increasing levels of traffic and congestion over the past few years especially during the morning and afternoon peaks. Dufferin Street is especially overwhelmed, with the intersections of Dufferin and Steeles, and Dufferin and Finch showing the highest levels of traffic in the area, with over 40,000 vehicles within an 8 hour period (Finch-Keele Transportation Study, 2017). The intersection of Chesswood Drive at Finch Avenue West is also an intersection that is an access point for employees during the morning and afternoon peak periods. Additionally, the York University Busway presents a great opportunity to provide better access to Dufferin and Keele Streets from Flint Road, and also an alternative to Finch and Steeles Avenues.

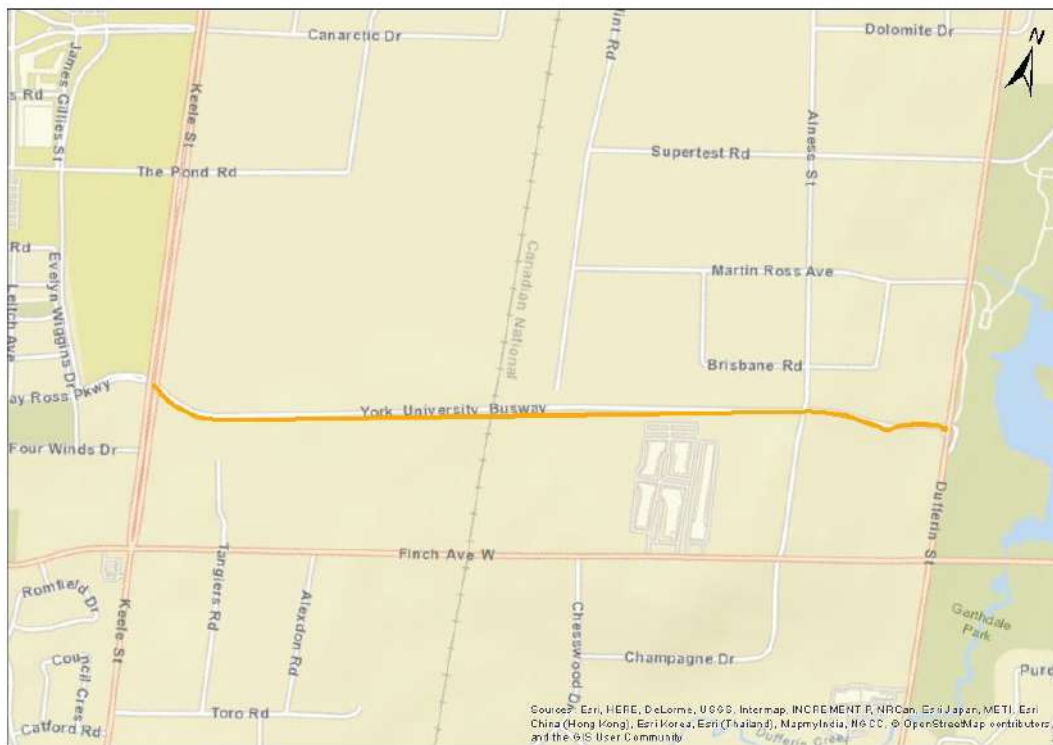
1.2. Recommendation: The extension of Flint Road South to Finch Avenue West, with a connection to Chesswood Drive, will provide an alternate north-south route for

vehicles in the area. This will create a route parallel to the train tracks to the west, and provide for much-needed relief on Dufferin and Keele Streets. A two lane street, one in each direction, will create a seamless loop within the northeast quadrant of the BIA (with Champagne Drive and Alness Street to the east), vastly improving access to the area and the road network overall. The connection to the York University Busway creates another alternative to access the major arterial roads in the area.

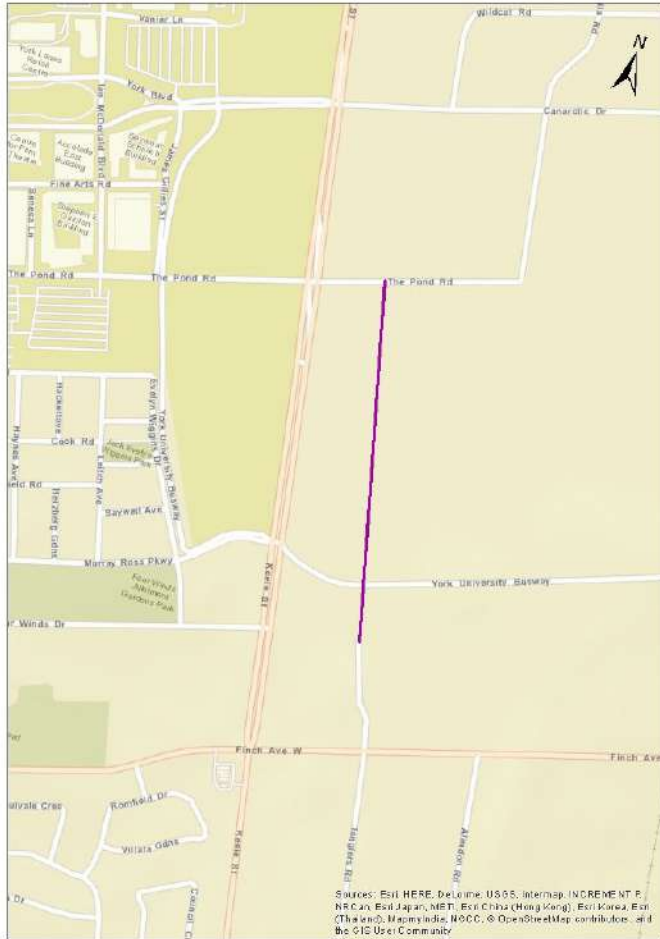
2. Permitting Truck Use on the York University Busway

2.1. Opportunity: The York University Busway, which runs along the Hydro Corridor just North of Finch Avenue West, is a designated roadway for public transit vehicles. It is currently being used to connect the York University Campus with the bus routes connecting through the Downsview TTC Subway station. With the opening of the Line 1 Extension to Vaughan, and the location of a subway stop at York University, many of the buses that currently use the busway will be rerouted. The only anticipated route to use the busway will be the 199 TTC bus route. The busway is a great alternate east to west route that will be underutilized once the Subway Extension opens. This provides a great opportunity to address traffic congestion in the area by permitting truck vehicles to also use the route. High truck usage on major streets results in traffic congestion and poor quality of the street for pedestrians and cyclists.

2.2. Recommendation: Permitting trucks and courier vehicles to use the York University Busway will divert heavy truck traffic from the major roads in the area, mainly along Finch Avenue West. As the busway is not anticipated to see much usage from public transit vehicles, its location within a high density employment area makes it an attractive alternative for truck and courier vehicles. The roadway is also away from pedestrians, cyclists and car drivers allowing for a safe and separated passageway for trucks. Truck use on major roads contributes to increased traffic congestion and a poor quality of the street for pedestrians and cyclists.



3. The northerly extension of Tangiers Road, connecting with The Pond Road



3.1. Opportunity: Dufferin and Keele Streets are the major arterial roads that run north to south in this area. Both of these roads have shown increasing levels of traffic and congestion over the past few years especially during the morning and afternoon peaks. Alternatives to these routes are essential to ensure a more efficient road network in the area. Tangiers Road currently provides an alternative route around the busy Keele St. and Finch Ave. W intersection. There is a great opportunity to increase the benefit of this road if it were to be extended North, further decreasing pressure on Keele St.

3.2. Recommendation: The extension of Tangiers Road North to The Pond Road will provide further relief to the high traffic levels on Keele Street. The new road will provide an alternative route to access The Pond Road, leading directly to York University, while also providing access North to Steeles Ave. through Petrolia Rd.

4. Improvements to York University GO Station



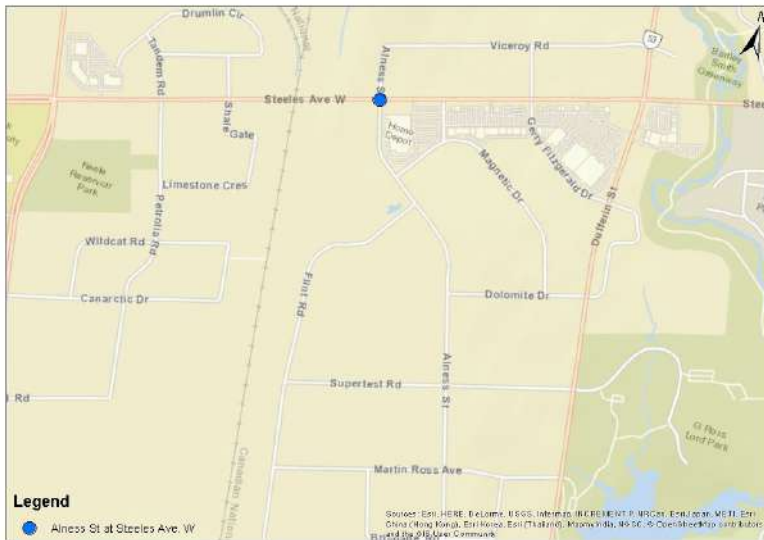
4.1. Opportunity: The York University GO Station is an important transportation access point that is severely lacking adequate access for drivers, pedestrians and public transit users. With the station located within an low-rise industrial employment area, it can only be accessed on the West side of the railway tracks, with no access from the East side of the railway. Being located just a couple hundred meters from the York University Campus, close to an area of high employment and near a number of other public transit lines, there is great opportunity to improve access to the station in order to relieve the area of increasing traffic.

4.2. Recommendation: The building of a pedestrian pathway over the railway tracks to the East side of the station will vastly improve the access to the station for students, employers and commuters alike. The limited use of the station can be closely related to its inaccessibility for the majority of workers in the area. The pedestrian pathway will not just encourage use of the station but will also provide for a pedestrian-friendly route over the rail tracks, greatly enhancing the overall accessibility of the area.



Top: York University GO Station Pedestrian Walkway entrance to Canarctic Dr.

5. Improvements to the intersection of Alness Street at Steeles Avenue West



5.1. Opportunity: The intersection of Alness Street and Steeles Avenue West is an important gateway intersection into the Duke Heights BIA. Alness Street provides for an alternate route to Dufferin and Keele Streets while Steeles Avenue West is one of the east-west arteries in the area. Major traffic congestion occurs at this intersection during the morning and afternoon rush hours especially travelling eastbound on Steeles Avenue West. Improving movement through this intersection is crucial in ensuring an improved road network for the Duke Heights BIA.

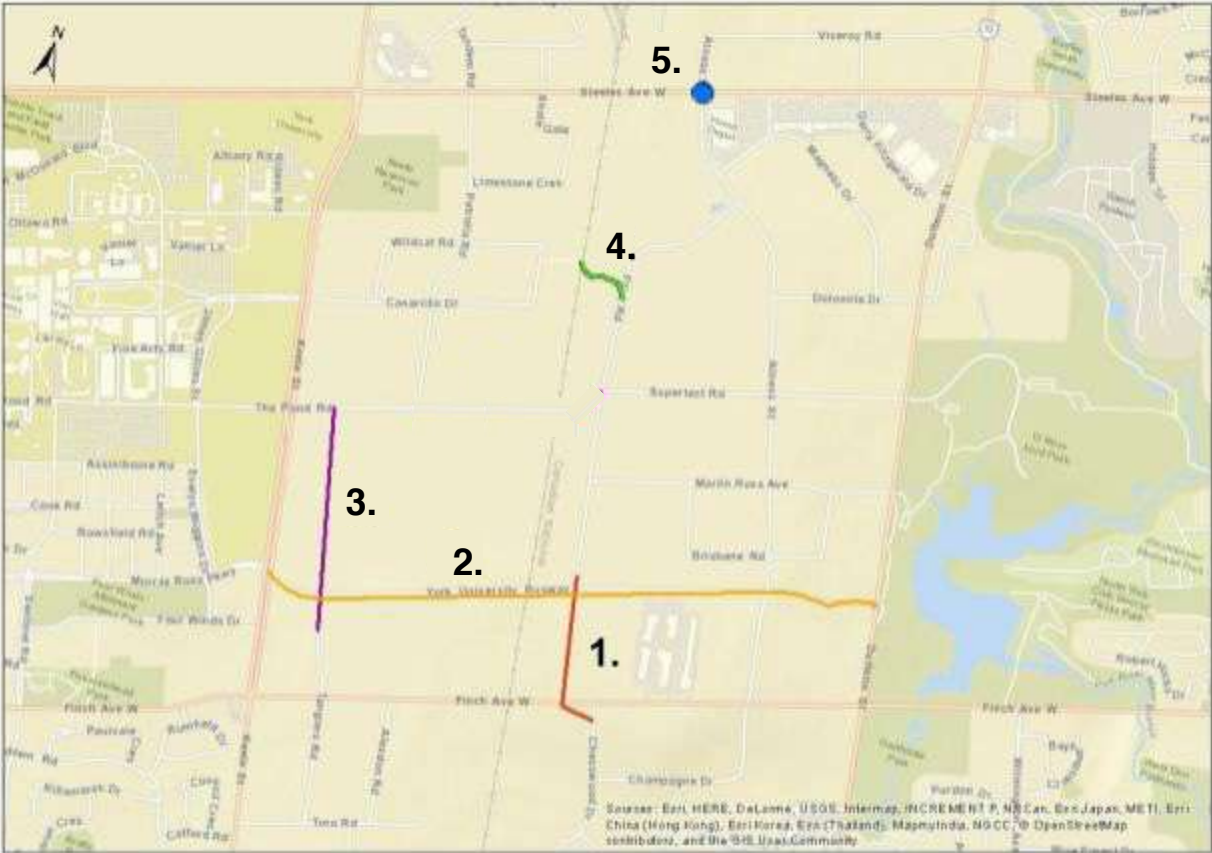
5.2. Recommendation: Two key improvements can be made to the Alness Street and Steeles Avenue West intersection: the improvement of traffic signal timings for traffic along Steeles Avenue West, and the construction of a second northbound right turn lane on Alness Street. The majority of congestion occurs along Steeles Avenue West travelling eastbound and cars turning eastbound from northbound Alness Street. These two improvements will ensure better traffic flow for the intersection in the directions where most congestion currently occurs.



Top Left: Steeles Ave W. eastbound approaching Alness St. Top: Alness St Northbound approaching Steeles Avenue W.

Appendix

a. Map of transportation network with proposals



Legend

- Ainess St at Steeles Ave. W
- York University GO Station Walkway
- Tangiers Road Extension
- Flint Road Extension
- York University Busway

