a-map

User Guide

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Introduction

The LoyaltyOne AIR MILES Mapping & Analytics Program (A-MAP) is designed for easy adoption by users across different business units within an organization. The different layers of information and reporting provide insight into common business cases, such as new store openings and target marketing.

You will receive a username and password for the LoyaltyOne Partner Portal (https://partnerportal.loyalty.com). Once you are logged in you will see an a-map button. Clicking the button will open a-map in a new browser window. Browser pop-up blocker must be turned off. A-map is best viewed in Google Chrome.

A-MAP

The help symbol can be found throughout the application and when clicked an information window will appear.

The Interface

A-MAP uses Google maps as a base. Layers can be created by the user with the various functionality found throughout the application i.e. trade areas and hot spot maps. Custom layers created by the LoyaltyOne GIS team, can also be loaded into the application for display i.e. average household income by FSA. Once logged in, a full view of Canada is shown along with the Sponsor locations with activity during the timeframe.
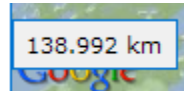
Button Tool Bar

The Info tool lets you point to an object on the map (if listed under layer control) to display a pop-up window with information about that object, (i.e. retail location, trade area, etc.). Click on the button, then click the object to obtain information about that object. *See appendix for more detailed information on the Info tool.*

The Ruler tool allows for a user-defined path measurement. Click on the button, then click on the map where you want to start the path. Each click of the mouse will create a turn point. At the final destination double-click the mouse to end the route. The distance will be shown in the bottom left corner of the screen as you are drawing the path.

138.992 km

Selecting this button and clicking on a point of interest on the map will allow for a user-defined distance to be projected around the point. Click on the icon to remove it. *See Toolbox – Trade Area (page 9), for more information.*

Click and hold the left mouse button and draw a circle around retail location(s) to select for analysis. Selected locations appear as a red square symbol. Choose this button again to add more locations to the selection.

Click and hold the left mouse button to draw a user-defined shape to more precisely select retail locations of interest for analysis.

Click this button to unselect all locations. Unselected locations appear as blue circles .

Once clicked, the tab in the top right corner of the map window slides open and the user is able to select different Google layers that can allow for a different view of the landscape. ***New*** Google Grey provides a subtle map background for a more vibrant display of layers.

Base Layer
- Google Physical
- Google Streets
- Google Hybrid
- Google Satellite
- Google Grey

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Time Frame Selector

From [07/18/2013] 🗓 To [07/17/2014] 🗓 [Default]

By default the **To** time frame selected for analysis is the last day of transaction currently on file plus 10 days, to account for any lag in data transmissions. The **From** time frame is 1 year prior, making for a full year of data for analysis.

The time frame can be changed by clicking on the calendar symbol 🗓 next to the date, at which time an interactive calendar will appear. The month and year can be adjusted by the pull-downs or one month can be moved at a time by selecting the black arrows ◖ . Once the correct month is selected, the preferred day should then be selected, and then the calendar will close and the date will be updated. Within the application, once the Apply button is hit, any analysis on screen will be updated with data for the new time frame.

◖	Nov ▾	2009 ▾	◗

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Navigator

The navigator tool allows for zooming and panning of the map.

The same operations can be done with the mouse …
Panning: Click and hold the left mouse button and move the mouse in the desired direction.

Zoom one level: Double-clicking on a point on the map will zoom and center the map on that point. The wheel on a mouse can also be used to zoom.

Quick Zoom: While holding the shift key, clicking and holding the left mouse button while dragging it allows for a user-defined rectangle to be drawn to zoom in. The map will zoom into the maximum extents of this rectangle.

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The Toolbox

The toolbox on the left of the screen can be hidden at any time by pressing the half circle left arrow directly adjacent ◀ . Clicking it again will make the Toolbox reappear. In order for any of the following tools to function, at least one location must be selected. Once selected, the Apply button will appear with an asterisks.
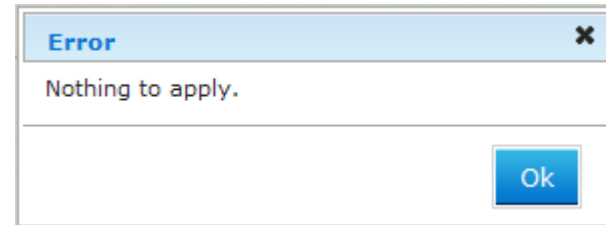

If Apply button is selected without a new location or analysis request selected, the following message will appear:

Toolbox - Find

FIND: Searching by Address (Canada only) or Sponsor location code can be performed using the Find tool. When the Go button is selected, the map will centre on the search result.

When the beginning of an address is entered, suggested results are shown below the entry, which can then be selected and searched on. The find tool can also be used to zoom to a general area or region, including province, city, FSA, or postal code.

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Toolbox – Trade Area

TRADE AREA: When one or more location is selected, trade areas can be created based on AIR MILES (AMRP) spend at the location(s). The pull-down allows for predefined trade area percentages. Trade areas are created by radiating out from a location until the desired percentage of spend is achieved (i.e. 60%).

A user-defined drive distance value can also be created around the locations. This allows for a more standard summary around selected locations.

Project location checkbox becomes active when a user-placed location is dropped, once the flag button (🚩) is selected on the button tool bar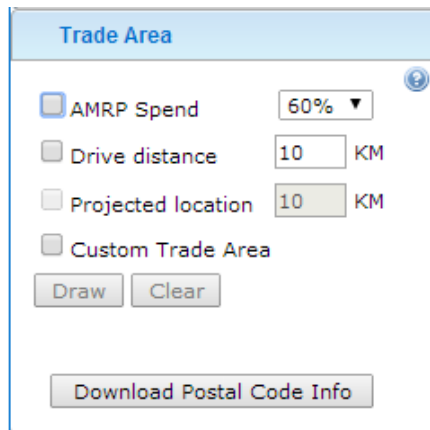. Once a site (🔻) is placed on the map, select the "Project Location" box, enter a distance, then select Apply. A user-defined drive distance polygon is drawn around the site, and can be referenced within the map or Reporting tool.

NEW A Custom trade area can be drawn by the user. Click the check box next to "Custom Trade Area", then click on the "Draw" button. Use your cursor to draw a custom polygon and double click to close the shape. Click the "Apply" button. The custom polygon is now ready for the info tool and reporting. While drawing the polygon if a mistake is made, click the "Clear" button and start over.

NEW Postal codes within a trade area can be extracted. Create any of the trade areas above and then click the "Download Postal code Info" button and a list of postal codes and the straight line distance is calculated between the postal code and the locations for each trade area. The postal codes can be viewed on the map by turning on the Postal Code layer.

Toolbox - HotSpot
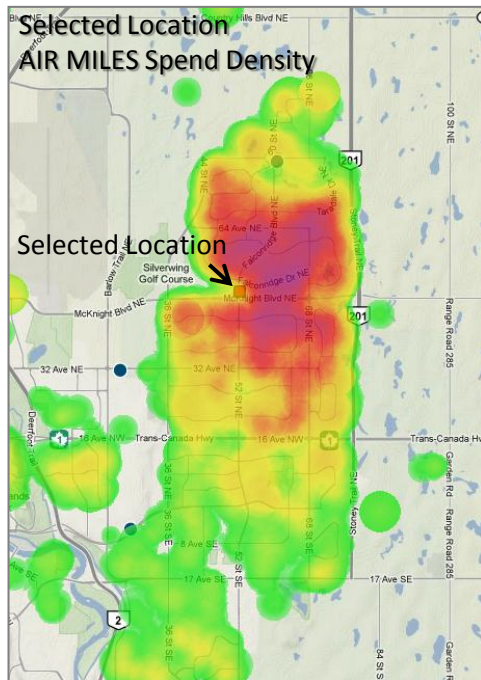
How to Read HotSpot Maps: HotSpot maps are created by using point level data (i.e. Collector addresses) and displaying the varying levels of densities, most commonly with 5 graduated colours. The purple areas represent the areas with the highest density, while the green areas represent the lowest. There are three options for HotSpot mapping.

AIR MILES Current Active
Density of AIR MILES Collectors who have been active in the program within the past 12 months at any Sponsor.

Sponsor Active
Density of activity for all Collectors active at any location within the selected time frame.

Selected Locations
Density of Collectors active at the selected location(s) within the selected time frame.

The following two options are available for Sponsor-active and selected locations only.
- AIR MILES Spend Density: HotSpot is created using the volume of AIR MILES spend
- Collector Density: HotSpot is created using the volume of Collectors

Opacity of the HotSpot layer can be adjusted in order to view the layers underneath the HotSpot.

In the example shown, the greatest density of AIR MILES Spend for the selected location is coming from within close proximity and more so to the east of the location.

Legend Viewer

The HotSpot maps have a legend that quantifies the values represented by each colour. In the example shown below, there are 5 ranges that show concentration of Collector spend at a location. Any custom layers found under the layer control can also have a legend.
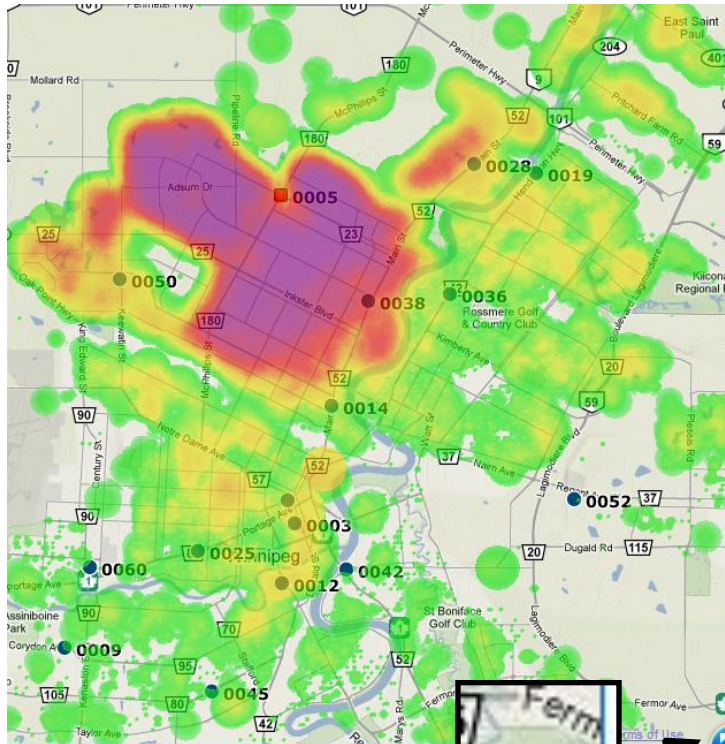
Clicking this icon will open the hotspot legend.

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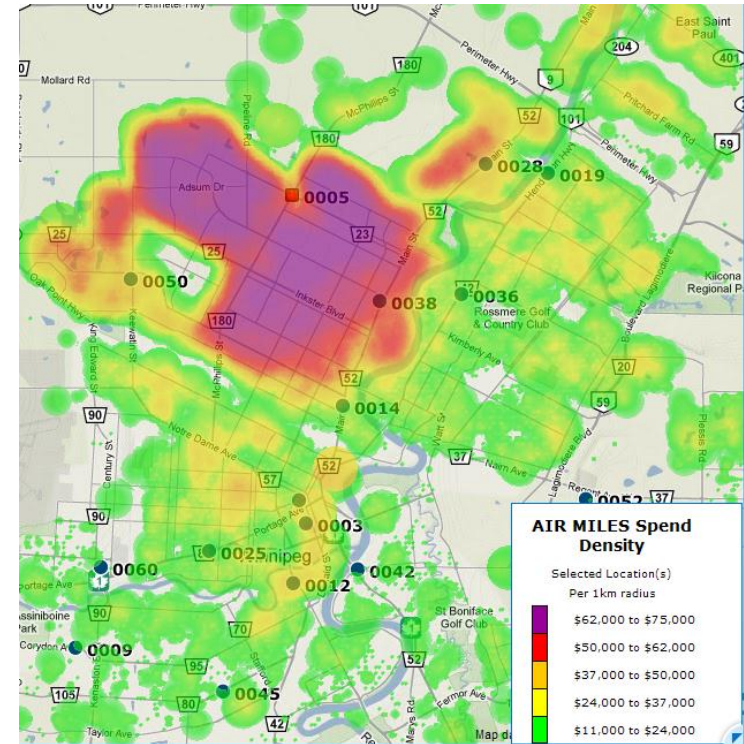
Toolbox – Neighbourhood Watch

Gain a visual understanding of the designation of locations to each neighbourhood, based on AIR MILES sales activity. **NEIGHBOURHOOD WATCH** allows for a more fiscal approach to defining store territories. When comparing different time frames, it will illustrate the impact of changes in the marketplace, such as new location openings on existing locations.

Neighbourhoods in this case are defined using Statistics Canada Dissemination Area (DA) boundaries. These boundaries represent between 400 and 700 persons, and are a fairly stable geographic area.

Using the AIR MILES data for the selected time frame each Collector has a DA assigned to them based on their reported address. All AIR MILES spend in each DA is aggregated to the location level…
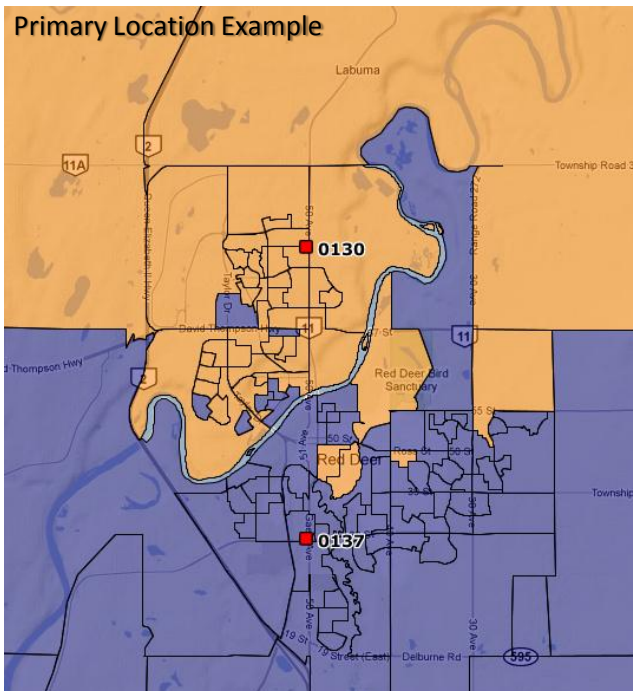
Primary Location
Neighbourhoods are coloured for the location that has the greatest amount of AIR MILES sales allocated.

Majority Location
Neighbourhoods are coloured for the location that has more than 50% of total AIR MILES sales allocated.

Interpreting the Maps
Typical patterns show clusters of neighbourhoods of one colour and the location they represent inside the cluster. This indicates that the neighbourhoods surrounding the location, for the most part, tend to shop at their closest location, a commonly seen pattern. When there are multiple coloured DA's clustered together, with no location near it, the sales activity reveals that there is no specific location allocated in this area, and Collectors living in these neighbourhoods travel to a variety of locations.

In the example shown, the light orange areas represent where location 0130 has more sales than location 0137, and the dark blue areas show where location 0137 spend exceeds 0130. This allows for a quick understanding of how these two locations cohabitate in the market and the impact proximity and a river has on consumer behaviour .

Primary Location Example

Compare

Compare →

Found in the bottom left corner of the application window, the Compare button creates two mapping screens which allows for side-by-side comparison of maps. The map on the right cannot be modified and is essentially a frozen image.

The map on the left is the master and when it is moved or zoomed the map on the right performs the same action.

This icon indicates that the 2 images are currently locked together allowing for simultaneous zooming and panning.

Clicking the padlock to the unlocked position allows for movement of each map individually, which if pressed again, re-synchronizes the map on the right to the map on the left.

The arrow towards the middle of the map window removes the map on the right making it a one-map screen again. Note: Once this arrow is selected the image on the right is lost.
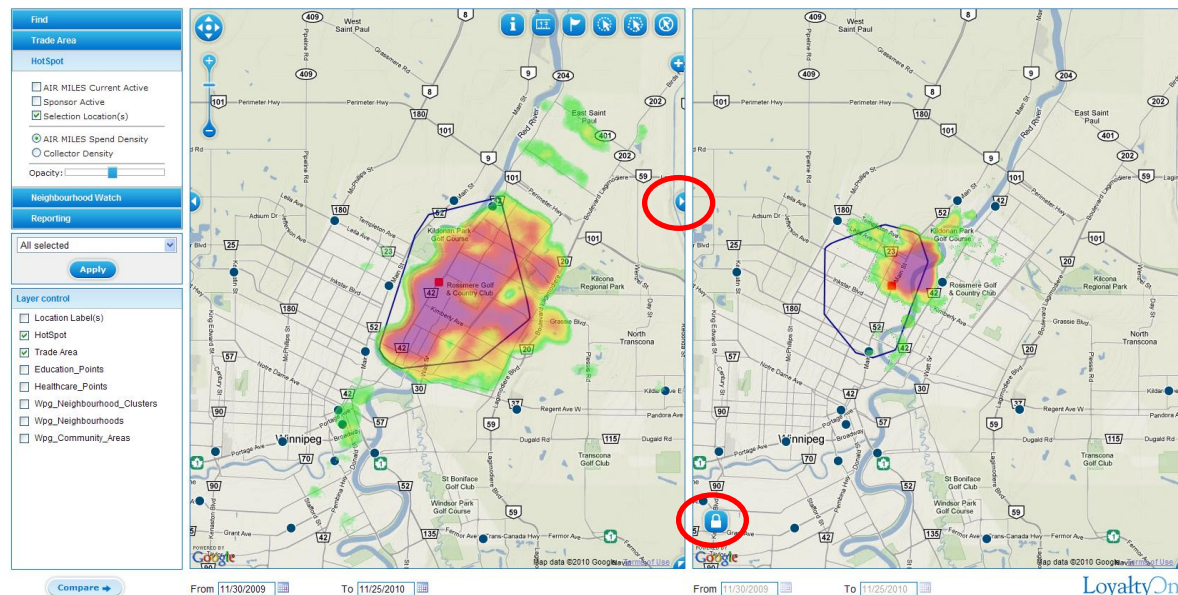
This example shows two locations and a trade area and hotspot created for each in comparison mode.

Toolbox - Reporting

The **REPORTING** tool offers two reports that are described in the following pages. The reports are output in pdf format which require Adobe Acrobat to open.

(1)
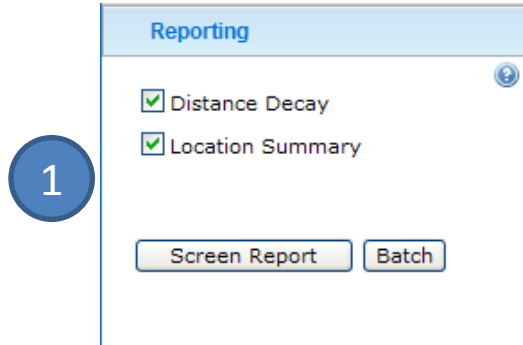
Screen Report
The map in the map window will be captured in the report, and the selected summaries will be created for locations that are selected in the application.

Batch
A report, along with a map and selected summaries, will be created for each selected location. The same information will be shown for each location based on the layers currently active in map view.

(2)
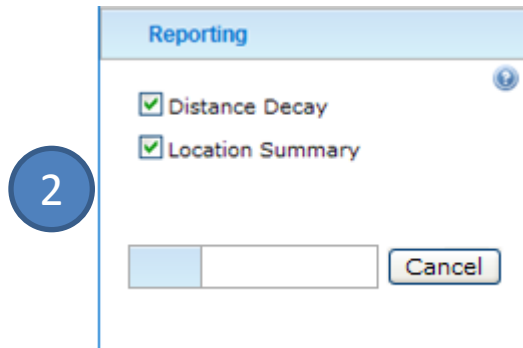
While reports are being created, a progress bar will be shown. Depending on the number of locations selected, batch reporting can take some time to process.

(3)
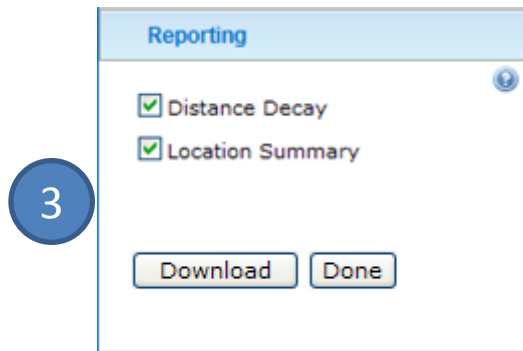
When reports are ready, a Download button will appear. Once downloaded, the done button can be pressed if another type of report is needed.

Reporting: Distance Decay

The distance decay summary breaks down the AIR MILES Collector activity surrounding a location and can assist with developing a local or regional target marketing campaign.

Distance Decay - Site #0435

Location 0435: Molson Park, Barrie, ON										
Distance Band (km)	Total AIR MILES Collectors past 12 Months	SPON Active Collectors	% of Total AIR MILES Collectors	Loc. 0435 Collectors	% Total Loc. 0435 Collectors	Loc. 0435 Transactions	Loc. 0435 AIR MILES Spend	Loc. 0435 Spend/Txn	% Loc. 0435 Total AIR MILES Spend	Running total
0-2	396	104	26.3%	37	0.3%	68	$ 3,319	$ 48.81	0.3%	0.3%
2-5	7,810	1,895	24.3%	1,353	10.3%	2,774	$ 133,820	$ 48.24	13.7%	14.0%
5-10	22,378	4,134	18.5%	2,349	17.9%	4,402	$ 210,401	$ 47.8	21.5%	35.5%
10-15	12,228	2,190	17.9%	1,303	9.9%	2,304	$ 108,909	$ 47.27	11.1%	46.6%
15-25	12,324	2,512	20.4%	1,228	9.3%	2,166	$ 103,392	$ 47.73	10.6%	57.2%
25-30	3,196	618	19.3%	283	2.2%	495	$ 22,262	$ 44.97	2.3%	59.5%
30-50	83,773	18,307	21.9%	1,406	10.7%	1,996	$ 92,237	$ 46.21	9.4%	68.9%
50+				5,081	38.7%	6,446	$ 297,287	$ 46.12	30.4%	99.3%
N/A				101	0.8%	138	$ 6,993	$ 50.67	0.7%	100.0%
Summary	142,105	29,760	20.9%	13,141	100.0%	20,789	$ 978,620	$ 47.07	100.0%	

Collector activity is summarized by distance band (i.e. 0-2km , 2-5km, etc.). Collector volumes and AIR MILES spend Activity at the AIR MILES program level, Sponsor level, and Sponsor location level are represented.

Note: *The values in the summary are specific to the time frame selected in the application with the exception of the second column which represents the current AIR MILES Collectors active in the past 12 months. The percent of total AIR MILES Collectors column is therefore subject to over/under representation unless the applications default time frame is used.*

Reporting: Location Summary

The location summary report provides a quick overview of the activity within a boundary which can assist with real estate exercises, in particular understanding the potential cannibalization impact a new location could have on existing ones.
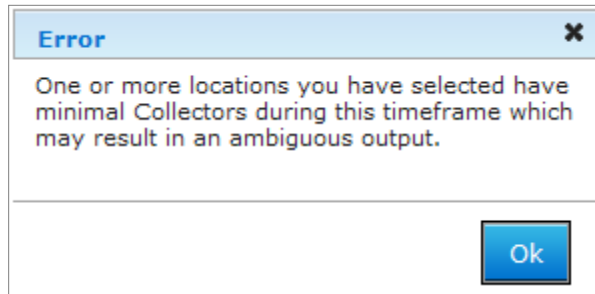
AMRP Location Code 0054: 60% Trade Area Summary (16,688 households)													
AMRP Location Code	Name	Distance to Loc. 0054 (km)	Collectors			Transactions			AIR MILES Spend			% of Total AM spend within TA
			Store Total	Within Trade Area	% of Total	Store Total	Within Trade Area	% of Total	Store Total	Within Trade Area	% of Total	
0054	Crestview Shop. Ctr	0	27,876	9,244	33.2%	208,298	132,139	63.4%	$ 9,372,464	$ 5,678,083	60.6%	58.2%
0008	Portage & Ainslie	2.8	22,594	5,233	23.2%	131,479	42,992	32.7%	$ 5,777,646	$ 1,867,275	32.3%	19.2%
0060	Madison Square	6.8	35,408	2,315	6.5%	142,828	7,640	5.3%	$ 6,940,816	$ 347,161	5.0%	3.6%
0026	Charleswood	3.7	19,504	1,953	10.0%	128,063	7,365	5.8%	$ 5,856,857	$ 328,456	5.6%	3.4%
0017	Kenaston Crossing	9.5	40,672	1,040	2.6%	176,851	2,740	1.5%	$ 10,298,737	$ 173,167	1.7%	1.8%
0074	Park West Express	2.5	8,414	653	7.8%	58,760	3,638	6.2%	$ 2,399,364	$ 150,521	6.3%	1.5%
0025	Portage & Burnell	9.1	25,114	946	3.8%	146,629	3,366	2.3%	$ 5,569,468	$ 124,962	2.2%	1.3%
0045	Grant Park Shop Ctr	9.8	34,616	879	2.5%	177,037	2,134	1.2%	$ 8,360,015	$ 97,697	1.2%	1.0%
0009	Tuxedo Shopping Ctr	6.5	17,490	677	3.9%	109,672	2,097	1.9%	$ 5,114,819	$ 84,066	1.6%	0.9%
0042	Dominion Shop Ctr	12.3	23,608	315	1.3%	128,321	1,269	1.0%	$ 5,847,197	$ 68,736	1.2%	0.7%
48 Other Locations			585,207	6,377	1.1%	3,464,763	20,012	0.6%	$ 159,961,211	$ 829,150	1%	8.5%
Summary			840,503	29,632	3.5%	4,872,701	225,392	4.6%	$ 225,498,594	$ 9,749,274	4%	100.0%

Within the boundary of a trade area, the user defined distance boundary of an existing location, the user defined distance boundary of a projected location, or a custom trade area, the AIR MILES spend and Collector activity is summarized, showing the 10 locations that have the most Spend in the boundary. The 11th row summarizes all of the remaining activity found in the boundary at all other locations. A Collector could have gone to multiple locations so the total Collector count is not unique.
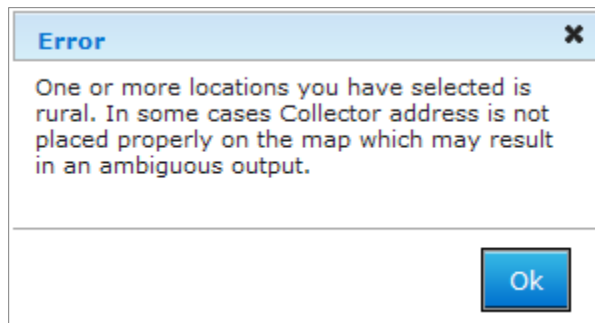
Appendix

Errors

Once the apply button is selected and the analysis has finished running, up to three different errors could show in any combination.

Error ✖
One or more locations you have selected have minimal Collectors during this timeframe which may result in an ambiguous output.
Ok

If a location has fewer than 100 Collectors, this message will appear. This could happen, if for example, the location has recently opened or the time frame defined is too small.

Error ✖
One or more locations you have selected is rural. In some cases Collector address is not placed properly on the map which may result in an ambiguous output.
Ok

Locations situated in rural settings may have data that creates an undesirable output. In many cases the address information for rural Collectors does not allow accurate placement on a map and will result in odd-shaped trade areas or hotspots maps that are very polarized.

Error ✖
There is insufficient data for one or more locations to create a Trade Area.
Ok
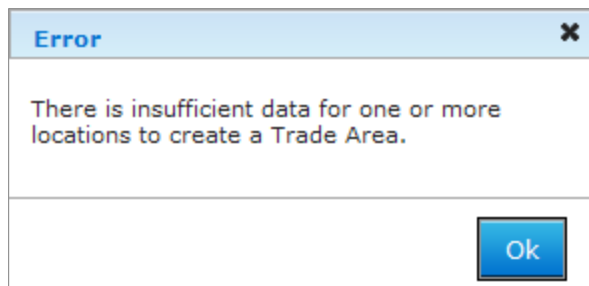
In order to create a trade area there must be a minimum amount of data present. If conditions are not met, the following message will appear.

Info Tool – Trade Area

The Info tool, when selected lets you point to something on the map (if listed in the layer control), to open a pop-up window that will display information about the object selected (i.e. Sponsor location, Trade Area, etc.)
The example below shows the information that is displayed for a trade area when the Info tool is used.

Info-tool Window	✖
Trade Area	
LOCATION CODE:	0054
TRADE AREA SIZE:	3.06 km
HOUSEHOLDS (CAN. POST):	16,688
AMRP COLLECTORS PAST 12 MONTHS:	15,004
MAILABLE:	14,195 (95%)
EMAILABLE:	7,239 (48%)
WEB ACTIVE:	13,035 (87%)
MOBILE ACTIVE:	0 (0%)
SPONSOR COLLECTORS:	11,202
SPONSOR AMRP PENETRATION:	75%
SPONSOR AMRP SPEND:	$9,705,196
LOCATION COLLECTORS:	9,222
LOCATION SPONSOR PENETRATION:	82%
LOCATION AMRP SPEND:	$5,665,092

For Projected trade area the same information is shown with the exception of location level information.

For custom trade area the same information is shown including the location level information separately for all locations selected.

Note: The fields described below represent the total values within the individual trade area.

LOCATION CODE: 4-character AIR MILES location code

TRADE AREA SIZE: The maximum distance a Collector active at the location travels within the trade area

HOUSEHOLDS (CAN. POST): Number of households (AIR MILES and NON AIR MILES)

NEW **AMRP COLLECTORS PAST 12 MONTHS:** Number of Collectors active in the AIR MILES program in the past 12 months

    MAILABLE: Number of AMRP Collectors that indicate promotional materials may be mailed to them by AIR MILES

    EMAILABLE: Number of AMRP Collectors that indicate promotional materials may be emailed to them by AIR MILES

NEW   **WEB ACTIVE:** Number of AMRP Collectors that have ever logged into the AIR MILES websites (www.airmiles.ca and/or www.airmilesshops.ca)

    MOBILE ACTIVE: Number of AMRP Collectors that have ever logged into the AIR MILES mobile app

SPONSOR COLLECTORS: Number of Collectors active at any of the Sponsor locations within the user selected timeframe

SPONSOR AMRP PENETRATION: Sponsor Collectors vs. AMRP Collectors (Note the two numbers do not represent the same time frame)

SPONSOR AMRP SPEND: AIR MILES Spend at any of the Sponsor locations within the user-selected time frame

LOCATION COLLECTORS: Number of Collectors active at the Sponsor location within the user-selected time frame

LOCATION SPONSOR PENETRATION: Location Collectors vs. Sponsor Collectors

LOCATION AMRP SPEND: AIR MILES Spend at the Sponsor location within the user-selected time frame

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