

RouteAhead Update: 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 Primary Transit Network Service

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 at least every 30 minutes, 15 hours a day

PTN: a combination of services operating at least every 10 minutes, 15 hours a day

A key Base service measure is making transit service accessible (i.e. within 400 metres walking distance) to ensure accessibility for the majority of Calgarians where they live and work.

The PTN is intended to provide a network of higher quality services with wider spacing serving high-density development. The PTN will feature vehicles (irrespective of whether the vehicles are standard buses, articulated buses, or Light Rail Transit [LRT]) operating over an extended time span, with transit priority measures and enhanced passenger amenities, and sometimes operating on dedicated rights of way. The PTN offers customers the ability to “show up and go” as a result of 10 minute scheduled headways.

The figures below illustrate:

- The spatial extent of the city where a Base level of transit service (or better) is currently provided, as well as service levels below Base and developing/developed areas without transit service. (Figure 1).
- The percent completion of the PTN (Figure 2).

As shown on Figure 1, in Q1 2019 Base service was provided to 76% of Calgary residences (+3% since 2016) and 77% of employment locations (+1% since 2016).

Some form of transit service (but not necessarily Base service) was provided to 95% of residences and 93% of employment locations.

In Q1 2019, PTN service was provided to 15% of Calgary residences and 31% of employment locations. The PTN now totals nearly 76 kilometers and is nearly 20 percent complete. PTN expansion also contributes towards achieving Base service coverage.

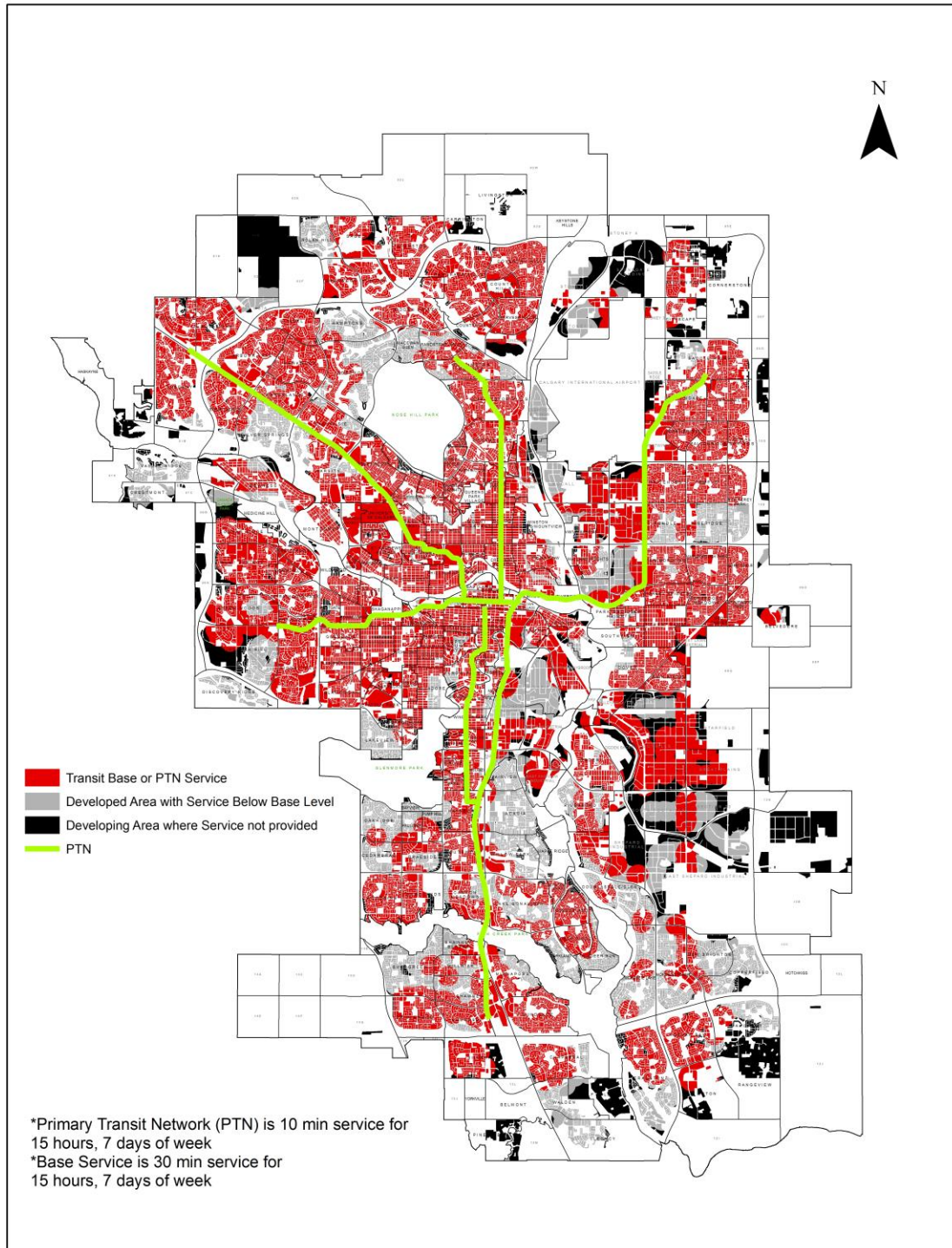


Figure 1 – Q1 2019 Transit Service Map

Primary Transit Network

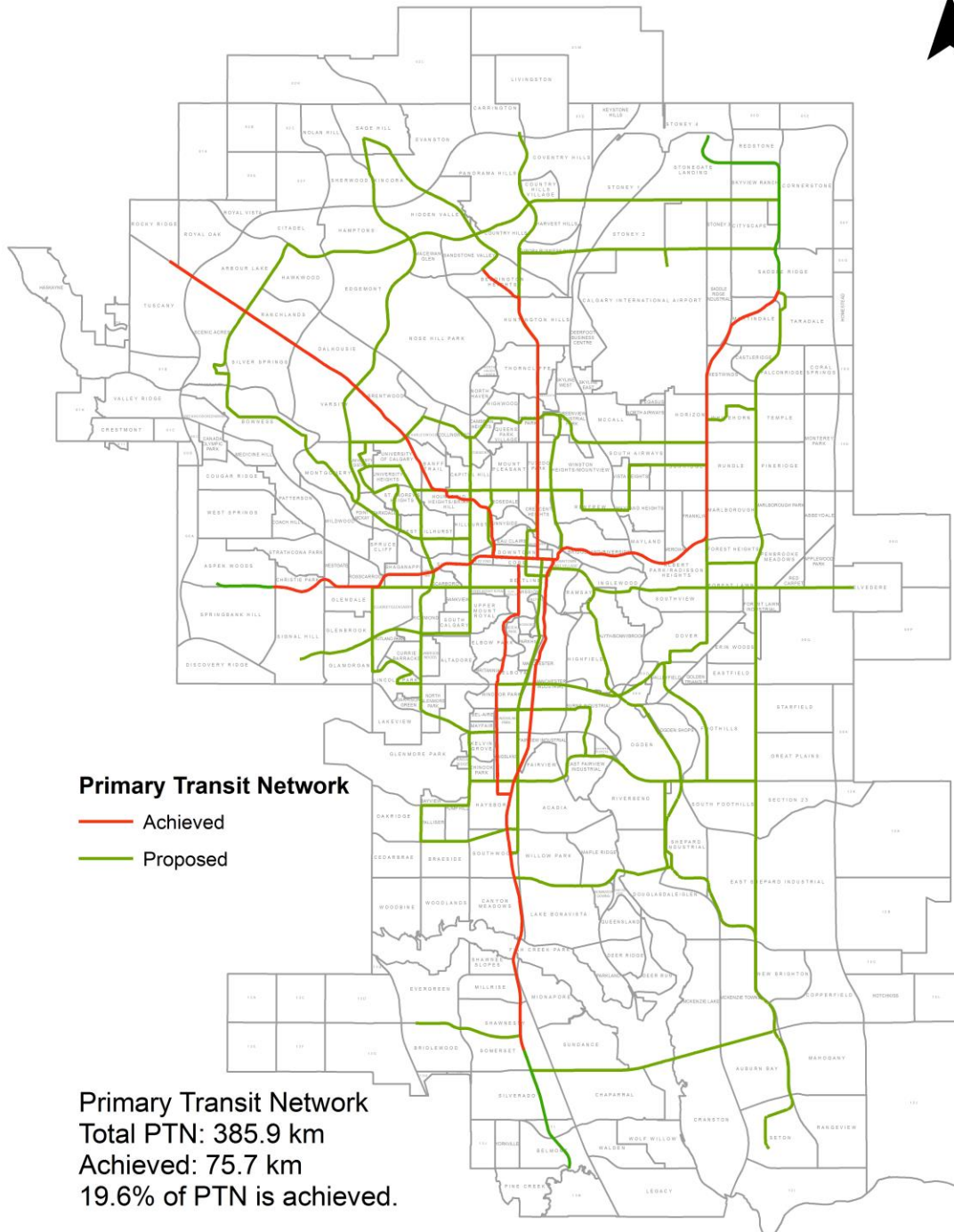


Figure 2 – Q1 2019 Primary Transit Service Map

Table 1 below includes a summary of the percentage of residential areas and employment areas across the city that are reached by Base and PTN service and how that service provision has changed over time.

Table 1

Base and PTN Service Provision to Residential Areas

Year	AM Peak	Midday	PM Peak	Evening	Saturday	Sunday	Total
2014	95.4%	86.3%	95.3%	92.9%	75.8%	56.6%	60.4%
2015	95.0%	81.1%	95.0%	91.2%	75.4%	55.3%	60.4%
2016	95.1%	92.7%	95.0%	92.8%	85.7%	76.3%	76.5%
2017	95.7%	95.7%	92.0%	92.1%	85.5%	76.9%	76.3%
2018	96.0%	96.0%	91.6%	91.8%	84.6%	76.6%	75.9%
2019 Q1	95.9%	95.9%	91.8%	91.9%	84.4%	76.8%	75.8%

Base and PTN Service to Employment Areas

Year	AM Peak	Midday	PM Peak	Evening	Saturday	Sunday	Total
2015	87.8%	89.6%	88.0%	82.1%	71.5%	55.6%	62.7%
2016	91.8%	90.4%	91.7%	86.3%	78.8%	76.3%	76.4%
2017	93.1%	91.6%	93.0%	87.6%	80.2%	78.2%	76.4%
2018	92.9%	91.1%	92.9%	87.3%	79.4%	77.5%	76.8%
2019 Q1	93.1%	91.2%	93.3%	86.8%	79.7%	78.0%	76.7%

The significant improvement in performance between 2015 and 2016 can be attributed to the addition of midday, off-peak and weekend service frequency as a result of the 2016 Transit Service Review. Significant duplication of routes in northwest and downtown Calgary was addressed, and service hours were reallocated to routes/corridors with gaps in frequency and span of service.

Further improvements to service coverage, frequency and span over the past two years have mainly been achieved through delivering service more efficiently with limited increases to service funding relative to growth in population and development across the city. The 2018 Transit Service Review was the first part of a two-year comprehensive review of Calgary Transit fixed route bus service as a supporting element in implementing the MAX rapid transit network, with the goal of developing a more effective bus network that makes efficient use of MAX infrastructure investments. The review has been informed by technical considerations and public engagement, and based on the following objectives:

1. Implementing a high quality MAX rapid transit route that more customers are able to conveniently connect to;

2. Leverage capital investment in MAX infrastructure (e.g. MAX stations, queue jumps, dedicated lanes) by increasing the routes and customers who can benefit from it;
3. Provide routes that are more direct and easier to understand;
4. Reduce travel time;
5. Operate more frequently with a longer span of service on some routes;
6. Provide better service to key destinations;
7. Reduce duplication of service; and
8. Increase ridership.

Significant improvements have been made to service distribution and local network connectivity; this has mainly been achieved through reallocations that have maintained service coverage with some targeted improvements but while improving connectivity, transferability and ease of travel to key destinations (e.g. employment centres) and among different areas of the city. Building on access to transit service, this has led to improvements in the ability and time required to travel to destinations across the city; both downtown and outside of downtown.

The 2019 Transit Service Review is ongoing in southwest Calgary, with public engagement feedback currently being analyzed to inform potential adjustments to the service proposals. The more efficient and productive local bus network is expected to be implemented with the southwest MAX line introduction in late 2019.

In response to recently approved operating budget reductions in 2019 June, Calgary Transit is currently evaluating service reductions across the network. As part of these reductions, there will be impacts to current service levels and temporal/spatial service coverage, but will be prioritized using a least-harm approach.

Challenges with Service to Actively Developing Communities and Employment Areas

Calgary Transit provides introductory transit service that is intended to evolve as the community grows and ridership matures. Before introductory service may be considered five criteria must first be met:

- 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
- The road network must be adequately developed to carry the service
- The population or job intensity must be sufficient to support the service

The viability of new service also depends on the speed at which development is occurring, availability of a continuous road network, the density of the development and the ability to extend service on an existing route versus the need for a new independent route. New service typically begins with weekday peak period service followed over time, as ridership and 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 higher-order transit service, is critical to developing transit travel habits of the new residents (which will offset future demand for road infrastructure).

Administration is faced with a challenge that has emerged in new and actively developing communities since the economic downturn, where many new residents are now living and new employment areas are being created. In these newer areas, about 1,040 residents and 500 jobs are currently in actively developing communities that do not receive conventional transit service. The population and jobs in actively developing communities is forecasted to increase significantly by 2022 as outlined in Table 2, with occupancy beginning in some recently

approved additional new communities as well. Many newer areas have received peak-period introductory service several years ago, but have continued growing with delayed transitions to mid-day and off-peak bus service. 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 and RouteAhead.

Following the elimination of 2017 and 2018 growth investments to manage financial challenges associated with the economic downturn, Administration attempted to address gaps on a first-come first served basis, through negotiated developer-funded service agreements or prioritization of the least costly extensions of existing bus routes. Further service investments to address gaps in a systematic manner were previously approved through One Calgary 2019-2022 for direct incremental operating costs of actively developing communities. Some service improvements have been implemented in 2019 June in the communities of Nolan Hill/Sage Hill, Redstone/Cornerstone, Walden/Legacy, and Mahogany/Cranston. Calgary Transit On Demand, an on-demand shared public transportation pilot is also planned to take place in the communities of Carrington and Livingston, and will help inform how an innovative public transit service can be introduced in low density communities earlier and in a more cost-effective, scalable and demand-responsive manner. Service hour investments over the current budget cycle were planned in order to keep pace with development and occupancy, and meet growing customer demand for Base transit service. These investments will be refined through the annual budget adjustments process based on revised budget targets that are established. As part of this process, reductions in base and growth service budgets will impact current service levels, temporal/spatial coverage and implementation timelines in actively developing communities, but will be prioritized using a least-harm approach.

Transit service to employment areas is also 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 these areas is vital to support Calgary's economic growth and diversification (e.g. technology/research, logistics/goods movement), and aligned with Calgary's Economic Strategy to support business growth and development. Bus service to growing industrial employment areas in NE and SE Calgary have been improved over the past two years through limited route introductions/extensions and service reallocation through the 2018 Transit Service Review. Examples include Routes 100 (North Pointe/Airport/McKnight Stn), 119 (Freeport), 147 (Starfield), 148 (Great Plains), 149 (Point Trotter), 150 (114 AV SE), 157 (Saddletowne-Stoney Industrial) and 161 (North Pointe-Stoney Industrial). Calgary Transit will continue to work closely with Real Estate and Development Services and Calgary Economic Development to promote transit options for major employers considering locating in Calgary.

Table 2

Population and Jobs in Developing Areas Currently Without Transit Service

Developing Area Category	Population	Jobs
Actively Developing Communities – 2018	1,040	500
Actively Developing Communities – 2022/2023 forecast	18,800	2,400
New Communities with Approved Plans – 2022/2023 forecast	6,100	1,200