



# Operational Requirements Memo

## Transit Center Study

July 24, 2023

# Transit Center Study



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# 1

## Anchorage Transit Center

Why Reconsider the Current Transit Center?

## Project Context

The Anchorage Transit Center is located in the heart of Downtown. This area is central to long-term plans for the city and region. Because of the concentration of jobs and services within a small, walkable area, Downtown is also a primary destination for many People Mover riders.

The Anchorage Community Development Authority (ACDA) has identified the current transit center site as a potential redevelopment opportunity. During any upcoming construction, People Mover will be required to move transit center operations to a temporary site.

Because this will inevitably cause some disruption for transit riders and operators, this is the right time to examine whether the current location is in fact the best possible option for the transit system.

The Public Transportation Department (PTD), which manages People Mover, has agreed to engage in a Transit Center Study to examine the benefits and trade-offs of other locations as it looks towards future service.

This memo looks at current conditions at the downtown transit center and baseline operational requirements for a transit center moving into the future.



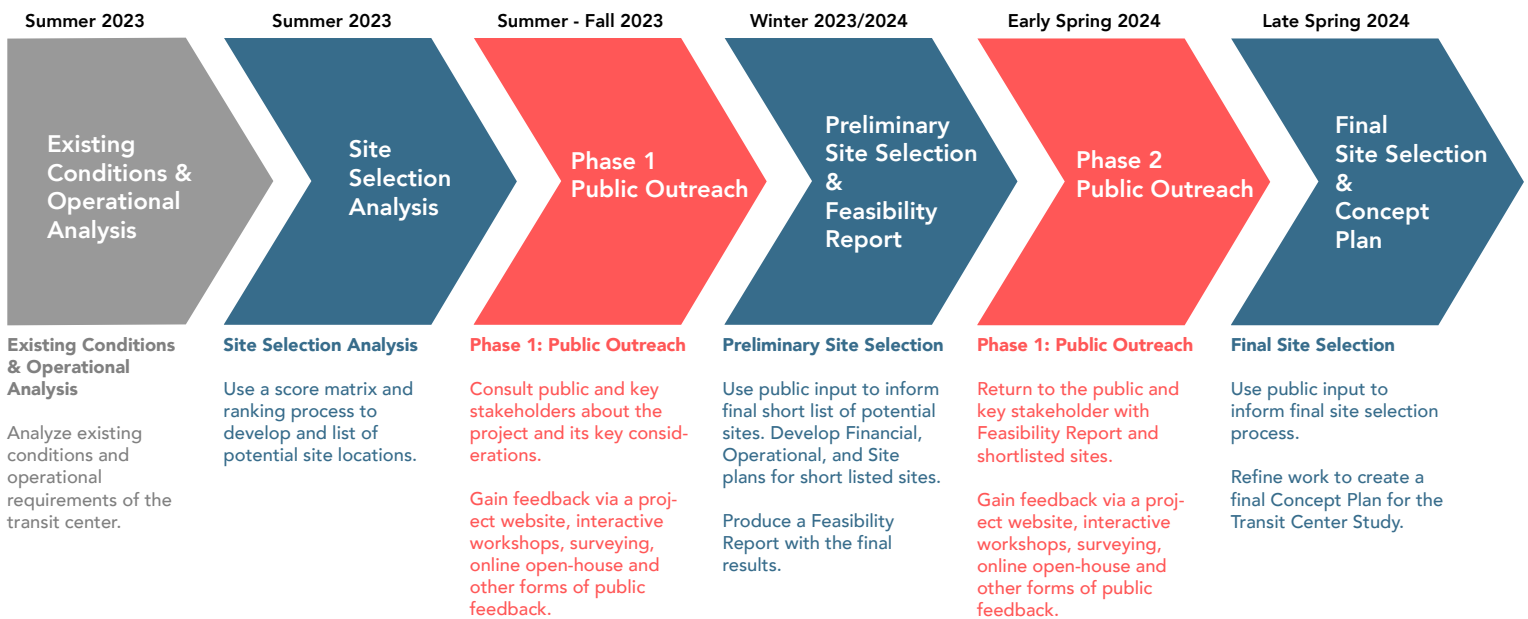
Figure 1: The existing downtown transit center in operation.

## Project Timeline

The Transit Center Study is starting in July 2023, and is expected to conclude by mid-2024.

Key stakeholders will be involved throughout the project. There will also be two periods of public outreach: one in the early fall of 2023, and the second in the early spring of 2024. Public and stakeholder feedback will help inform which sites should be studied in detail, and which site should ultimately be selected.

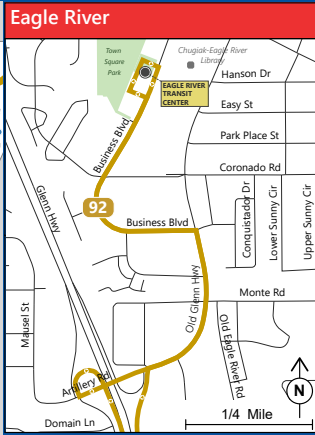
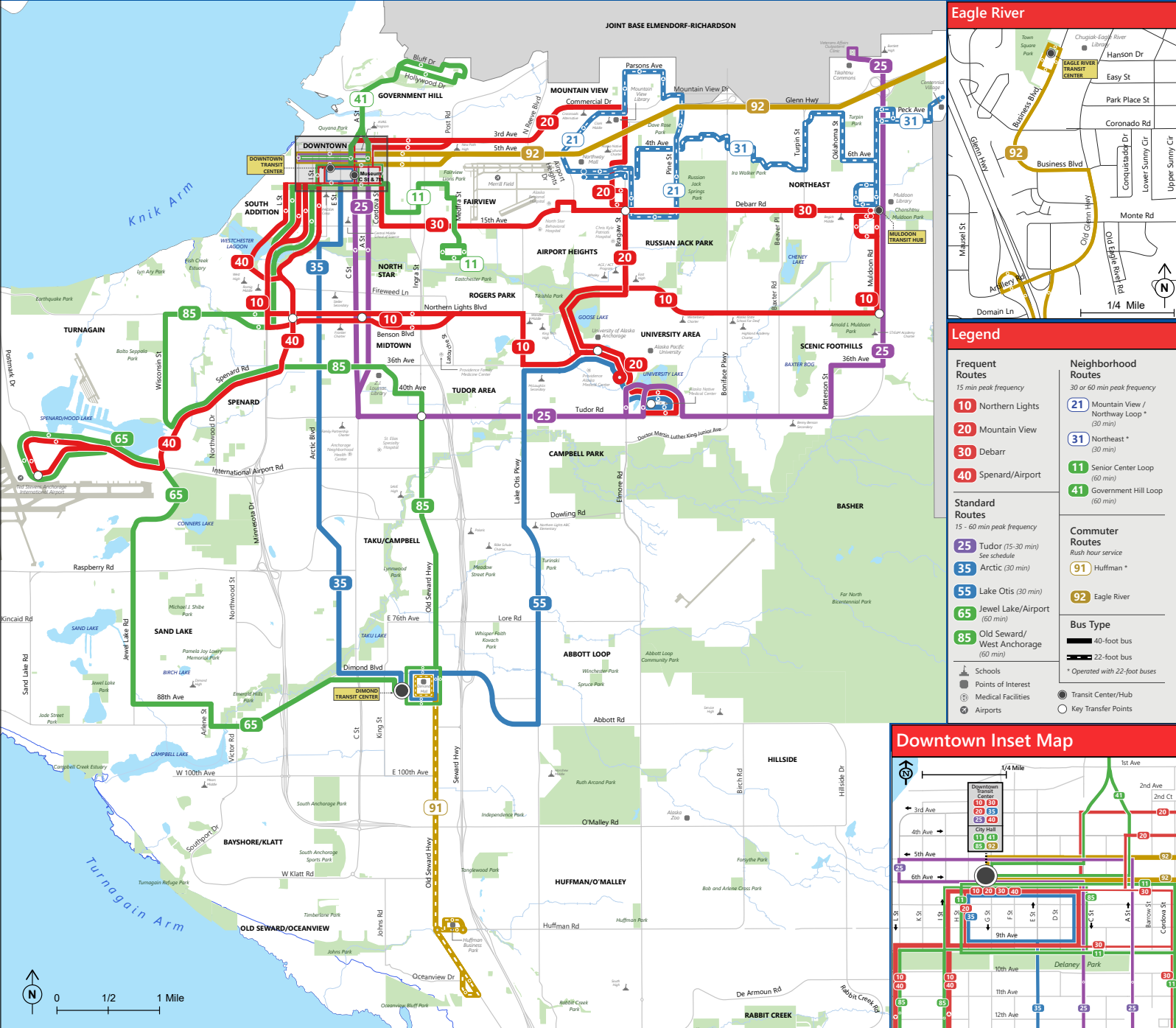
If the study concludes the transit center should relocate, a Concept Plan will be developed for the final site, based on the operational and capital needs identified through this work.





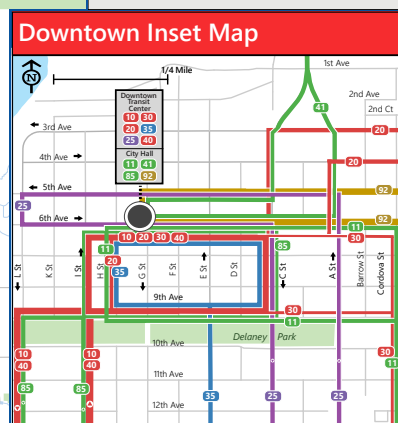
# Anchorage Transit Map

Effective Date: September 20, 2021



### Legend

<b>Frequent Routes</b> 15 min peak frequency	<b>Neighborhood Routes</b> 30 or 60 min peak frequency
10 Northern Lights	21 Mountain View / Northway Loop* (30 min)
20 Mountain View	31 Northeast* (30 min)
30 Debarr	11 Senior Center Loop (60 min)
40 Spenard/Airport	41 Government Hill Loop (60 min)
<b>Standard Routes</b> 15 - 60 min peak frequency	<b>Commuter Routes</b> Rush hour service
25 Tudor (15-30 min)	91 Huffman*
35 Arctic (30 min)	92 Eagle River
55 Lake Otis (30 min)	<b>Bus Type</b>
65 Jewel Lake/Airport (60 min)	40-foot bus
85 Old Seward/West Anchorage (60 min)	22-foot bus
<b>Icons:</b>	* Operated with 22-foot buses
Schools	Transit Center/Hub
Points of Interest	Key Transfer Points
Medical Facilities	
Airports	



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Figure 2: The current People Mover Transit Map.

## How the Downtown Transit Center fits in the People Mover Network

Anchorage's People Mover transit network is comprised of 15 total routes. Service is provided seven days per week, starting around 6 am and ending around midnight.

The Network includes 4 key Frequent Routes providing all-day service, every 15 minutes from 7 am to 8 pm. Five other Standard Routes provide service every 15 to 60 minutes, connecting all corners of Anchorage to the downtown core.

4 Neighborhood Routes provide coverage service within select neighborhoods and 2 Commuter Routes offer limited connections to Eagle River and Huffman.

### Existing Site

The Downtown transit center is comprised of three bus stop zones, located on two adjacent city blocks. Each zone has its own specific information boards detailing routes served, rider information and system maps.

- The Blue Zone, where most routes stop is located on the south side of W. 6th Avenue between H Street and G Street.
- The Red Zone is on the east side H Street, sharing the same block as the main Blue Zone area.
- The Green Zone is located on the south side of W. 6th Street near G Street, directly in front of City Hall.

Valley Transit also picks up and drops off passengers across H Street from the Red Zone.

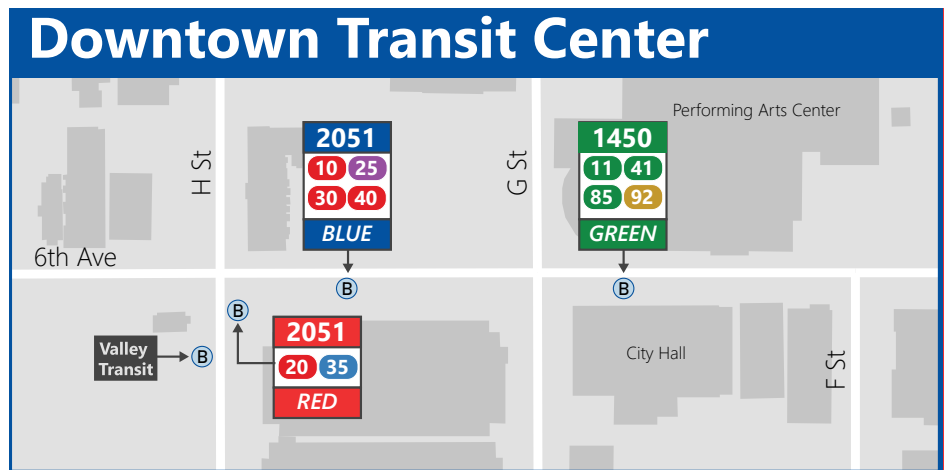


Figure 3: Bus stop locations at the existing Downtown transit center.

### Partial Closure Since 2020

Since August 2020, the enclosed portions of the transit center have been closed to public use, due to public safety concerns. Customer information (maps, schedules, advisories) have been moved to the outer windows to be read from the sidewalk. The customer service office has been relocated two blocks away.

These changes have led to the loss of public access to restrooms and a heated waiting area. Customer service is also no longer directly on site, and travel training offices have moved to People Mover's operational facilities at Elmore Road.

### Key Advantages and Challenges

- The downtown location allows for easy access to the most walkable part of Anchorage, which also includes a great concentration of jobs, services, and places people need to go.
- The existing site is easily visible from the surrounding streets and is located near several large destinations (including City Hall, the Performing Arts Center, Town Square Park and the surrounding businesses).
- The current transit center is entirely outdoors, and is unable to provide many of the rider amenities that were present in the past.

## Redevelopment Project

The Anchorage Community Development Authority (ACDA) is a municipal corporation whose mission is to act as a catalyst for economic development in Anchorage. ACDA owns the site of the Downtown transit center, and has identified a potential redevelopment opportunity. This would require, at minimum, a temporary relocation of the transit center during construction.

## Temporary Relocation

A consequence of this proposed redevelopment is the need for a temporary relocation during construction. This temporary location remains under consideration. Ideally, it will be somewhere close to the existing site, to reduce impacts on current operations and transit riders who rely on People Mover in their day to day lives.

## Long-Term Options

There are three primary ways to think about where People Mover's central transit center should be located in the future.

### Option 1: Keep the transit center in place post-redevelopment.

This is considered the project baseline, and is within the current plans for redevelopment. Any options for future relocation will be compared to this option. However, because there will be a need for a temporary relocation, People Mover will examine whether any viable alternative locations might provide an equal or higher level of service.

This option includes some advantages to People Mover, in that it minimizes disturbance to the system. However, it may also pose challenges for redevelopment. Transit centers serve a multitude of purposes for bus operators, riders, and the general public. Some of these uses may not interact optimally with the proposed site use as a high-end hotel.



Figure 4: People Mover bus in the Green Zone in front of City Hall

### Option 2: Relocate somewhere else in Downtown.

Downtown is a central location in the city and a significant destination in its own right. While any relocation would impact operators and riders, staying Downtown would minimize this disruption, and any changes to People Mover routes. However, relocating to another site in the Downtown area may require understanding interactions with any immediately adjacent neighboring uses.

### Option 3: Relocate outside of Downtown.

Because PTD cannot be certain an optimal site will be available Downtown, this study will also consider:

- Midtown, due to the area being relatively central and housing large numbers of jobs and destinations. However, Midtown is much less walkable than Downtown, and any relocation to Midtown would require restructuring People Mover's bus routes. This may require additional operating costs, and will impose higher levels of disruption on operators and riders.
- The UMed District. This would be far from the city's center, but at a location important enough to be the end of several frequent bus lines. In this case, People Mover would no longer have one central transit center, but would instead rely on three outlying centers. This would minimize People Mover's footprint in Downtown, but would also require considerable rethinking of People Mover's network structure.

In both cases, there would also be challenges locating an available and viable site.



Figure 5: A cyclist reading the Blue Zone information board. Buses with bicycle carrying capacity can expand the transit networks reach for many travelers.



## Transit's Role in Planning for Anchorage's Future

Public transit plays a key role in the future planning of the communities it serves. This can be seen in the many ways transit is identified as an important aspect in regional, citywide, and district level planning documents over recent years. This section will review how these plans see transit's role in the future.

### Comprehensive Plans

Through the 2020 Comprehensive Plan (2001) the Municipality of Anchorage identified the vision of building a high frequency transit network which operates along key corridors as a long term vision for public transit in the region.

The Anchorage 2040 Land Use Plan (2017) supported this further with plans to encourage main street, transit-oriented and mixed-use development patterns. Each of these development types are seen as supportive of public transit.

### Transportation Planning

In 2020, the 2040 Metropolitan Transportation Plan again identified public transit's role in the region's future success with a number of recommendations. One of which, MTP# 706, recommended projects around Transit Centers and Support Facilities. Identifying the importance of providing major transit facilities in key areas of the city. Some of the areas identified in this plan include Midtown, Downtown, UMed, Dimond Center and Muldoon.

The Transit on the Move Transit Plan (2020) provided a report on the state of the transit system and worked with customers and stakeholders to identify goals and objective for PTD to work towards in the future. The plan helped develop a number of potential new routes, some of which have now become a part of the People Mover network.



Figure 6: Riders using the current downtown transit center during a weekday afternoon.

### District Level Planning

Several District-level plans also identify transit as playing a pivotal role in future success.

The recent Downtown District Plan (2021) identified multiple opportunities for improvements around transit. These included the encouragement of more 15-minute headway routes, the potential for a downtown transit circulator service, and support for a direct airport connection to downtown by transit. It also identified the Downtown transit center as potentially reaching its operational capacity at its current location.

Similarly, the UMed District Plan (2016) identified transit's role as a key tool in Travel Demand Management (TDM) practices. The plan expresses a desire to promote transit as a viable mode to travel to and within the UMed District, and the potential need for roadways to enable transit to serve major destinations in the area effectively. This plan also identified the role that transit plays in supporting medium and high intensity land use types.



# 2

## Current Operations

How does the current Transit Center operate?

The Downtown transit center is a medium-sized transit facility with 8 bus bays across three zones, which connect most routes in People Mover's Transit System to the downtown business core of Anchorage.

This section describes the current service patterns at the Downtown transit center. It also includes an analysis of the current baseline operational requirements and ridership currently provided by the transit center.

## Existing Bus Service

The current transit center's operations connect 10 existing People Mover routes to each other and to downtown Anchorage. The graphic on the right shows routing pathways and transit center stops under current conditions.

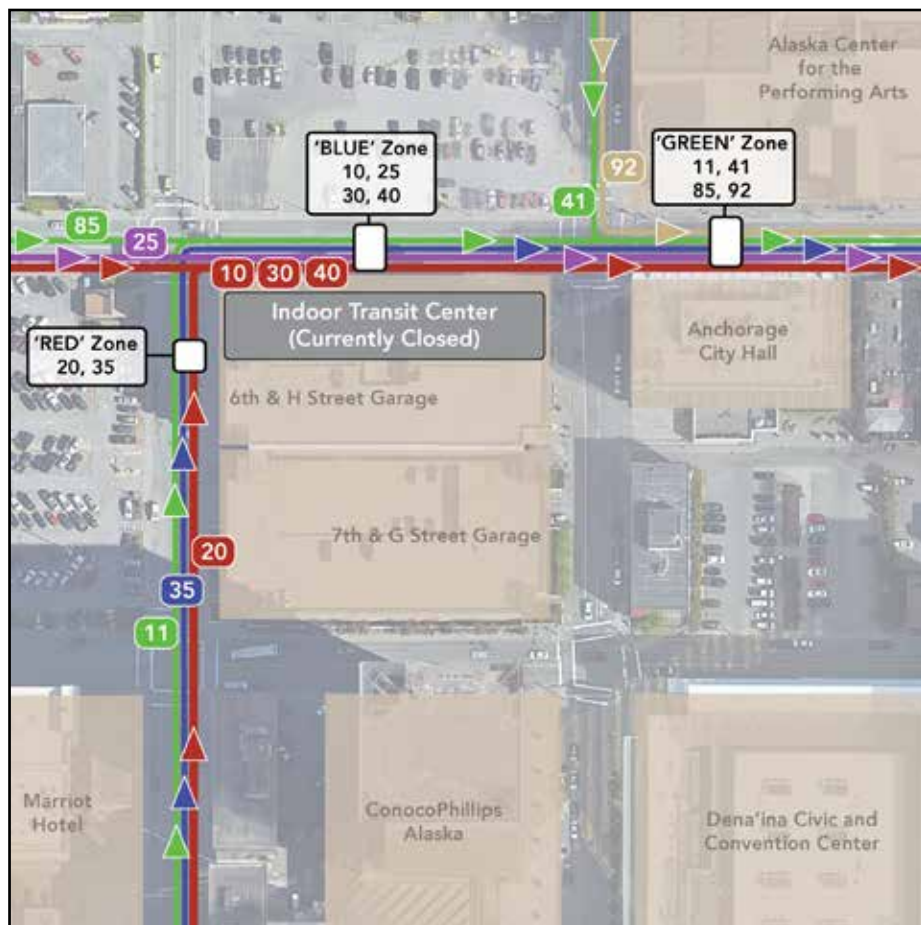


Figure 7: Routes serving the transit center stop at one of three 'zones' creating a centralized gateway to downtown and easy transfer between routes.

## Red Zone Stops

The 'Red Zone' stops, along the east side of H Street, provide easy connection between routes and direct access to the old indoor transit center.

- **Frequent Route 20 - Mountain View.** Route 20 is part of People Mover's Frequent Network, operating every 15 minutes between 6 am to 8 pm, with service until about midnight. Route 20's eastern end is the Alaska Native Medical Center Heath Campus, and it connects to the Downtown transit center via Bragaw Street and Commercial Drive.
- **Route 35 - Arctic.** Route 35 operates every 30 minutes during midday. Route 35's southern end is the Dimond transit center, in southern Anchorage. It connects to the Downtown transit center via Arctic Boulevard

## Blue Zone Stops

The 'Blue Zone' stops, along the south side of 6th Avenue, provide easy connection between routes and access to the old indoor transit center.

- **Frequent Route 10 - Northern Lights.** Route 10 is a part of People Mover's Frequent Network, operating every 15 minutes between 6 am to 8 pm, with service until about midnight. Route 10's eastern end is Muldoon Road and it connects to the UMed District and the Downtown transit center via Northern Lights Road.
- **Frequent Route 25 - Tudor.** Route 25 operates every 15 minutes during weekday afternoons and PM peaks. Off-peak and weekends it operates every 30 minutes. Route 25's eastern end is the VA Clinic in northeast Anchorage. It connects to



the Alaska Native Medical Center Health Campus and the Downtown Transit center via Muldoon Rd and Tudor Road.

- **Frequent Route 30 - Debarr.** Route 30 is a part of People Mover's Frequent Network, operating every 15 minutes between 6 am to 8 pm, with service until about midnight. Route 30's eastern end is Muldoon Road. It connects to the Downtown transit center via Debarr Road.
- **Frequent Route 40 - Spenard-Airport.** Route 40 is a part of People Mover's Frequent Network, operating every 15 minutes between 6 am to 8 pm, with service until about midnight. Route 40's western end is Ted Stevens Anchorage International Airport and it connects to the Downtown transit center via Spenard Road.

## Green Zone Stops (City Hall)

The 'Green Zone' stops are located a block east of the other zones, along the south side of 6th Avenue, directly outside of City Hall. This location provides walkable connections between routes, with a single street crossing to access to the old indoor transit center.

- **Route 11 - Senior Center.** Route 11 operates every 60 minutes seven days per week. Route 11's eastern end is Chugach Manor. It connects to the Downtown transit center via 9th Avenue and 13th Avenue.
- **Route 41 - Government Hill.** Route 41 operates every 60 minutes seven days per week. Route 41's northern end is Government Hill. It connects to the Downtown transit center via E Loop Road.
- **Route 85 - Old Seward-West Anchorage.** Route 85 operates every 60 minutes seven days per week. Route 85's southern end

is Dimond Transit center. It connects to the Downtown transit center via the ZJ Loussace Public Library and Wisconsin Street.

- **Route 92 - Eagle River.** Route 92 operates limited weekday trips during rush hour peaks between Eagle River and the Downtown transit center.

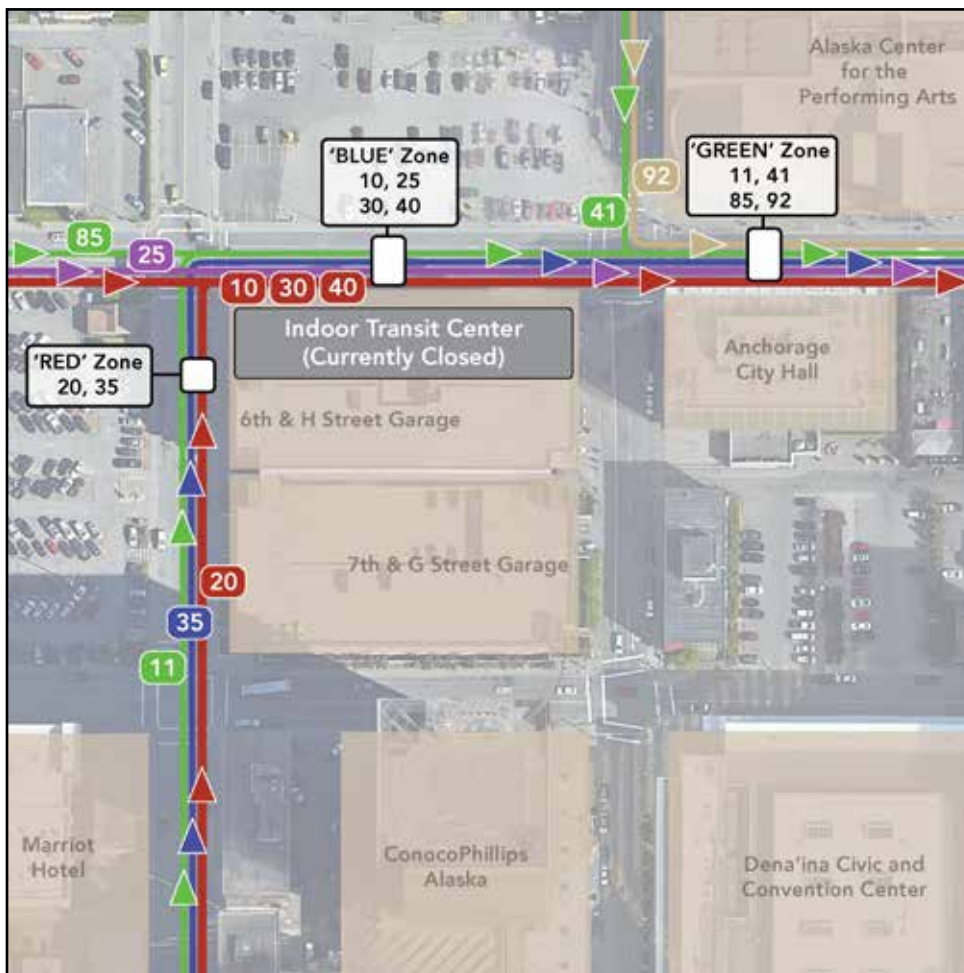


Figure 8: Graphic showing current operations of the Downtown transit center. Route lines are color coded by frequency to match the system map. (Red is every 15 minutes, Purple is every 15 to 30 minutes, Blue is ever 30 minutes, Green is ever 60 minutes, and Tan is limited service. Each of the routes connect via their assigned 'Zone' and transfer are made via short walks between zones, when required.



## Frequency and Spans

The chart at the bottom of this page shows the frequency of each of People Mover's routes across each hour of the day, on weekdays and weekends. In general, People Mover routes tend to run at a consistent frequency during the daytime, then decline in frequency in the evenings. Route 25 is an exception to this pattern, running more frequently during the afternoon period.

## Route Types

People Mover's current route types help reflect the primary purpose of each route.

Frequent routes provide a consistent level of service, every 15 minutes from 6 AM to 8 PM, allowing for ease of use and quick transfers between routes.

Standard and Neighborhood routes, providing 30- or 60-minute frequencies, extend transit coverage to areas where demand is relatively low but there are still some high-need

populations or important transit destinations.

Not all Neighborhood routes serve the Downtown transit center. However, a relocation impacting the routing of Frequent and Standard routes could also impact those Neighborhood routes not currently serving the transit center.

Commuter routes, which only run during the traditional weekday commute periods, help to connect outlying communities to more central parts of Anchorage with limited stop service.

## Weekend Service Levels

People Mover's network operates seven days a week. This is very important: maintaining service, even at a reduced level compared to weekdays, allows riders to rely on the same travel patterns on Saturday and Sunday, and build their lives around transit service.

It is much more common today for people to work jobs that require people to work on the weekend. Service seven days a week also allows riders to take non-work trips, no matter the day of week.

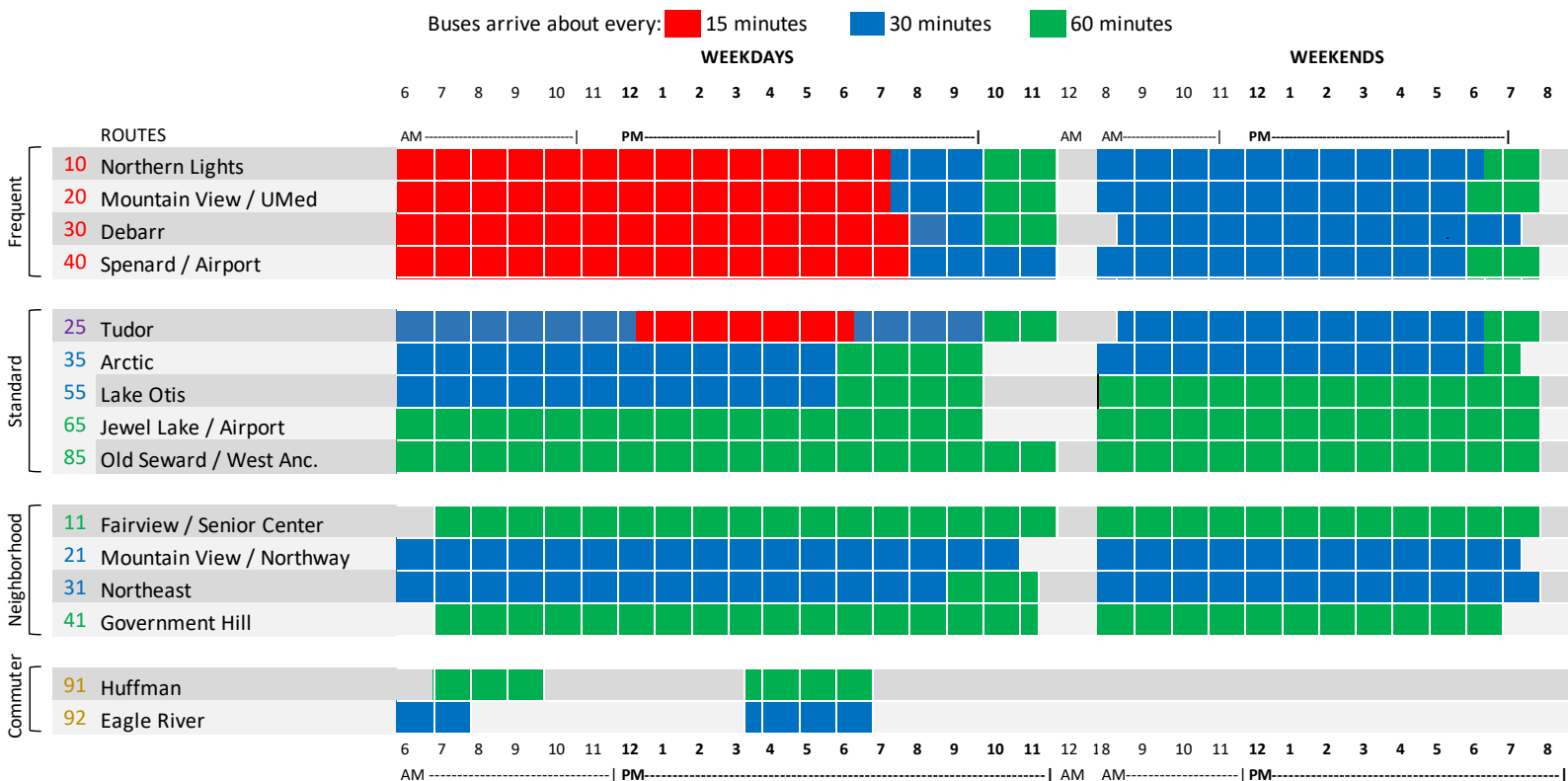


Figure 9: The graphic above is helpful in visualizing how often a buses arrives for each routes and how these frequencies change over the day and throughout the week.

## How routes currently access the Transit Center

There are currently four primary routings into and out of the downtown transit center.

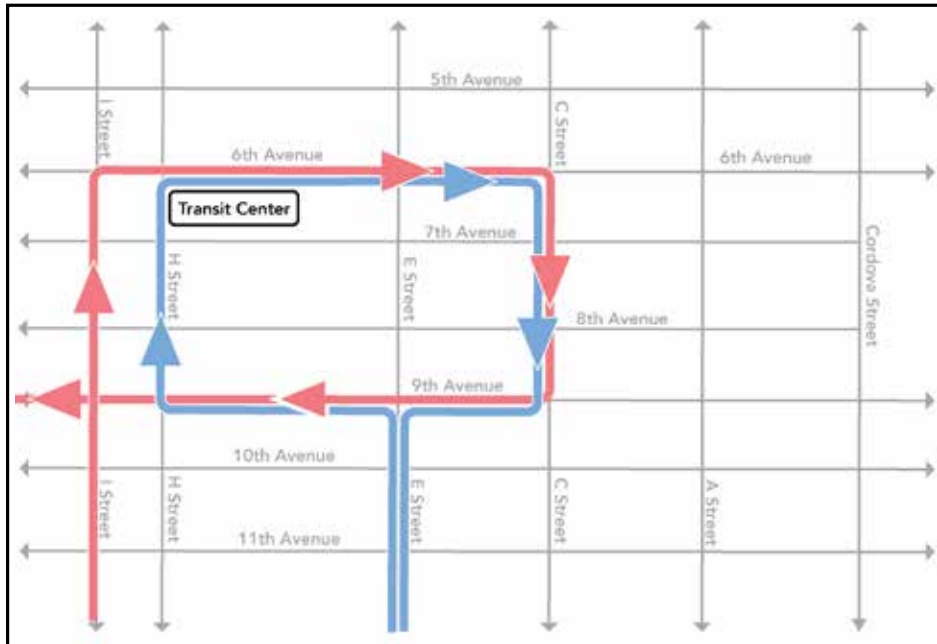


Figure 11: These series of routes entering downtown from the south and southwest, connect with the transit center before exiting downtown via C Street.

### West 6th Avenue / C Street Pattern

Routes 10, 35, 40, and 85, coming inbound from the south, approach the transit center on West 6th Avenue from H and I street. The routes then leave downtown via southbound C Street (where they share a stop), before continuing out into the larger transit network.

### C Street / West 6th Avenue Pattern

Route 20 coming from the east, operates on C Street inbound before continuing onto the transit center and exiting via West 6th Avenue.



Figure 10: Route 20 runs counter the previous set of routes, stopping along C Street before entering the transit center.

### West 6th Avenue / West 5th Avenue Pattern

Routes 25, 41, and 92 enter downtown core via West 5th Avenue, then turn around to access the transit center along West 6th Avenue. On its outbound path, Route 25 also connects with the C Street stop.

Because Route 25 spans a large part of Downtown on 5th and 6th avenues with service every 15 minutes, it provides some amount of downtown circulation for a segment of 5th/6th Avenue within the downtown core.

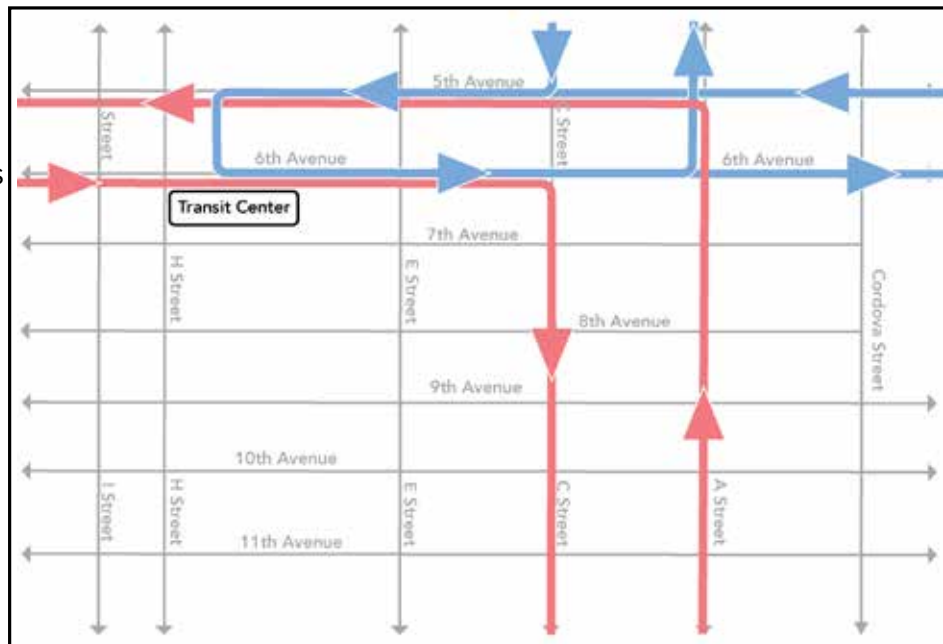


Figure 12: These routes use the one-way couplet of West 5th Ave. and West 6th Ave. to access the current transit center. This pattern has the additional benefit of provide east/west circulation within the core of downtown Anchorage.

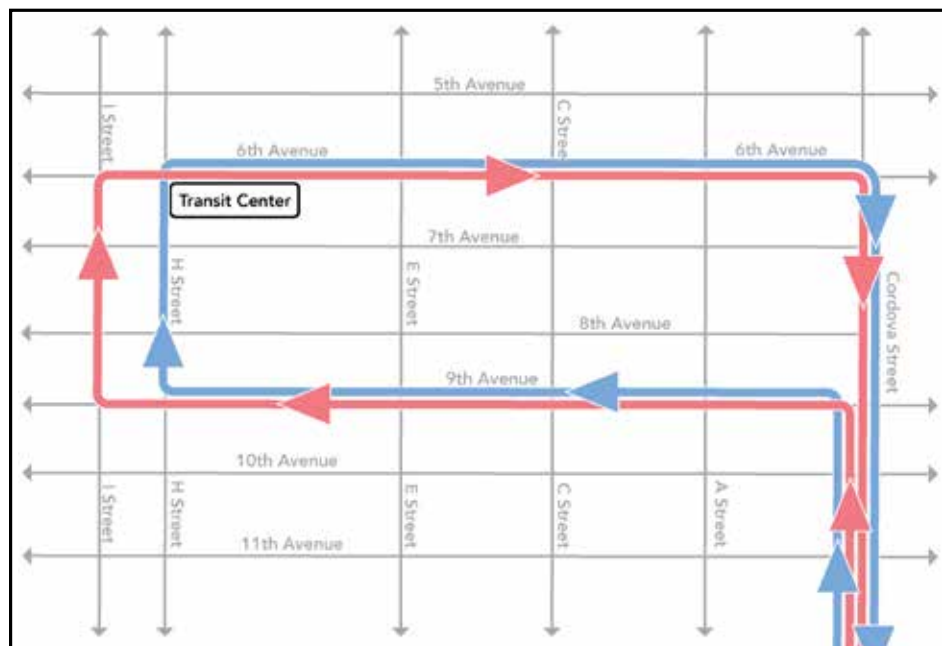


Figure 13: These routes entering downtown from the south and southeast, connect with the transit center before leaving downtown via Cordova Street.

### West 6th Ave. / Cordova Street Pattern

Routes 11 and 30 enter Downtown from the east via Cordova Street, turning onto West 9th Avenue before using H and I street to reach at the transit center on West 6th Avenue.

After serving the transit center, both routes continue along West 6th Avenue eastward, eventually turning south along Cordova Street before heading east.

## Ridership and Usage

A key component in understanding the Downtown transit center's role in the day-to-day operations of the larger People Mover network is to look at how people are using it throughout each day and across the week. The charts on this page show both the number of people arriving (Alighting) and departing (Boardings) from the current transit center between January and May of 2023.

### Total Ridership: 2019 vs. 2023

- » Ridership has recovered to approximately 80% of pre-COVID levels and continues to grow.
- » In 2019, average weekday ridership on People Mover was over 11,000 boardings, including about 1,800 boardings at the Downtown transit center.
- » From January to May 2023, average weekdays ridership was about 8,600 boardings, including about 1,200 boardings at the transit center.

## Weekday Ridership

The Weekday usage chart helps to visualize how the current transit center is used during a standard weekday. Boardings and alightings happen at all hours throughout the service day. Alightings are slightly higher in the 7 am and 8 am hours than in subsequent morning hours, as some people arrive downtown at the beginning of the workday, with over 70 people arriving in the 7 am to 8 am period.

However, the highest boardings and alightings are recorded in the afternoon and early evening, between about noon and 7 pm. The period of highest activity is more or less between 3 pm and 6 pm, with over 200 combined boardings and alightings per hour.

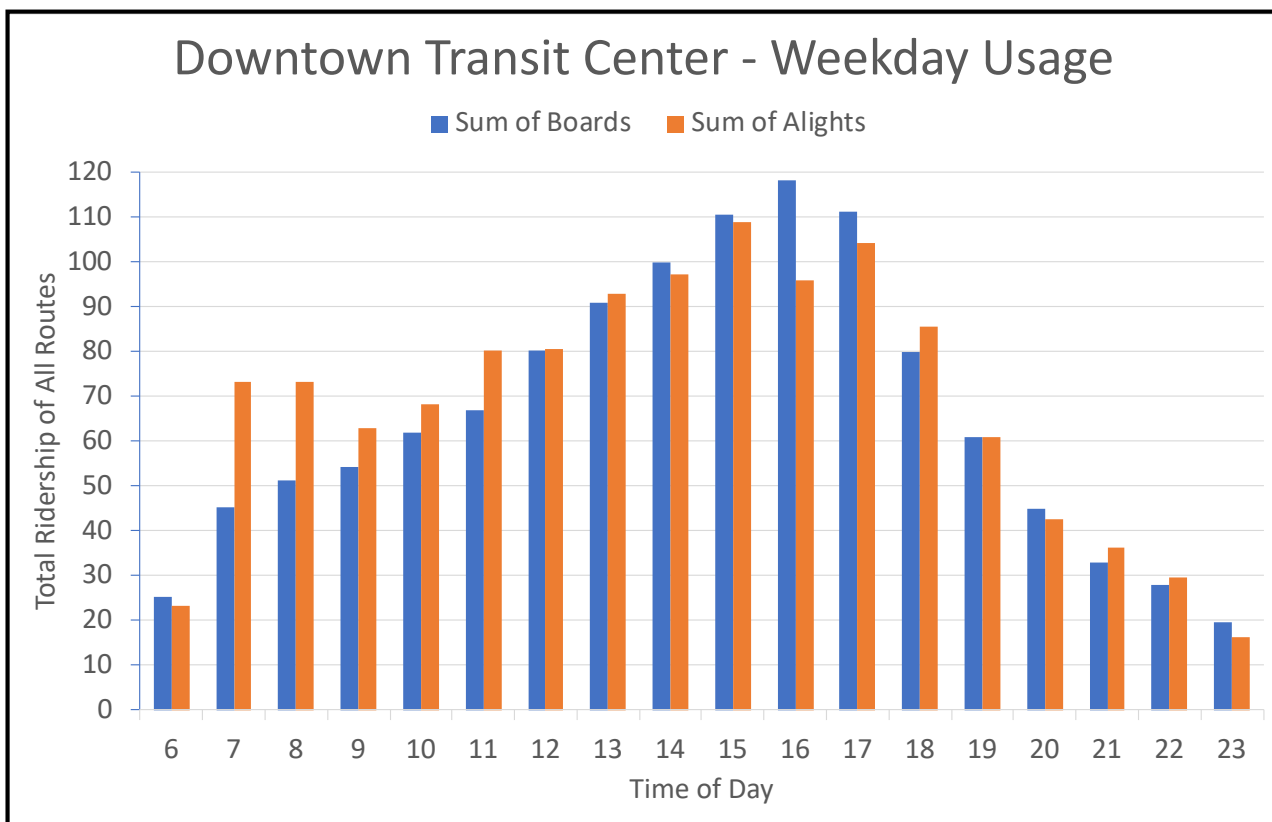


Figure 14: Weekday usage (boardings and alighting) of the transit center between 1/23 - 5/23



## Weekend Ridership

Total weekend ridership numbers reflect the transit network's lower levels of activity in comparison to weekdays. There is also less difference between different times of day. The busiest time on weekdays is the 4 pm hour, with over 120 combined boardings and alightings.

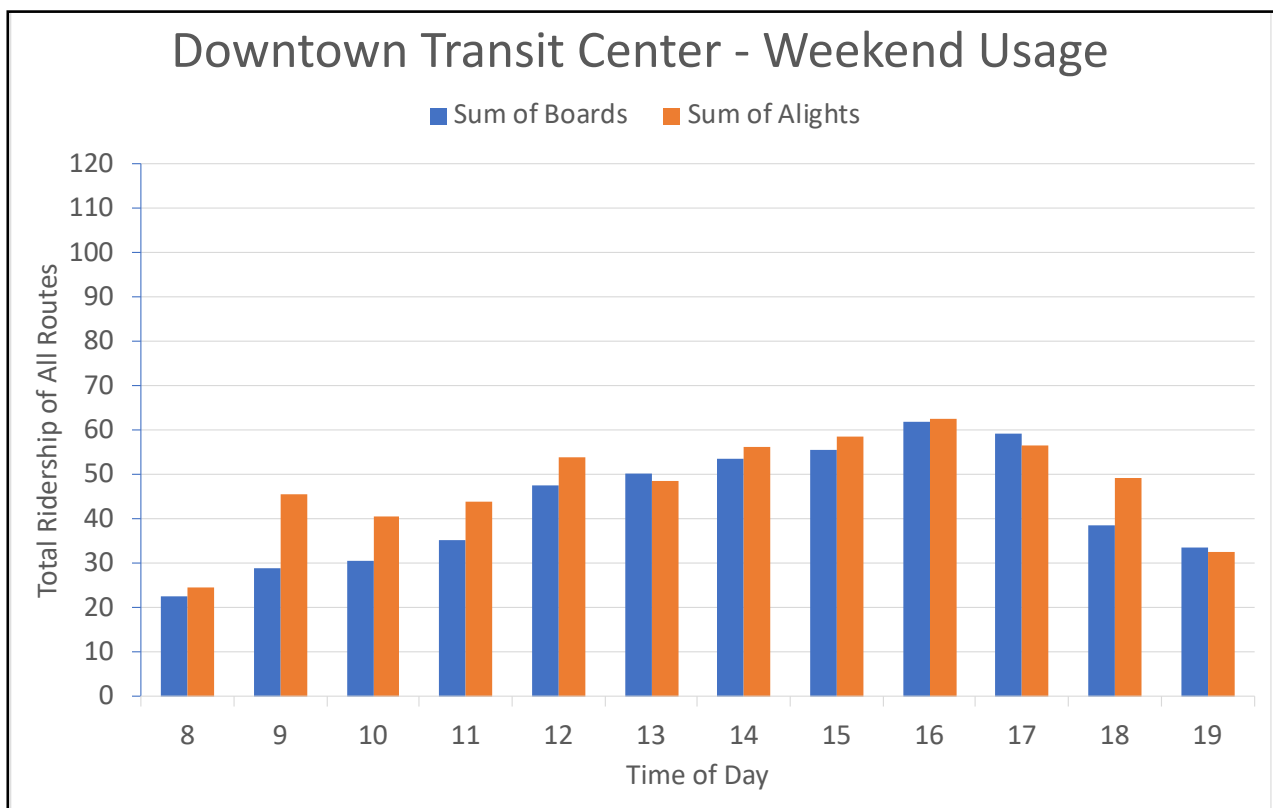


Figure 15: Weekend usage (boardings and alighting) of the transit center between 1/23 - 5/23

## Current Operational Footprint

The graphic below shows the current operational layout of the Downtown transit center. Riders board buses at one of three 'Zones': red, blue and green.

The Red Zone is located along H Street. The Blue Zone is located along 6th Avenue in front of the old indoor facility. The Green Zone is one block to the east on 6th Avenue in front of City Hall.

Network maps, schedules and rider information are available along the windows and information boards in the Blue and Red Zones. The Red and Green Zones also have a real time arrivals/ departure board.

Buses lay over (i.e. stop and park for a driver break) along the two street faces shown in yellow below. Having a layover location in the transit center maximizes operator breaks and increases efficiency by reducing the amount of time a driver is required to travel between active service and their break locations.

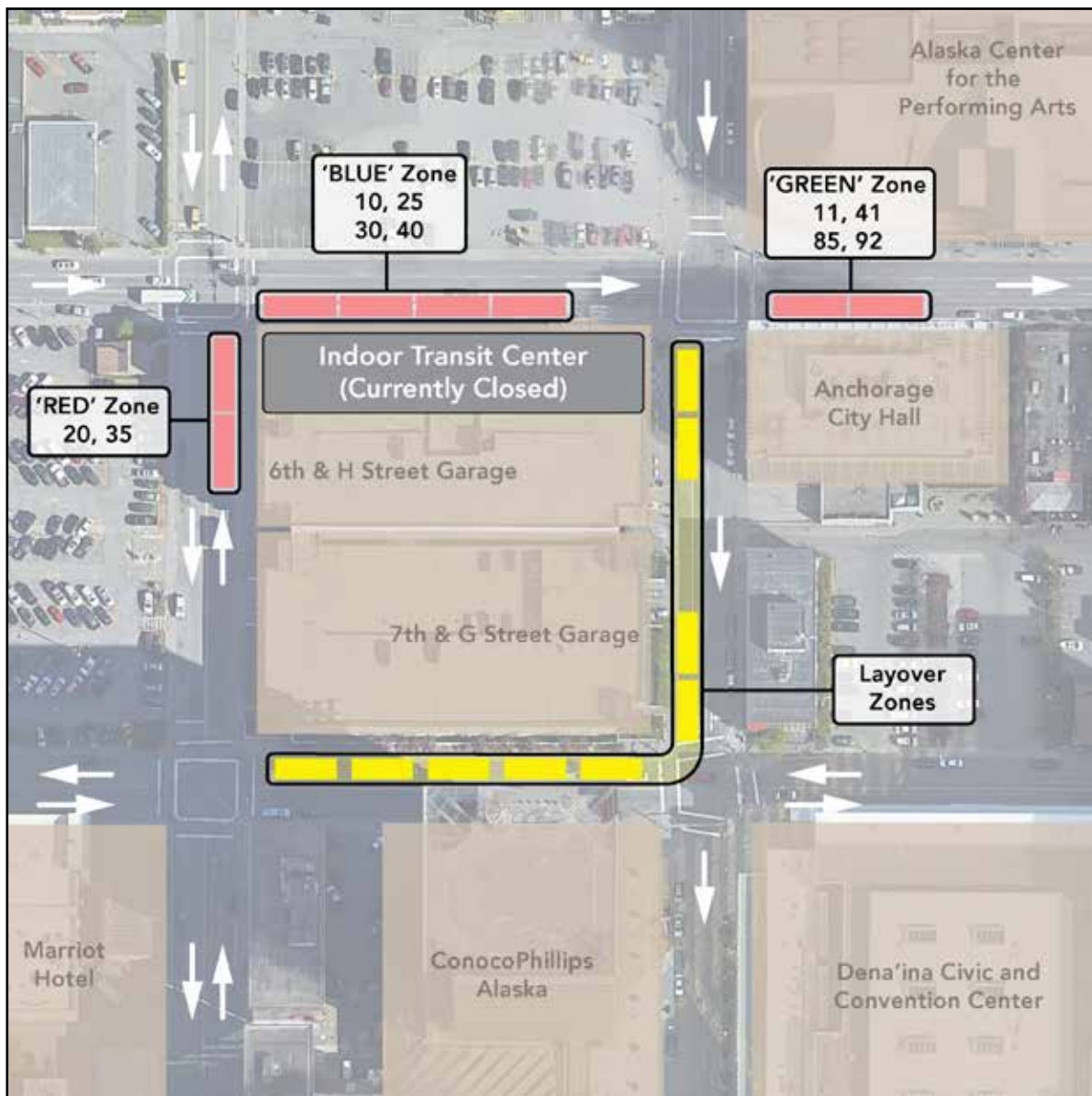


Figure 16: The graphic above shows how the current downtown transit center operates. Red rectangles represent the locations where buses stop to pick up and drop-off passengers. The yellow area and rectangles show where buses outside of active service layover before their next trip begins.

## Bus Volumes

One of the most important considerations in transit center design is vehicle capacity: how many buses per hour can the facility accommodate?

The chart to the right helps visualize how many buses are running through the current transit center in a standard weekday. Service ramps up in the early morning and ramps down in the evenings, but between 8 am and 6 pm over 50 trips per hour use the facility throughout the day.

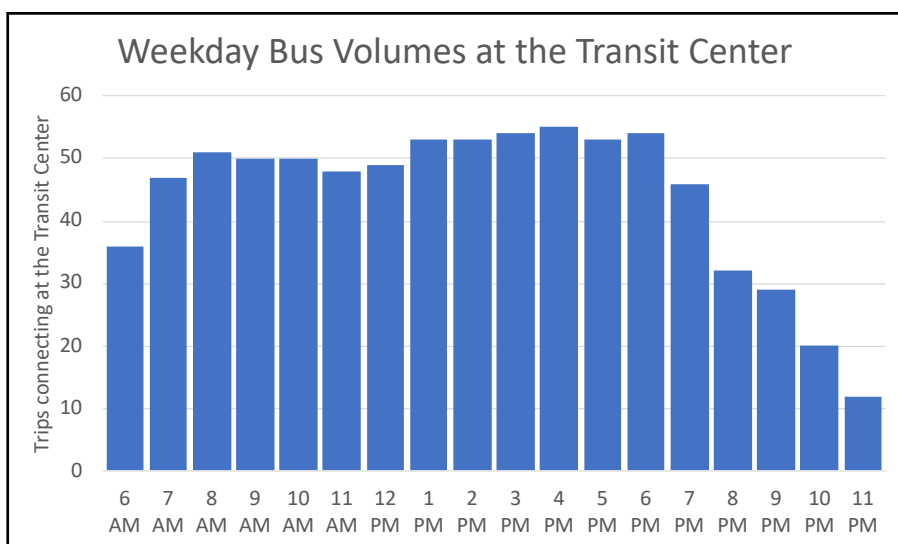


Figure 18: The chart above shows how many bus trips move through the transit center every hour during an average weekday.

## Peak Capacity

The graphic at the bottom of the page provides more details on how routes and bus volumes change across a standard weekday.

The route numbers are listed on the far left column of the graphic, with their total trips on a weekday listed in the far right column. The number of trips per hour are shown in the center of the chart with the total number of trips using the transit center by all routes totaled along the bottom row.

In total, 480 bus trips serve the transit center across an average weekday. The highest number of trips occur during the evening period, between 6 pm and 7 pm at 35 trips per hour. Because most bus trips end and begin at the transit center, this effectively means 25-29 buses go through the transit center every hour.

**480 trips serve the transit center on an average weekday. The peak usage is 35 trips per hour.**

Route Number	Hour of the Day																		Total Trips by Route
	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	
10	4	5	4	5	5	4	4	4	4	4	4	4	5	6	3	5	3	1	74
11	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
20	4	4	4	5	4	5	4	4	4	4	4	4	5	6	4	4	1	1	71
25	3	1	3	2	2	1	3	5	4	4	4	4	5	4	4	4	3	1	57
30	4	3	5	5	4	5	5	4	4	4	4	5	5	6	6	3	2	1	75
35	2	2	3	2	2	3	2	2	2	2	2	2	2	2	1	2	0	0	33
40	4	3	4	5	4	5	4	4	4	4	4	4	7	5	5	4	3	1	74
41	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	34
85	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	36
92	1	2	0	0	0	0	0	0	0	1	2	1	1	1	0	0	0	0	9
<b>Total Trips by Hour</b>	25	26	28	29	26	28	27	28	27	28	29	29	35	35	28	27	17	8	480

Figure 17: This graphic shows the distribution of trips using the transit center on a weekday under the current schedules.

## Operator Layover

Operator layover is the name for scheduled breaks that are built into each bus' schedule. These breaks allow drivers time to recover, take restroom breaks, and rest before starting their next trip.

All transit networks have layovers built into their schedules. An advantage of having layover locations for operators at a transit center is the reduction in "deadhead", or the out of service time required for bus operators to reach their breakpoint and facilities. This additional time is not a part of the operators break and can become an additional cost and inefficiency in situations where schedules are tight.

## Average Weekday Layover

The chart below looks at the current schedule to see how layover is currently managed at the downtown transit center. While layovers occur throughout the day, the maximum scheduled layover happens around 7 pm and 8 pm with up to 7 buses laying over simultaneously at the facility.

This is only accounting for scheduled layover. There are often situations where buses are delayed or running late due to traffic or unexpected situations. Transit agencies also often need to run additional buses for special services or seasonal changes that require additional layover space. For this reason, the existing transit center has several spare bays, for a total capacity of about 9 buses laying over.

**The transit center has up to 9 layover spaces currently.**

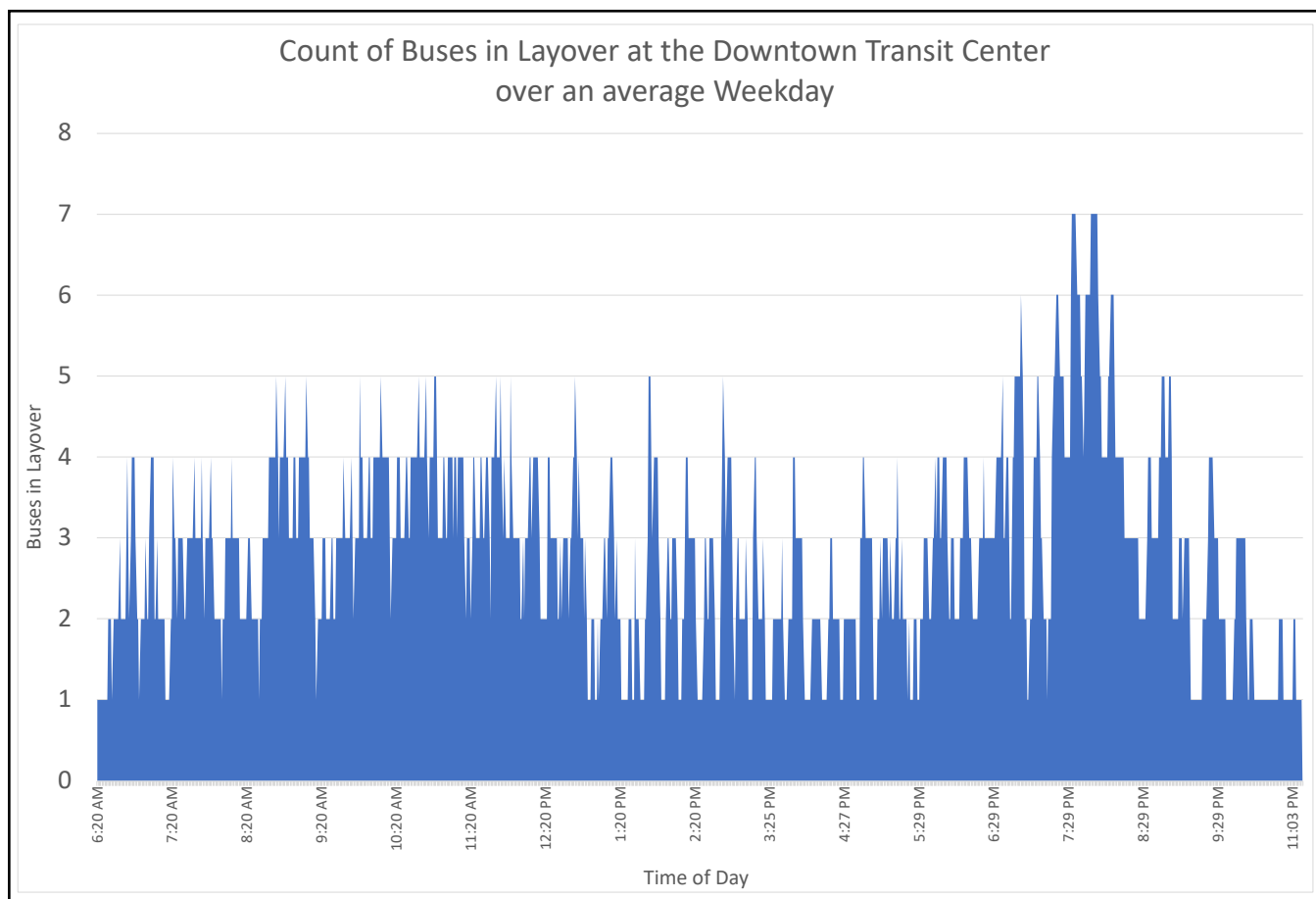


Figure 19: This chart help visualize how buses currently use the transit center for layover in between periods of active service.





# 3

## Site Requirements

What matters when selecting a transit center location?

## The Role of a Transit Center

When considering potential locations for a transit center, it is important to remember that the facility plays multiple roles in the success of a public transit network. For example:

- Operators depend on structured and comfortable break facilities.
- For new riders, a transit center is a central and highly visible point of entry into the network. This helps new riders access and use the system to its full potential, and makes it easy to explain where to go to people from out of town.
- As the connection point between multiple routes, it is a key location providing access to large parts of the city.
- The shape of the overall transit network is impacted by the location, size and design of the facility.
- Long term network plans and growth are constrained or aided by a transit center's capacity and location.

This concentrated focal point in the network can also become a natural location to centralize rider services and programs, and can even be a boon in locating other public and social services. The high volume of riders and other people coming through the facility makes it possible to provide services to many people at relatively low cost.

### Transit centers have two essential purposes:

- » Riders use transit centers to access and navigate the transit system.
- » The facilities at the transit center allow operators and managers to organize and provide service efficiently.

As a place many people come through, transit centers and their vicinity can also be an efficient place to locate a variety of public and private services.



Figure 20: Seating and trash amenities at stations and stops provide riders with more comfort during their trips.

## Orienting New Riders

Transit centers play an important role for riders, particularly new and first-time users. People riding for the first time, such as tourists, can find navigating a new transit system a challenge.

Transit centers are commonly a place where new riders enter the system with the help of larger network maps, detailed schedules and explanatory graphics. Some transit centers are also able to provide a customer service desk or staff with training to provide direct help.

## Maintaining Easy Connections

For a public transit network, transit centers can play a role in simplifying transfers.

As an end-of-line location for multiple routes, transit centers become a natural hub in the network allowing for riders to make a single transfer to the highest number of final destinations.

## Creating a 'Pulse' or Timed Connections

This structure can also allow for the introduction of multiple timed connections, called a "pulse". A pulse allows for multiple lower frequency routes (e.g. routes that operate every 30 or 60 minutes) to arrive at the same time, allowing passengers to transfer easily in any direction.

A transit center's ability to accommodate a pulse in the future can be limited or encouraged by its location and design. The right site and operational layout will make it possible to have timed transfers, if desired.

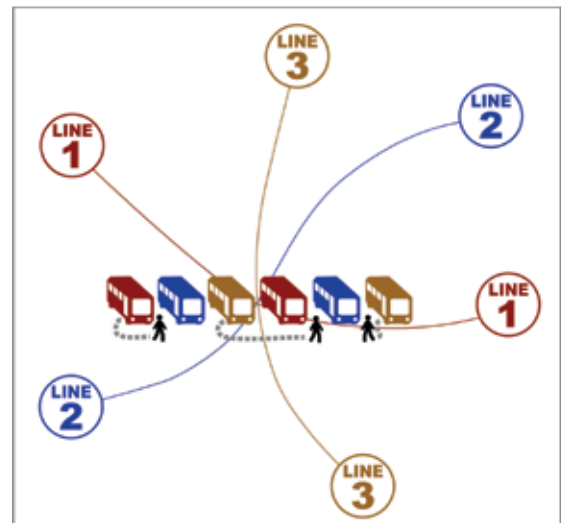


Figure 21: This graphic helps show how a pulse (or timed connection) allows a rider to transfer between multiple routes with a single timed transfer. This multiplies the amount of total destinations available to a rider.

## Operational Requirements

Transit centers play a key role in the operations of a transit network. They provide staging and layover areas for buses that support reliable schedules and service levels. They also commonly house additional transit agency operations and staff in a centralized single location.

### Layover and Bays

No matter what other functions the transit center serves, it must at a minimum allow buses to serve passengers and provide layover for bus operators.

**The size of the transit center is driven mostly by the number of required bus stops and layover bays.** The current downtown transit center footprint offers space for 8 total bays for 10 routes in service and up to 9 layover bays along G Street and 7th Ave. This works because currently individual bays are not assigned to specific routes and any given zone can handle

several vehicles.

Because a transit center may have a long life span (e.g. 20-50 years), it is better to plan with the idea that more space will be needed in future, to prevent under-sizing a new facility. At the same time, over-sizing a facility can be expensive and counter-productive, so we will refer here to People Mover's known future expansion plans.

People Mover's 2020 Transit On The Move plan includes the possibility of up to three additional routes serving downtown in the next twenty years, for a total of 13 routes. Two of these new routes would operate every 30-60 minutes, and one would operate every 15 minutes<sup>1</sup>.

**This suggests the following capacity needs:**

- If current scheduling and operating practices are continued, at least 10 bays for pick up and drop-off and 12 layover spaces.
- If the goal is to make it possible for all bus routes to be present simultaneously at the transit center in addition to possible occasional added services, at least 15 bays

for pick-up and drop-off (13 regular + 2 occasional), and at least 8 additional layover spaces to handle overflow (6 for frequent route layover + 2 for overflow).

However, **these are not hard requirements: they depend on site design and desired level of flexibility in operational practices.** Other possible arrangements include:

- Scheduling buses to deliberately make it possible for two or more routes to share a bus bay.
- Using the same bus bay for pick-up/drop-off and layover.

1. Designated in the plan as Routes F, I and U. The other additional route to Downtown in this plan (H) has already been implemented as Route 85.

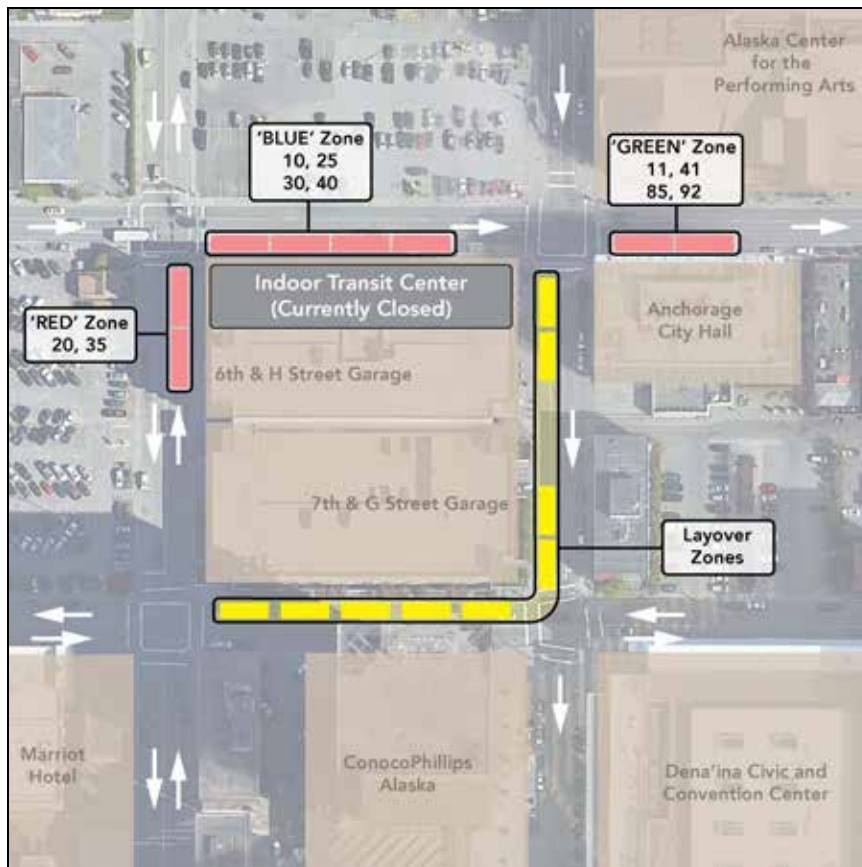


Figure 22: The yellow area and rectangles on this graphic help show how the current transit center provides layover for operators and buses in between active service periods.



- Using a single small area for drop off and pick-up (equivalent to 2 to 4 bus lengths), and reserving the bulk of the space for the maximum anticipated simultaneous layover (likely 12 bays based on current operations and possible expansions).

Overall, depending on operational arrangements, **a future facility will require between 8 and 16 spaces for pick-up and drop-off, and 8 to 12 layover spaces.**

**The amount of space required for these will depend on location.** If an on-street arrangement can be found, a new transit center may be able to continue using curb space for pick-up/drop-off and layover. If off-street operations are required and all buses must stop and park off-street, then the space needed for bays and layover spaces would require up to 2 acres, or about a Downtown city block.

## Operators and Support Staff

Not all transit centers need to provide operational support. For those transit centers that do act as operating bases, the following facilities will be needed.

### Operator break-rooms and restrooms

To allow for operator breaks, there must be designated bathrooms and break-rooms available. The ability for operators to have these facilities on site and easily available can be important in recruiting and maintaining operators.

It also plays an important role in schedule reliability: people need to use restrooms. If restrooms are not on site, operators will just go somewhere off-site and take longer, impacting overall reliability.



*Figure 23: A Red Zone stop in the transit center provides riders information about both the routes using this zone and the network as a whole.*

### Service Staff break-rooms and restrooms

Customer service and other support staff are essential to a functional indoor transit center. They will also require facilities.

### Security

Sufficient security is essential in order for riders and operators to feel safe within in the transit center. Having offices or security on site facilitates efficient operations and can help to monitor and maintain transit center operations.

Combining multiple functions through the transit center (e.g. access to businesses) can also be beneficial to security. This ensures that many (and many different kinds of) people see and use the space throughout the day.



## Rider Amenities

Rider Amenities help support riders' willingness to use the facility and in turn boost (or maintain) overall ridership on the transit system.

### Ticket Office and Kiosks

While online and digital ticketing allow many people to pay for their transit trips using their phones, they do not work for everyone.

Centralized kiosks allow for the purchase of tickets at an on-site machine, which can be easily monitored and maintained.

Having a ticket office can act as a central location for riders experiencing issues with their payments, who are having issues with lost passes, or need assistance understanding what their options are.

### Customer Service Desk

On-site customer service can also help create a successful transit center. Customer service staff sell fares, provide information about individual routes and schedules, and can help people to navigate the transit system. In addition, their presence also aids in limiting anti-social behavior and enhances station security.

### Travel Training

Travel training is a very successful program that many transit agencies offer, but is commonly unknown to the general public. Travel training is a method that can help bridge the learning gap for new riders, especially seniors and persons with disabilities.

In the past, People Mover had Travel Training located at the centralized and easily reachable downtown transit center. A centralized location for travel training can help expand People Mover's ability to help those with an interest to gain mobility and freedom on the public transit network.



Figure 24: Large maps and schedules help riders navigate the People Mover network with ease.

### On-site Businesses and Other Amenities

Transit centers can also offer a home to many non-transit amenities, from bicycle facilities to food carts.

While these smaller storefronts and amenities are rarely driving the overall size and footprint of a transit center, they are a good way to enliven the site and improve the productivity of the land and the benefits of a transit center investment.

Indoor transit centers can provide spaces for storefronts to multiple food vendors and other businesses. These spaces can allow for non-traditional collaborations between other public or private businesses looking to reach the public.

## Location Criteria

The overall size of the facility, its location within the transit network, and any desired amenities all impact how a location may suit a potential transit center.

A transit center intended to act as the key transfer facility or the primary face of the transit network is best located close to high activity locations with mixes of uses that are active throughout the day and across the week. These locations are common in already high activity areas and places where transit is already present.

For a center that needs to function as the major transfer location between routes, and the major customer service center, it will ideally be located in a place that is:

- In a **central location** within the city and transit network, to allow the largest number of people the highest number of opportunities.
- In a **dense and busy area**, so that many people can access an area active throughout the day and night, and on weekends. This allows people to take advantage of the longer hours and higher levels of service available at the transit center.
- Where **transfers make sense** to connect riders traveling across different parts of the city.

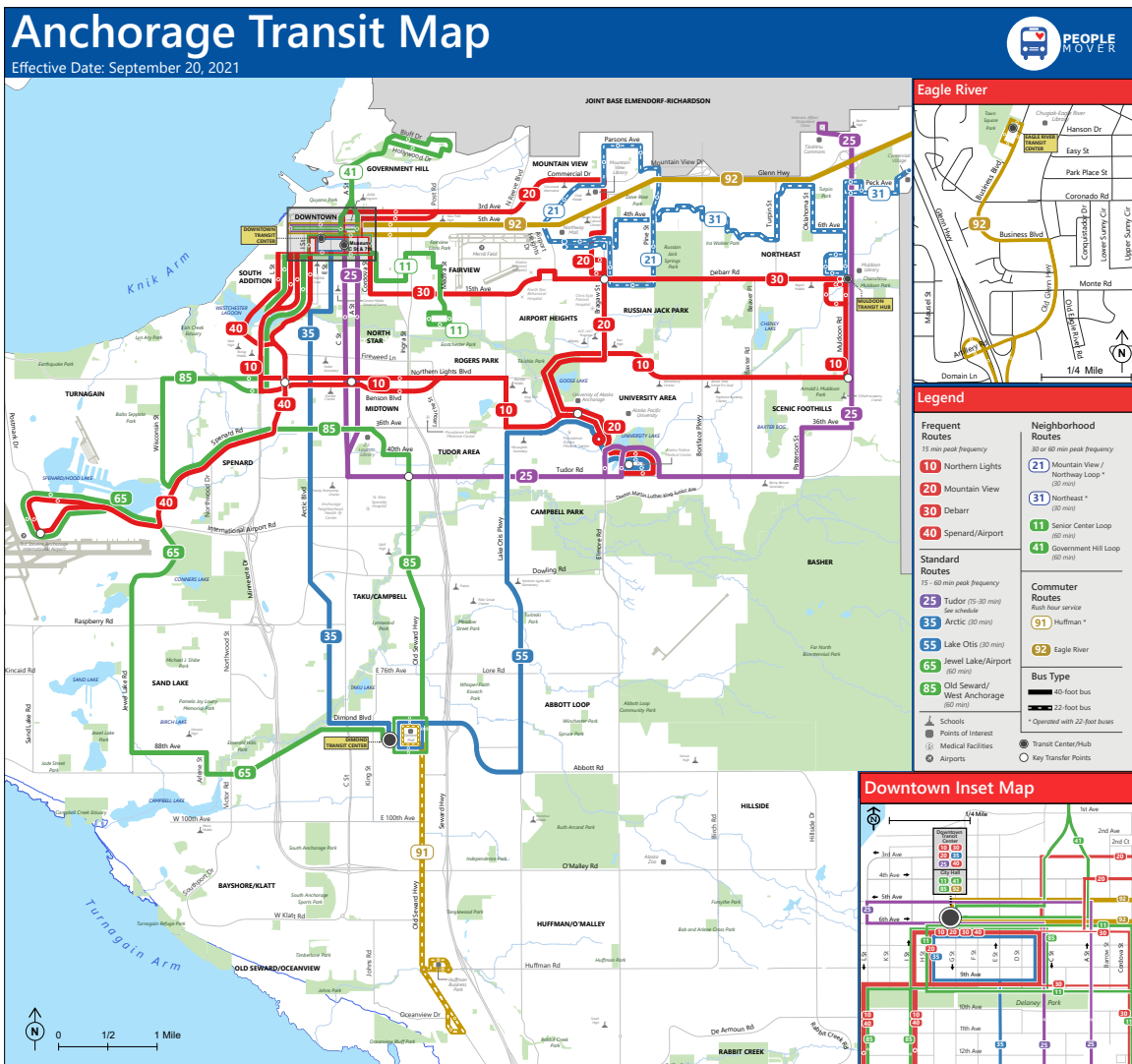


Figure 25: Current People Mover Transit Network Map.

## Somewhere Central

**Transit centers provide a big concentration of useful transit service to one location. It is strategic to put that concentration of service in an area where transit will be especially useful.**

This is typically a dense and walkable area, with many jobs and residents, such as a downtown, a hospital or university district, or a major shopping area. Doing this allows for a large number of trips to be served by individual routes to the transit center's already active location.

Job location data is a decent indicator of overall activity. This data represents both a worker traveling to and from the job location, as well as capturing some of the activity created by other people using that job's service during day to day life.

The map below shows the density of jobs in Anchorage. Looking at areas with the highest jobs per square mile, patterns around the city emerge.

A strong core area stretches between downtown Anchorage south to the Taku / Campbell area. There are also large stretches of job-rich areas along Tudor Road and the UMed District, and pockets scattered around the edges (Ted Stevens Airport, Muldoon, and Old Seward).

The map reflects areas within Anchorage that act as strong economic centers for the region and can be a useful indicator when looking for locations where a transit center can support and leverage the current development patterns.

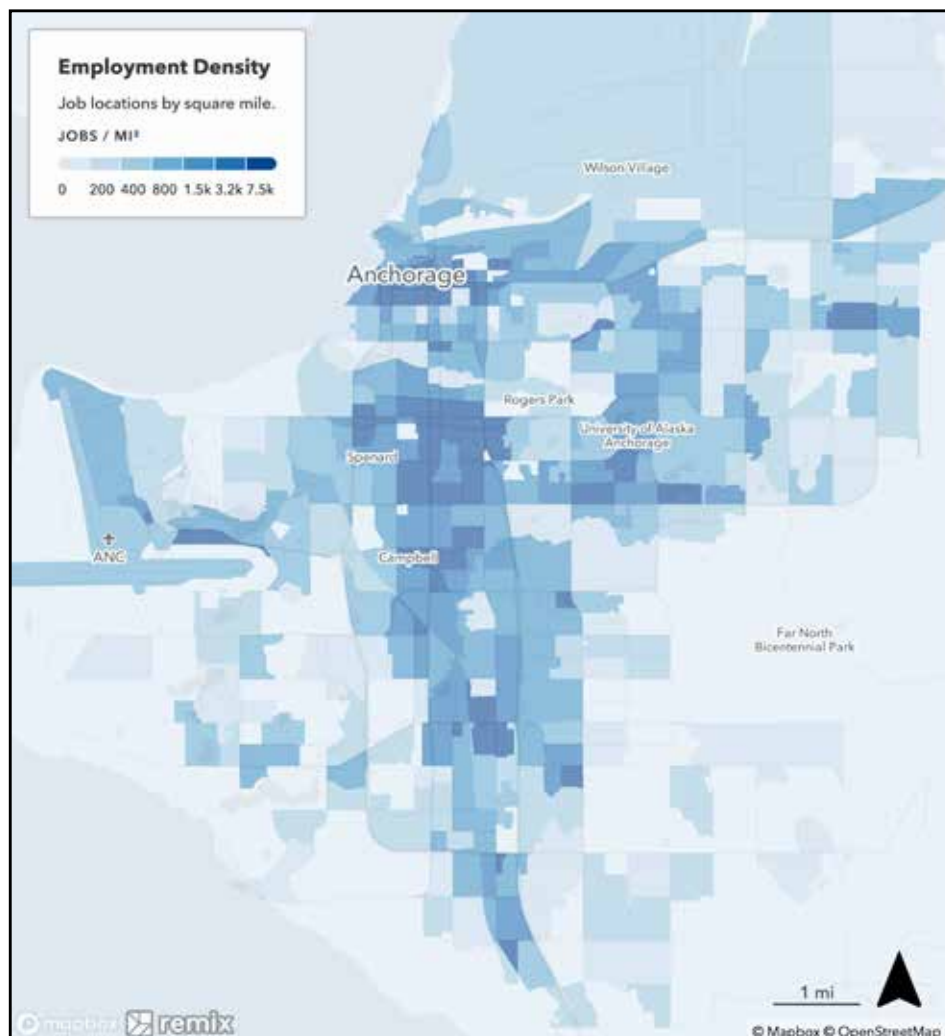


Figure 26: This map shows the Traffic Analysis Zone with the highest levels of employment density. Job data source is Census (CTTP) 2016 TAZ data.

## Somewhere Useful

Everyone is a pedestrian in some portion of their trip. Whether you're walking from a parking lot, securing your bicycle, or walking to a bus stop the number of overall places you can reach is impacted by how walkable the area is. Limited street connections, sidewalk availability, and safe points to cross the road act as barriers to a person's ability to reach their destinations.

With this in mind, one way to examine areas of high activity (concentration of jobs) is to see how effectively the street network supports someone's ability to walk to a destination in 10 minutes or less. A walking supportive area can act as a multiplier allowing transit riders (and other travelers) to reach many more destinations from a single stop location.

When looking at how many job locations can be reached in a 10 minute walk, we can see the three highest density employment zones of Anchorage emerge.



Figure 27: Walkability looks at how street design impacts how far someone can walk in a limited amount of time. A highly gridded interconnected road network will allow someone to travel farther in a short walk than a disconnected area with limited street access.

**Downtown Anchorage** remains a very strong economic core with its historic concentration of jobs, destinations, and services. Supported by the traditional gridded road network, a high number of jobs can be reached with a 10 minute walk.

The more recently developed **Midtown** area has high concentrations of jobs and services. Even with its less gridded street network the area has a large amount of jobs reachable in 10 minutes of walking.

The last area which emerges, at a much more limited scale, is the UMed District. The combination of University, Medical and other institutional destinations concentrate a number of jobs into the area. Even with a less walkable street network than the downtown core, a modest number of jobs are reachable in a 10 minute walk.

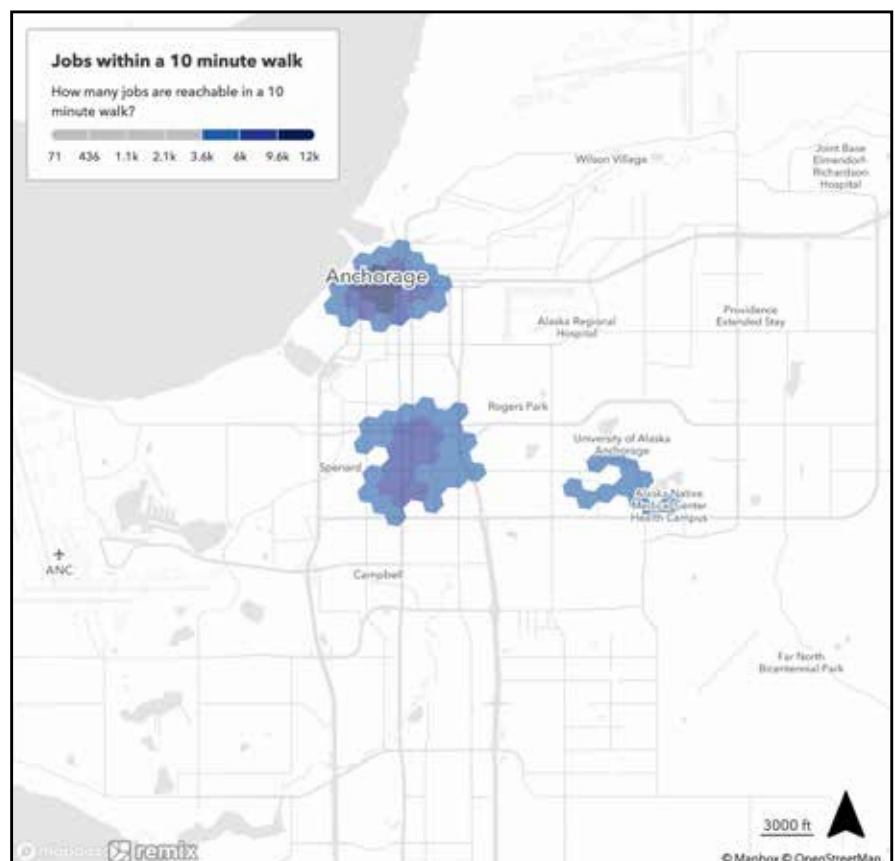


Figure 28: This map shows how many jobs can be reached in a 10 minute walk. Job data source is Census (CTTP) 2016 TAZ data.



## WHAT IS ACCESS?

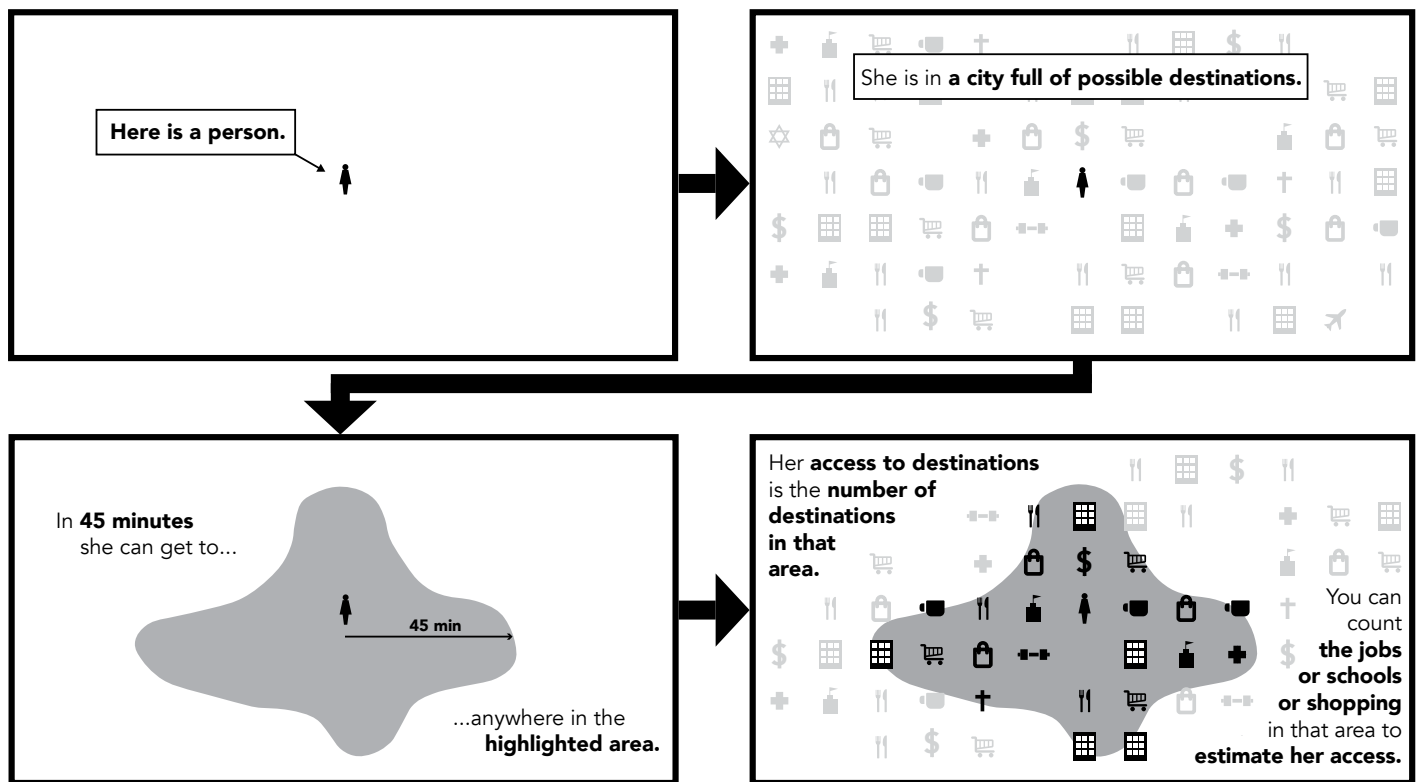


Figure 29: Access defines how many opportunities a potential transit rider can reach in a discrete amount of time.

If a transit center were located within any of these areas then existing and potential riders looking to access the high of concentration employment centers benefit from improved service. In turn, this higher level of activity would benefit the transit center by providing a useful non-transfer service in addition to the newly created transfer activity from riders moving through the transit center as a part of trip.

### Why Transit Access Matters

Many factors affect people's decision to use transit, but the most fundamental is time. Most potential riders are working, studying, or raising children (or all three!) and have a limited amount of time in their day that they can devote to traveling. Even people who don't have the option to drive won't use public transit if it takes more time than they can spare. Long travel times required are one of the most universally cited reasons not to use transit, even among people who would otherwise be open to it.

We can measure this component of the transit network by looking at how many total destinations a person can reach from anywhere in the city using the current transit system.

For any one person, traveling from one location at one time of day, there is a limited number of destinations reachable within their available time, which can be represented in the blob seen above.

We can take this method and adjust the total travel time expectation to show the areas that are reachable by the greatest number of existing residents at various thresholds. High access areas would create the largest benefit if a transit center were located in them. Transit centers help support easy connections between multiple routes, magnifying the total amount of service to and from the Transit center location, and in turn into the larger People Mover transit network.



## Somewhere it's Easy to get to by Transit

In addition to where jobs are located, and how supportive the road network is, it is important to consider the ability for a current or potential transit rider to have the most useful network possible.

The map below uses Transit Access, described on the previous page, to analyze how many jobs are reachable in 20 minutes during a weekday afternoon, when demand tends to be highest.

The darker blue colors reflect how the current network provides high levels of access to jobs to the central areas in Anchorage. These areas correspond to places with high levels of job locations that can be reached by transit and walking.

Downtown Anchorage stretching south to Midtown and the UMed district are all highly served by the current network. Ted Stevens Airport to the west, the Dimond transit center to the south, Bragaw Street and Debarr Road out to Muldoon Road also emerge, but at slightly lower levels of access than the central core.

If the transit center were moved to a new location it would have an impact on the overall access of the region, but the current network has already been designed to support the city of Anchorage as a whole. The majority of the routes and roadways served will likely continue to run similarly to today, even with a new transit center location. This means that while a change to the overall network structure would result in some changes to the map below, the larger patterns of access will remain similar.

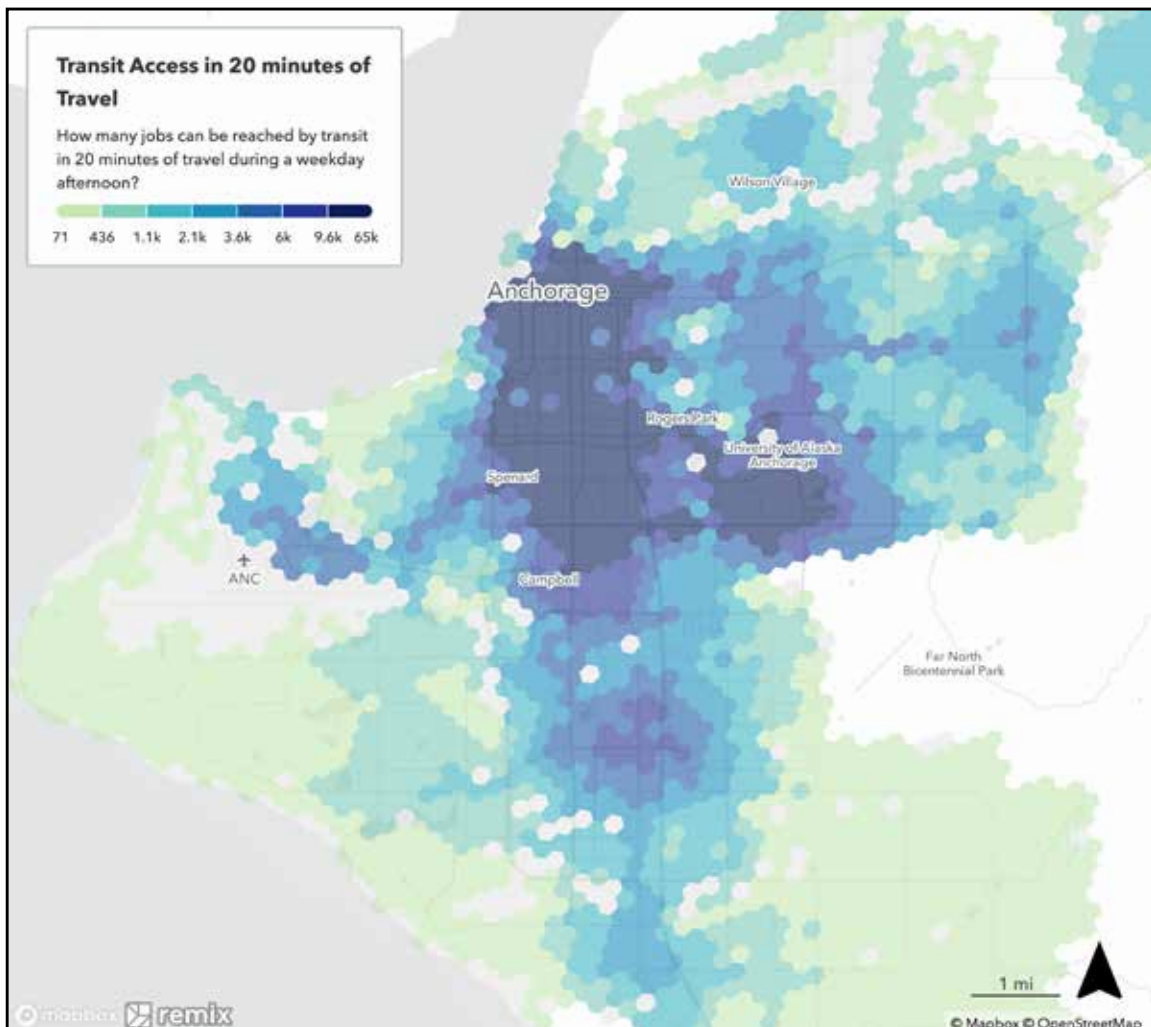


Figure 30: This map shows the number of jobs that can be reached in a 20 minute trip using the current transit system on a weekday afternoon. Job data source is Census (CTTP) 2016 TAZ data.

## Suitable Central Areas

Looking at the current People Mover Transit system, areas with the highest levels of all-day activity, areas with transit supportive land use and roadway patterns, and areas where the current network is best served by transit a few potential areas emerge that seem suitable for a central transit facility:

- Downtown Core.** Anchorage's downtown core is the current location of the transit center. The network has been designed to take full advantage with 10 routes currently using it as an operational facility. The downtown core also provides high levels of activity throughout the day and across the week. The traditional street grid, extensive sidewalks and safe crossings allow people to easily walk to and from the transit center. Downtown Anchorage also has some of the highest levels of Transit Access to jobs and opportunities in the system.
- Midtown Area.** Midtown is another large commercial center within Anchorage. The current network has 5 routes operating in the area, 3 of which run every 15 minutes during the afternoon peak. While not as concentrated as the downtown core, Midtown has very high levels of daily
- UMed District.** The UMed District is the last area that emerges as a potentially suitable location. The current network has 4 routes serving the district, 3 of which run every 15 minutes during the afternoon peak and 2 using it as a current end-of-route location. Job densities also show the district as one of the higher concentration of jobs in Anchorage. It is the weakest in terms of jobs reachable in 10 minutes of walking, but the area has a high level of off-street pathways and sidewalks that do support transit's effectiveness. UMed also shows very high levels of Transit Access to jobs and opportunities for people using the current system.

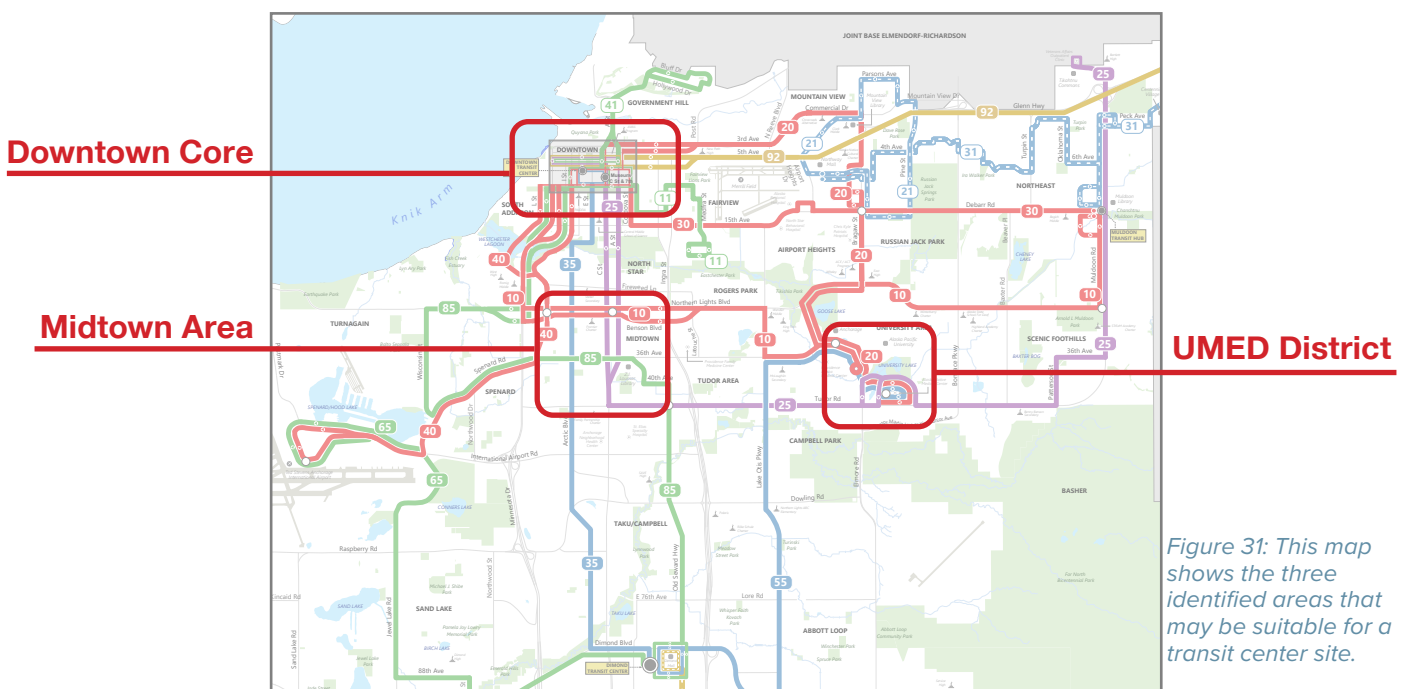


Figure 31: This map shows the three identified areas that may be suitable for a transit center site.

## Alternatives to a Central Transit Center

If the Municipality were to locate the major People Mover transit center in a less centralized location, there would be consequences for the usefulness of the transit system. These consequences will be considered in the decision about where to locate the transit center.

A transit agency looking to build high performing, strong ridership-routes will likely continue connecting to the productive downtown core. A non-downtown transit center will not change the need for high levels of service to downtown. This can often result in undesirable, and inefficient, duplicative services being operated.

With all of this in mind, it is possible to restructure the network to have a non-central transit center. This can be achieved through a couple of different approaches.

### Multiple Outlying Transit Hubs

If transit center facilities are reoriented to become edge focused through the creation of multiple smaller outlying transit hubs, it will be important that all rider amenities and operational requirements are fully considered.

This shift in focus will not reduce or eliminate any of the outlined requirements, but careful planning and design of these requirements can be achieved via alternative methods.

### Rider Amenities

Moving to focus towards outlying hubs is primarily a large restructuring on the operational side. Many of the services that would exist in a centralized transit center would likely need to be maintained in some form downtown.

While this change could allow for these amenities to be distributed across a few locations downtown, they could also be replaced with a single smaller facility without the need for some operational requirements.

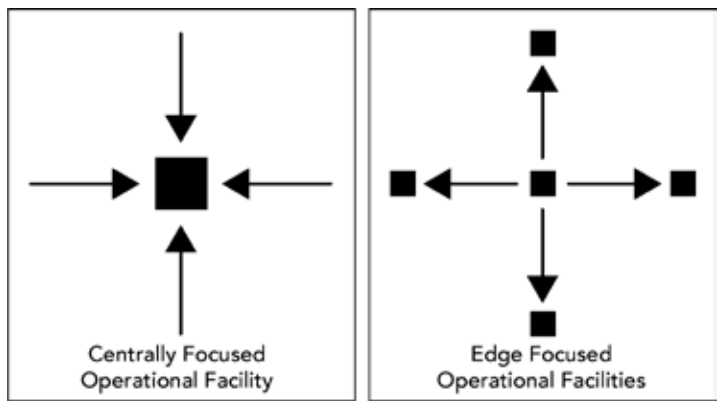


Figure 32: Outlying operational facilities decreases the required facilities at any single location, but will require adjustments to overall network structure, planning, and facility management over multiple individual sites.

### Operational Requirements

The majority of the operational requirements listed earlier in this report can be shifted to various outlying transit centers. Many, if not all, of the current routes heading downtown will continue to do so, but under this model they would not spend additional time waiting or taking layover downtown.

Under this design, routes would continue through downtown after making their stops and have their operational requirements met at the outer ends of each route. This would likely see many of these routes reconnecting at shared outer destinations where layover and operator facilities can be provided.

This operational change would have limited impact on riders, but would require each route to be redesigned to guarantee that minimum operator layover, restroom access, and break facilities are available without the current downtown facility.

People Mover's current system has the Dimond transit center to the south. The current UMed District also has a high number of routes converging, but currently has very limited layover and restroom options. There are also early planning efforts looking at enhancing the Muldoon area with a smaller transit hub which may be able to expand to meet some of these requirements.

At this time, the current status of these existing and planned facilities would not be able to replicate the operational capacity of the current downtown transit center.

This would likely mean instead of a single investment into a centralized transit center, these same resources would need to be spread across a number of the identified, or new, outlying smaller transit hubs.

### Downtown Transit Mall

Another alternative to a single central transit center would be the creation of a Downtown Transit Mall. Transit Malls are a fairly common approach to creating a street or pair of streets where transit is concentrated, usually in a city's downtown core. This is done by improving and branding a collection of stops along a Transit Mall street, or zone, where riders can easily navigate to or transfer between routes.

#### Rider Amenities

The advantage of a transit corridor is that riders are not concentrated at a single location, but instead spread across a number of blocks. With correct signage this also makes navigating simple for new riders or tourists who will be able to easily identify the transit mall and access the larger network.

These blocks would provide a higher level of amenities than a standard transit stop, but individually would provide less than a single transit center. Think of the same overall amount of rider services from a transit center spread across a couple of blocks .



Figure 34: Riders using the transit mall in downtown Minneapolis, MN

A transit mall does not eliminate the need for other rider amenities identified in the previous section. To provide the same benefit as a centralized transit center, customer service centers, ticket offices, travel training and other rider amenities need to be located throughout or nearby the mall.

#### Operational Requirements

Operationally this solution would provide bays for routes to stop downtown, but layover and other operational requirements would still need to be sited. These could be moved to multiple outer transit facilities, as described in the previous example, or they could be dispersed throughout the downtown.

Driver layover could be split into multiple smaller layover locations where, if close enough to the transit mall, inefficiency and wasted time can be held low similar to if there was a single central facility.

It is important that the transit agency has secure access to restrooms, break rooms and other

operational requirements in a manner that is comparable to a single centralized facility controlled by the agency.

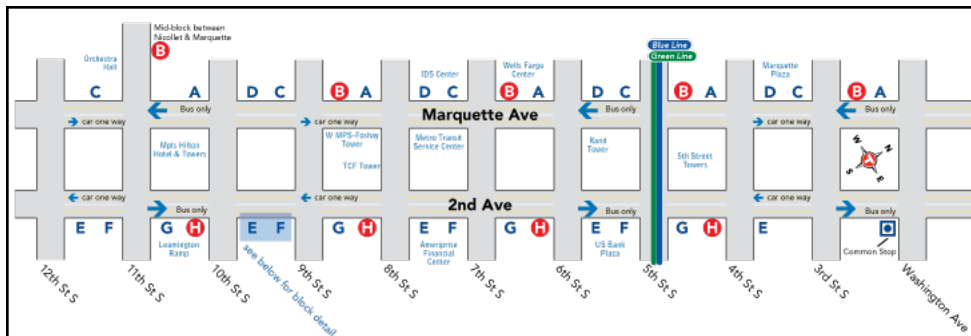


Figure 33: Design layout of Marquette and 2nd Ave. Transit Mall in Minneapolis, MN. (www.metrotransit.org)





# 4

## Summary of Key Points



## Context

The Downtown transit center site has been identified for redevelopment. The transit center site is owned by the Anchorage Community Development Authority (ACDA). Due to potential redevelopment plans, People Mover will be required to temporarily relocate transit center operations to a different site during construction.

This is an opportunity to re-examine where the transit center should be located. Because even a temporary change will disrupt riders and operations, the Public Transportation Department is taking this opportunity to conduct a study to examine the benefits and trade-offs of potential future transit center locations.

## Options

### Option 1: Keep the transit center in place.

This is the project baseline against which any options for future relocation will be compared. This option minimizes long-term disturbance to riders and service. However, it may also pose challenges for ACDA's redevelopment plans, such as finding a way to replace the former indoor facilities on-site. It will also not take away the need for a temporary relocation.

### Option 2: Relocate somewhere else in Downtown.

While any relocation would impact operators and riders, staying Downtown would minimize disruption. However, relocating to another site in the Downtown area may impact adjacent neighboring uses. This would also be dependent on finding a site that is both viable and available.

### Option 3: Relocate outside of Downtown.

This could be in two areas that are both relatively strong centers of activity, if a viable site can be identified:

- Midtown is a major commercial and jobs center. However, Midtown is much less walkable than Downtown, and any relocation to a Midtown site would require redesigning People Mover's bus routes.
- UMed District is far from the city's center, but is important enough to be the end of several frequent bus lines. A new transit center in this area might remove the need for a downtown facility. However, this would require both redesigning bus routes and rethinking many other aspects of People Mover's operations.

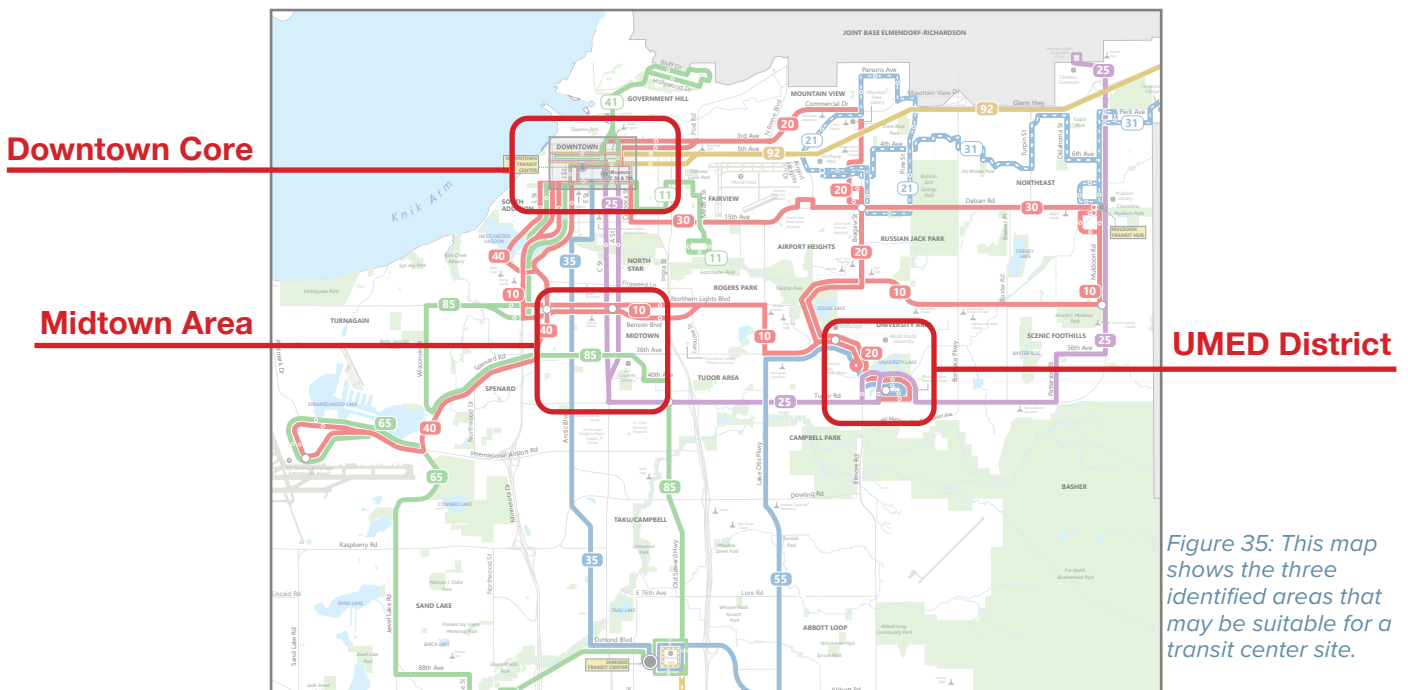


Figure 35: This map shows the three identified areas that may be suitable for a transit center site.

## Operational Requirements

**People Mover's main transit center should be in a central location**, in a dense and busy area, where it makes sense for many bus routes to converge. This limits possibilities to the ones mentioned above: Downtown, Midtown, potentially the UMed District.

## Necessary Features

Regardless of location, any transit center location should at minimum include:

- Enough bays and layover spaces. Based on People Mover's existing service and future plans, this likely means **enough room for about 16 to 24 buses**. These spaces could be located on-street, off-street, or a mix of the two. Their exact number and configuration is highly site-specific.
- Break rooms and restrooms for bus operators.
- A means for passengers to buy fares and interact with People Mover, such as a customer service desk and/or ticket office.
- Public restrooms.
- Break rooms and restrooms for other support staff.
- Security.

## Useful Amenities

Transit centers function best (and require less additional security) when amenities attract many different people and types of uses. Other common uses at or near transit centers that should be considered include:

- Offices for various transit system support functions, such as travel training.
- Offices for social, health or other services.
- On-site businesses, such as a convenience store and/or food vendors.
- Connections to other travel modes, such as bicycle parking and storage, space for taxis and ridesharing.

## Next Steps

This memo summarizes the context and requirements for a transit center relocation. **The next step is to identify possible relocation sites**, and evaluate whether they are potentially viable.

**The public will be consulted about key trade-offs** among five potential sites in September 2023. In March 2024, the public will again be consulted about the detailed implications of three potential sites. Public feedback will help inform the final site selection process.

