

Attachment 4: Progress Toward Service Goals

This attachment provides an overview of progress toward service delivery goals identified in RouteAhead, a 30-year strategic plan for public transit in Calgary.

Base Transit Service and the Primary Transit Network

Base transit service and the Primary Transit Network (PTN) define both the quality and quantity of transit service in terms of the coverage (accessibility), frequency (how often transit vehicles arrive at a stop or station) and the time 'span' of service (when does service start and finish each day).

Base: a combination of services operating approximately every 30-minutes all day, seven-days a week

Primary Transit Network: a combination of services operating 10-minutes all day, seven-days a week

Base Transit Service includes a comprehensive range of transit services (e.g., feeder routes, mainline and cross-town transit services) to support the Primary Transit Network by providing comprehensive community coverage. Base Transit Service may also augment the Primary Transit Network by meeting additional needs (e.g., cross-town travel, local circulator services within the Greater Downtown and Activity Centres) that involve high ridership but not necessarily full Primary Transit levels of service. The Calgary Transportation Plan (CTP) goal is for 95 per cent of development to be within a five-minute walk (400 metres) of Base service to ensure accessibility for the majority of Calgarians where they live and work. Primary Transit Network expansion also contributes towards achieving Base service coverage.

The Primary Transit Network is the desired future state which creates the backbone or artery network of transit, building the city. The Primary Transit Network provides a network connecting activity centres across the city, getting Calgarians to a multitude of origins and destinations and increasing transportation choice and transit convenience. Land use and the Primary Transit Network are intentionally planned and integrated together to reach Municipal Development Plan (MDP) goals. The Primary Transit Network intends to provide a network of foundational transit services with wider spaced stops serving high-density development. The principle of prioritizing investment in the Primary Transit Network was recently reaffirmed in the Next 20 project that resulted in the 2020 MDP and CTP that were approved by Council in February 2021.

Transit need to be reliable, frequent, and fast to attract customers. Calgary Transit customer surveys consistently show one of the largest barriers to using transit is not cost, but ease of use. Primary Transit Network corridors emphasize transit priority, including overall travel time/speed and reliability, with a "transit-first" philosophy along the network. The Primary Transit Network features an improved customer waiting environment, including amenities such as shelters, benches, and real-time information. The Primary Transit Network offers customers the ability to "show up and go" because of 10-minute scheduled headways. By emphasizing off-peak service, enhancements to the Primary transit Network encourage greater transit use, increased ridership, and increased transportation choice.

Figure 1 illustrates transit service levels provided in Calgary as of December 2021. Most notably, Primary Transit Network level service is not currently provided anywhere in the City, including on MAX or LRT lines. The impact of the COVID-19 pandemic is two-fold: demand for transit is lower than normal, and service levels cannot be sustained at normal levels due to higher costs resulting from pandemic impacts and lower revenues (which are tied to lower demand). A Base level of transit service (or better) is currently provided to 62 per cent of the population, far from the 95 per cent coverage goal. This is contrasted with 2016 when Primary Transit Network service levels were provided to 16 per cent of Calgary residences, and Base service or better was provided to 73 per cent of Calgary residences. This illustrates Calgary Transit is falling behind in terms of operating investments, and further highlights the need for service investment. Investment in the Primary Transit Network and improving Base service coverage is required to make transit an attractive transportation choice for Calgarians, and to meet their needs with a network that is fast, frequent, and reliable.

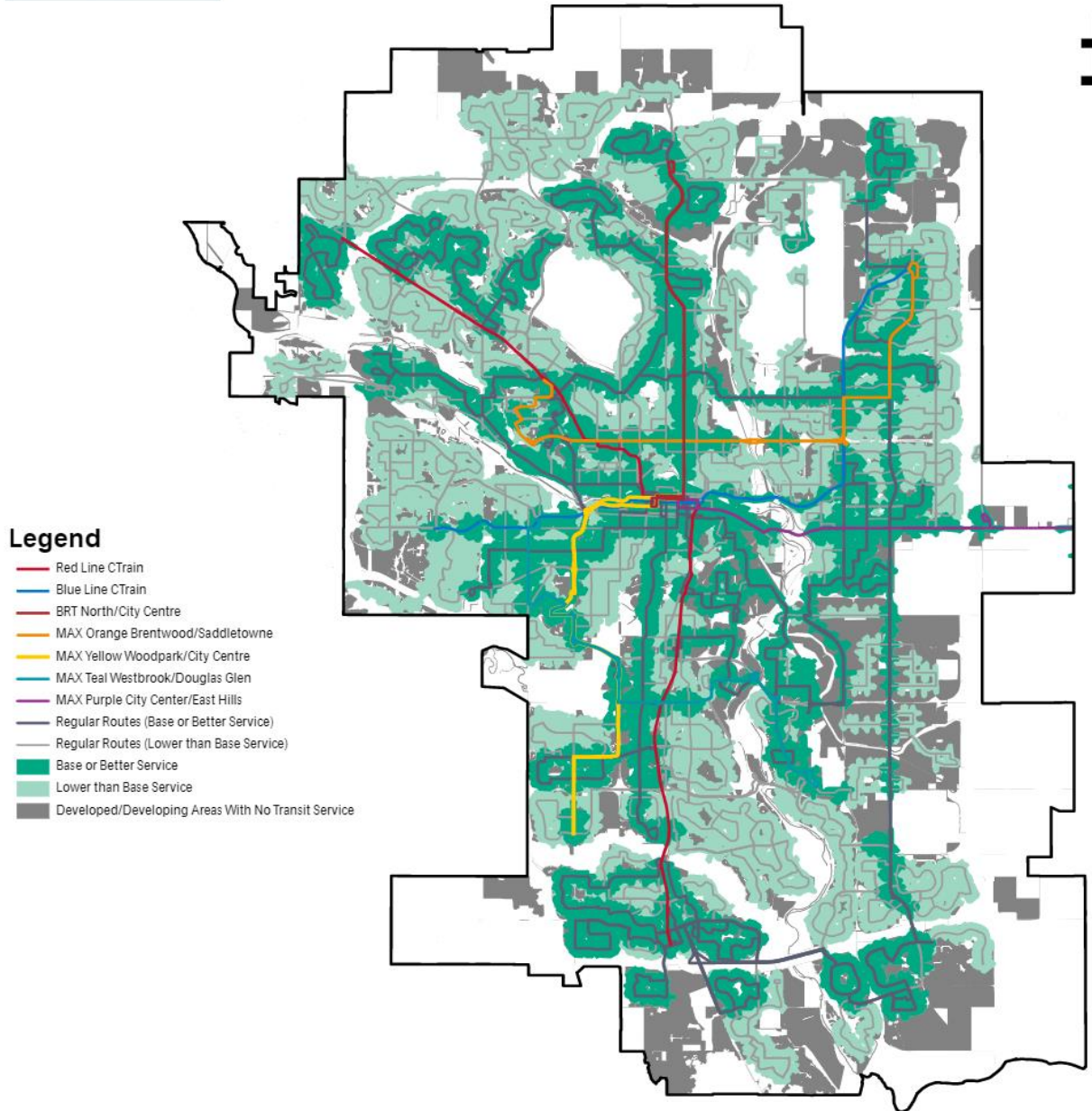
Figure 2 shows the transit scores for developed residential communities within Calgary. Darker shades indicate communities with convenient access to public transit, whereas lighter shades illustrate communities with fewer public transit options and connections to major destinations. The concentration of better transit services in and around the downtown core further illustrates the need for increased operating investments in Base and Primary Transit Network to ensure a greater proportion of the City has access to good, excellent, and rider's paradise transit services.

Figure 3 demonstrates the areas you can access via transit during the morning rush hour within 25 minutes starting from either end of the downtown free fare zone, Downtown West-Kerby or City Hall CTrain stations. The map shows the level of transit connectivity in the downtown and surrounding communities, while also highlighting the importance of travel time when deciding to take transit. Further investments in transit service lead to a greater number of areas and activity centres accessed within 25 minutes, increasing accessibility and making transit a more viable travel option.

Figure 1: 2021 Calgary Transit Service Coverage.



2021 Calgary Transit Service Coverage



Legend

- Red Line CTrain
- Blue Line CTrain
- BRT North/City Centre
- MAX Orange Brentwood/Saddletowne
- MAX Yellow Woodpark/City Centre
- MAX Teal Westbrook/Douglas Glen
- MAX Purple City Center/East Hills
- Regular Routes (Base or Better Service)
- Regular Routes (Lower than Base Service)
- Base or Better Service
- Lower than Base Service
- Developed/Developing Areas With No Transit Service

62% of the population is within walking distance to Calgary's Primary Transit Network and Base Services.

Primary Transit Network (PTN): Transit service running 10 minutes all day, 7 days a week as of December 2021.

Base Service: Transit service running approximately 30 minutes all day, 7 days a week as of December 2021.

Walking Distance: 600 meters from CTrain services, 400 meters for all other services.

Census Data: 2020 and 2021 Census data was not available. 2019 Census data was used for this analysis.

Figure 2: Transit Score of Calgary Communities.

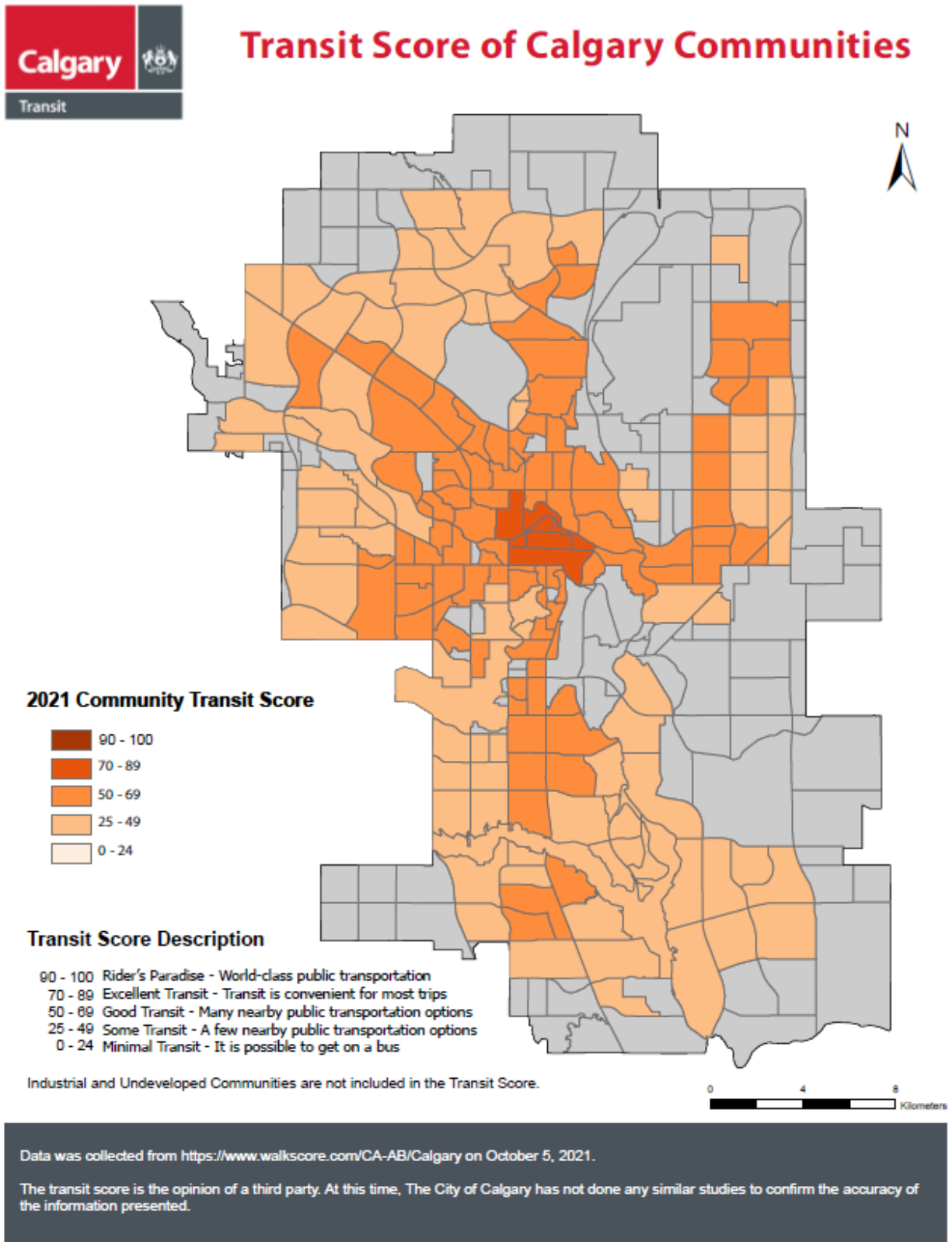
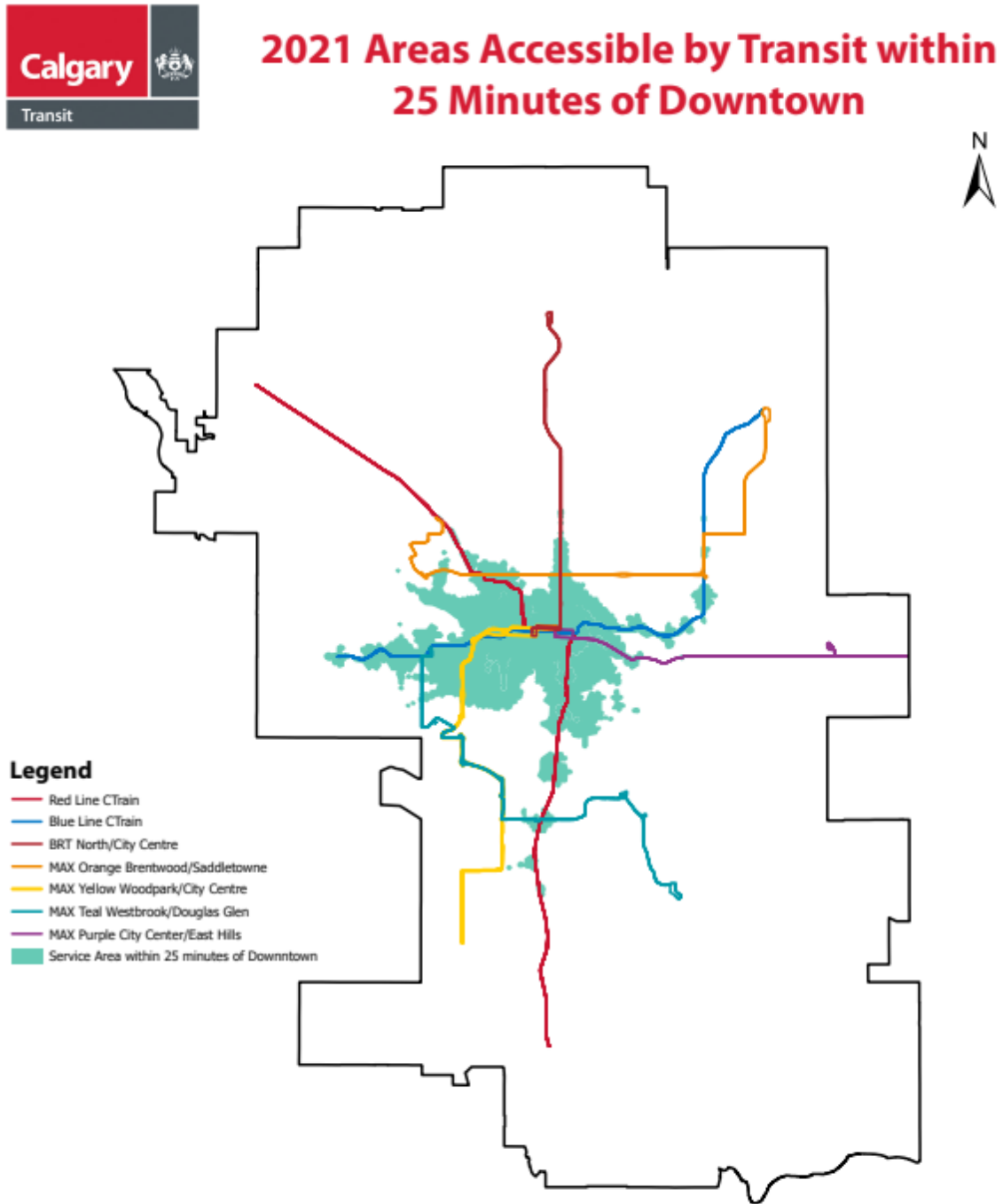


Figure 3: 2021 Areas Accessible by Transit within 25 Minutes of Downtown.



The service area was determined using the bus schedule for January 25, 2022 at 08:00. Two locations were chosen on opposite ends of the Free Fare zone. A polygon was produced illustrating the distance someone could travel using the transit system within 25 minutes starting at one of those two locations.

Service for New Communities and Employment Areas

Calgary Transit provides introductory transit service intended to evolve as the community grows and ridership matures. New service typically begins with weekday peak-period service followed, over time as ridership and community growth occurs, by off-peak services (i.e. mid-day, evenings and weekend) leading up to base service. An early introduction of transit service, including connections to existing service like MAX and LRT lines, is critical to developing transit travel habits and offset future demand for road infrastructure.

Five criteria must first be met to consider introductory service:

- The road network must be developed and connected to carry the service.
- The population or job intensity must be sufficient to support the service.
- Funding must be available to pay for the service.
- Labour must be available to operate the service.
- Vehicles must be available to provide the service.

A new residential community can usually sustain transit service upon reaching 300 to 400 occupied dwellings. However, the viability of new service also depends on the speed and density of development, availability of a continuous and accessible road network, and the ability to extend service on an existing route versus the need for a new independent route.

Transit service to employment areas is crucial to enable employers to attract and retain staff. The ability of new employment areas to support transit service is typically lower than residential growth and the span of service often needs to be longer to serve multiple shift times, including weekends. However, transit service to employment areas is vital to support Calgary's economic growth and diversification.

Residents and employers in areas without transit service are increasingly concerned with the uncertainty of the timing of introductory service or service upgrades. The lack of transit service in these areas may result in traffic congestion developing on roadways that were designed assuming transit service will carry a portion of peak period trips.

Administration is faced with a significant challenge in new and developing communities where many residents now live and new employment areas are being created. Travel demand exists, and has for some time in many areas, but is not being addressed in a manner consistent with development approvals and the vision of the MDP/CTP. Administration continues to attempt to address gaps on a first-come first served basis, by prioritizing the least costly extensions of existing bus routes, or through tools such as negotiated developer-funded service agreements and On Demand service (currently introduced in a pilot program in Carrington and Livingston).

Figures 4 and 5 below illustrate the challenge. Figure 4 identifies future growth areas where future transit service investments are required. Figure 5 demonstrates the growing gap between service level goals for new communities and Calgary Transit's ability to meet transit demand in new communities. From 1997 to 2014 it took an average of 2.6 years to introduce transit service (peak period service) in an actively developing community, and service was introduced when

the community reached 670 dwellings on average. Between 2015 and 2017 the timespan grew to 6.2 years on average to introduce service in new communities, and service was introduced when there were 1810 dwellings on average, far exceeding the 300-400 dwelling guideline. Calgary Transit pivoted from creating new routes to extending existing routes in adjacent communities and partnering with developers to fund transit service in new areas. However, developer-agreements provide a short-term funding source and further investments are needed to reach full-service levels and full community coverage in developing areas. Furthermore, in 2020 and 2021, Calgary Transit relinquished operating funds for service in new communities, further widening the gap. With more new communities approved and the City expanding outwards, as shown in Figure 4, the length of time to reach full service in new communities is expected to increase further. Without transit investment in new communities, a growing number of Calgarians will be without access to transit service. Calgary Transit Access (CTA) provides specialized transportation for people with disabilities and continues to be available for all eligible Calgarians regardless of where they live in the city and where regular bus service exists.

Figure 4: 2021 Calgary Transit for New Communities.

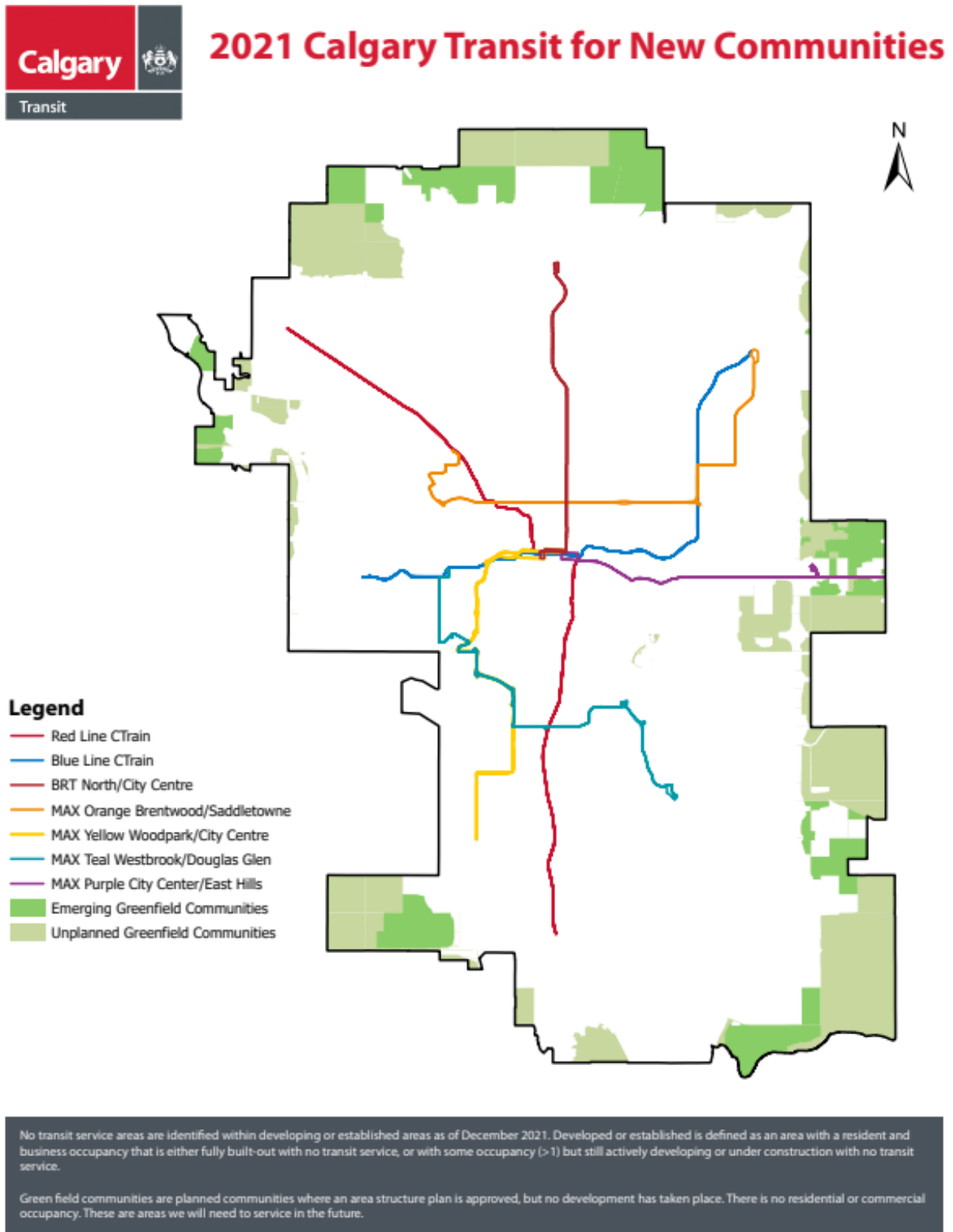


Figure 5: Population, Number of Dwelling, and Time Thresholds for Introducing Transit Service Over Two Time Periods.

Time Range	Introductory Service		
	Average Population	Average Dwellings	Average Years from Initial Dwellings to Intro Service
1997-2014	1,290	670	2.6
2015-2017	4,620	1,810	6.2

Moving Ahead with Performance Monitoring

A 10-year update to the RouteAhead plan will be delivered in 2022. This offers an opportunity to create a new set of performance measures for annual reporting on the status of the RouteAhead plan, in addition to measures currently used like Base and Primary Transit Network coverage. Administration is currently considering the candidate performance measures shown in Figure 6 below. Administration will select from these measures (and others) in alignment with Council’s vision for the development of the 2023-2026 Service Plan and Budget.

Figure 6: Candidate Performance Measures for Calgary Transit.

Service Goals	Coverage	Frequent service coverage (including Primary Transit Network)
		Base service coverage
		New and Actively Development Communities served
	Ridership	Average weekday and annual ridership
	Environment	Per cent of fleet by category with improved emissions (electric, natural gas, etc.)
		Transit mode split city-wide, to activity centres, etc.
Equity	Coverage for key market segments (low-income, youth, people with disabilities, older adults, essential service providers etc.)	
	Accessibility of vehicles, stations, stops and facilities	
	Travel time to activity centres (a measure of equitable travel time/speed on transit relative to owning a car and driving)	
Customer Commitment Goals	Safety	Actual incidents, perception of safety, nuisance behaviour, etc.
	Reliability	Being on time, minimizing delays, etc.
	Helpfulness	Customer service, friendliness, staff behaviour, etc.
	Quality of information	Information on changes, service disruptions, future plans, etc.
	Ease of use	Crowding, accessibility, convenience, connections, etc.
	Cleanliness	Condition of vehicles, stops, stations, etc.