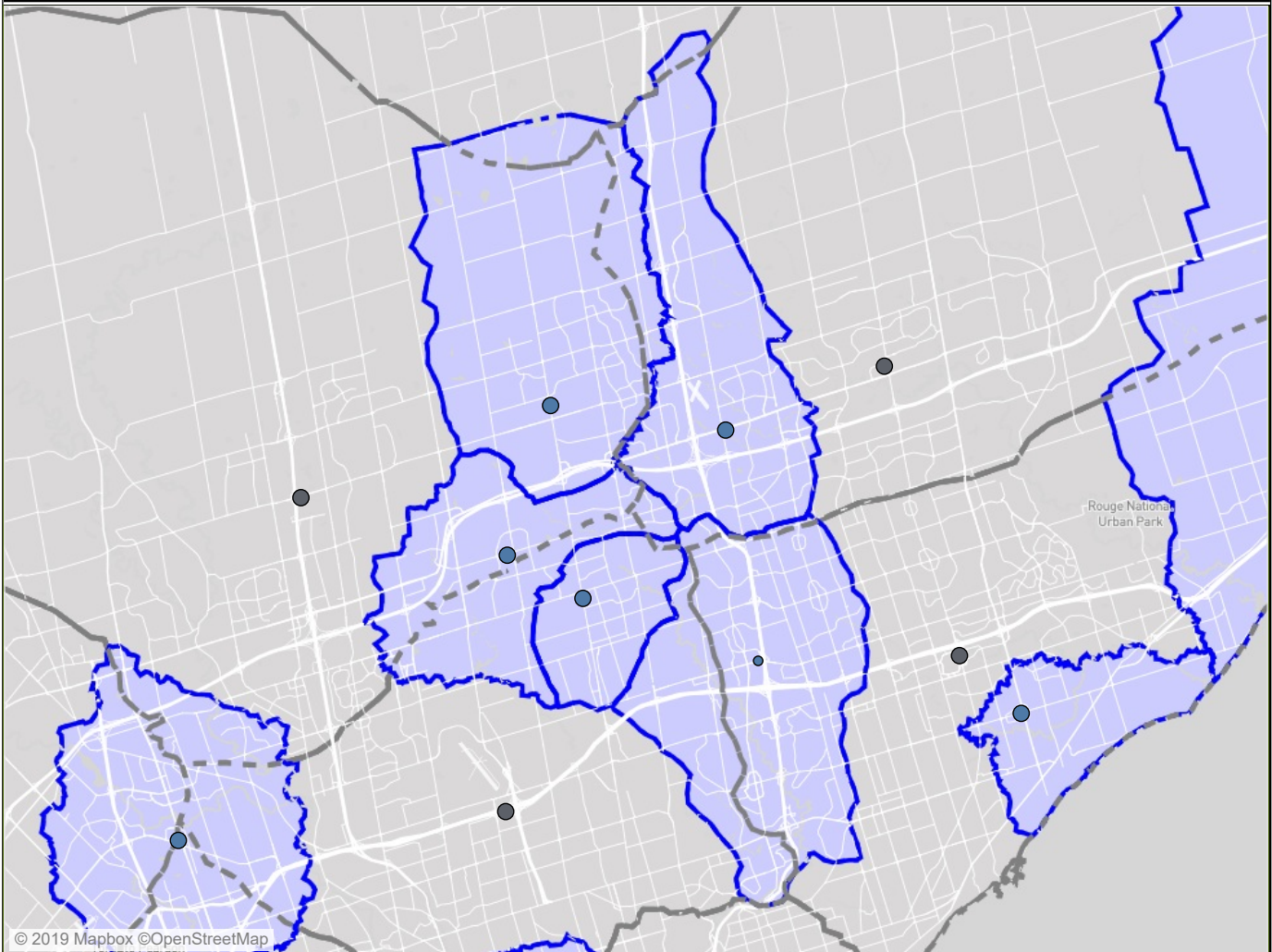![exceed ANALYSIS]

September 2019

An Exceed Location Intelligence Report
for North York| Centerpoint Mall
Map Overview: 1st Trade Area(s) Comparison
Location Analytics and Optimization for Canadian Real Estate

Trade Area of Interest (TAoI)	1st Trade Area(s) Comparison	Filters
North York| Centerpoint Mall	Markham| First Markham Place (R)	**Province** All

Trade Area of Interest (TAoI)
North York| Centerpoint Mall

Primary TA Points
■ Super Regional
■ Regional

1st Trade Area(s) Comparison

Markham| First Markham Place (R)

North York| Centerpoint Mall (R)

Richmond Hill| Hillcrest Mall (R)

Thornhill| CF Promenade (R)

Toronto| Fairview Mall (R)

Filters

Province
All

Primary TA Layers
✔ Super Regional
✔ Regional
☐ Community
☐ Neighbourhood

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Primary Trade Area Layers
1. The super-regional layer has the greatest consumer attraction, with the largest depth and breadth goods and services, particularly for shopping (durable) and many specialty goods. They generally have a GLA of over 800 sq ft with 3+ anchors. Super-regional layers typically carry convenience (non-durable) goods, which have a lower level of attraction then shopping and specialty goods.
2. The regional layer competes directly with the super-regional layer for shopping goods, but have slightly less attraction because of a reduced depth and breath. They consist of enclosed malls with a GLA of 400-800k sq ft and 2-3 anchors, or open-air centres with 3+ box stores with a GLA of 400-1,000 sq ft.
3. The community layer competes directly with the super-regional and regional layers for both shopping (durable) and convenience (non-durable) goods. They have slightly less attraction than super-regional or regional layers, particularly for shopping goods. They consist of enclosed malls with 100-400 sq ft, or open-air power centres with 2-3 big box stores. Stores like Walmart, Costco and Superstore are primary examples of stores in community (or higher) trade areas that offer both shopping and convience goods.
4. The neighbourhood layer competes directly with the super-regional, regional and community layers, primarily for con..
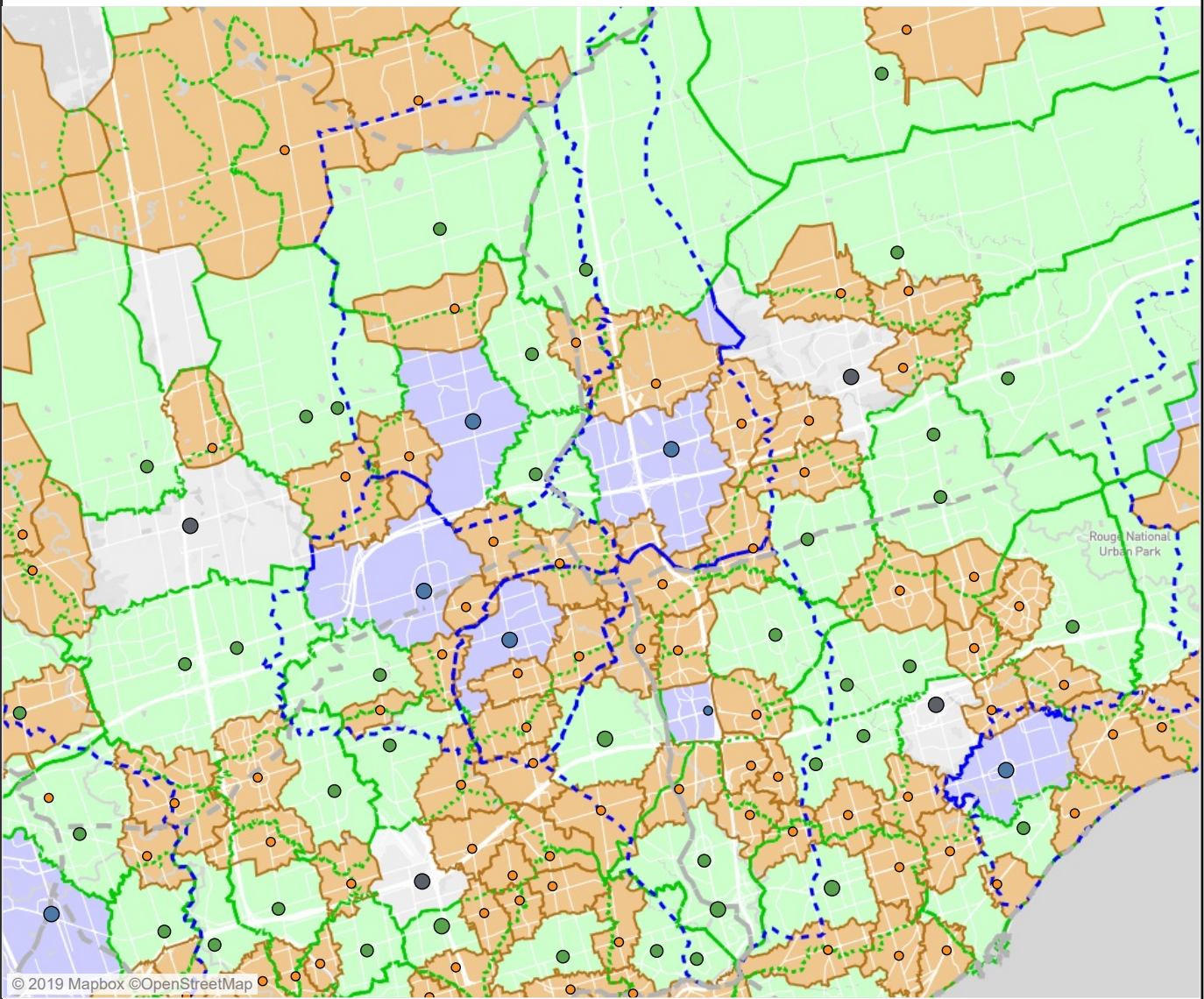
![Exceed Analysis logo]

An Exceed Location Intelligence Report
for North York| Centerpoint Mall
Map Detail: 1st Trade Area(s) Comparison
Location Analytics and Optimization for Canadian Real Estate

September 2019

Trade Area of Interest (TAoI)	1st Trade Area(s) Comparison	Filters
North York| Centerpoint Mall	Markham| First Markham Place (R)	**Primary TA Layers**
Primary TA Points	North York| Centerpoint Mall (R)	✔ Super Regional
⬛ Super Regional	Richmond Hill| Hillcrest Mall (R)	✔ Regional
🟦 Regional	Thornhill| CF Promenade (R)	✔ Community
🟩 Community	Toronto| Fairview Mall (R)	✔ Neighbourhood
🟧 Neighbourhood		

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Calibration is done by adjusting market leakages between trade area layers (with sales data when available).
R ▸ 1st TA %: Market leakage from Regional to adjacent Super Regional trade areas.
C ▸ 1st TA %: Market leakage from Community to adjacent Regional or Super Regional trade areas.
C ▸ 2nd TA %: Market leakage from Community to 2nd adjacent Super Regional trade areas.
N ▸ 1st TA %: Market leakage from Neighbourhood to adjacent Community, Regional, or Super Regional trade areas.
N ▸ 2nd TA %: Market leakage from Neighbourhood to 2nd adjacent Regional or Super Regional trade areas.
N ▸ 3rd TA %: Market leakage from Neighbourhood to 3rd adjacent Super Regional trade areas.

R ▸ 1st TA %	C ▸ 1st TA %	C ▸ 2nd TA %	N ▸ 1st TA %	N ▸ 2nd TA %	N ▸ 3rd TA %
100	100	100	100	100	100

An Exceed Location Intelligence Report
for North York| Centerpoint Mall
Location Analytics and Optimization for Canadian Real Estate

eXceed ANALYSIS

September 2019

Trade Area of Interest (TAoI)	2nd Trade Area Compare	3rd Trade Area Compare	4th Trade Area Compare
North York| Centerpoint Mall	Winnipeg| Garden City (R)	Calgary| Deerfoot City (R)	Laval| Centropolis/Galeries (R)
1st Trade Area(s) Comparison	Winnipeg| Kildonan Place (R)	Calgary| South Centre Mall (R)	Laval| Mega-Centre Notre-Dame (F
	Winnipeg| St. Vital Shopping (R)	Calgary| Sunridge & Marlborough (	Rosemere| Fauborg Boisbriand (R)
Markham| First Markham Place (R)			Saint-Laurent| Place Vertu (R)
North York| Centerpoint Mall (R)			
Richmond Hill| Hillcrest Mall (R)			
Thornhill| CF Promenade (R)			
Toronto| Fairview Mall (R)			

Variable Group (Col1)	Variable Description (Col2)	TAoI Values (Col3)	2nd TA Compare Values (Col4)	3rd TA Compare Values (Col5)	4th TA Compare Values (Col6)	TAoI/ 1st TA Compare (% Change) (Col7)	TAoI /2nd TA Compare (% change) (Col8)	TAoI/3rd TA Compare (% change) (Col9)	TAoI /4th TA Compare (% change) (Col10)
1. Raw Trade Area Pop	1|Geo Advantage Sub-Region	28.1 k	33.6 k	21.2 k	29.2 k	-15.6	-16.3	+32.3	-3.9
	2|1st Adjacent Sub-Region	62.0 k	85.1 k	114.1 k	69.5 k	-41.4	-27.2	-45.7	-10.8
	3|2nd Adjacent Sub-Region	36.7 k	49.7 k	78.2 k	20.6 k	-15.7	-26.1	-53.1	78.1
2.Tot Pop	4|2019 Tot Pop	126.7 k	168.3 k	213.6 k	119.3 k	-30.6	-24.7	-40.7	6.2
3.Demo graphics	11|2019 Med Age	43.0 yr	39.6 yr	38.7 yr	42.6 yr	-0.1	+8.6	+11.0	1.0
	12|2024 Tot Pop	104.9 %	106.0 %	111.3 %	105.0 %	-3.1	-1.0	-5.8	-0.1
	13|2029 Tot Pop	109.8 %	112.2 %	123.7 %	110.0 %	-6.1	-2.1	-11.2	-0.2
	14|Age 0-19	16.9 %	24.3 %	25.0 %	23.2 %	-15.3	-30.7	-32.6	-27.4
	15|Age 20-39	31.2 %	26.9 %	27.2 %	24.0 %	+17.4	+16.2	+14.9	30.0
	16|Age 40-59	26.8 %	26.3 %	28.6 %	28.0 %	-5.2	+1.6	-6.4	-4.3
	17|Age 60+	24.6 %	21.2 %	17.5 %	23.7 %	+2.6	+15.9	+40.6	3.6
4.Day Population	19|2019 Tot Day Pop	141.3 k	145.5 k	202.4 k	142.0 k	-37.9	-2.9	-30.2	-0.5
	20|2019 Day Pop Home	48.8 %	58.4 %	53.8 %	45.9 %	+7.3	-16.4	-9.4	6.4
	21|2019 Day Pop Home 0-14	9.9 %	21.1 %	20.2 %	15.0 %	-16.3	-52.8	-50.9	-33.8
	22|2020 Day Pop Home 15-64	3.9 %	2.7 %	3.3 %	2.9 %	+5.7	+44.0	+17.6	32.8
	23|2021 Day Pop Home 65+	16.5 %	17.3 %	11.9 %	14.7 %	+18.4	-5.0	+38.3	11.8
	24|2019 Tot Day Pop Work	51.2 %	41.6 %	46.2 %	54.2 %	-6.1	+22.9	+10.9	-5.5
5.Income	25|2019 Avg HH income	$100 k	$101 k	$140 k	$101 k	-14.2	-1.1	-28.2	-0.3
	26|2024 Avg HH income	$112 k	$121 k	$167 k	$115 k	-13.8	-7.9	-33.1	-2.7
	27|2029 Avg HH income	$127 k	$146 k	$203 k	$133 k	-13.4	-13.6	-37.7	-4.9
6.Labour	29|2019 Labour Force	51.2 %	55.8 %	56.4 %	55.2 %	-1.3	-8.2	-9.3	-7.2
	30|2019 Unemploy Rate	8.6 %	12.6 %	14.5 %	11.9 %	+11.3	-32.0	-40.8	-27.6
7.Total HH	31|2019 Tot HH Owned	60.9 %	72.4 %	76.4 %	63.8 %	-13.1	-16.0	-20.3	-4.6
	32|2019 Tot HH Rented	39.1 %	27.6 %	23.6 %	36.2 %	+30.7	+42.1	+65.7	8.2
	33|2019 Tot HHs	52.0 k	62.8 k	72.4 k	46.4 k	-22.4	-17.2	-28.2	12.1
8.Education	40|2019 No cert, dip, degree	8.6 %	14.9 %	14.0 %	15.0 %	-17.7	-41.8	-38.3	-42.5
	41|2019 App, trades, diploma	2.7 %	5.9 %	6.2 %	11.6 %	-7.6	-55.3	-57.1	-77.2
	42|2019 College, diploma	14.9 %	17.3 %	17.6 %	18.2 %	-6.5	-14.3	-15.5	-18.6
	43|2019 Univ Bach degree +	43.4 %	18.5 %	19.3 %	19.1 %	+20.0	+135.0	+124.7	127.2
9.Shelter	44|Average Home Value	$1051 k	$351 k	$501 k	$427 k	-2.0	+199.4	+109.9	146.1
	45|Avg Rent Paid	$5258	$2486	$3014	$3626	+38.0	+111.5	+74.5	45.0

1. Complexity and Double Counting
The problem with conventional trade area defintions is that they can't explain and quantify the complex nature of mobile consumer purchases across multiple trade areas. Figure 1 shows the overlapping radii trade areas that are necessary to account for consumer purchase behavior. This creates a double counting problem, which in turn, makes it virtually impossible to accurately calculate useful and comparable trade area metrics.

2. Accuracy: Trade Area Size & Shape
The second problem is that the size and shape of the trade area assumptions largely determine the final solution. Figure 2 compares the consumer spend by trade area between the Exceed model (green points) and radii sized by the ICSC (blue points). In Figure 3, the green points represent the model results, and the blue points represent modeled results plus 1 city block. These graphics reveals how important trade area definition is to the overall analytical solution.

3. Why it Works
3.1 Explains complex consumer behavior: Layers allow the model to quantify the complex nature of consumer purchase behavior from multiple stores and shopping centre destinations. Each layer represents the consumer decision to shop at a specific class of shopping centre (defined by ICSC). See Figure 4.

3.2 It's Accurate: The model imposes accuracy with a system approach that completes supply & demand by individual trade area while accounting for surpluses and leakages. The combined intersect between layers creates sub-regions representing an equation of consumer shopping choices (Figure 5). The equation can now be calibrated and effectively allows for accurate measurement and comparison of all opportunities across Canada, without double counting.

3.3 Adaptable: The number of layers in the model is flexible. It means that new layers can be inserted to include unique retailers like Costco and Outlet Malls.

3.4 Big Data: Our partnership with Manifold Data Mining gives us access to consumer demand data to populate our trade areas: Geo-demographic, household spending, consumer product and media usage, consumer purchase behavior, shopping patterns, psycho-graphic and lifestyle cluster data all created at the 6-digit postal code level.

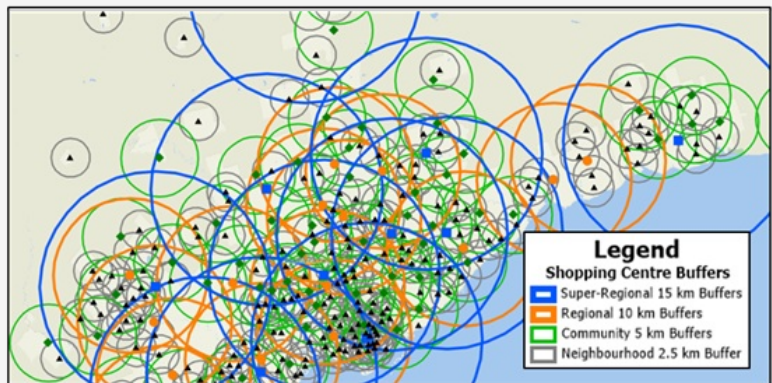Figure 1: Toronto ICSC Radii Trade Area

Legend
Shopping Centre Buffers
- Super-Regional 15 km Buffers
- Regional 10 km Buffers
- Community 5 km Buffers
- Neighbourhood 2.5 km Buffer

Figure 2: Consumer Spend by Greater Toronto Trade Areas

Modeled & Ranked   ICSC Radius   VS

Consumer Spend — Individual Canadian Retail Trade Areas
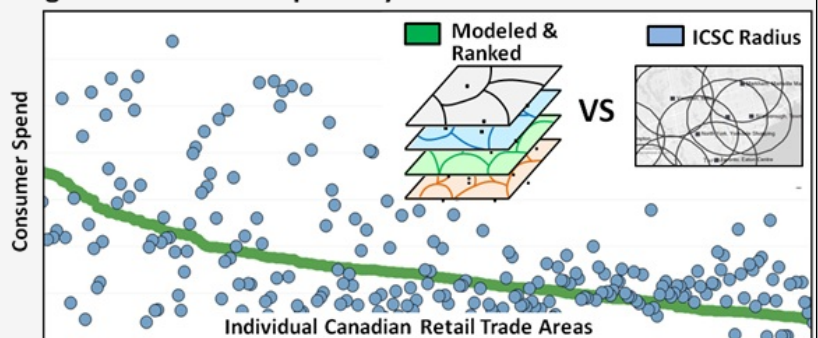
Figure 3: Consumer Spend by Greater Toronto Trade Areas

Modeled & Ranked   Modeled + 1 City Block   VS

Consumer Spend — Individual Canadian Retail Trade Areas
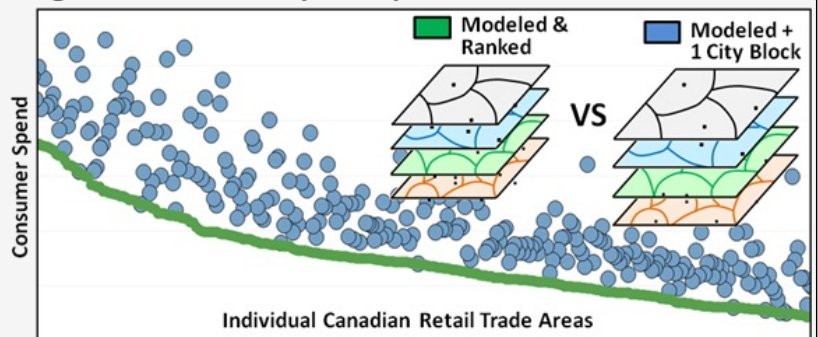

Figure 4: Layered Consumer Shopping Decision Equation

Y = **Total Consumer Purchases**

$=$

S Super Regional Purchases

$+$

R Regional Purchases

$+$

C Community Purchases

$+$

N Neighbourhood Purchases

Intersection of Layers = Shopping Decision Equation
N-1674 + R-118 + SR-173