



# NEIGHBOURHOOD PLAN

Thorncliffe Park and  
Flemingdon Park,  
Toronto

May 2016

This plan was produced by the Toronto Centre for Active Transportation, a project of the Clean Air Partnership in Toronto, Ontario.

Authors:

Car Martin, Project Manager & Design Lead  
Mikey Bennington, Project Manager & Research Lead  
Chris Hilbrecht, Planning Advisor  
Overseen by Nancy Smith Lea, TCAT Director

\*Special thanks to local citizens & interested professionals who volunteered their time

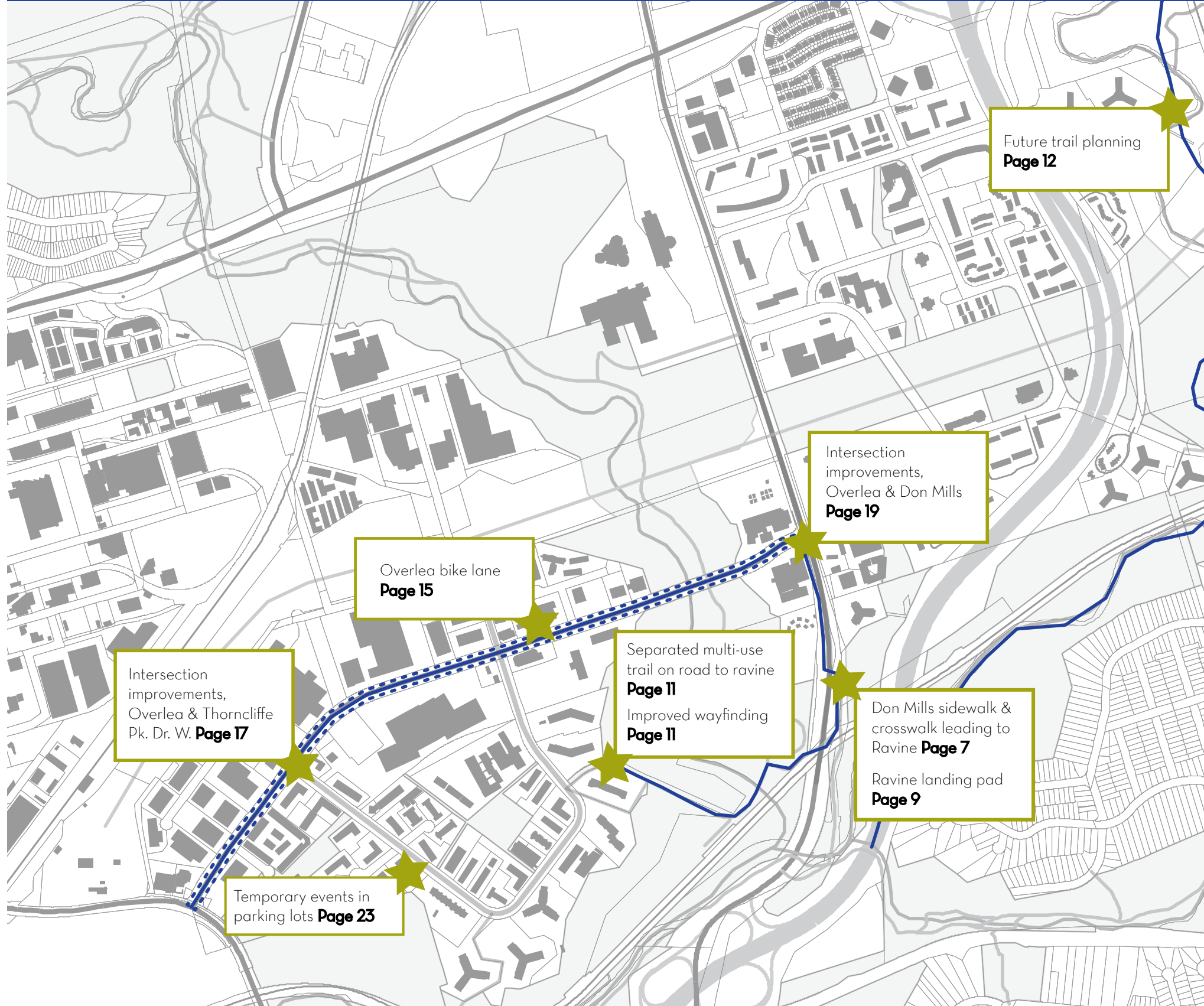
Lead Partners:

Flemingdon Health Centre  
Toronto Emerging Artists (TEA)

Secondary Partners:

Thornccliffe Park Women's Committee  
Evergreen BikeWorks  
Toronto International Film Festival, Special Delivery Program  
Architecture for Humanity, Toronto Chapter





# KEY MAP of Proposed Interventions

# Overview

The Thorncliffe and Flemingdon Active Neighbourhood Plan identifies key design interventions to make walking and biking safer, easier and more enjoyable; to improve access to green spaces and to enhance neighbourhood identity.

The ideas presented here reflect the efforts of an extensive community engagement project, “Active Neighbourhoods Canada (ANC)”.



The core elements of this 3 phase method are a Neighbourhood Portrait created in partnership with local residents, A Professional Workshop to develop design ideas-held in 2015 at the Ismaili Community Centre-and a series of Pop-up Citizen Forums at various local events. The Neighbourhood Plan is the final product. It contains a series of recommendations grounded in the ideas of community members, with strategies to work towards implementation.

Each design concept in this Plan was supported by at least 75 percent of residents surveyed during the Citizen Forum’s. The most popular proposals dealt with three common themes: 1) improving access to the nearby Don Valley Ravine and other green spaces, 2) Transitioning Overlea Boulevard from arterial to complete street, 3) animating spaces in-between neighbourhood buildings. The following pages describe and illustrate these top actions, explaining how they meet needs identified in the Portrait and how they connect to other projects, plans and policies working to improve active transportation throughout Toronto.



## PRIMARY IMPACT AREAS:

1. IMPROVE ACCESS TO RAVINE AND GREEN SPACES
2. TRANSITION OVERLEA FROM ARTERIAL TO COMPLETE STREET
3. ANIMATE SPACES IN BETWEEN NEIGHBOURHOOD BUILDINGS



# IMPROVE ACCESS TO RAVINE AND GREEN SPACES

# Priority 1: Improve Access to Ravine and Green Spaces



Connecting neighbourhood open spaces to form a network of linked destinations encourages their use (Friedman 2015). Thorncliffe Park and Flemingdon Park are rich in open space and green spaces, but these spaces are disconnected and often difficult to access. Almost everyone we consulted wanted to see safe, accessible and clearly marked routes to the trails running through the Don Valley and better connections to other green spaces in Thorncliffe Park and Flemingdon Park.

## Resident Voices:

“Ravine access seems to me one of the most overlooked elements of these neighbourhoods immediately adjacent to the Don. Anything to improve access is a huge plus.”

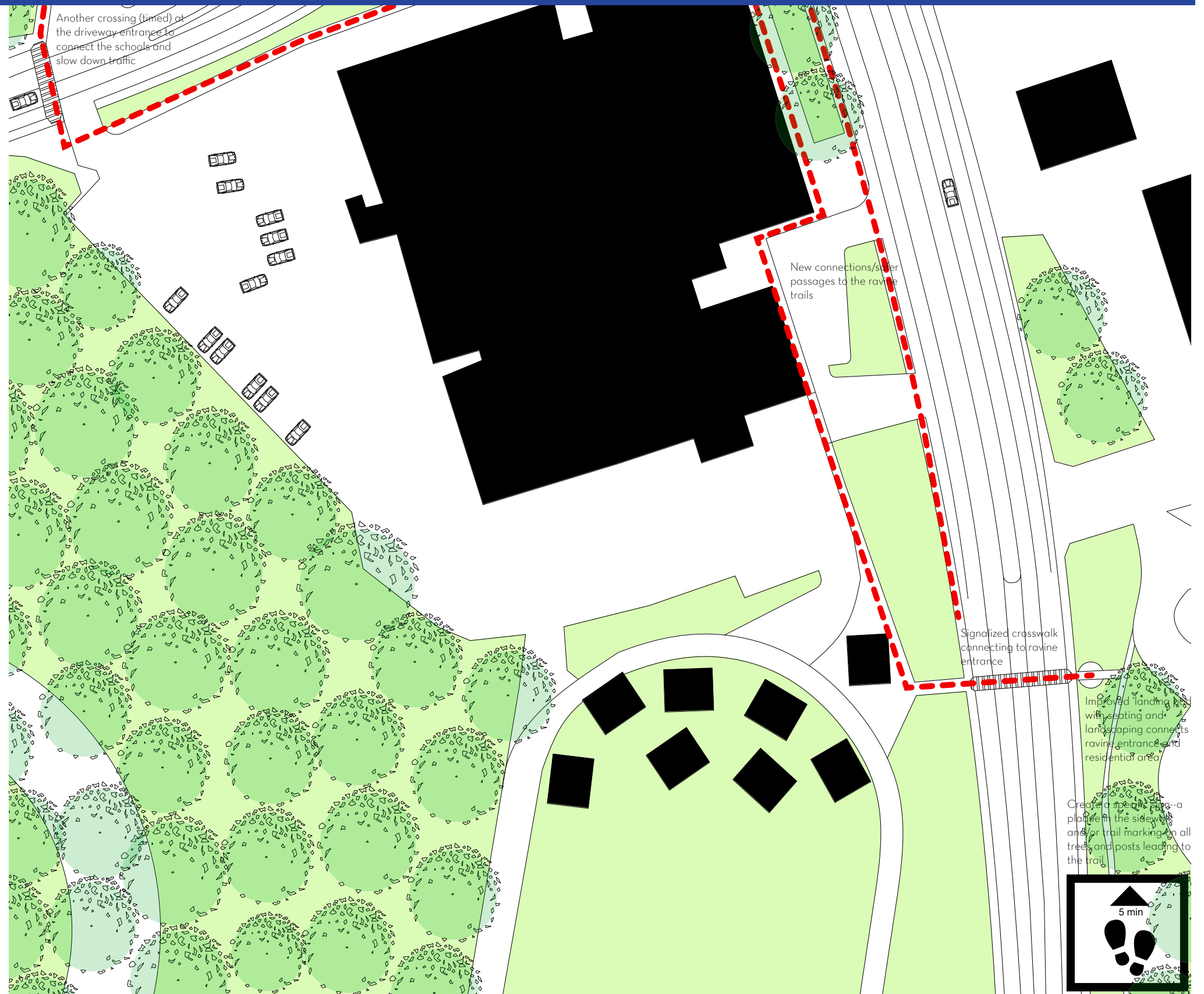


# Don Mills Sidewalk and Crosswalk

## **Location: Don Mills Rd., south of Overlea**

Access to the Ravine trail system in Flemingdon Park is unsafe and poorly marked. The access off of Don Mills just south of Overlea is a dirt path winding down Don Mills Road where vehicles exit off the DVP. The worn footpath is evidence of demand for access at this location—people have ‘voted with their feet’. This is also the most convenient route for many nearby residences and for the schools.

By reorienting the path to the Ravine to the West side of the road, pedestrians can follow a well-graded sidewalk and then cross the road via a newly installed crosswalk. They will then enter the ravine ‘landing pad’ where they find improved welcome signage and way-finding signage and a paved area that denotes a clear trailhead.



# Don Mills Sidewalk and Crosswalk

## Needs addressed by adding a crosswalk on Don Mills:

\*Improve accessibility

\*Safety and addition of basic pedestrian infrastructure

\*Encourage and enable enjoyment of natural spaces

## The big picture:

“Pedestrian crossings,” the Ontario Traffic Manual explains, “are a critical element among the many factors that influence the overall walkability of an environment” (OTC 2010). Installing a sidewalk, buffered from fast-moving cars by trees and other streetscaping, along with a controlled crossing leading to the ravine could go a long way toward providing convenient and safe access to the Don Valley.

Pedestrian facilities should be planned as an integrated network. The more integrated sidewalks, trails and crossings are, the more walkable an area will be (Friedman 2015). This proposed connection would formalize, protect and connect pathways that people already use, enhancing the overall walking network.

## Next steps and key partners:

The process of requesting a sidewalk or crosswalk begins with sending a request to the City’s Transportation Services Department. For a crossing, transportation experts will collect data to see if it’s justified, looking at vehicle traffic volumes and speed, pedestrian volumes, accident records, and nearby land uses and activities.

According to the OTM, signals can be installed as long as one of six criteria is met. In particular, this proposed crossing may fit with #6, which calls for crossings “where traffic volume on a main road is so heavy that pedestrians experience excessive delay or hazard in crossing the main road, or where high pedestrian volumes produce the likelihood of such delays” (2010, p.21).

Once approved, the proposal will go to Community Council and City Council for approval. Community Council is where citizens can make their wishes known by commenting or making presentations before an item moves on to City Council. City Council has the final say, so ultimately it will be important that the Councillor for Ward 26 advocate for improved pedestrian facilities in Don Valley West.



# Ravine Landing Pad

## **Location: Don Mills Rd., south of Overlea**

Connected to the sidewalk and crosswalk leading to the ravine entrance, an inviting entrance with seating and signage should be installed to direct pedestrians and cyclists to the entry point of the Don Valley Ravine trail system.



### **Needs addressed by the Ravine Landing pad:**

**\*Improve ravine access and wayfinding**

**\*Support physical activity and recreation**

**\*Enhance sense of place**

### **The big picture:**

The Toronto Parks Plan (2013) calls for equitable access for all residents to high-quality, well-designed parks and trails throughout the city. Increasing options for safe access to the Don Valley in Flemingdon

Park would help to fulfill Parks, Forestry and Recreation's equity and placemaking goals.

The addition of a ravine landing pad at the entry point to the Don Valley on Don Mills is also consistent with Toronto's Multi-use

### **Resident voices:**

"Love the Ravine landing pad."  
"Gaining access to the ravine is key. There is so much wonderful green space bounty - yet very challenging to access."

# Idea: Ravine Landing Pad



sketch created at professional workshop, 2015

trail design guidelines (2014). This guidebook recognizes the role of multi-use trails as a vital part of the City's active transportation network and outlines a number of relevant recommendations for the design of trailheads. By incorporating many of these recommended

elements, the ravine landing pad would contribute to the City's goal of improving access to Toronto's trails and expanding the bikeway network.

Some residents identified illegal dumping as a problem at this site. Along with broader steps to curb this activity, the City should provide garbage bins at the ravine access point to prevent littering.

## The City recommends:

1. **Clear markings and wayfinding at trailheads**
2. **The use of gateways, public art and signage to establish trail identity**
3. **"Supportive facilities" such as water bottle filling or bike repair stations**

## Key and potential partners:

### City of Toronto; Transportation Services; Parks, Forestry & Recreation:

Along with the Toronto and Region Conservation Authority, these City departments are responsible for site assessments, design, public consultation, and construction of new trail connections.

### Toronto and Region Conservation Authority:

Works to plan and rehabilitate regional watersheds, including Don Valley. TRCA is currently partnering with the City of Toronto on an Environmental Assessment for a trail on the East Don. The TRCA also operates "Multicultural connections," a program aimed at reducing language and cultural barriers for new Canadians to participation in environmental initiatives. This program may be a suitable partner for translation of wayfinding and signage for landing pad.

### Evergreen

Currently working with the City & TRCA to revitalize the Lower Don Trail. The revitalization calls for new gateways, access points, public art and pedestrian and cyclist enhancements to the trail system. Evergreen also has a stated goal of increasing use and stewardship of Don river which should extend upstream to the Thorncliffe and Flemington

### Flemington Urban Fair Committee

Active local residents' group seeking to animate green spaces

# Further Actions: Improving Access to Ravines and Green Spaces

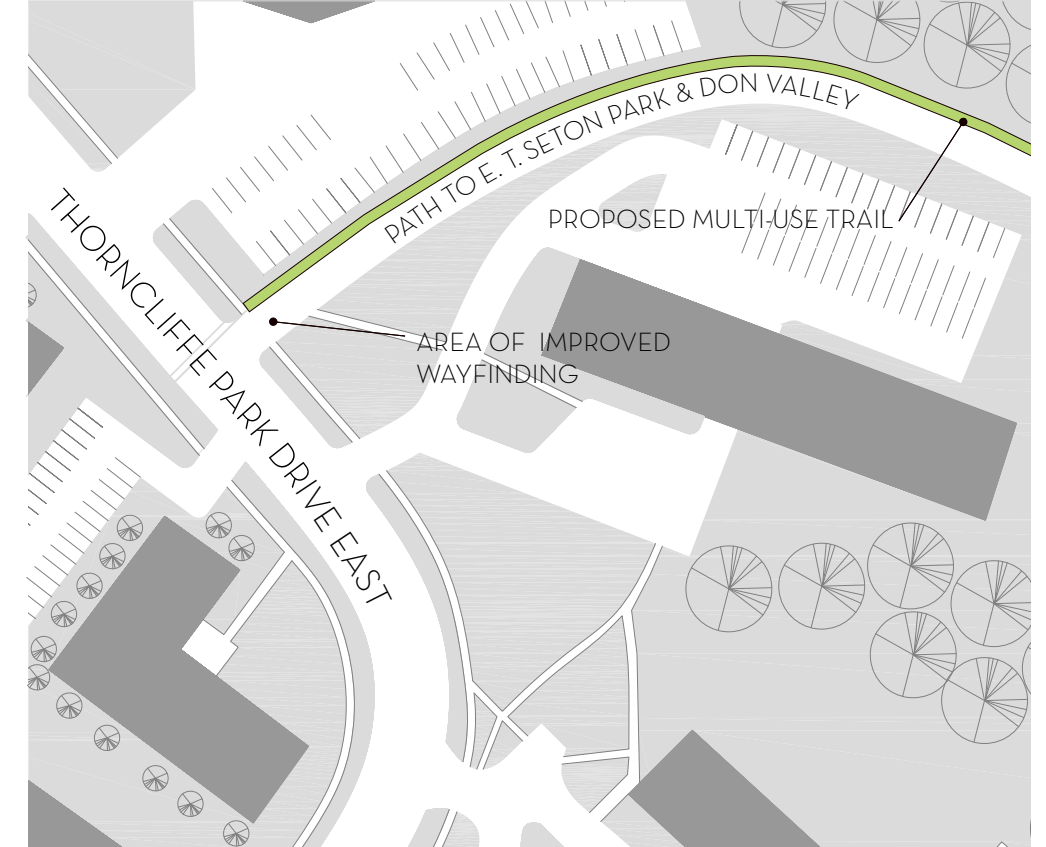
## Separated Multi-use path to ravine from Thorncliffe Park Drive East

83% of residents supported a proposal to add a multi-use path on the road that descends from Thorncliffe Park Drive East down to the Don Valley Ravine. Currently, the entrance is a wide asphalt road without sidewalks or a bike path. This connection could be made safer and more inviting with the addition of a pathway for pedestrians and cyclists.

## Better wayfinding and information

Most people we spoke to supported adding signage to direct people to entrances to the Don Valley and provide information about the ravine system and trails. This proposal is consistent with the goals of the Toronto 360 wayfinding strategy, adopted in 2012, including: connecting places, encouraging exploration and building confidence and trust to walk.

The City's Parks Plan (2013) promotes better wayfinding to parks and trail systems that include information about Toronto's natural and cultural heritage. The City also recognizes a need for information and educational materials targeted to newcomers. These policy directions should be kept in mind when planning and designing wayfinding systems for Thorncliffe & Flemingdon.



# Further Actions: Improving Access to Ravines and Green Spaces

## **Future Trail Planning:**

The current environmental assessment for the new East Don Trail has listed potential links to Flemingdon Park as out of its scope (City of Toronto 2014, June 24). Given the demand for connections to the ravine system in Flemingdon

Park and the City's stated equity goals in ensuring access to green space, we strongly recommend that future effort be made to improve connections between the neighbourhood and the new trail.



# OVERLEA BOULEVARD: FROM ARTERIAL ROAD TO COMPLETE STREET



*sketch of pedestrian scramble at Overlea and Don Mills  
developed at the young urbanist summer camp, 2015*

## Priority 2: Overlea - From Arterial to Complete Street

Residents supported several proposals for improvements along Overlea Boulevard, including bike lanes and safer, more protected intersections. Overlea is a hub of activity with a number of existing assets, including an attractive median. But as our street audit showed, narrow sidewalks, patchy plantings, minimal seating, and street designs prioritizing cars leave pedestrians and cyclists exposed to fast-moving traffic and without enough places to rest and wait for transit, or enjoy the street as public space. By protecting cyclists and making intersections more inviting, we can support already high levels of walking and encourage increased bicycle travel.



### Resident voices:

“improving the conditions for walking seems absolutely vital to this area.”

# Overlea Bike Lane



## **Location: Overlea Blvd.**

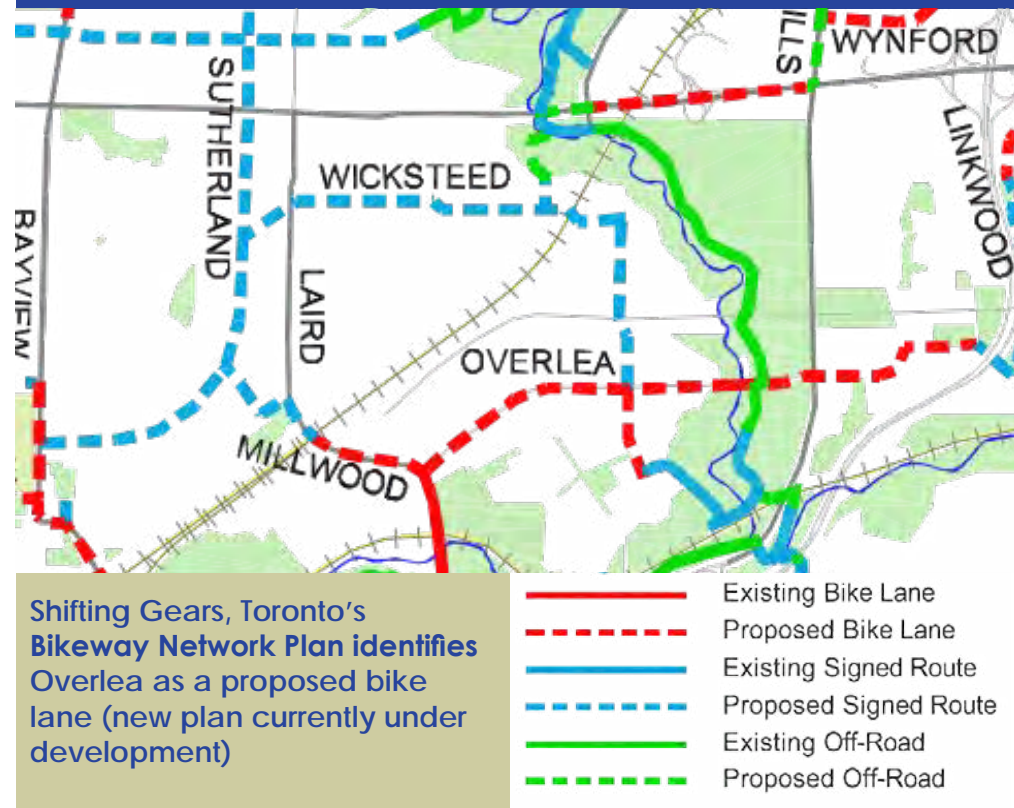
Fast-moving auto traffic on Overlea makes this arterial uninviting for cycling. A bike lane along Overlea blvd would connect Flemington Park, Thorncliffe Park and Leaside and improve cyclist safety along the Overlea bridge.

Residents strongly supported this intervention (88.5%), but opposed removing the median, and any trees on Overlea to make space for bicycle infrastructure. Traffic volumes are high on Overlea, and some residents expressed concern that people might not be comfortable cycling on the street. One suggested that if a bike lane is installed, lanes should be protected, rather than just painted on.

### **Needs addressed:**

- \*Increase cyclist safety**
- \*Links into existing cycling network**

# Overlea Bike Lane



## The big picture:

Adding a bike lane on Overlea could help meet the objectives of the City's new 10 year cycling network plan, currently under development. An expansion to Overlea would grow the network, furthering the 2001 Toronto Bike Plan's goal of having all Torontonians within five minutes of the city's bikeway network. This new lane could also help connect

gaps, serving to link existing bike lanes on Millwood Road to Thorncliffe and could eventually provide a connection up to the protected, crosstown bike route approved by council on Eglinton Avenue.

The City's cycling network research shows relatively high potential demand in Thorncliffe/Flemingdon for cycling infrastructure, based on high numbers of short trips made by car or transit in the area. With evidence mounting that a broader cross-section of the public is more interested in cycling if they are safely separated from motor vehicle traffic (NITC 2014; NACTO n.d.), and acknowledging resident concerns about traffic volumes, future cycle planning on Overlea could invite more active travel by buffering cyclists from traffic.

## Local momentum:

Traffic lanes on St. Dennis Drive in

Flemingdon park are being converted into buffered bicycle lanes and parking from Don Mills Rd. to Linkwood Lane to improve pedestrian safety currently affected by excess road capacity. Planning more bikeways and links to them could improve use of these short stretched of bike lanes.

## Resident voices:

"The median is so beautiful in the spring, with the tree and blossoms. It would kill me to see more trees in our neighbourhood go ..."

"I'm not sure how many cyclists we have in the area but maybe this would promote more cycling."

"I think it is a great idea :D The bike lanes though should be protected - not just painted."



## Intersection Improvements: Overlea Blvd. & Thorncliffe Park Dr.



### **Location: Overlea/Thorncliffe Park Dr. W.**

Thorncliffe Park Dr. W. and Overlea is an intersection that provides a gateway to Thorncliffe Park. Pedestrians pass through here to connect to shops and cultural institutions from their homes. High pedestrian volumes need to be accommodated as many people travel to the mosque at particular times.

Residents support several enhancements to make the intersection more safe for pedestrians and promote a sense of neighbourhood identity, including widening sidewalks to make space for large groups of pedestrians; installing planters and other vegetation to buffer people from traffic; adding seating so people can rest and wait for transit. Public art expressing a distinctive locale was generally supported, but some residents considered it to be a waste of money. By drawing on local talent and

# Intersection Improvements: Overlea Blvd. & Thorncliffe Park Dr.

paying neighbourhood artists, future public art could address some of these concerns by spending money locally and supporting community arts groups.

## **The big picture:**

These proposals uphold the principles of Toronto's Streetscape manual (2015b) and the City's forthcoming (2016) Complete streets guidelines.

The Streetscape manual emphasizes the importance of high-quality streetscape design, stressing how beautiful, tree-lined, accessible streetscapes on Toronto's arterial roads contribute to quality of life. Overlea could be classified as an "emerging main street," given its

suburban context, commercial activity and transit service, or as a "scenic street," based on the existence of a generous median. In either case, the City identifies streets like Overlea as important sites for improved pedestrian amenities.

The City of Toronto's Complete streets guidelines are currently under development with a vision of streets as important public spaces and making them safe for people of all ages, genders and abilities. The guidelines will promote improved active transportation networks and also encourage street design that reflects differences in local context. Interventions at Overlea and Thorncliffe Park Drive West to widen sidewalks, protect vulnerable road users, add vegetation and add beauty and identity with appropriate public art will all serve to make this street more complete.

## **Needs addressed:**

**\*Improving pedestrian amenities at intersection for users of all age and ability.**

## **Resident voices:**

"I like the design elements that you're proposing as long as vegetation and other amenities do not impede site lines and visibility"

"We have many seniors and children in the area so seating is ideal while waiting for busses or to give people a rest."

## **Key and potential partners:**

**City of Toronto Transportation Services:**  
*The Public Realm Section's Beautiful Streets Program accepts proposals for neighbourhood improvements on publicly owned land, helping projects to find partners and resources*

**Parks, Forestry and Recreation:**  
*Responsible for street trees*

**City of Toronto Urban Design:**  
*Developed the Streetscape Manual and has interest in citywide improvements to the appearance and function of streets as public spaces*

# Intersection Improvements: Overlea Blvd. & Don Mills Rd.

## **Location: Overlea and Don Mills**

Home to two large schools, the intersection of Don Mills Rd. and Overlea Blvd. is a high-volume pedestrian zone. During our community engagement exercises people identified both streets as loud and inhospitable.

Residents feel concerned for safety of school children, though also oppose proposals that would slow down traffic at this congested intersection.

The most widely agreed upon improvement to this site was to add more landscaping and planting to the intersection to make the area visually appealing and buffer pedestrians from traffic. Most residents (74.5%) also supported the addition of an audible crossing signal at this large intersection to improve safety for the visually impaired.

## Needs addressed:

- \*Create a safer intersection at peak hours
- \*Accommodate the visually impaired

## Resident voices:

“The more flowers and trees the better”



# Intersection Improvements: Overlea Blvd. & Don Mills Rd.



## **The big picture:**

With two schools at this intersection, this proposal ties into important efforts to make walking and biking to school easier and safer. Children and youth are especially vulnerable to road accidents (Global Road Safety Partnership, 2015). Protecting the sidewalks where they walk and wait for transit with plantings and street furniture would help to improve neighbourhood safety, reinforcing school travel planning work underway by groups like Green Communities Canada in Thorncliffe Park.

For kids and adults, long travel distances in tower neighbourhoods with separated land uses discourage walking (TCAT 2014). Pedestrian journeys can seem even longer if there is little to see along suburban roads (City of Toronto, 2009). Ultimately, by adding high-quality pedestrian infrastructure to this corner

and along Overlea, this proposal would help achieve the City's goal of improving walkability in Toronto's suburban neighbourhoods. The improvements suggested here should be implemented to help realize Toronto's Walking Strategy (2009), which calls for pilot projects in the city's priority neighbourhoods.

## **Key and potential partners:**

### **City of Toronto Transportation Services:**

The Public Realm Section's Beautiful Streets Program accepts proposals for neighbourhood improvements on publicly owned land, helping projects to find partners and resources

### **Parks, Forestry and Recreation:**

Responsible for street trees

### **Green Communities Canada:**

Non-Profit Organization promoting active and safe routes to schools

**Marc Garneau Highschool**

**Valley Park Middle School**



# ANIMATING IN-BETWEEN SPACES

## Priority 3: Animating In-Between Spaces

A final theme to emerge from our design activities and community engagement exercises was a desire to animate spaces such as parking lots around apartment towers with temporary programming. Doing so could help to address the inconvenient separation of land uses in Thorncliffe and Flemingdon Park, encouraging active transportation by reducing distances travelled for activities or goods and services.

A key piece of feedback from consultations with residents was that programming should support and reinforce existing activities, community initiatives and services without duplicating them. Changes to the City of Toronto Residential Apartment Commercial (RAC) zoning that have recently come into effect for this area support temporary & mixed uses within the residential apartment areas.

### **Location: parking lots around neighbourhood towers**

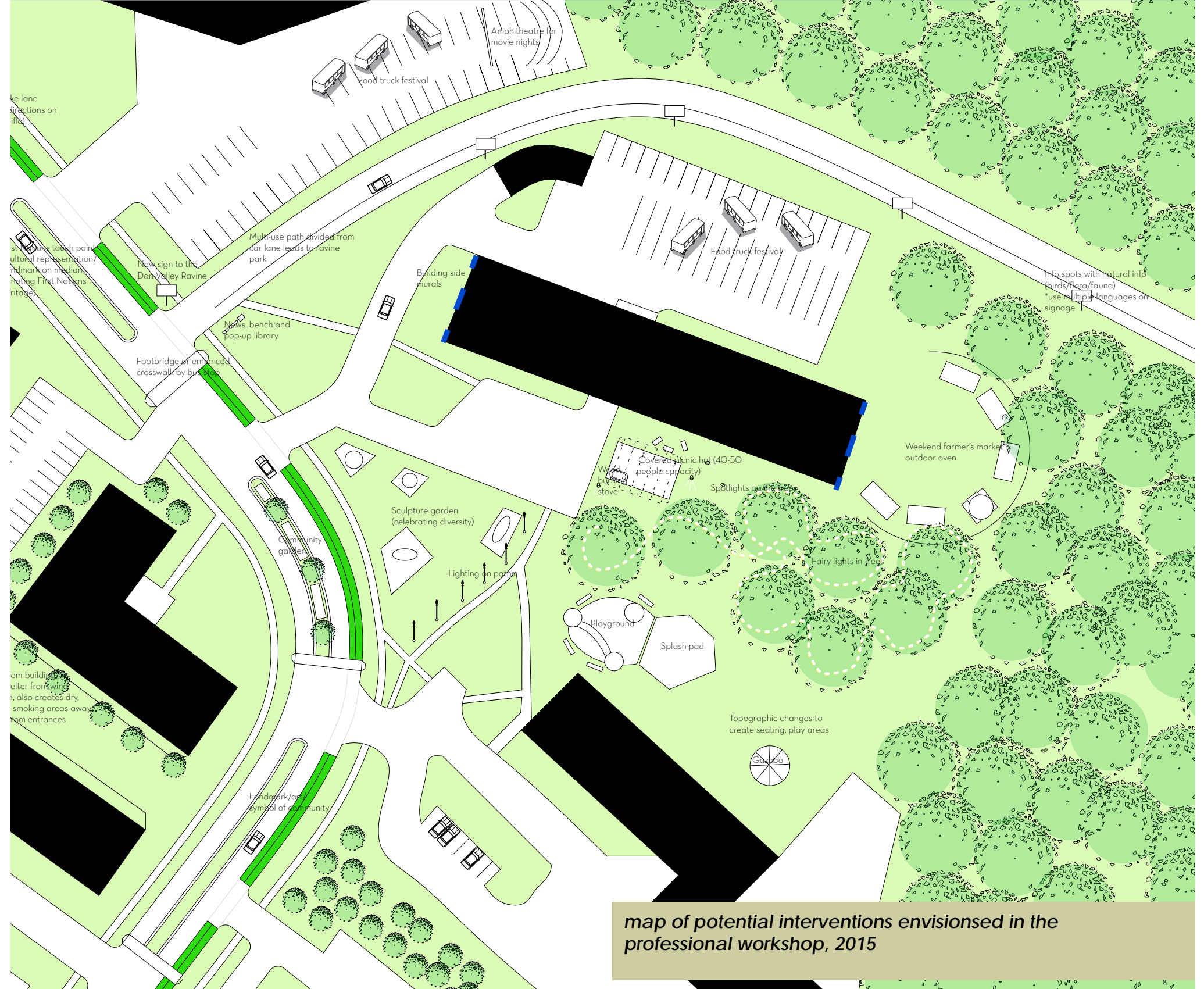
Temporary public events in the parking lots around residential towers—including festivals, sports, recreational activities, and pop-up markets—could encourage more active use of neighbourhood outdoor spaces. Programming at the bases of apartment buildings could help to reduce distances traveled for activity, foster social interaction and build a culture of dynamic public spaces. What's more, by creating more reasons for people to gather, we add more “eyes on the street,” helping spaces feel safer and more comfortable for everyone. New activities should reinforce and connect with existing area events, such as the weekly Farmer's Market organized in R. V. Burgess Park by the Thorncliffe Neighbourhood Office.



### **Needs addressed:**

- \*Brings events and activities to tower residents
- \*Reduce need for travel across separated land uses
- \*Add life to shared outdoor spaces

# Temporary Events in Parking Lots



map of potential interventions envisioned in the professional workshop, 2015

# Temporary Events in Parking Lots

82% of the residents we consulted supported low-cost programming options to make better use of available spaces like parking lots. It is worth noting that temporary outdoor uses were more popular than establishing shops at the ground level of apartments (70.9% support).

## **The big picture:**

Several studies of apartment neighbourhoods in Toronto illustrate how the separation of land uses—resulting in a dispersion of the places where people live, work shop and enjoy free time—contributes to poor walkability (Hess & Farrow, 2009; CUGR, 2012). In 2013, responding to calls for more flexible uses of spaces around apartment towers, the City created a new zoning type, “Residential Apartment Commercial,” to allow small scale commercial and community uses on apartment building

sites, including many in Thorncliffe Park and Flemingdon Park. Recent University of Toronto research suggests that the most feasible way to introduce a mix of activities and services to apartment neighbourhoods is through “high impact, low investment” uses such as outdoor activities and community uses (Bonilla et al., 2014). Changes to zoning alone won’t animate these spaces and it is important to partner with the right people to foster activity.

## **Local momentum:**

TCAT is currently partnering with the Flemingdon Urban Fair Committee to develop park equipment in Flemingdon Park that can serve as a gathering space and help bring life to the neighbourhood centre. Although this equipment will not be temporary, it works in the same spirit of creating small changes to activate space.

## **Key and potential partners:**

*Building (and parking lot) owners*

*Thorncliffe Neighbourhood Office*

*Flemingdon Urban Fair Committee*

**City of Toronto, Social Development, finance and administration division:**

*\*Tower and Neighbourhood Revitalization Unit focuses on the implementation of RAC zoning*

*\*A potential source of funding is the Partnership Opportunities Legacy Fund 2, a fund for projects in Neighbourhood Improvement Areas for “partnership-based community infrastructure”*


## **Resident voices:**

“I really love the temporary events on the parking lots. A lot of people would involve in activities. Like playing ground hockey, basketball, futsal (soccer on concrete or gymnasium)”



# References

1. Bonilla, H. Chu, S., House, S., Naklicki, K. & Plottel, S. (2014). *InteRACtive Spaces: Exploring the feasibility of RAC Zoning in Toronto's Apartment Towers*. University of Toronto: Department of Geography and Planning.
2. City of Toronto (2016). Complete streets guidelines for Toronto. Retrieved from <http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=bdb604f82477d410VgnVCM100000071d6Of89RCRD>
3. City of Toronto (2015a). Official Plan, June 2015 Office Consolidation. Retrieved from: <http://www1.toronto.ca/planning/chapters1-5.pdf>
4. City of Toronto (2015b). Streetscape manual. <http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=Oe88036318061410VgnVCM100000071d6Of89RCRD>
5. City of Toronto (2015c). Toronto cycling network plan - studying Toronto. Retrieved from: <http://www.torontocyclingnetwork.info/studying-toronto/>
6. City of Toronto. (2015; September 8). Ten year cycling network plan: Project update and 2016 implementation program.
7. City of Toronto. (2014). Toronto multi-use trail design guidelines. Retrieved from: [https://www1.toronto.ca/City%20Of%20Toronto/Transportation%20Services/Cycling/Files/pdf/TORONTO%20MULTI-USE%20TRAIL%20DESIGN%20GUIDELINES-December%202014\\_Fina\\_4.pdf](https://www1.toronto.ca/City%20Of%20Toronto/Transportation%20Services/Cycling/Files/pdf/TORONTO%20MULTI-USE%20TRAIL%20DESIGN%20GUIDELINES-December%202014_Fina_4.pdf)
8. City of Toronto (2014; April 22). St. Dennis Drive - Conversion of traffic lanes to on-street parking and bicycle lanes. <http://www.toronto.ca/legdocs/mmis/2014/pw/bgrd/backgroundfile-68947.pdf>
9. City of Toronto. (2014; June 24). East Don Trail environmental assessment public consultation report. Retrieved from: [https://www1.toronto.ca/City%20Of%20Toronto/Policy,%20Planning,%20Finance%20&%20Administration/Public%20Consultation%20Unit/Studies/Transportation/East%20Don%20Trail/Files/EDT\\_PIC3\\_SummaryReport\\_FINAL.pdf](https://www1.toronto.ca/City%20Of%20Toronto/Policy,%20Planning,%20Finance%20&%20Administration/Public%20Consultation%20Unit/Studies/Transportation/East%20Don%20Trail/Files/EDT_PIC3_SummaryReport_FINAL.pdf)
10. City of Toronto Parks, Forestry and Recreation. (2013). Parks plan 2013-2017. Retrieved from: <http://www.toronto.ca/legdocs/mmis/2013/pe/bgrd/backgroundfile-57282.pdf>.
11. City of Toronto. (2012). Toronto 360 wayfinding strategy: Final report. Retrieved from: <https://www1.toronto.ca/City%20Of%20Toronto/Transportation%20Services/Walking/Files/pdf/torontowayfindingreport-accessible.pdf>
12. City of Toronto (2009). Toronto Walking Strategy. Retrieved from: <http://www1.toronto.ca/City%20Of%20Toronto/Transportation%20Services/Walking/Files/pdf/walking-strategy.pdf>
13. City of Toronto (2001). Toronto Bike Plan. Toronto, Canada.
14. Friedman, A. (2015). *Fundamentals of sustainable neighbourhoods*. New York: Springer.
15. Global Road Safety Partnership. (2015). Vulnerable road users. Retrieved from: <http://www.grsroadsafety.org/our-knowledge/safer-road-users/vulnerable-road-users>
16. National Association of Transportation Officials (n.d.). Urban bikeway design guide. Retrieved from: <http://nacto.org/publication/urban-bikeway-design-guide/>
17. National Association of Transportation Officials (n.d.). Urban street design guide. Retrieved from: <http://nacto.org/publication/urban-street-design-guide/>
18. National Institute for Transportation and Communities. (2014). Lessons from Green Lanes: Evaluating Protected Bike Lanes in the U. S. Retrieved from: [http://ppms.otrec.us/media/project\\_files/NITC-RR-583\\_ProtectedLanes\\_FinalReportb.pdf](http://ppms.otrec.us/media/project_files/NITC-RR-583_ProtectedLanes_FinalReportb.pdf)
19. Ontario Traffic Council (OTC). (2010). Ontario traffic manual, book 15: Pedestrian crossing facilities. Queen's Printer for Ontario. Retrieved from: <http://www.directtraffic.ca/wp-content/uploads/2014/02/Book-151.pdf>
20. Toronto Public Health, City of Toronto Planning, City of Toronto Transportation Services and Gladki Planning Associates. (2014). *Active City: Designing for Health*. City of Toronto. Retrieved from: [http://dtah.com/wp-content/uploads/2014/06/2014-05\\_ActiveCityReport\\_Final\\_reduced.pdf](http://dtah.com/wp-content/uploads/2014/06/2014-05_ActiveCityReport_Final_reduced.pdf)



*“Albeit not by choice, inner suburban high-rise residents exhibit some of the most sustainable travel habits in Toronto, while also facing some of the worst walking environments”*  
*-Hess & Farrow, 2009*