

Unlocking New Horizons: The 24Seven Expansion Blueprint

Product Proposal

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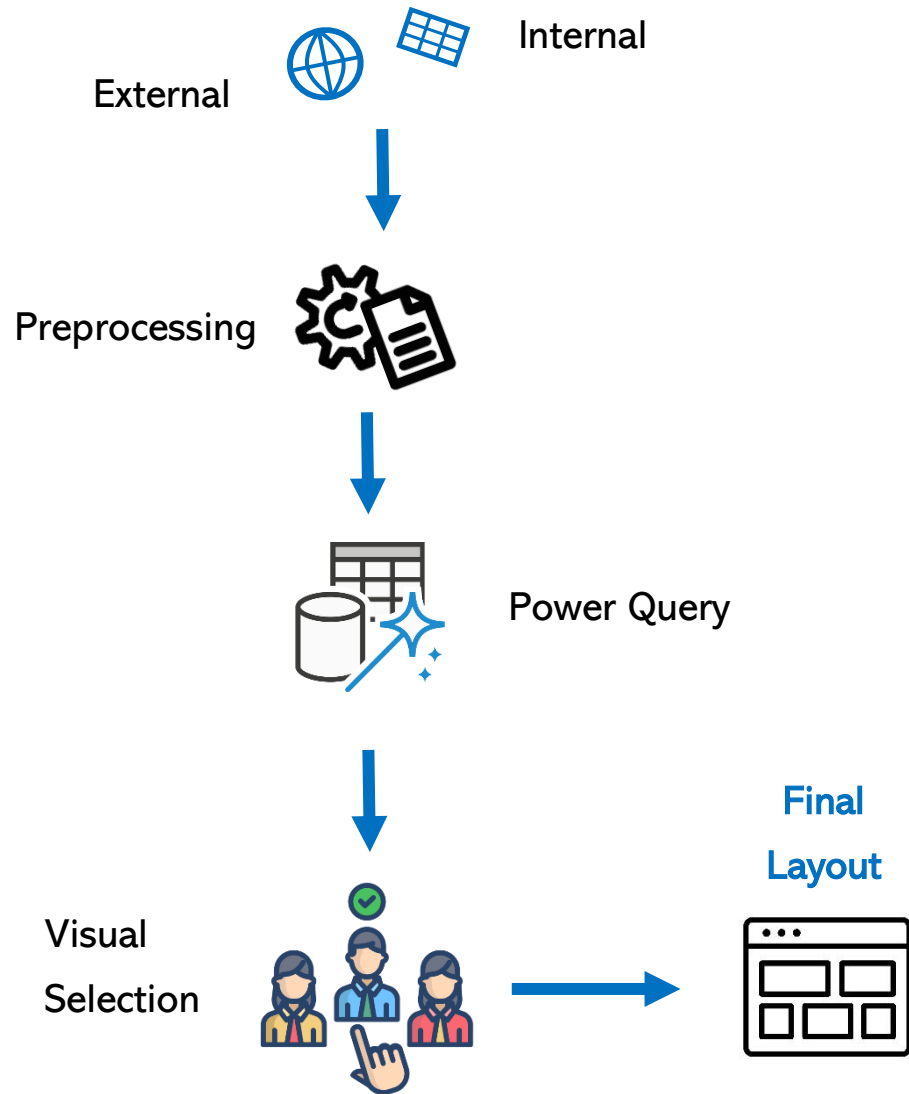
INSY 695-077 | Advanced Visualization with Power BI

Team 8

Use Case Outline

- About 24Seven
- Data Ingestion
- Data Preparation & Pre-processing
- Dashboard Overview
 - Sales Trends & Performance
 - Demographic Analysis
 - Territory Analysis
 - Projections Analysis
- Summary
- Appendices

Data Ingestion



Data Sources:

- External
- Internal

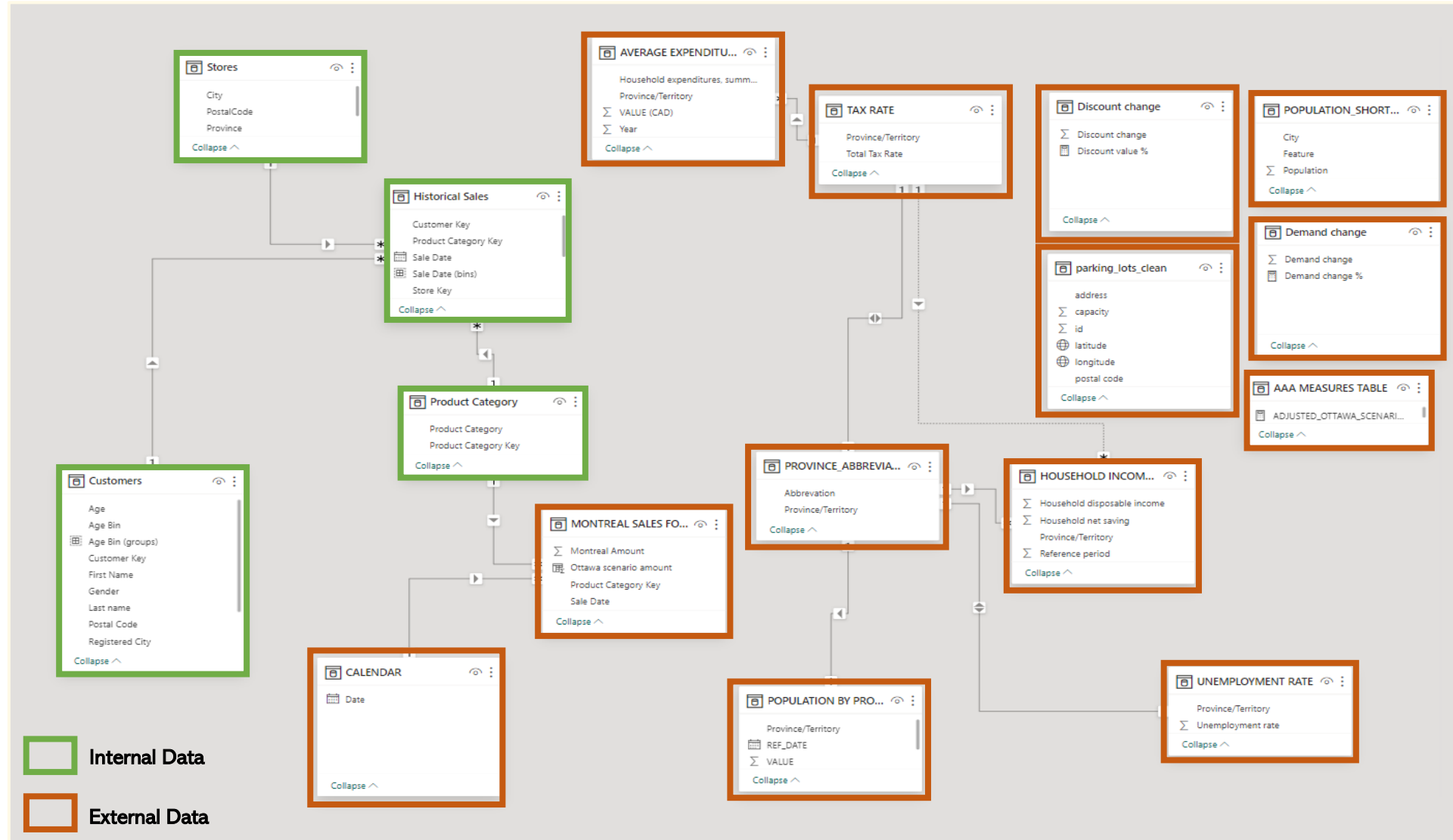
Preprocessing: This step involves cleaning and preparing the data for analysis. Preprocessing included removing duplicates, handling missing values, normalizing data, and other data cleaning tasks to ensure data quality.

Power Query: Power BI feature that enabled us to perform data transformation and the preparation of data for analysis. It allowed us to connect to various data sources, transform the data as needed, and load it into our model.

Visual Selection: This step involved choosing appropriate visualizations for the processed data. It was about selecting the right types of charts, graphs, etc. that will effectively communicate the insights from the data.

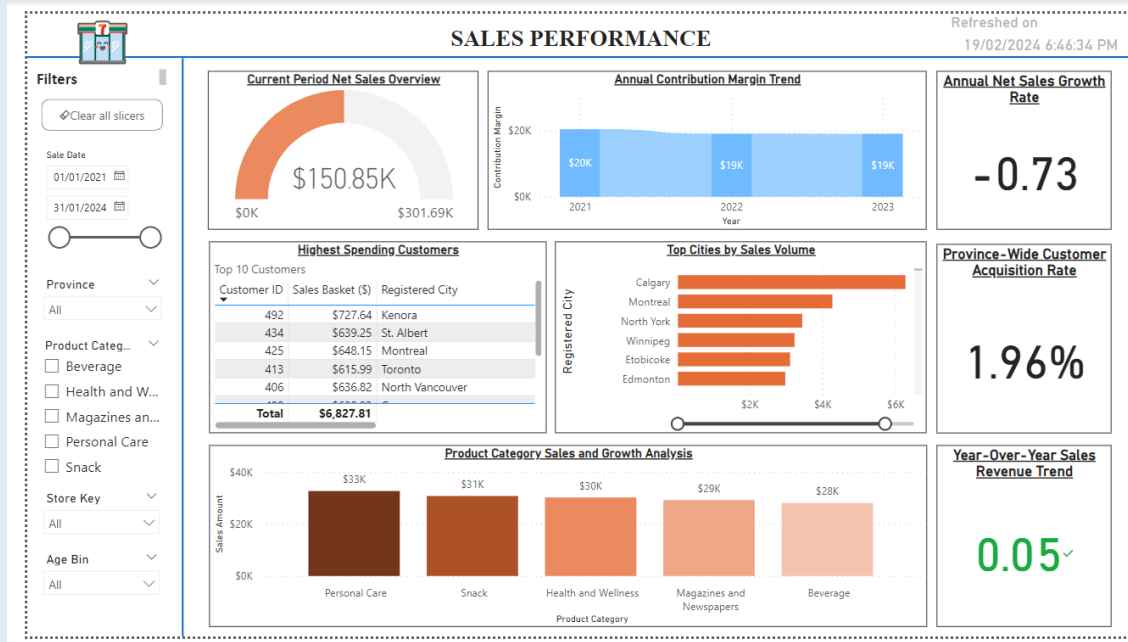
Layout: The final step in the process is designing the layout of the dashboard. It involved arranging the selected visualizations in a logical and aesthetically pleasing manner to facilitate understanding and drive informed decision-making.

Model View and Relations



Sales Performance Analysis

Objective: Examine the sales performance to optimize strategies for 24Seven's expansion and revenue growth.



Key Insights

- Differences in sales by product category
- Variations in sales growth highlighting the need for flexible business strategies.
- An effective customer acquisition rate of 1.96% - indicator of market penetration and the success of future marketing strategies.

Aaron, Supply Chain Manager

Our year-over-year sales revenue trend, has highlighted the need for strategic agility. It's imperative that we stay responsive to market conditions to maintain the remarkable momentum we have built.

Celine, Business Strategist

The robust increase in net sales to \$95.6K this period from \$20.23K previously is a testament to our effective market strategies and product appeal.



KPI 1 Net Sales Trends & Avg Transaction Values

KPI 2 Profitability across product categories

KPI 3 Customer acquisition rates



SALES PERFORMANCE

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Filters

Clear all slicers

Sale Date

01/01/2021

31/01/2024

Province

All

Product Categ...

- ☐ Beverage
- ☐ Health and W...
- ☐ Magazines an...
- ☐ Personal Care
- ☐ Snack

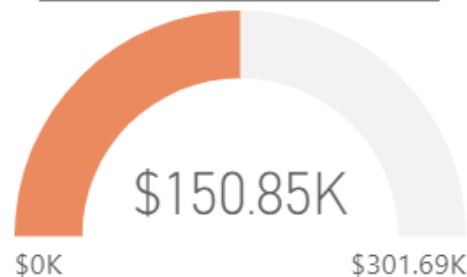
Store Key

All

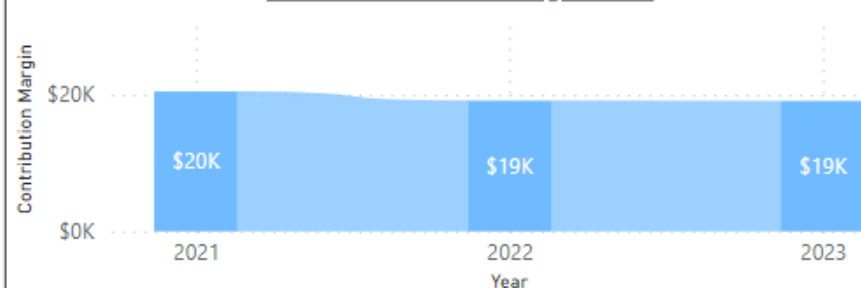
Age Bin

All

Current Period Net Sales Overview



Annual Contribution Margin Trend



Annual Net Sales Growth Rate

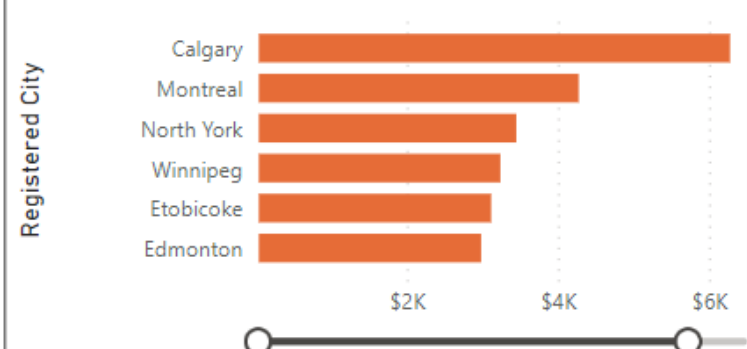
-0.73

Highest Spending Customers

Top 10 Customers

Customer ID	Sales Basket (\$)	Registered City
492	\$727.64	Kenora
434	\$639.25	St. Albert
425	\$648.15	Montreal
413	\$615.99	Toronto
406	\$636.82	North Vancouver
Total		\$6,827.81

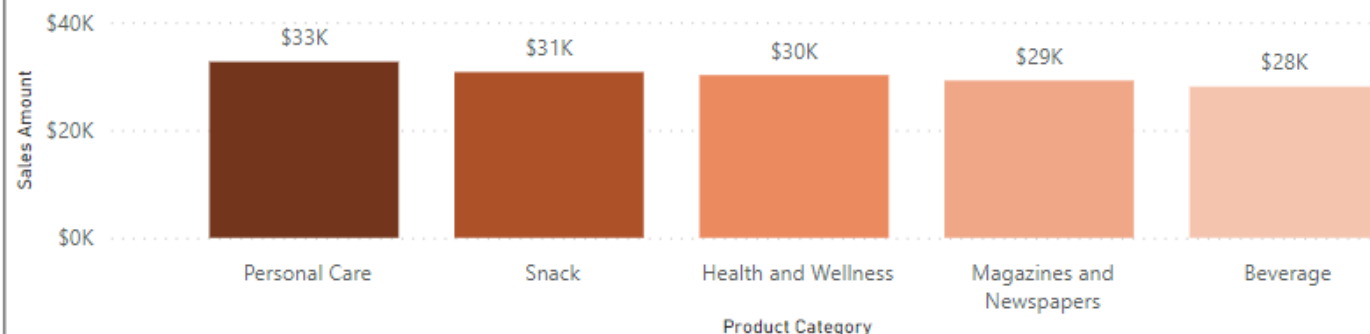
Top Cities by Sales Volume



Province-Wide Customer Acquisition Rate

1.96%

Product Category Sales and Growth Analysis



Year-Over-Year Sales Revenue Trend

0.05✓



Sales Analysis

SALES PERFORMANCE

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Filters

Clear all slicers

Sale Date

01/01/2023

31/12/2023

Province

All

Province

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Age Bin

All

Current Period Net Sales Overview

Annual Contribution Margin Trend

Annual Net Sales Growth Rate

-0.73

Province-Wide Customer Acquisition Rate

1.96%

Year-Over-Year Sales Revenue Trend

0.05✓

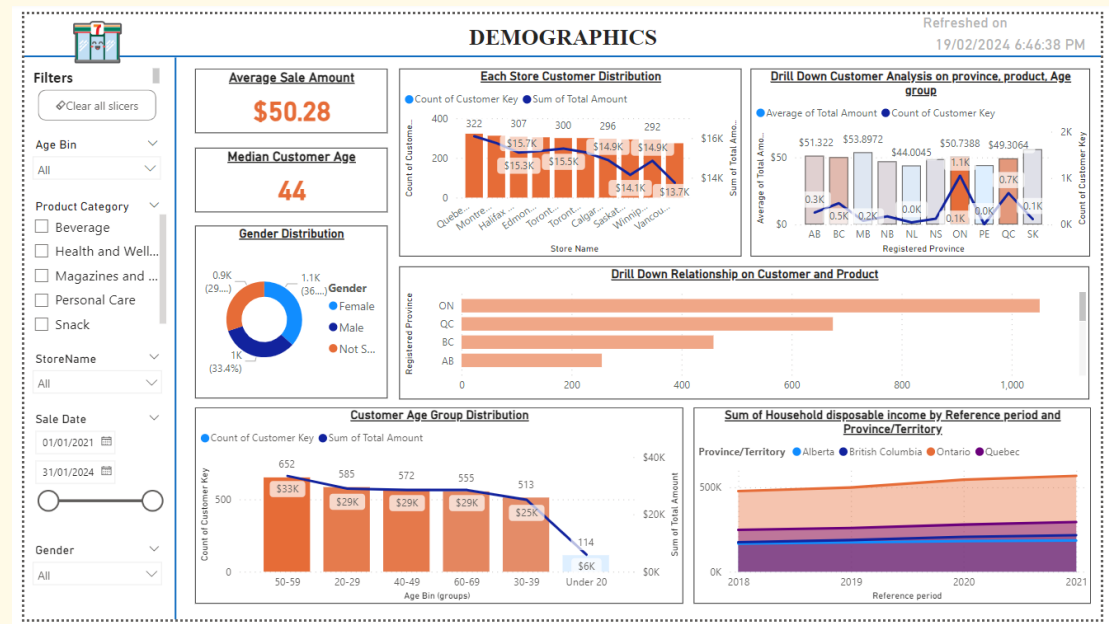
DAX Code Snippet

```
Total Potential Customers by Province =
SUMX(
    VALUES('POPULATION'[GEO]), // Unique list of provinces
    CALCULATE(
        MAX('POPULATION'[POPULATION]), // Assuming we take the most recent population figure
        per province
        LASTDATE('POPULATION'[REF_DATE]) // The most recent date for the population data
    ) * SWITCH(
        TRUE(),
        'POPULATION'[GEO] = "Ontario", 0.07, // Assuming 7% for Ontario
        'POPULATION'[GEO] = "Quebec", 0.065, // Assuming 6.5% for Quebec
        'POPULATION'[GEO] = "British Columbia", 0.06, // BC
        'POPULATION'[GEO] = "Alberta", 0.055, // Alberta
        'POPULATION'[GEO] = "Manitoba", 0.05, // Manitoba
        'POPULATION'[GEO] = "Saskatchewan", 0.05, // Saskatchewan
        'POPULATION'[GEO] = "Nova Scotia", 0.05, // Nova Scotia
        'POPULATION'[GEO] = "New Brunswick", 0.045, // New Brunswick
        'POPULATION'[GEO] = "Newfoundland and Labrador", 0.045, // Newfoundland and Labrador
        'POPULATION'[GEO] = "Prince Edward Island", 0.04, // Prince Edward Island
        'POPULATION'[GEO] = "Northwest Territories", 0.035, // Northwest Territories
        'POPULATION'[GEO] = "Yukon", 0.035, // Yukon
        'POPULATION'[GEO] = "Nunavut", 0.035, // Nunavut
        0.04 // Default for any other or unspecified province
    )
)
```

```
Customer Acquisition Rate by Province =
CALCULATE(
    DIVIDE(
        DISTINCTCOUNT('Customers'[Customer Key]),
        [Total Potential Customers by Province],
        0
    ) * 100,
    ALL('Customers')
)
```

Demographic Analysis

Objective: Track store's current demographic to uncover the best province for 11th store.



KPI 1

Age Distribution

KPI 2

Provincial Registered Population

KPI 3

External: Average Household Income

Key Insights

- Median Customer Age is 44, and 50-59 represents the most customer age group.
- Ontario has the largest customer base (registered customers) and the highest household income compared to other provinces.
- Many people register in one province but purchase from the other province.

Jacob,
Product Development Manager

With demographic insights, we can innovate products that resonate with our core user demographics, ensuring we meet their needs.

Sophia,
Marketing Manager

Demographic analysis sharpens our marketing strategies to engage our target audience more effectively.





DEMOGRAPHICS

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Filters

Clear all slicers

Age Bin

All

Product Category

- ☐ Beverage
- ☐ Health and Well...
- ☐ Magazines and ...
- ☐ Personal Care
- ☐ Snack

StoreName

All

Sale Date

01/01/2021

31/01/2024

Gender

All

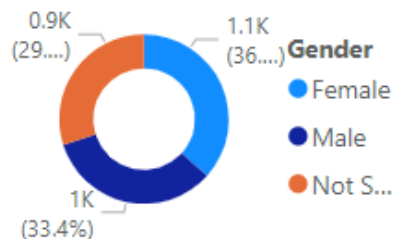
Average Sale Amount

\$50.28

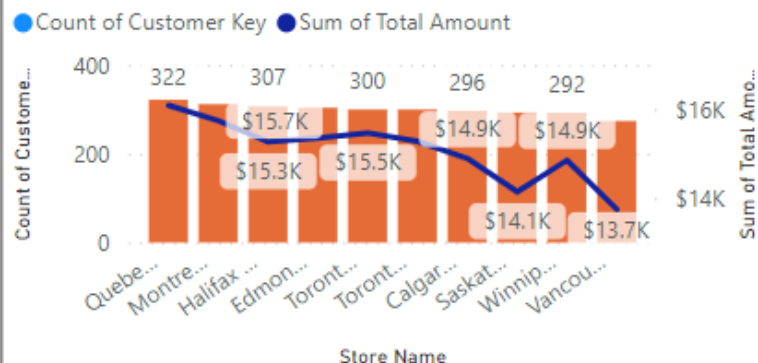
Median Customer Age

44

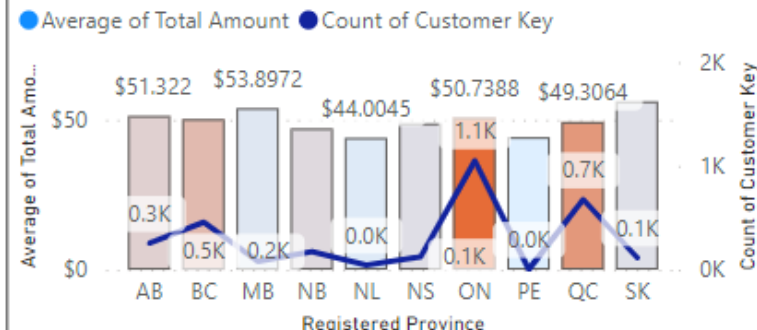
Gender Distribution



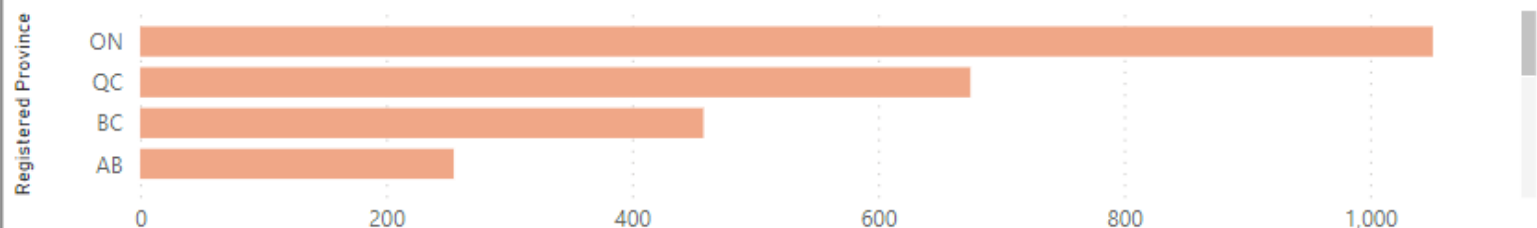
Each Store Customer Distribution



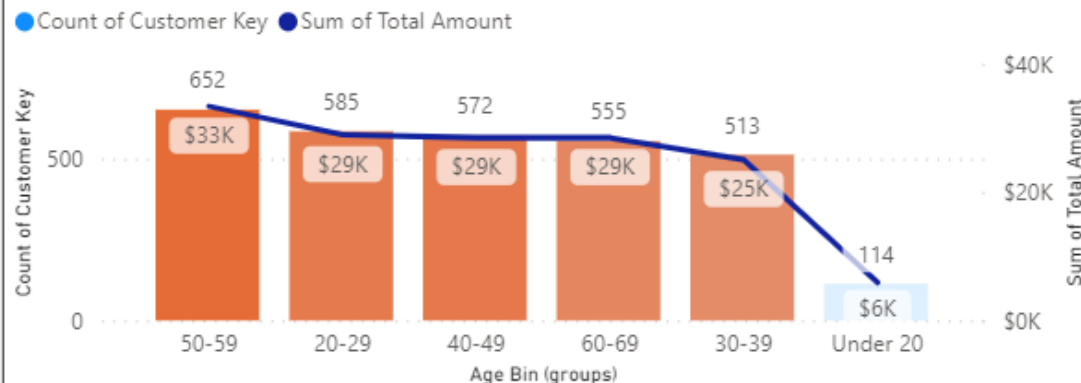
Drill Down Customer Analysis on province, product, Age group



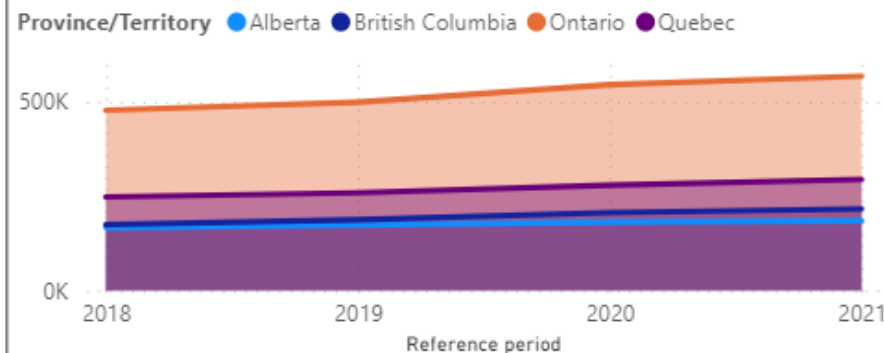
Drill Down Relationship on Customer and Product



Customer Age Group Distribution

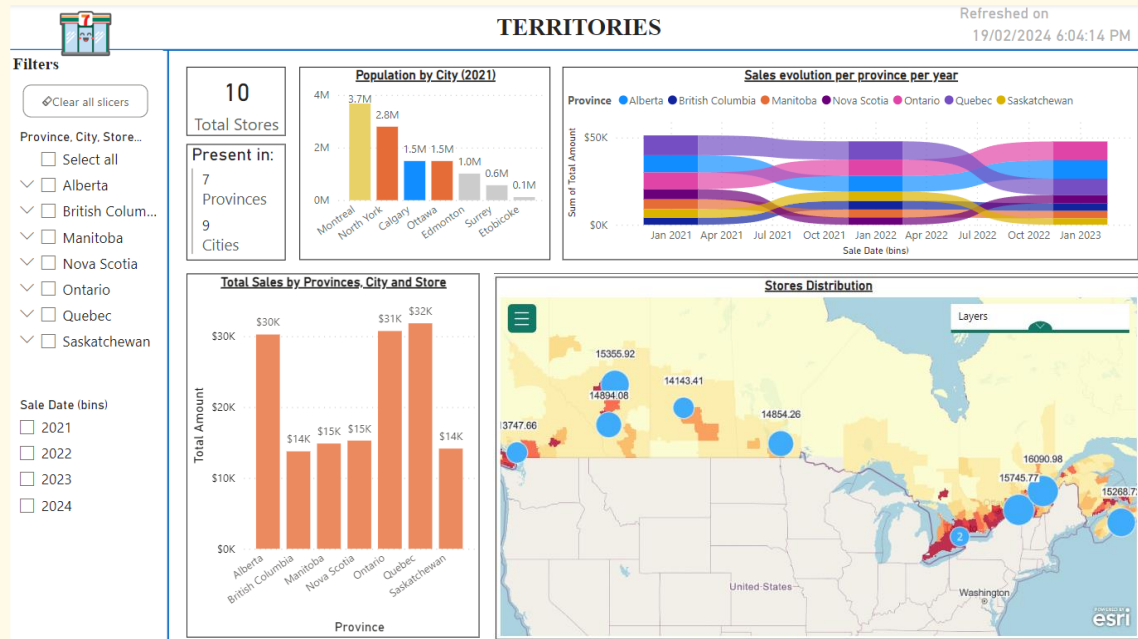


Sum of Household disposable income by Reference period and Province/Territory



Territories Analysis

Objective: Track stores locations and uncover the best provinces for the 11th store.



Key Insights

- Ontario is the biggest province in terms of sales in 2023
- Most of the population density is concentrated in the southern part of Canada
- Canada's capital city (Ottawa) doesn't have any 24/7 stores

Marc, Business Analyst

The interactive map allows me to zoom into certain regions to get granular data. It's amazing!

Emma, Regional Sales Manager

I can use the drill down function to get the sales for each city and stores. This makes my job so much easier!



KPI 1

Sales per Province

KPI 2

Population Density

KPI 3

Population per target city



TERRITORIES

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Filters

Clear all slicers

Province, City, Store...

- ☐ Select all
- ☒ Alberta
- ☒ British Colum...
- ☒ Manitoba
- ☒ Nova Scotia
- ☒ Ontario
- ☒ Quebec
- ☒ Saskatchewan

Sale Date (bins)

- ☐ 2021
- ☐ 2022
- ☐ 2023
- ☐ 2024

10

Total Stores

Present in:

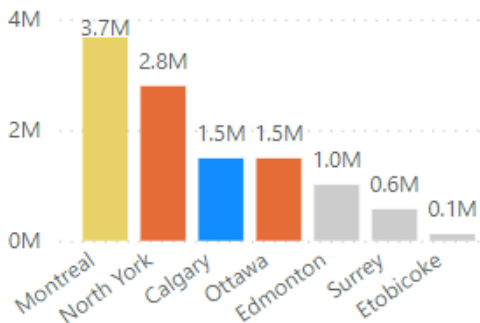
7

Provinces

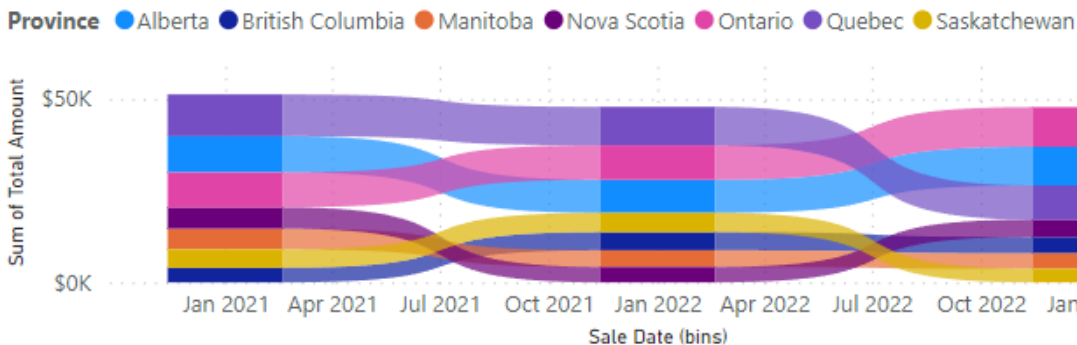
9

Cities

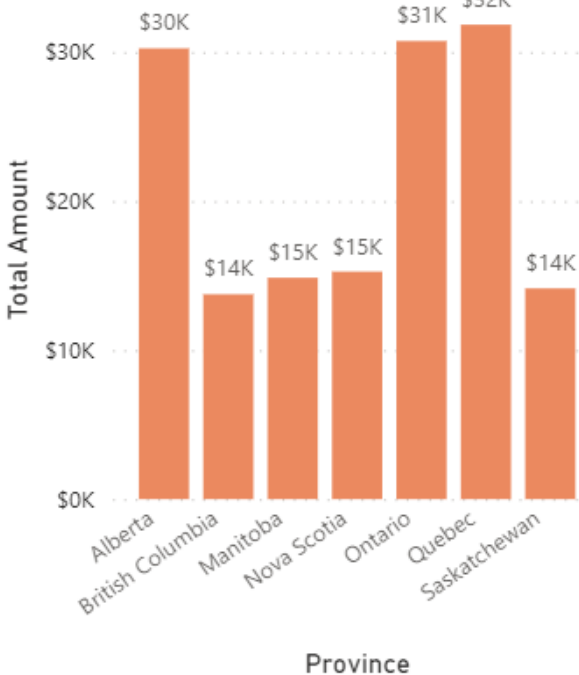
Population by City (2021)



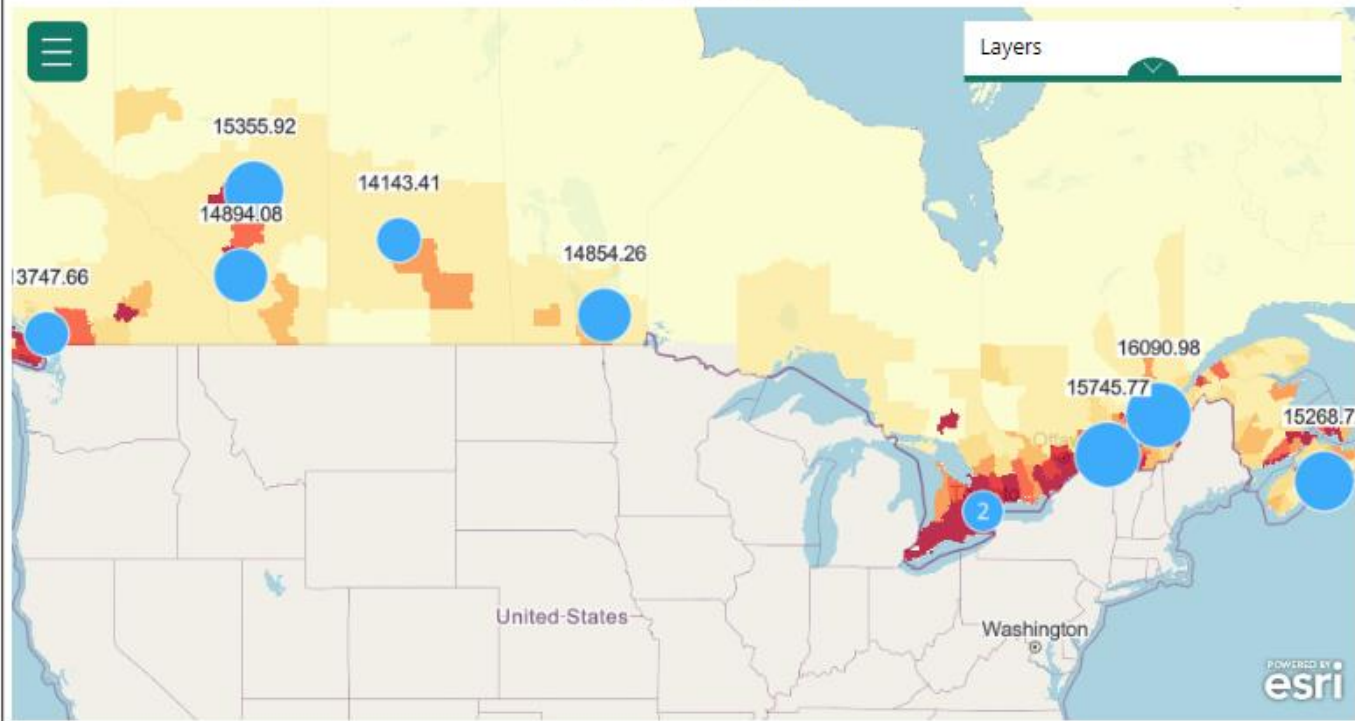
Sales evolution per province per year

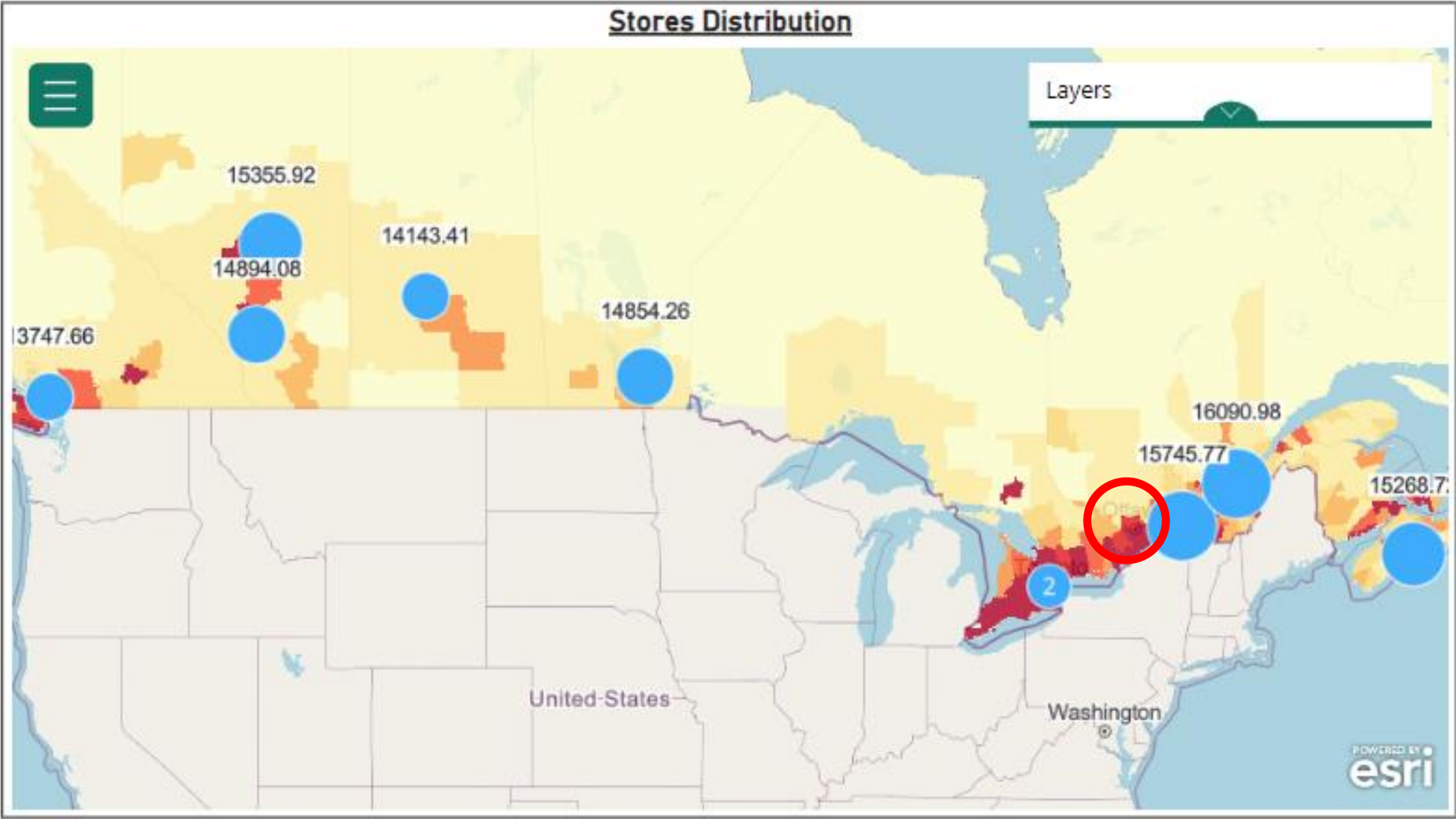


Total Sales by Provinces, City and Store



Stores Distribution





An aerial, slightly blurred photograph of a European town, likely in France or Germany, featuring numerous half-timbered houses with colorful facades (pink, yellow, green, and white) and dark wooden beams. The houses are densely packed, with some having multiple stories and dormer windows. Green trees are interspersed among the buildings. The overall scene is captured from a high angle, looking down on the town.

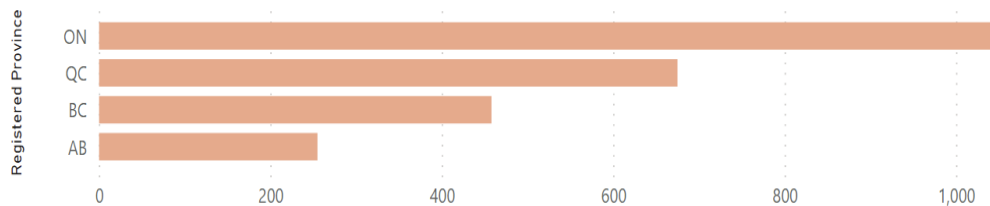
Where in Canada?

Top 10 Provinces

1. Etobicoke, ON
2. North York, ON
3. Ottawa, ON
4. Montreal, QC - second store
5. Surrey, BC
6. Calgary, AB - second store
7. Edmonton, AB



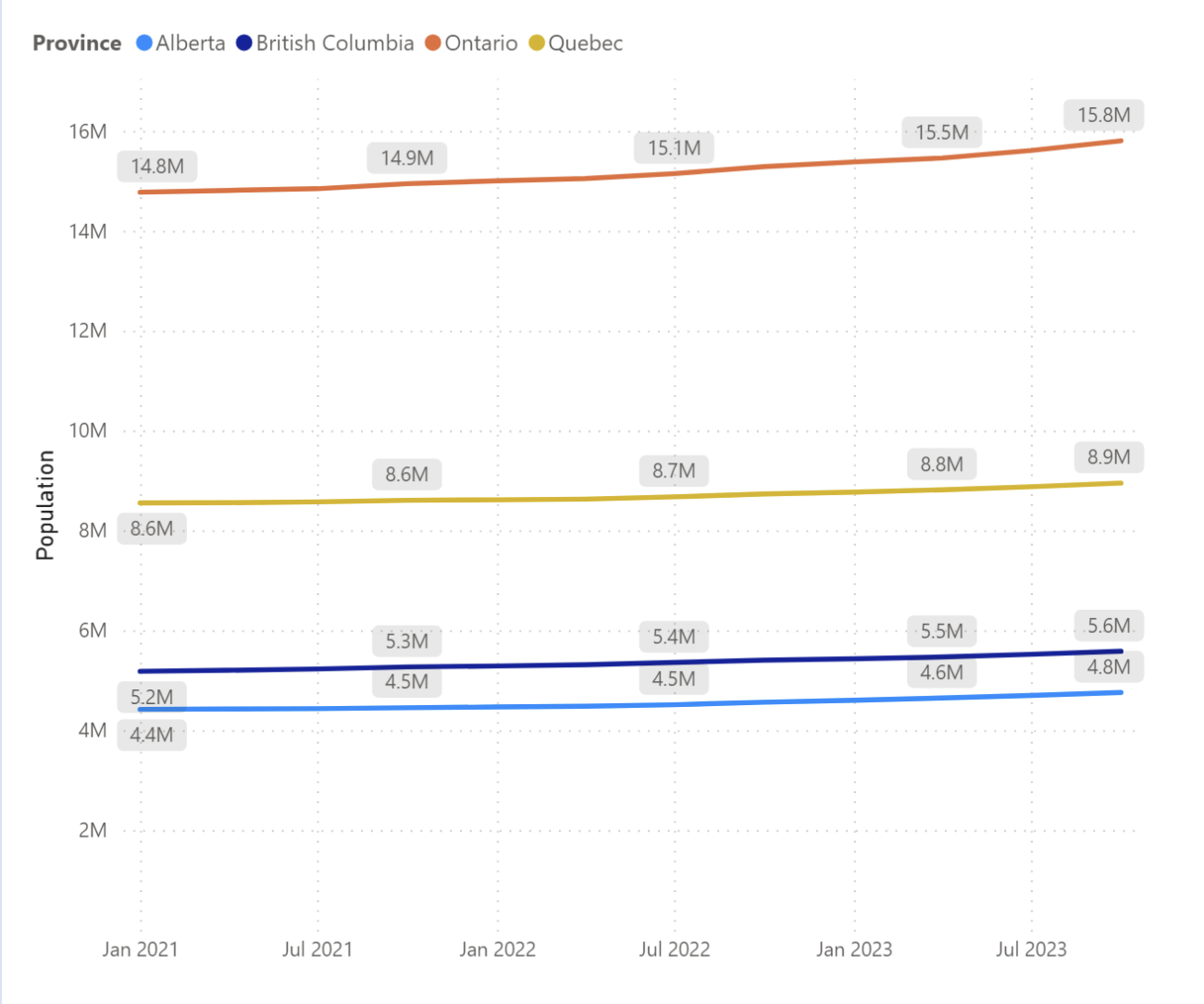
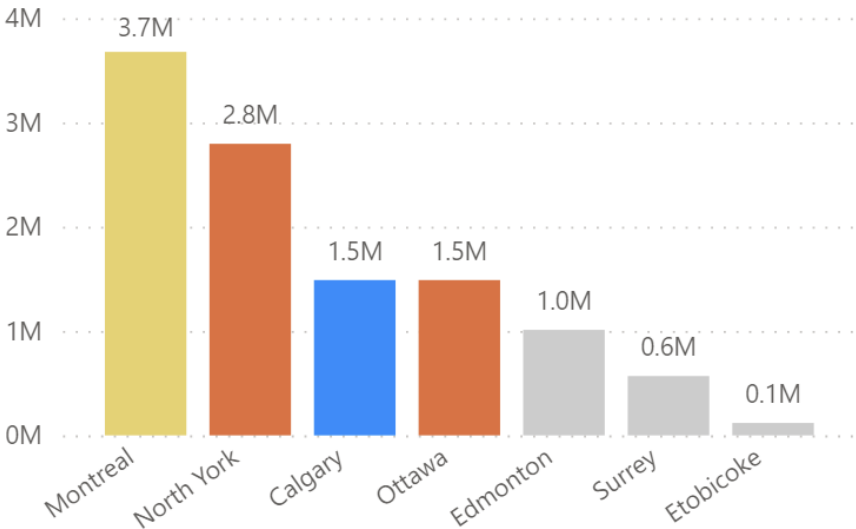
Customers by Province



How is Population Size?

- 1. Montreal, QC
- 2. North York, ON
- 3. Calgary, AB
- 4. Ottawa, ON
- 5. Etobicoke, ON
- 6. Surrey, BC
- 7. Edmonton, AB

Population By City



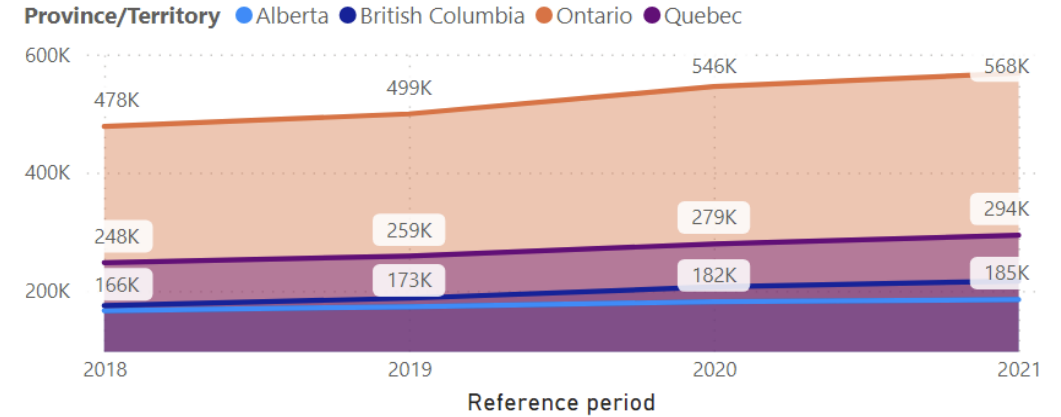
How is Household Income?

1. Ottawa, ON
2. North York, ON
3. Montreal, QC
4. Etobicoke, ON
5. Surrey, BC
6. Calgary, AB
7. Edmonton, AB

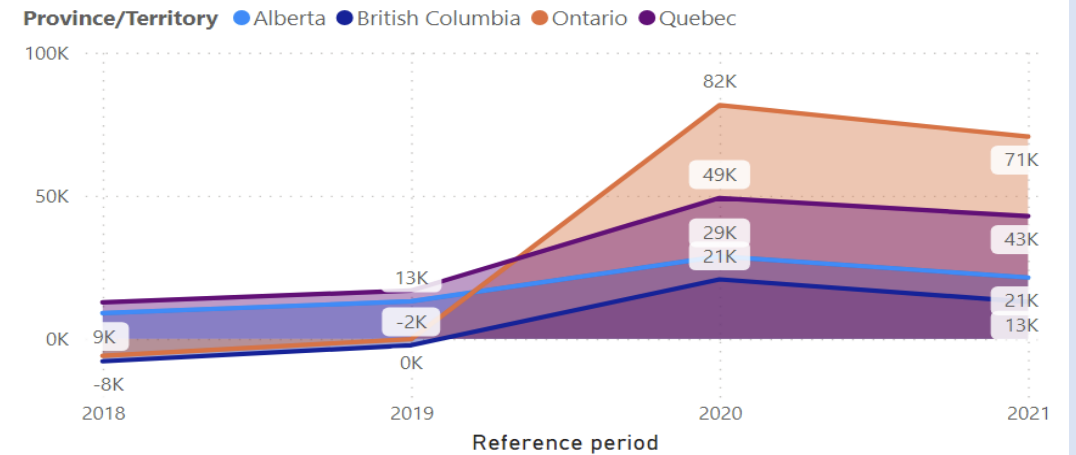
Household disposable income has been the highest for Ontario since 2018. AB and BC have low household disposable income and household net savings on average.

Data source: StatsCan

Household Disposable Income



Household Net Savings



Where in Ottawa?

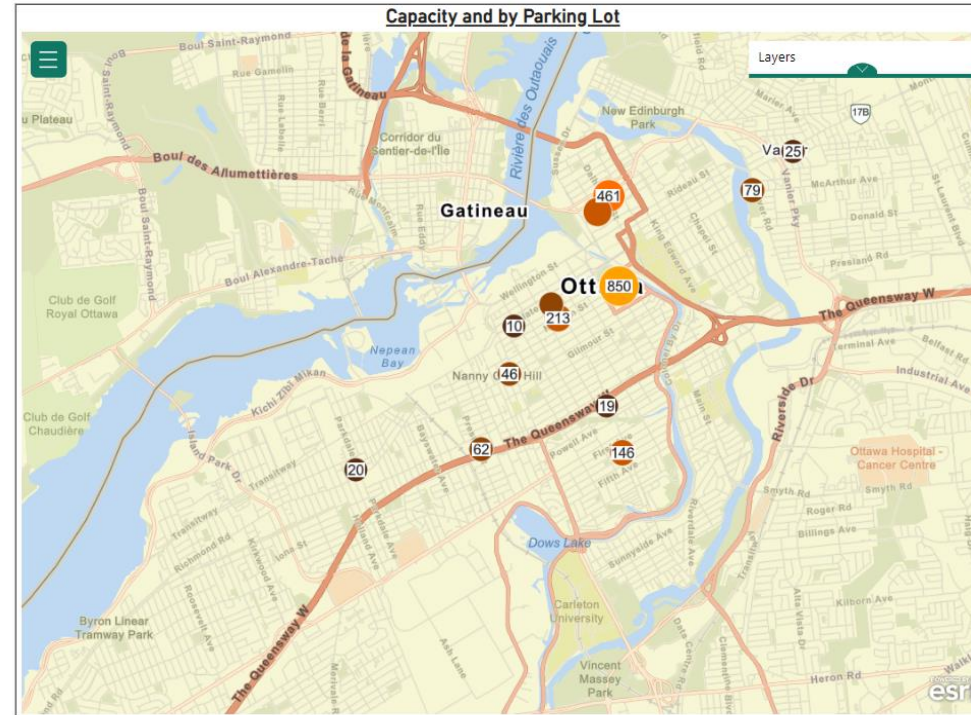
Why Ottawa:

- Growing population: 1.5M
- High household disposable income (568k) and net savings (71k)
- Capital city

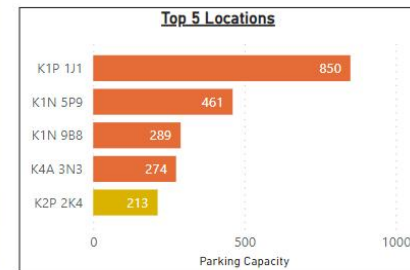
Using the number of parking spaces, we can infer traffic level.

INFER TRAFFIC THROUGH PARKING LOTS

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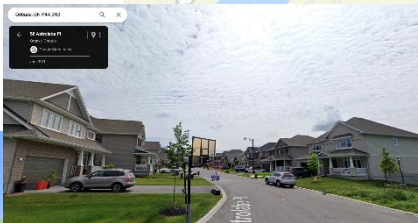
Parking Address	Postal code	Capacity
110 Laurier Ave.	K1P 1J1	850
141 Clarence St.	K1N 5P9	461
70 Clarence St.	K1N 9B8	289
789 Trim Rd.	K4A 3N3	274
210 Gloucester St.	K2P 2K4	213
2950 Riverside Dr.	K1V 6M8	186
170 Second Ave.	K1S 2H6	146
400 North River Rd.	K1L 8C2	79
234-250 Slater St.	K1P 1C2	65
301 Preston St.	K1R 7R6	62
687 Somerset St. W	K1R 6P3	46
283 Cyr Ave.	K1L 7N6	25
366 Parkdale Ave.	K1Y 1G6	20
574 Bank St.	K1S 3T3	19
422 Slater St.	K1R 5V9	10



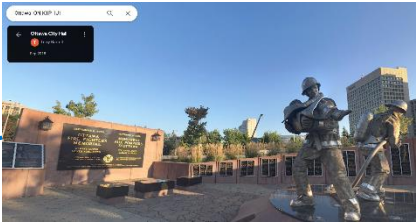
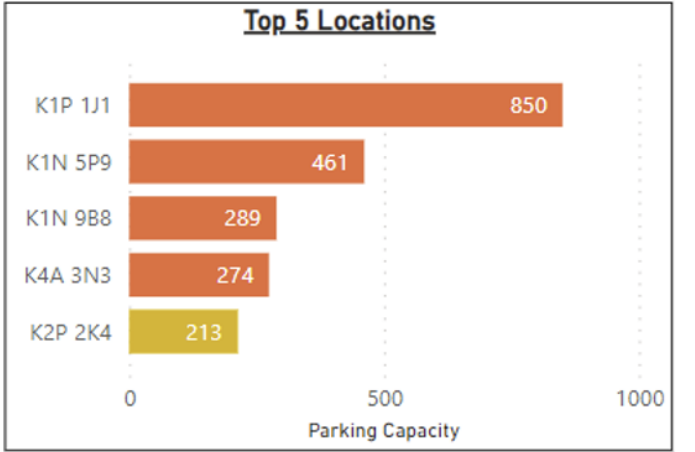
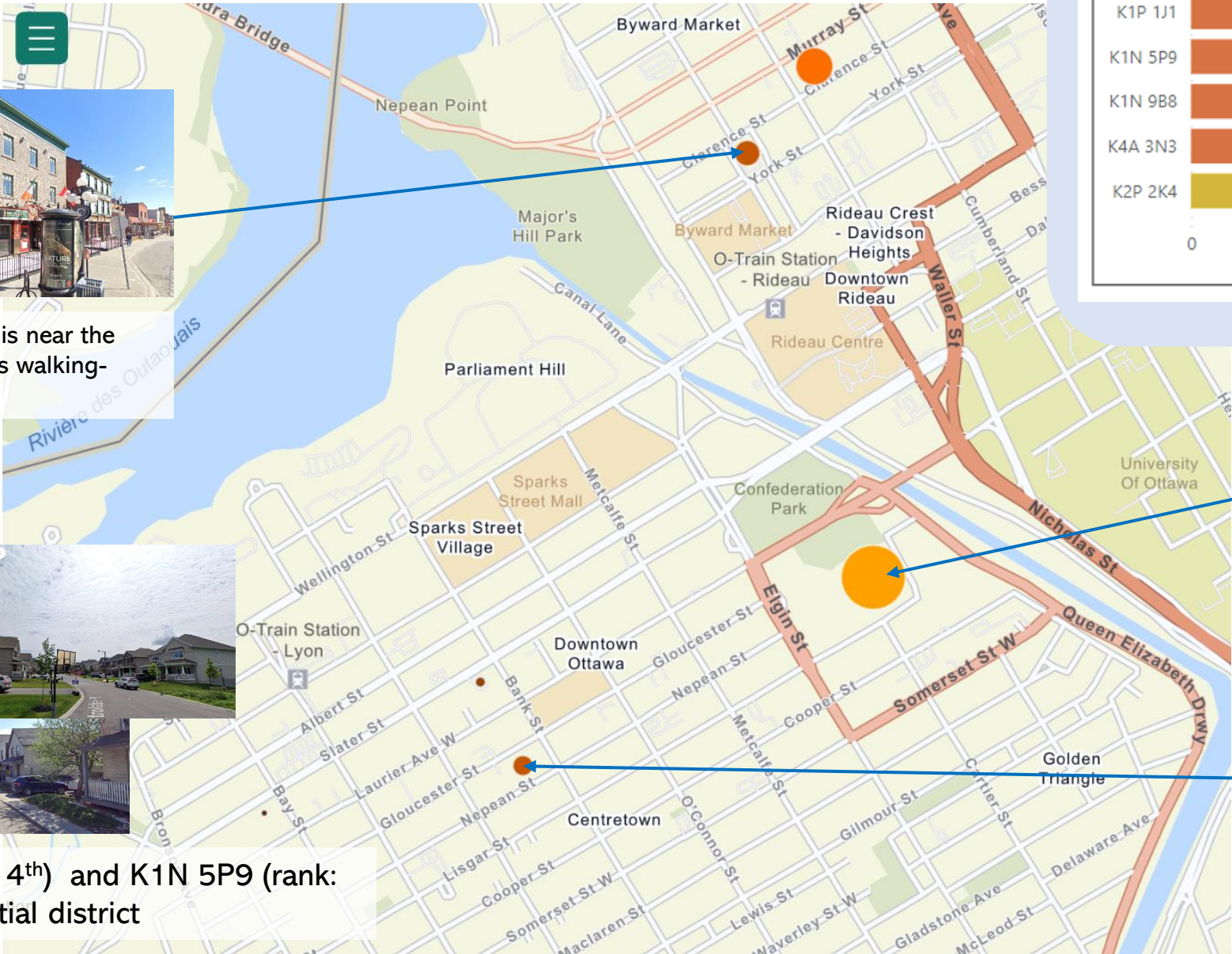
Where in Ottawa?



K1N 9B8 (rank 3rd) is near the train station and has walking-friendly streets!



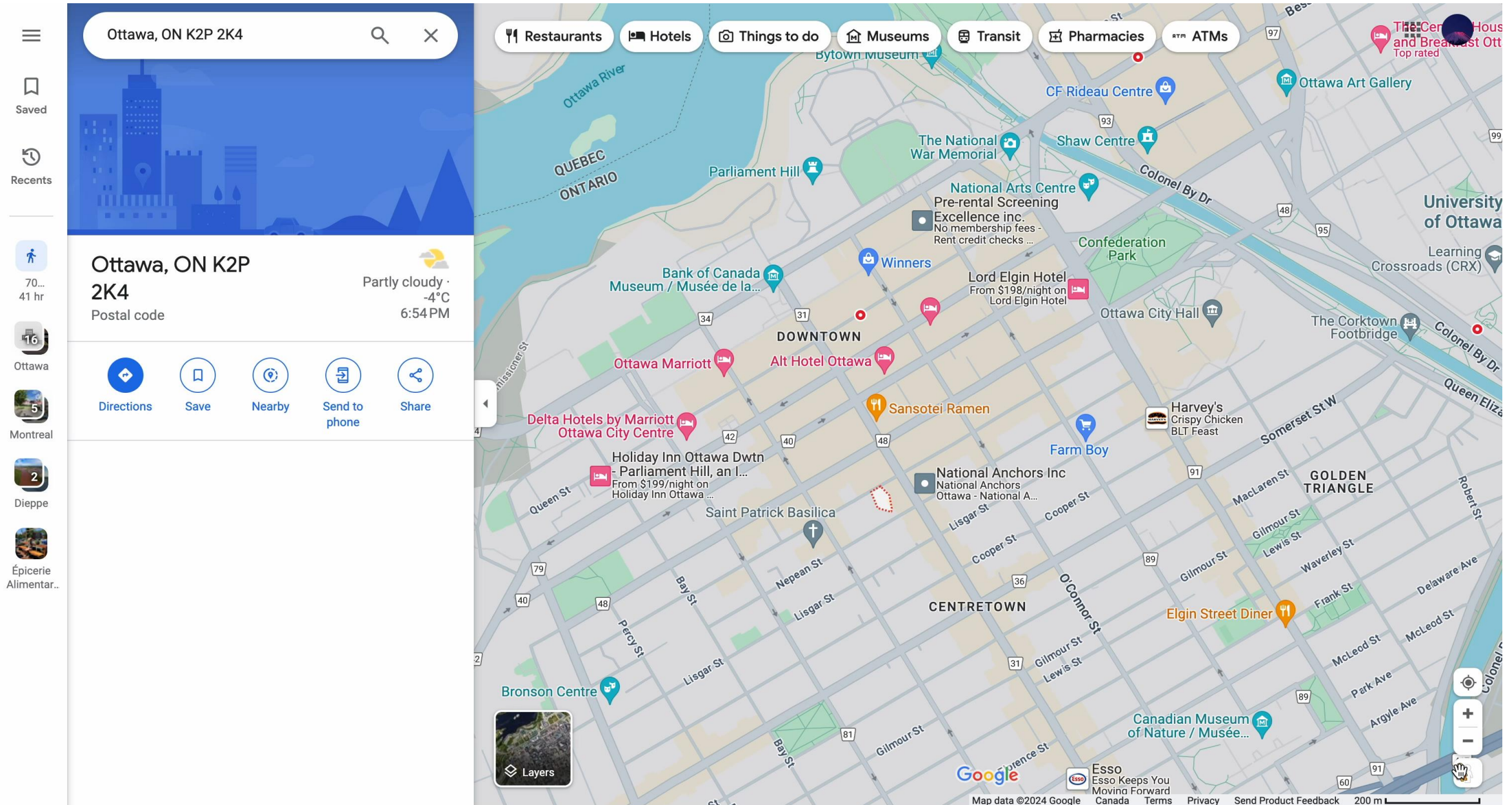
K4A 3N3 (rank: 4th) and K1N 5P9 (rank: 2nd) are residential district



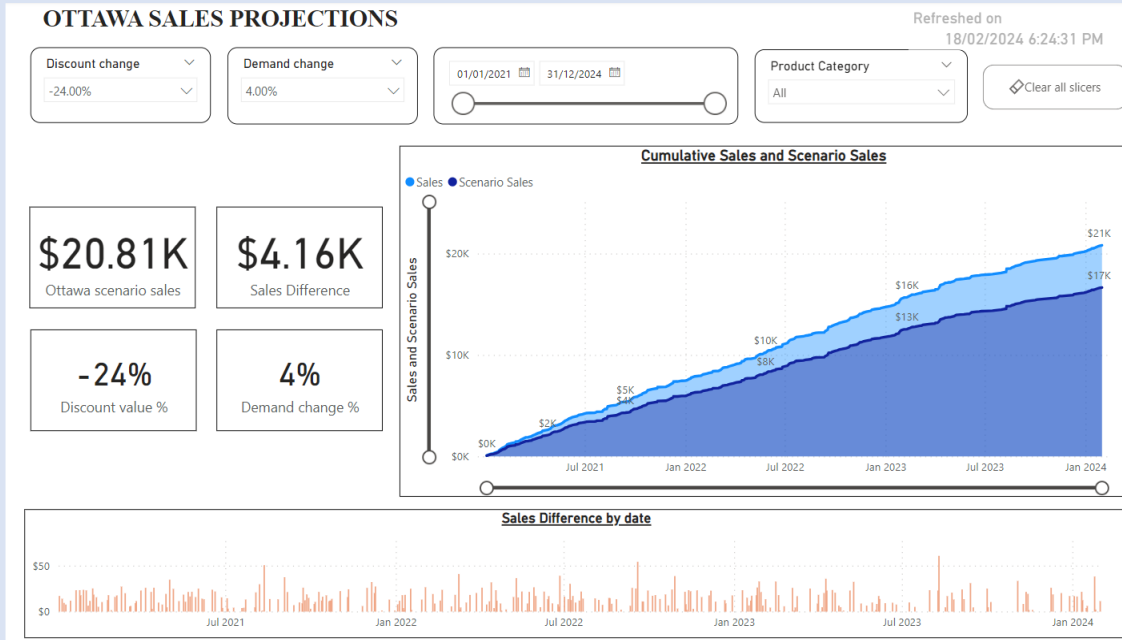
K1P 1J1 (rank 1st) has the City Hall



The new store should open in **Ottawa, Centretown Area (K2P 2K4)**



Projections Analysis



Key Insights

- Cumulative sales in Ottawa is \$20.81k
- Scenario sale (25% discounts and 4% demand increase) is \$17k
- Difference between projected and scenario is \$4k

$$\text{Ottawa Sales} = \text{Montreal sales} \times (0.4 \times \text{Ottawa Montreal population ratio} + 0.6 \times \text{Ottawa Montreal income ratio})$$

Marco, Associate Finance Manager

Lucy, Sales Manager

This dashboard lets me create scenarios and filter by category. Highly recommended!

Budgeting is made easier! I can project sales and ensure that our financial goals are met.



KPI 1

Sales Projection

KPI 2

Scenario Sales Projection

KPI 3

Difference between Projected Sales and Scenario Sales

OTTAWA SALES PROJECTIONS

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Discount change

Demand change

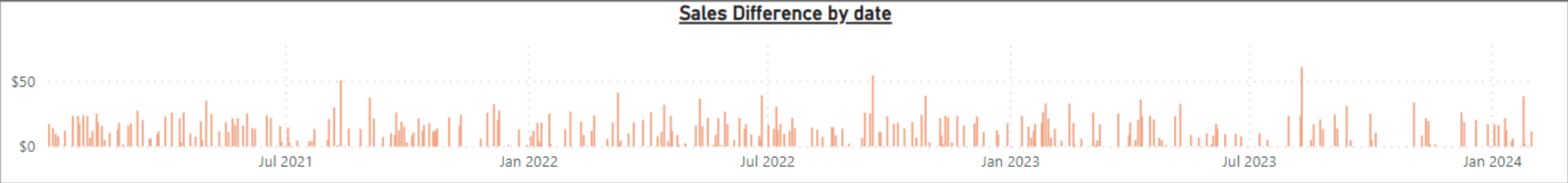
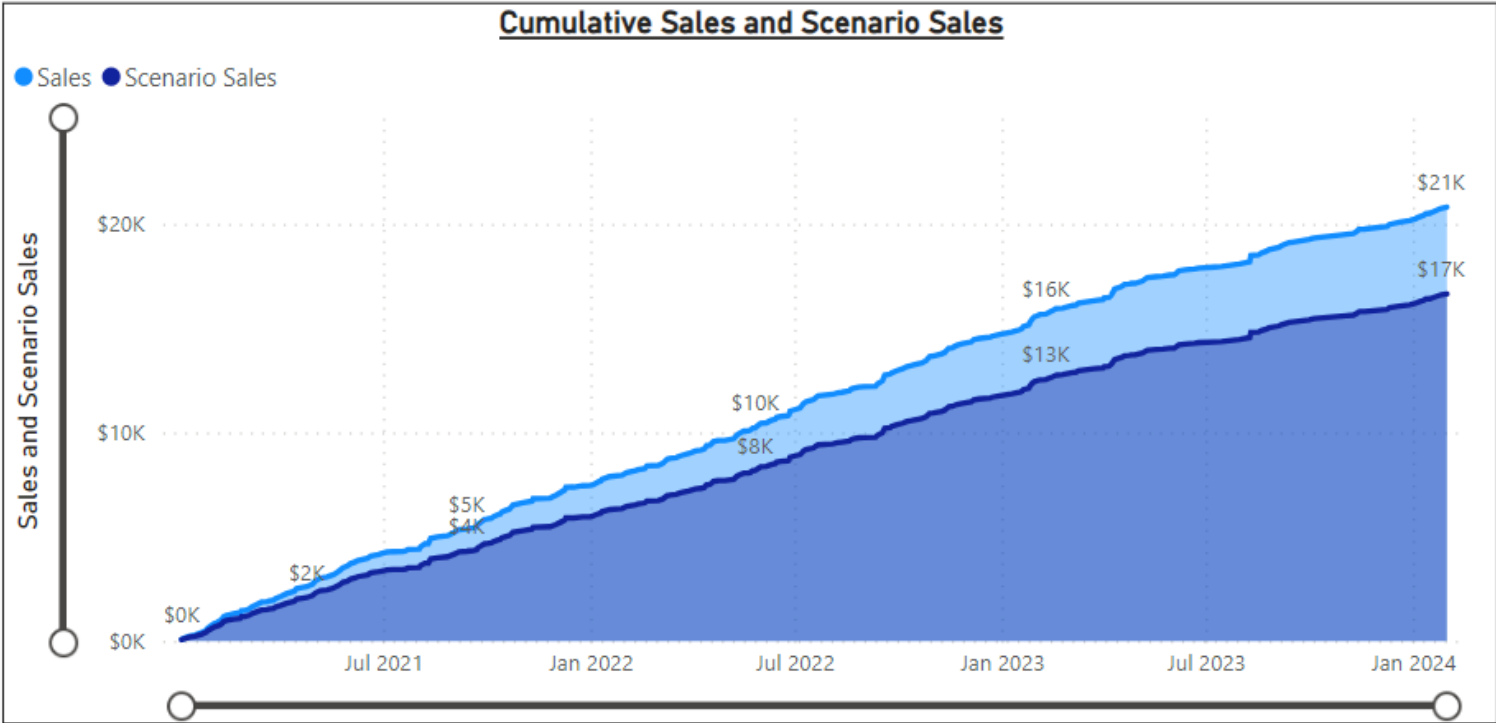
Product Category

\$20.81K
Ottawa scenario sales

\$4.16K
Sales Difference

-24%
Discount value %

4%
Demand change %



Summary

Crafting the Future of 24Seven's Expansion

Identifying Prime Location

- Utilized Power BI features & functionalities
- Ottawa selected for next store location
- City's growth & demand for 24/7 services highlight market potential
- Strategic Focus Areas: Capitalizing on Ottawa's vibrant, high-traffic area
- Strategy aimed at boosting visibility and building customer loyalty

Customer Segmentation Insights

- Tailored Marketing
- Product Optimization
- Personalized Engagement

Brand Differentiation Strategies

- 24/7 Service
- Sophisticated Branding
- Meeting Untapped Needs



Final Store Selection in Ottawa

- Strategic Location
- High-Traffic Areas
- Competitive Edge

BUY IN NOW!

25% for 320K

References

City of Ottawa. (2024). *About the Data*. Retrieved February 17, 2024, from <https://traffic.ottawa.ca/en/traffic-map-data-lists-and-resources/about-the-data>

Government of Canada, Statistics Canada. (2023, December 19). *Population estimates, quarterly*. <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000901>

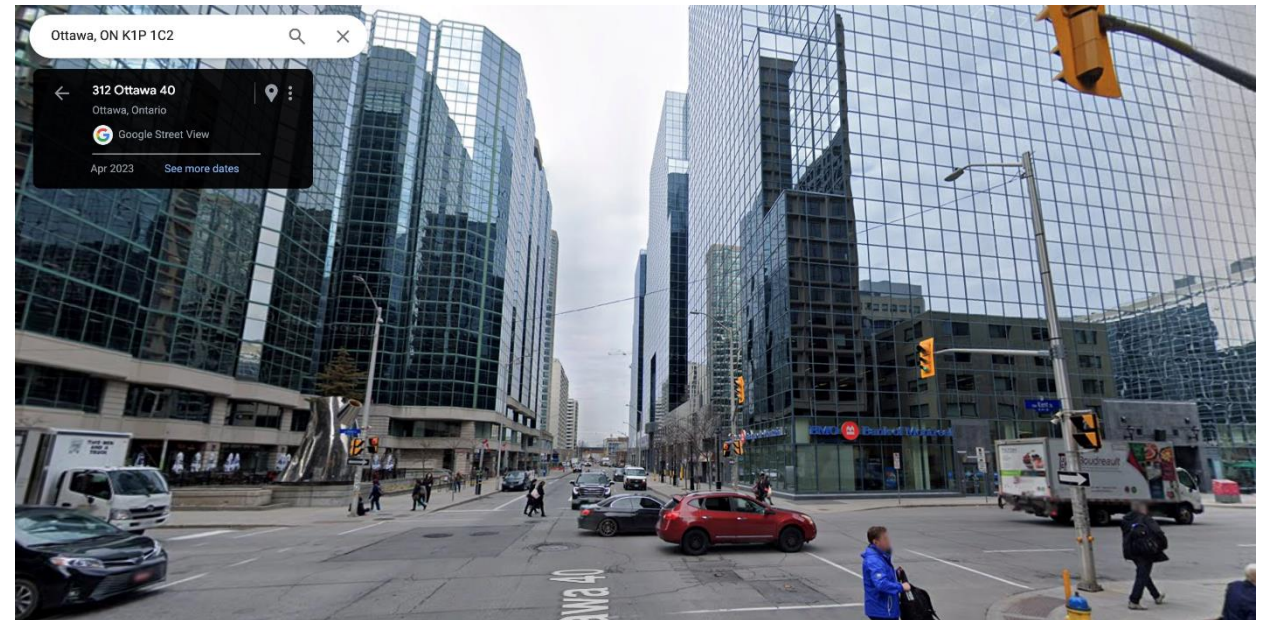
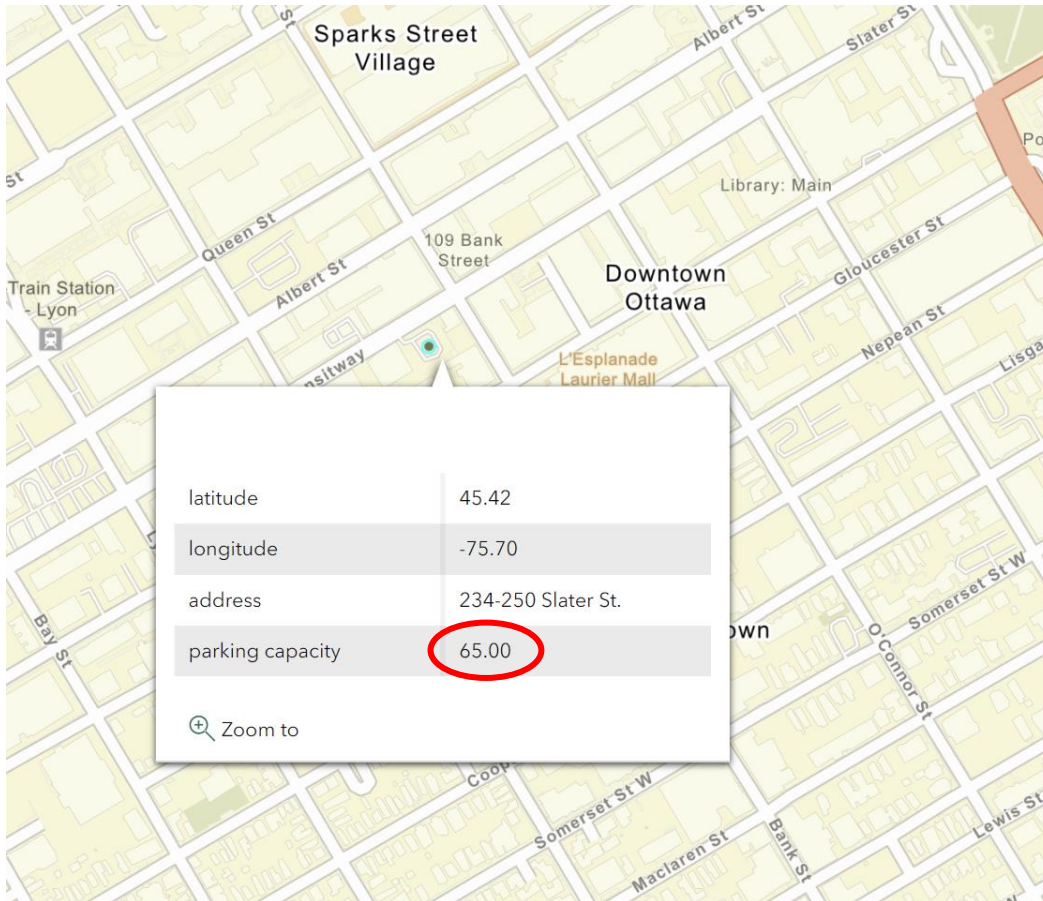
Government of Canada, Statistics Canada. (2023a, October 18). *Add/Remove data - Household spending, Canada, regions and provinces*. <https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1110022201>

Government of Canada, Statistics Canada. (2023b, December 19). *Population estimates, quarterly*. <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000901>

Statistics Canada. (2024). *Census Profile, 2021 Census of Population*. Retrieved February 17, 2024, from <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=Etoibicoke%20Centre&DGUIDlist=2013A000435027&GENDERlist=1,2,3&STATISTIClist=1,4&HEADERlist=0&wbdisable=trueLink>

Appendices

APPENDIX A: Example of small parking lot in downtown Ottawa



We investigated small parking lots' surroundings, and this is an instance from downtown Ottawa. This is a financial district, and it is not suitable to open a convenience store here.

Brand Differentiation

- Observation: Intense competition and high demand in Centretown convenience store market.
- Insight: Only Circle K and one other store open 24/7, setting 24Seven apart.
- Advantage: With 10 chains nationwide, 24Seven enjoys widespread visibility and recognition.
- Recommendation: Leverage presence to position as refined and sophisticated brand.

Segment & Product Category Analysis

- Utilization: Sales and demographic dashboard for user persona and segmentation analysis.
- Approach: Dissect data for diverse customer segments based on age, location, buying behavior, and preferences.
- Benefit: Tailor offerings and marketing strategies for personalized interactions, increased satisfaction, and loyalty.
- Optimization: Align restocking, product placement, and promotions with segment preferences for higher sales.

APPENDIX C: Dashboard Utility Across Organizational Stakeholders: Insights for Strategic Decision-Making

Business Strategists

- Needs: High-level market trends, competitor analysis, and growth opportunities.
- Dashboard Value: Offers insights into strategic positioning and potential areas for expansion or investment.

Business Analysts

- Needs: Detailed operational data, performance metrics, and trend analyses.
- Dashboard Value: Provides granular data for deep dives, enabling data-driven decision-making and operational optimization.

Regional Sales Managers

- Needs: Sales performance data by region, product, and team.
- Dashboard Value: Enables tracking of sales goals, identification of high and low-performing regions, and strategizing for sales improvements.

Marketing Data Analysts & Managers

- Needs: Consumer behavior insights, campaign performance data, and ROI metrics.
- Dashboard Value: Assists in measuring marketing effectiveness, optimizing campaigns, and understanding customer segments.

Product Development Manager

- Needs: Market demand trends, customer feedback, and product performance metrics.
- Dashboard Value: Informs product innovation, feature prioritization, and market fit analysis.

Supply Chain Analysts & Managers

- Needs: Inventory levels, supplier performance data, and logistics efficiency metrics.
- Dashboard Value: Supports supply chain optimization, risk management, and cost reduction strategies.

Finance Directors

- Needs: Financial KPIs, budget allocation data, and cost analysis.
- Dashboard Value: Aids in financial planning, performance tracking, and identifying cost-saving opportunities.

Executive Managers

- Needs: A consolidated overview of business health, key performance indicators, and strategic opportunities.
- Dashboard Value: Delivers at-a-glance insights for quick decision-making, strategic alignment, and performance overview across all departments.