

**TO:** TRANSPORTATION COMMITTEE (TC)  
**FROM:** GENERAL MANAGER ENGINEERING  
**SUBJECT:** **2024 BURNABY TRANSPORTATION BENCHMARK**  
**PURPOSE:** To present an overview of the 2024 Burnaby Transportation Benchmark Project for information.

## RECOMMENDATION

**THAT** the report titled “2024 Burnaby Transportation Benchmark” dated April 16, 2025, be received for information.

## 1.0 POLICY SECTION

The 2024 Burnaby Transportation Benchmark Project as outlined in this report, is aligned with:

- Corporate Strategic Plan (2022)
- Burnaby Official Community Plan (1998)
- Burnaby Transportation Plan (2021)
- Climate Action Framework (2020)
- Environmental Sustainability Strategy (2016)

## 2.0 BACKGROUND

Over the years, the City of Burnaby has experienced rapid growth, particularly around the four Town Centres including Metrotown, Brentwood, Lougheed and Edmonds. These neighbourhoods are evolving into thriving mixed-use urban environments with extensive multi-modal infrastructures that are influenced by regional rapid transit investments. Such investments support the mode shift towards active transportation and transit and reduce dependency on single occupancy vehicles travel.

The Burnaby Transportation Plan (the Plan) has set measurable targets for mode split for 2030 and 2050 indicating that 50% and 75% of all trips would be made by public transit and active transportation, respectively. To achieve the targets, the Plan sets out policies and actions aimed to support and enhance access to transit and active transportation to overcome the predominant auto modes in the City. In the effort to understand the influence of the Plan's guidance, a comprehensive database is required to help establish the benchmark for the City's current travel behaviour or patterns and the use of our transportation system.

During 2017, TransLink completed a Trip Diary consisting of a household travel survey to support transportation planning in the Metro Vancouver region. According to that travel survey the City's auto mode split – auto driver and auto passenger – was approximately 71% with the remaining 28% mode split being transit and active transportation. Further details are included in *Attachment 1*.

Since 2017, travel demands and patterns have changed as induced by the pandemic, and further data collected will help evaluate progress towards the City's measurable transportation targets and inform future planning of transportation modes. The 2024 Burnaby Transportation Benchmark Project (the Project) will create a comprehensive profile of travel patterns for the City to better understand transportation choices and trip purposes that will supplement the data collected through the Trip Diary.

### **3.0 GENERAL INFORMATION**

The Project includes a Household Travel Survey and an Interactive Dashboard.

#### **Household Travel Survey**

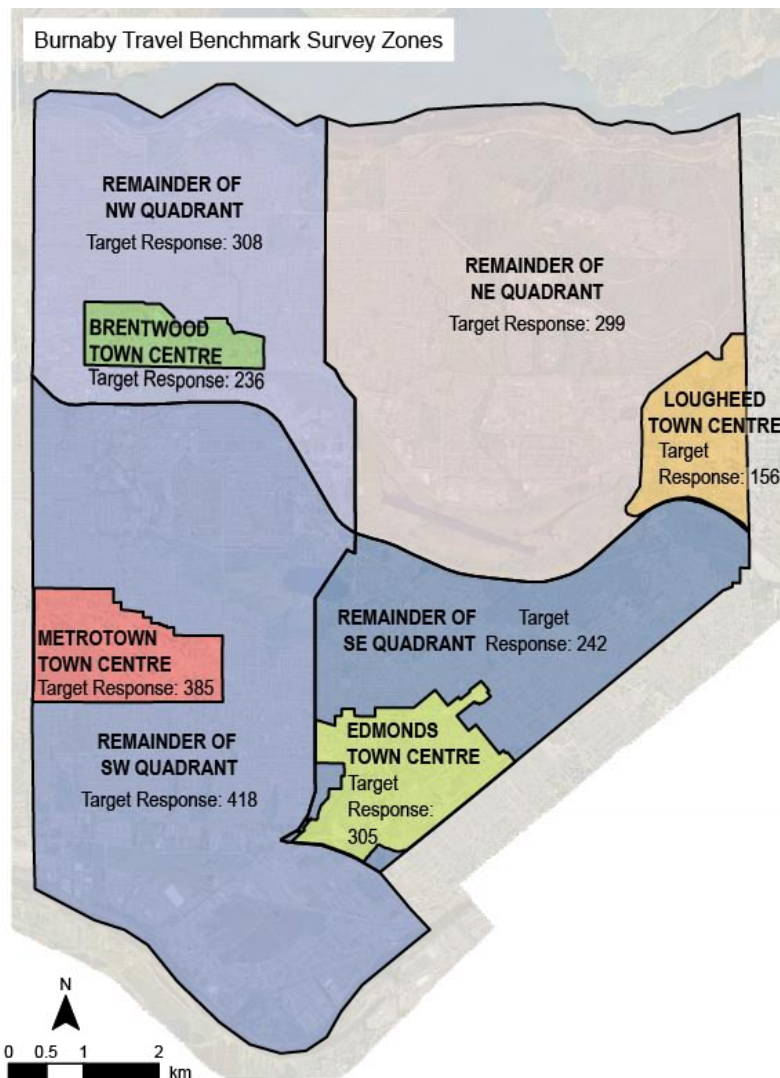
The Project's household travel survey was conducted between mid-September and mid-December. Randomly selected households across the City were contacted through letter mail and invited to complete the survey online or over the telephone. The survey's goal was to achieve a target sampling rate of 2% or 2,023 target responses of the household across the City. This is a typical rate used by various municipalities and regions across Canada and provides a balance between cost and accuracy of the results. In the effort to understand the City's travel patterns, a total of eight sampling zones based on the quadrant and town center boundaries were developed. The sampling zones and number of target responses are illustrated in *Figure 1*.

The Project's survey collected travel information for a weekday of each individual household member for every trip during a 24-hour period, as well as demographic and other household or personal information. The full survey is included in *Attachment 2*.

Over 24,000 letters were mailed out to participating residents in the travel survey. During the survey's three-months period, a total of 2,349 valid survey responses were collected, which exceeded the sampling target of 2,023 responses by 16%. The following key findings of the survey were estimated and summarized as follows:

- Average Fall weekday:
  - Total daily trips made by City residents are 555,200
  - Total daily distance travelled by City residents is 4,249,500 km
  - Total daily vehicle-kilometer travelled (VKT) is 2,230,800 km
- Transit and active transportation mode split in the City is 36.7%
- Auto driver and auto passenger mode split in the City is 62.5%
- Average City household size is 2.40
- Average household car ownership is 1.36

A summary of the household survey results is detailed in *Attachment 3*.

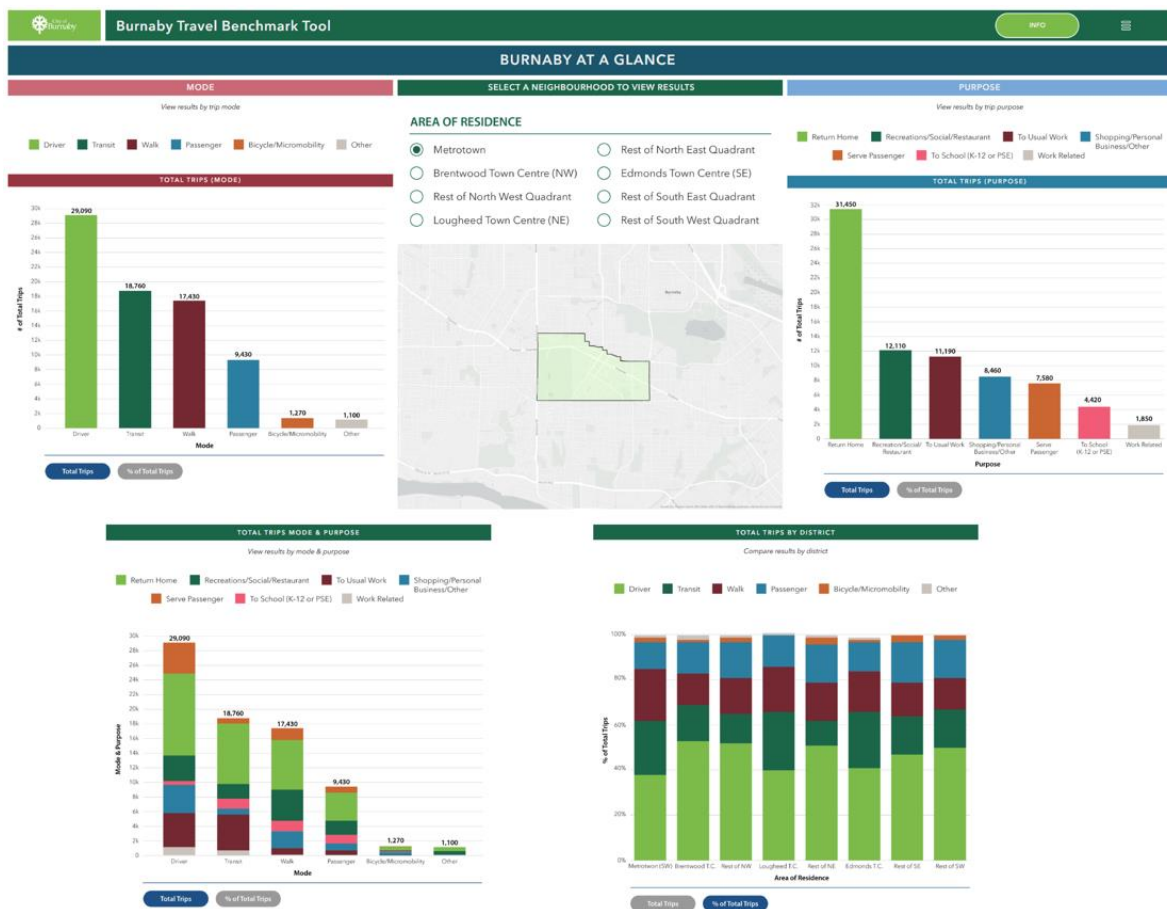


**Figure 1: 2024 Burnaby Household Survey Sampling Zone Map**

### Interactive Dashboard

An interactive dashboard based on survey responses is being finalized as part of the City's Geographic Information System (GIS). The purpose of the dashboard is to provide access and transparency to the survey data for City staff and the public. The dashboard will include intuitive visualization as well as user friendly query tools where specific data can be pulled from the survey results.

For the public dashboard, an introduction to the Project with survey background information will be provided. The survey results will be displayed in various charts, which is defined by the selected filters and criteria. *Figure 2* provides an example of the public facing dashboard for the Metrotown Town Center Sampling Zone. The dashboard includes trip related statistics such as total number of trips, trip purpose and modes split.



**Figure 2: 2024 Burnaby Household Travel Survey Dashboard**

## Next Step

The Project is a significant data collection effort aimed at understanding the daily travel choices of Burnaby residents. The results of the survey will create reliable statistics with indicators on how people travel and how it can change over time. The database created will support the implementation of the transportation policies and actions identified in the Plan while also informing the development of policies for emerging needs to support the overall transportation goals and target. The intent is to also use the survey results to potentially update the current City's travel demand forecasting model – a tool used to predict future travel patterns that is impacted by population, land use, transportation network, and travel behaviour patterns.

The frequency to undertake a household travel survey varies across different jurisdictions. In Metro Vancouver, including City of Vancouver and the North Shore municipalities, the survey is conducted every one or two years whereas cities outside our region will vary between five and ten years. In light of the ongoing growth in the City and how it impacts the transportation system, the need to track and respond to changes in travel patterns is the key to inform the Burnaby Transportation Plan, which integrates with the City's Official Community Plan. Consideration to the next Burnaby Household Travel Survey can be potentially revisited within the next two-to-five-year period.

#### **4.0 COMMUNICATION AND COMMUNITY ENGAGEMENT**

Between September 2024 and December 2024, over 24,000 households were invited by letter to participate in the Project's household travel survey. In addition to the letters, the survey was also promoted through different channels to increase public awareness and encourage survey participation including the City's official social media posts, posters in all civic facilities (community centers, libraries, senior centres, etc.) and roadside signs at key travel destinations (i.e. SkyTrain stations).

Survey responses were collected through a project website or over the telephone. The Project team responded to public inquiries and assisted with technical issues encountered by the participants through a project email or phone number that was included in the mail out letter.

#### **5.0 FINANCIAL CONSIDERATIONS**

Not applicable.

Respectfully submitted,

May Phang, P.Eng., General Manager Engineering

#### **ATTACHMENTS**

Attachment 1 – 2017 TransLink Trip Diary Results for City of Burnaby

Attachment 2 – 2024 Burnaby Household Travel Survey Questions

Attachment 3 – 2024 Burnaby Household Travel Survey Results Summary

Attachment 4 – Burnaby Household Travel Survey Presentation

#### **REPORT CONTRIBUTORS**

This report was prepared by Guangnan Feng, P.Eng., MEng, Transportation Engineer, and Kathy Ho, P.Eng., PTOE, Senior Manager, Transportation, and reviewed by Amy Choh, P.Eng., PMP, Director Engineering Transportation.