

PARK CITY SHORT RANGE TRANSIT PLAN



PREPARED BY

FEHR & PEERS



2023

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Acknowledgments



PARK CITY STAFF TEAM

Alex Roy

Senior Transportation Planner, Project Manager

Sarah Pearce

Deputy City Manager

Kim Fjeldsted

Transit Manager

Scott Burningham

Transit Operations, Planner

Andrew Stevenson

Transit Outreach Coordinator

Hannah Pack

Transportation Planner

Julia Collins

Transportation Planning Manager

Jerry Benson

Transit Advisor

Franklin Williams

Transit ITS and Data

Vincent Nguyen

Assistant Transit Manager

Jacob Marchlewski

Park City Transit

Matthew Neeley, P.E.

Former Transportation Director

CONSULTANT TEAM

Fehr & Peers

Jason Miller
Project Manager

Paul Jewel
Principal-in-Charge

Richard Brockmyer
Transportation Planner: Demand Modeling

Mary Sizemore
Transit Planner: Service Development

Natalia Brown
Transportation Planner: Demand Modeling

Kathrine Skollingsberg
*Transportation Planner
Graphic Designer & Outreach Specialist*

Annie Rice
Transportation Planner

LSC Transportation

Gordon Shaw
LSC Project Manager, Principal

A.T. Stoddard
Senior Advisor

Selena McKinney
Transit Planner

Alex Silverman
GIS Analyst

SE Group

Chris Cushing
Technical Advisor

KEY STAKEHOLDERS

Nann Worel, *Mayor*

John Kenworthy, *Park City Planning
Commissioner*

Matt Dias, *Park City City Manager*

Michael Lewis, *Vail Resorts*

Caroline Rodriguez, *Summit County*

Victoria Schlaepfer, *Deer Valley Resort*

Steve Issowits, *Former Deer Valley Resort*

Shirin Spangenberg, *Historic Park City*

Alliance

Jennifer Wesselhoff, *Park City Chamber of
Commerce*

Ginger Wicks, *Historic Park City Alliance*

Andy Beerman, *Former Mayor*

Tim Henney, *Former Park City City Council*

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Executive Summary

Public transit in Park City provides a means of addressing the mobility needs of a successful and growing resort region while helping to mitigate the need to expand roadway and parking capacity. The purpose of a Short-Range Transit Plan (S RTP) is to give local decision-makers an opportunity to evaluate and plan public transportation services and make recommendations to guide the day-to-day operations for the coming five years.

What is a Short-Range Transit Plan?

The Park City Transit S RTP contains the following elements:



Elements of a short-range transit plan

Key Issues

The key issues of the S RTP, along with key questions addressed within the plan, include:



Key issues of the Park City Short-Range Transit Plan

Plan Goals

The identified plan goals are:



Primary goals of the Park City Short-Range Transit Plan

Plan Process

The SRTP planning process has included five distinct phases carried out over approximately 18 months.



The planning process

Final Park City Short Range Transit Plan Overview

The five-year SRTP details focus areas and core tenets for transit investments in Park City.

	<p>SR-248 Corridor Investments</p> <ul style="list-style-type: none"> ▶ <i>New Express Routes with 15-20 minute peak frequency</i> ▶ <i>BRT infrastructure long-term</i>
	<p>Microtransit for Underserved Areas</p> <ul style="list-style-type: none"> ▶ <i>Park Meadows, Thaynes, Quinn's areas</i> ▶ <i>Deer Valley, Snow Park, Royal Street, Aerie, Solamere</i>
	<p>High Frequency Core / Express Routes</p> <ul style="list-style-type: none"> ▶ <i>Green and Red Routes improve to 15-minute peak frequency</i> ▶ <i>More direct, bidirectional routes</i>
	<p>SR-248 Services</p> <ul style="list-style-type: none"> ▶ <i>Direct service to both base areas during peak seasons</i> ▶ <i>Park and Ride Lots: Richardson Flat near-term, long-term in discussion with County</i>

Core tenets of the Five-year Service Plan

Route Hierarchy

The SRTP is based upon a route hierarchy designed to deliver appropriate levels of service based on existing and potential transit demand, key connections needed, and land use density.



Express Routes

- *High frequency, direct connections, limited stops*
- *Operating with BRT and transit priority elements*
- *Routes in SRTP: Pink, Teal*



Core Routes

- *High frequency at peak times, efficient connections, serving key stops*
- *Operating on major corridors*
- *Routes in SRTP: Yellow, Green*



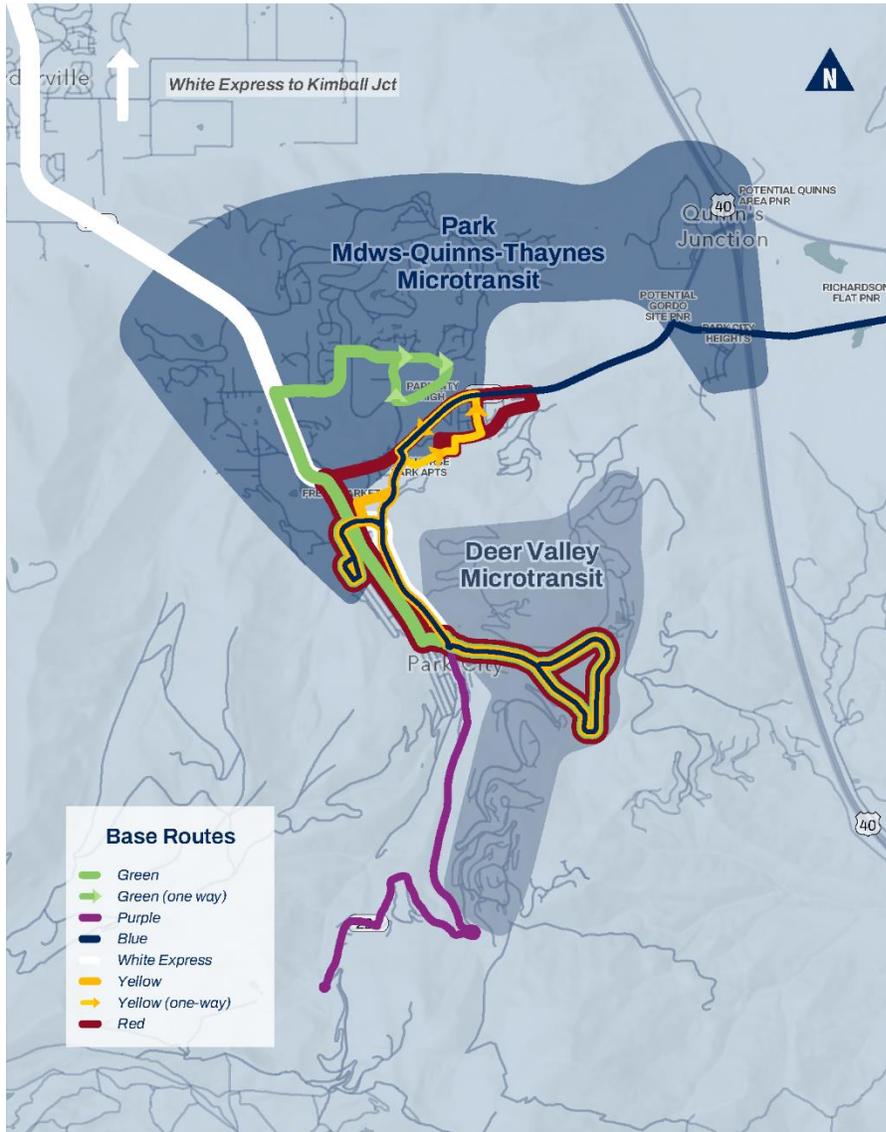
Local Routes

- *Mid-frequency (30-minute) typically serving more areas and more stops*
- *Operates on a mix of streets*
- *Routes in SRTP: Red, Blue, Orange, Purple*

Levels of routes providing different levels of connectivity and service

Base System

The SRTP has a base system designed to provide connectivity during shoulder season, spring and fall.



System map for the base final SRTP system vision.

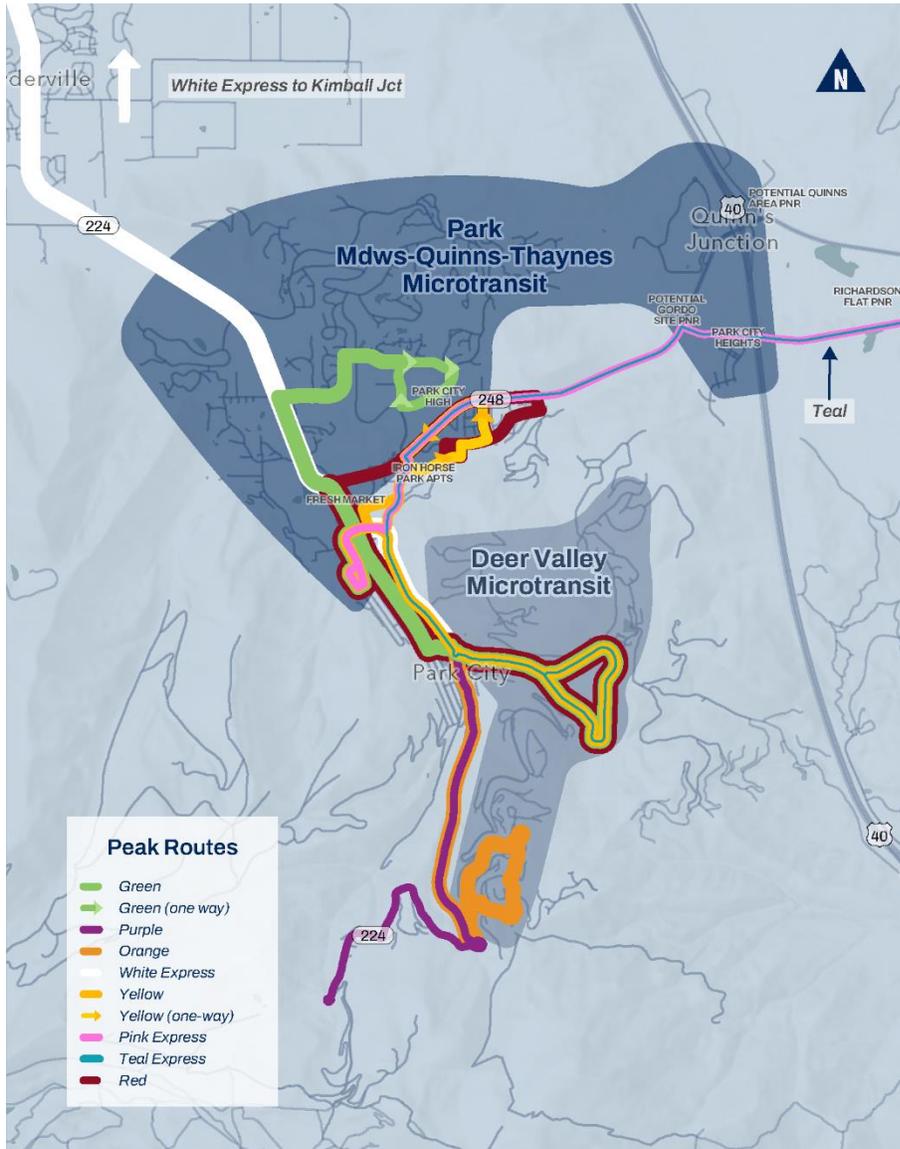
Characteristics

The characteristics of the base SRTP system include:

- Five primary Park City routes plus White Express (through 2024, when White becomes a High Valley Transit route) and Trolley
- Two microtransit zones
- Requires 12 buses and three microtransit vans
- 8% more vehicle service hours than the current system
- The Trolley route remains the same as it is currently and is not shown on the map for simplicity

Peak System

The SRTP system vision increases during peak winter and summer season to accommodate peak demands.



System map for the peak SRTP system vision.

Characteristics

The characteristics of the base SRTP system include:

- Seven Park City routes plus White Express, Citywide, and Trolley
- Two microtransit zones
- Requires 21 buses and seven microtransit vans at peak hours
- 23% more service hours in the winter peak season and 37% more service hours in the summer peak season than the current system (without the White route)

Trolley and Citywide Night Service (winter) remain the same as current and are not shown on the map for simplicity.

Implementation: Stay Opportunistic and Flexible

The SRTP defines implementation strategies that are flexible in response to different funding environments.



Opportunistic implementation strategies

Next Steps

As Park City begins to implement the system vision of the SRTP, several next steps should be considered ahead of implementation.

- ▶ Winter 2022-2023 Service Plan
- ▶ SRTP Plan Approval
- ▶ Community Awareness Building
- ▶ Steps Ahead of New Service Launch



Process for readying service launch

Chapter 1: Introduction and Background

Chapter 1. Introduction and Background

Public transit in Park City provides a means of addressing the mobility needs of a successful and growing resort region while helping to mitigate the need to expand roadway and parking capacity. It also enhances the region's attractiveness as a tourism destination and aids businesses by offering current and potential employees a cost-effective option for reaching employment within Park City. The purpose of a Short-Range Transit Plan (SRTP) is to give local decision-makers an opportunity to evaluate and plan public transportation services and make recommendations to guide the day-to-day operations for the coming five years.

This SRTP for Park City Transit (PCT) is being developed under exceptional circumstances. The world is still dealing with the impacts of the global COVID-19 pandemic, which has significantly affected all aspects of the economy and travel, especially travel on public transit. Second - after decades of jointly providing transit services, Summit County and the Park City Municipal Corporation (PCMC) are now each operating their own independent transit systems within their respective jurisdictions. This SRTP gives Park City the guidance it needs to adapt to the impacts of the pandemic, refocus on transit needs within Park City boundaries, and plan for future operations.

What is a Short-Range Transit Plan?

An SRTP is a plan focused on actionable implementation steps for route, service, and organizational improvements over a five-year time horizon. It serves as a business plan and operational playbook for PCT and how it adapts for the next five years and beyond. This SRTP contains the following:



Figure 1. Elements of a short-range transit plan

Key Issues, Goals, and Process

Key Issues

The key issues of the SRTP, along with key questions we are seeking to answer, include:



Figure 2. Key issues of the Park City Short-Range Transit Plan

Plan Goals

This SRTP has these four primary plan goals:



Figure 3. Primary goals of the Park City Short-Range Transit Plan

Plan Process

The SRTP planning process has taken place from summer 2021 through fall 2022 and has incorporated the steps shown in the graphic below. At each step of the process, we have incorporated significant public outreach and education that has helped shape the plan.



Figure 4. The planning process

Review of Relevant Projects and Studies

The first step in any planning effort is to thoroughly understand what has been studied in the past. A review of past projects and plans is provided below, starting with the most recent.

Park City Forward: A Transportation Blueprint

2022

The purpose of the Park City Forward, the Long Range Transportation Plan, is to engage and educate the community about citywide development and transportation trends, seek input on mobility needs, articulate values, and a shared vision, and define an actionable set of projects and priorities. Park City Forward is an update to the 2011 Transportation Master Plan, which looks to improve safety, protect the natural environment, expand transportation choices, and maintain the high quality of life for those that live, work, and play in Park City. Park City Forward was adopted as the long-range plan in 2022.

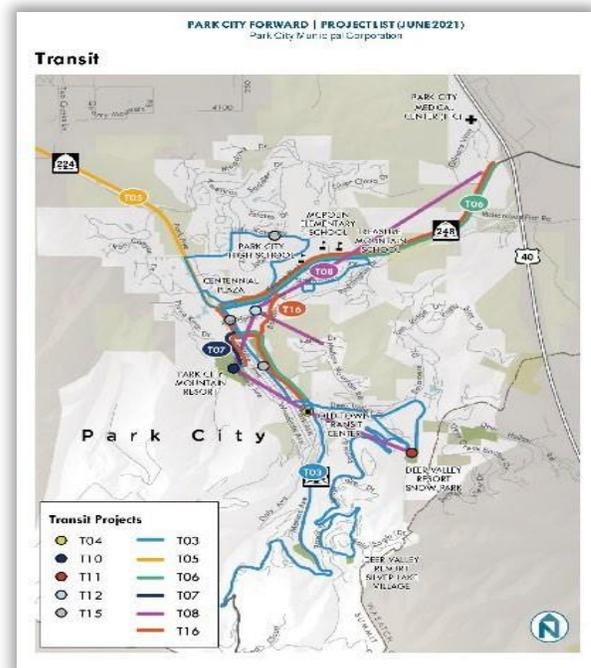


Figure 5. Transit map from the Park City Forward Plan

SR-224 Bus Rapid Transit I Corridor and Safety Improvement Studies

2017, 2021

The Utah Kimball Junction Area Plan includes three alternatives to address the traffic challenges at the intersection of Interstate 80 and S.R. 224. This is part of a broader SR-224 corridor plan, which includes a bus rapid transit (BRT) system to shuttle riders from the interstate and adjacent park-and-ride lots to the traffic magnets of Park City's ski resorts and Main Street.

In 2021, the BRT locally preferred alternative for SR-224, as part of an environmental assessment, was completed for the Deer Valley Drive segment of the alignment. The study recommended a maintaining the current roadway configuration with an added uphill bike lane for this segment based on comments received, a cost/benefit analysis, and experiences from other similar national transit projects.

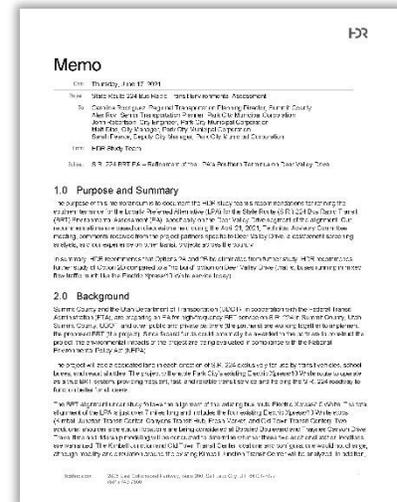


Figure 6. The SR-224 BRT Corridor and Safety Improvement Study memo

Wasatch County Transit Feasibility Study

2020

This study aimed to identify transportation needs in Wasatch County and develop a long-term strategy for enhancing passenger transportation services to meet current and future needs. The study was a cooperative effort of Wasatch County, Heber City, Midway, the Mountainland Area Association of Governments (MAG), the Utah Department of Transportation (UDOT), the Utah Transit Authority (UTA), and Park City. The study recommended development of a commuter service from Heber City to Park City. In 2022, High Valley Transit implemented a route from Heber Valley Hospital to the Fresh Market/Park Ave Condos stop in Park City. Other stops in Park City include the Medical Center and there are 8 departure times a day.

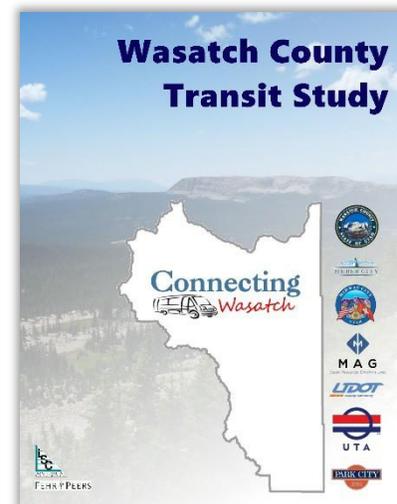


Figure 7. The Wasatch County Transit Study document

SR-248 Corridor and Safety Improvement Study

2019

This study aimed to address existing and future congestion within the SR-248 corridor through operational improvements, transit enhancements, bicycle and pedestrian improvements, and gateway aesthetic improvements. Ultimately, the study recommended to widening SR-248. This plan was stopped due to community members and elected officials not supporting the project. Recent internal Park City and UDOT efforts have focused on improving transportation along SR-248 without roadway widening.

The Bonanza District Study

2017 to Present

In 2017, the City purchased a 5.24-acre parcel located at the corner of Bonanza Drive and Kearns Boulevard for the development. Early visioning led to the proposal of a world-class arts and culture experience. The Planning Department has recently released an RFP for both a visioning process for the City owned parcel and a Bonanza District small area plan. This feasibility study included transportation and circulation plans.

Park City and Summit County Short Range Transit Development Plan

2016

The previous Short-Range Transit Plan (SRTTP) was completed in 2016 and addressed the services covering both Park City and Summit County. The plan reviewed demographics and transit services, evaluated transit demand, developed service alternatives, and recommended service modifications and new services. Specific recommendations included:

- **Call-a-bus** – Door-to-corner on-demand transportation in four defined zones.
- **Kimball Junction Transit Center and Timed Transfer** – develop a network of timed transfers where the KJTC would serve as a primary hub to connect to east/west routes from the north/south routes and vice versa.
- **Express Service** - Expanded express service from park and ride lots to Old Town with a 15- minute frequency of service.

Additionally, the service plan called for continued fine-tuning and preparing for future growth, as well as regular service reviews.

Park City General Plan

2014

The Park City General Plan was completed in 2014 and provides ongoing guidance for land use development. The General Plan was divided into four sections based on the Park City Visioning Core Values (Small Town, Sense of Community, Natural Setting, and Historic Character). Furthermore, characteristics and ideas for individual neighborhoods were also included, and ideas for supporting public transit are addressed for neighborhoods.

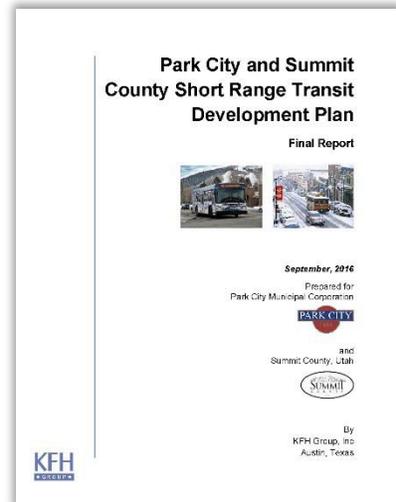


Figure 8. The Park City and Summit County Short-Range Transit Development Plan document

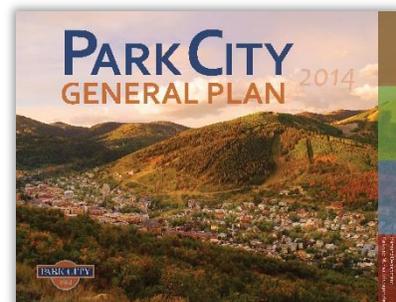


Figure 9. The Park City General Plan document

Chapter 2: Community Conditions

Special Events

Park City is home to a number of special events that attract attendees from all over the world. During the major events, Park City Transit provides extra service to offset potential traffic and parking issues. These recurring events include:



Figure 11. Recurring special events in Park City

In addition to the above events, other events occur throughout the year, including ski and snowboard competitions, celebrity ski events, cultural events, and other athletic events.

Economy and Employment

Park City has a tourist-oriented employment base. A list of the top employers in Park City from 2020, as shown in **Table 1**, indicates that the largest employers are ski resorts and other hospitality/tourism businesses. Other large employers include local government, the hospital, and public education.

Table 1. Top Employers in Park City, 2020

Rank	Employer	Service	Location	# of Employees
1	Deer Valley Resort	Outdoor Recreation	Park City	1,000-1,999
2	Park City Mountain Resort	Outdoor Recreation	Park City	1,000-1,999
3	Park City School District	Public Education	Park City	500-999
4	Park City Municipal Corporation	Local Government	Park City	500-999
5	Park City Hospital	Hospital	Park City	250-499
6	Stein Eriksen Lodge	Accommodations/Resort	Park City	250-499
7	Montage Hotels and Resorts	Tourism	Park City	250-499

Source: State of Utah Department of Workforce Services, 2021.

With tourism being affected by the coronavirus pandemic, employment has also been impacted. **Table 2** presents employment data by month for the last two-and-a-half years for Summit County. Up until March 2019, unemployment was extremely low, at just 2.3% to 2.9%. However, when the pandemic hit, unemployment reached as high as 20.4% in April 2020. It averaged 7.9% over the year, but by June 2021, it had recovered to pre-pandemic lows.

Table 2. Summit County Employment Rates

Month		Labor Force	Employment	Unemployment	
				#	%
2021	June	25,670	25,065	605	2.4%
	May	25,442	24,814	628	2.5%
	April	25,962	25,278	684	2.6%
	March	25,033	24,240	793	3.2%
	February	24,177	23,253	924	3.8%
	January	22,857	21,571	1,286	5.6%
2020	December	23,091	21,776	1,315	5.7%
	November	23,636	22,089	1,547	6.5%
	October	23,960	22,341	1,619	6.8%
	September	24,345	22,727	1,618	6.6%
	August	24,642	22,806	1,836	7.5%
	July	25,039	23,308	1,731	6.9%
	June	25,190	22,790	2,400	9.5%
	May	24,382	20,236	4,146	17.0%
	April	24,160	19,237	4,923	20.4%
	March	25,254	24,519	735	2.9%
	February	25,333	24,633	700	2.8%
	January	25,425	24,764	661	2.6%
2019	December	25,541	24,942	599	2.3%
	November	25,476	24,888	588	2.3%
	October	25,403	24,821	582	2.3%
	September	25,332	24,748	584	2.3%
	August	25,272	24,679	593	2.3%
	July	25,209	24,604	605	2.4%
	June	25,129	24,511	618	2.5%
	May	25,033	24,402	631	2.5%
	April	24,926	24,285	641	2.6%
	March	24,838	24,187	651	2.6%
	February	24,782	24,120	662	2.7%
	January	24,753	24,078	675	2.7%

Source: State of Utah Department of Workforce Services, 2021.

Another analysis revealing the pandemic impact is the trend in sales in Park City. Total lodging, retail, restaurant and bar, services, and other sales are depicted in **Table 3**. As indicated, total sales increased through fiscal year (FY) 2019 but dropped in FY 2020 by 8%. A closer look by quarter shows that the fourth quarter of FY2 020 (April through June) had a 40% drop from the year prior.

Table 3. Park City Sales Trends

Area	Total Sales ¹ by Year (in Millions)				
	FY17	FY18	FY19	FY20	FY21 ²
Deer Valley	\$265,656	\$276,567	\$301,782	\$276,771	\$19,523
Entryway	\$128,323	\$136,585	\$138,557	\$134,186	\$33,914
Main Street	\$164,692	\$188,939	\$192,422	\$174,748	\$42,048
Park Meadows	\$16,951	\$16,702	\$21,188	\$19,401	\$5,010
Prospector	\$74,401	\$75,866	\$76,796	\$61,013	\$12,910
Rest of City	\$50,515	\$29,601	\$31,635	\$40,101	\$10,562
Thaynes	\$15,755	\$16,501	\$18,175	\$16,096	\$7,075
Treasure Mountain	\$142,289	\$130,677	\$153,020	\$134,852	\$9,696
Total	\$858,582	\$871,438	\$933,575	\$857,168	\$140,738
Change over the Previous Year		1.50%	7.13%	-8.18%	NA
Quarter	FY17	FY18	FY19	FY20	FY21
Q1 (Jul-Sept)	150,528	144,361	149,893	171,816	140,738
Q2 (Oct-Dec)	195,973	189,097	204,607	221,673	
Q3 (Jan-Mar)	407,782	422,472	465,365	396,301	
Q4 (Apr-Jun)	104,299	115,508	113,710	67,378	

Source: Park City Budget, Debt & Grants Dept.

Population and Housing

As shown in **Table 4**, the population in Park City has grown at an average annual rate of 1.4% in the past ten years, compared to a very slow rate of 0.1% annually during the prior decade. The rate of growth is just slightly lower than in Summit County (1.8% annually) and in the State of Utah (1.7% annually). Population projections, developed by the Kem C. Gardner Policy Institute, are shown in **Table 5**.

Table 4. Historical Population Trends Park City Sales Trends

Year	Park City		Summit County		Utah	
	#	Average Annual Growth	#	Average Annual Growth	#	Average Annual Growth
2019	8,526	1.4%	42,145	1.8%	3,205,958	1.7%
2010	7,558	0.1%	36,324	2.2%	2,775,213	2.4%
2000	7,462	6.6%	29,736	9.2%	2,244,502	3.0%
1990	4,484	5.9%	15,518	5.2%	1,729,722	1.7%
1980	2,823	--	10,198	--	1,472,595	--

Source: US Census Bureau; mountainland.org; macrotrends.net/states/utah/population.

¹ Includes lodging, restaurant/bars, service, and other sales. The fiscal year is from July to June (i.e., FY 17 = July 2016 to June 2017).

² FY 2021 includes the first quarter only (July-Sept 2020).

Table 5. Population Forecasts

Year	Park City	Summit County	Utah
2020	8,517	42,829	3,325,425
2030	8,758	50,558	3,889,310
2040	8,893	57,983	4,463,950
2050	8,961	63,097	5,017,232

Source: <https://gardner.utah.edu/demographics/population-projections/>. Park City is estimated to continue growing at 0.34% annually.

The total population by census tract and block group is shown in **Table 6**. This data is drawn from the most recent American Community Survey (five-year data from 2014-2019), as the 2020 census data was not yet available at this level of detail as of the development of this section. The census tracts do not exactly overlap the boundaries of Park City, so the total population is not an exact match. Census Tract 9644.02, block group 4, while the smallest area block group is the most populous with 2,472 persons. This area includes Prospector Square.

Table 6. Demographic Characteristics of Park City

Census Tract ³	Block Group	Population	Youth (Ages 10-17)		Seniors (Ages 65 and older)		Ambulatory Disability		Persons in Poverty		Households with Zero or 1 Vehicle			
											0 Vehicles		1 Vehicle	
			#	%	#	%	#	%	#	%	#	%	#	%
9643.08	1	843	132	15.7%	194	23.0%	28	3.3%	19	2.3%	0	0.0%	49	5.5%
	2	702	215	30.6%	127	18.1%	23	3.3%	83	11.8%	51	17.8%	112	45.2%
	3	1,886	137	7.3%	408	21.6%	62	3.3%	46	2.4%	0	0.0%	147	88.0%
9644.01	1	818	62	7.6%	175	21.4%	14	1.7%	23	2.8%	0	0.0%	76	24.5%
	2	789	23	2.9%	45	5.7%	13	1.7%	137	17.4%	0	0.0%	167	51.7%
9644.02	1	430	0	0.0%	35	8.1%	10	2.3%	181	42.1%	19	11.0%	87	19.7%
	2	918	141	15.4%	62	6.8%	21	2.3%	56	6.1%	0	0.0%	85	46.7%
	3	222	0	0.0%	37	16.7%	5	2.3%	88	39.6%	0	0.0%	46	34.1%
	4	2,472	337	13.6%	63	2.5%	57	2.3%	104	4.2%	0	0.0%	180	29.2%
Total		9,080	1,047	11.5%	1,146	12.6%	234	2.6%	737	8.1%	70	2.2%	949	29.8%
Park City		8,375	938	11.2%	1,103	13.2%	201	2.4%	737	8.8%	70	2.4%	899	30.4%
Summit County		41,103	5,433	13.2%	4,854	11.8%	863	2.1%	2,289	5.6%	335	2.4%	3,065	21.6%

Source: US Census Table B082-1, American Community Survey 5-7 year 2015-2019.

High Transit Potential Population

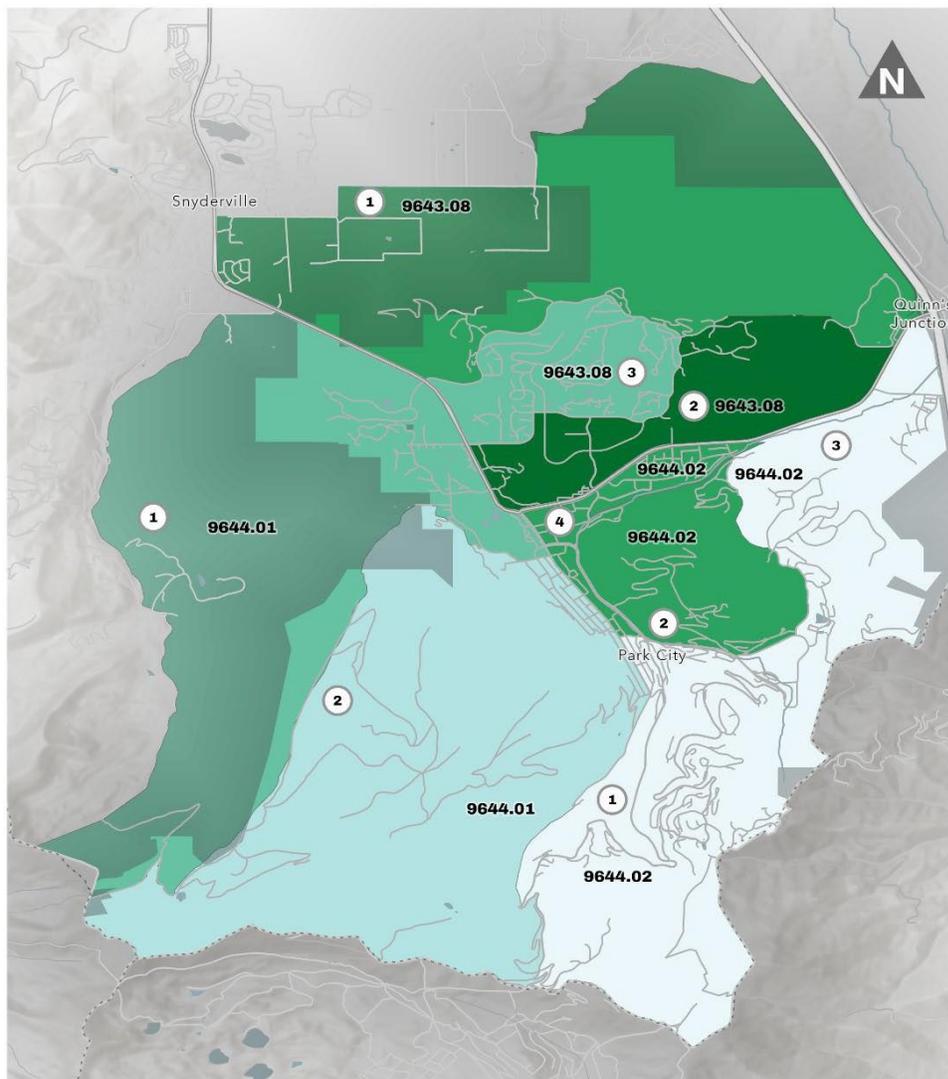
Nationwide, transit system ridership is drawn largely from various groups of persons who make up what is often called the “transit-dependent” population. This category includes youths, older adults, people with disabilities, people with lower income, and members of households with no available vehicle. In a resort community such as Park City, while transit ridership is more significantly generated by local workers and visitors (as subsequently

³ Some census tract block groups listed are both within and outside of the limits of Park City. Thus, totals exceed the Park City sums.

discussed), it is important not to lose sight of the needs of the local population, particularly those who may have transportation access challenges. The maps and figures presented in this section are derived from the U.S. Census Bureau and have limited explanations or interpretations provided for the data sets.

Youth Population

Youths represent a transportation-dependent population, as those under 16 years of age are unable to drive and may not have a parent available to transport them. As shown in **Table 6** and graphically in Figure 12, the youth population ages 10 to 17 totaled 1,047 in Park City in 2019. The average percentage of youths is 11.8, with up to 30% (in block group 3 of census tract 9643.08) and zero in block group 1 of 9644.02.



Youth Population (Ages 10-17)

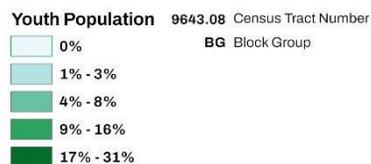
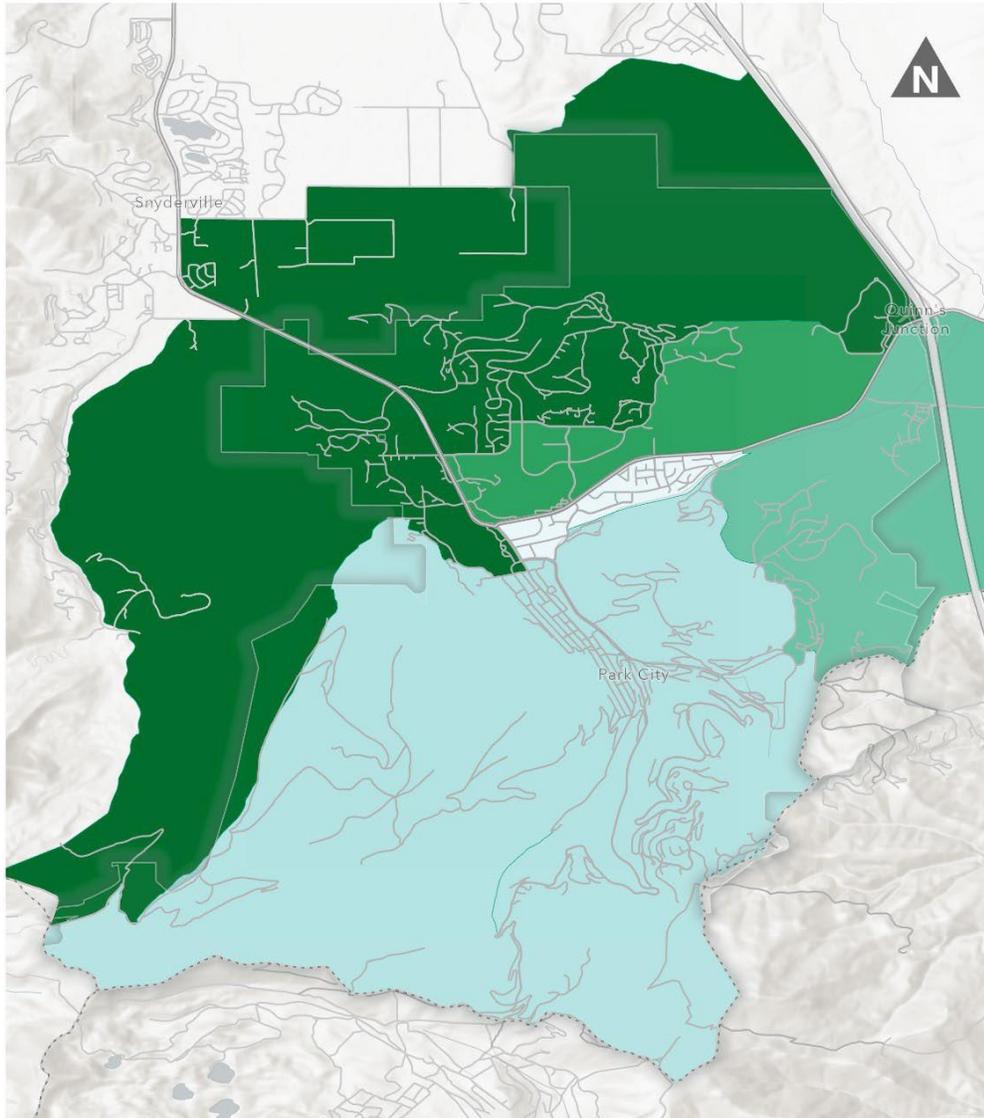


Figure 12. The population of Park City between the ages of 10 and 17 years old. (Source: U.S. Census Bureau)

Older Adults Population

Another important group that has a high potential for transit use is older adults. Many older adults who choose not to drive, or are unable to drive, need to make a variety of transportation connections. As presented in **Table 6** and **Figure 13**, residents over the age of 65 comprised 13.2% of Park City’s population. The greatest proportion of older adults is found in the northern half of Park City, particularly in census tract 9644.01, block group 1.



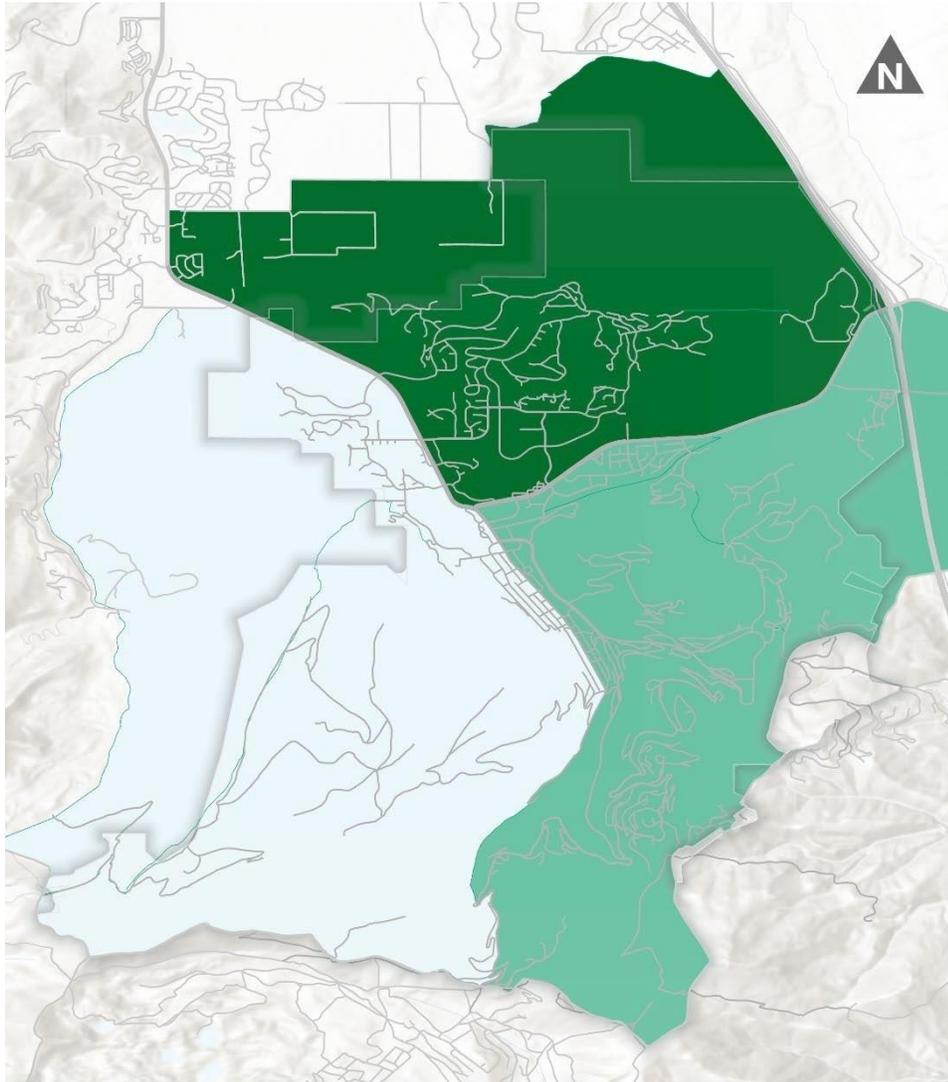
Senior Population (Age 65 and Older)



Figure 13. The population of Park City aged 65 years and older. (Source: U.S. Census Bureau)

Ambulatory Disability Population

The US Census Bureau collects data on multiple types of disabilities which affect people’s ability to drive to varying degrees. The category which best indicates a population’s likelihood to use transit is “ambulatory difficulty.” **Table 6** shows this population by census tract. The data was available as a percentage of the census tract and applied to the population of each block group. As indicated, 2.4% of Park City’s population identifies as having an ambulatory difficulty, with 3.3% in census tract 9643.08. This data is depicted in Figure 14.



Population with an Ambulatory Disability

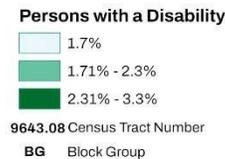
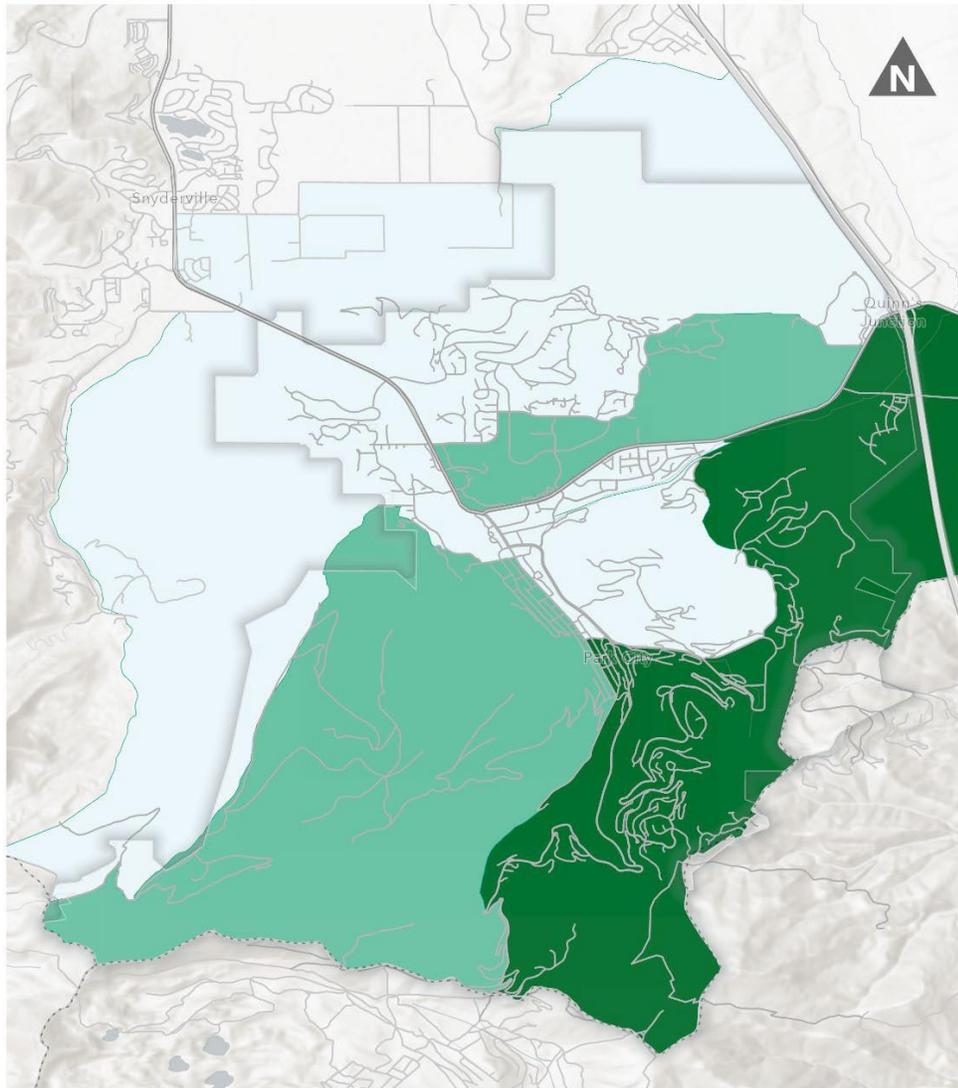


Figure 14. The population of Park City currently living with an ambulatory disability. (Source: U.S. Census Bureau)

Persons Living in Poverty

Low-income persons are another likely market for transit services, as measured by the number of persons living below the poverty level. This information is presented in **Table 6** and

Figure 15. An estimated 737 persons were living below the poverty level in Park City in 2019, representing 8.8% of the city's total population. Two block groups, in particular, have very high percentages of people living in poverty—block groups 1 and 3 within census tract 9644.02. These areas are in the southeast of Park City.



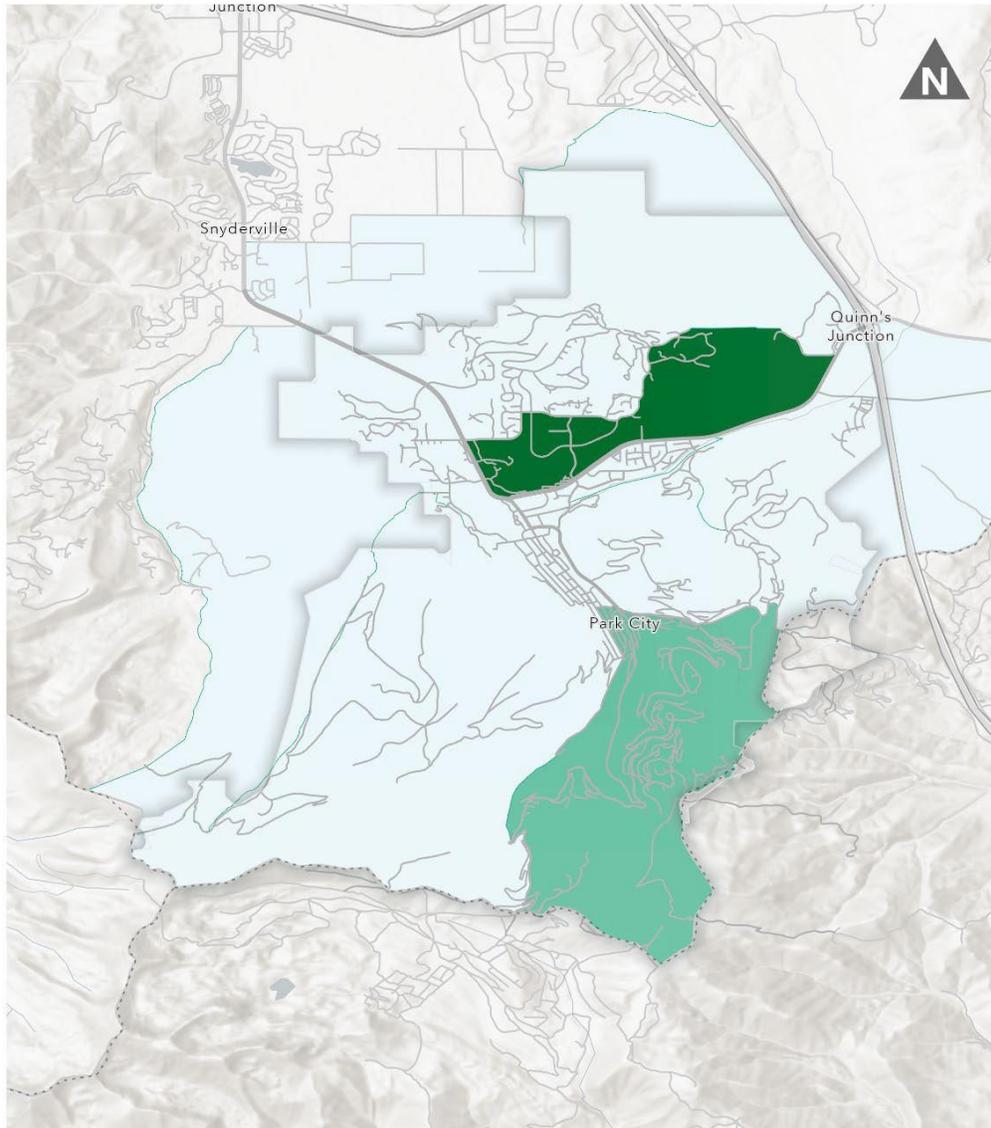
Population Living Below the Poverty Level



Figure 15. The population of Park City currently living under the Federal poverty level. (Source: U.S. Census Bureau)

Zero Vehicle Households

The number of households without a vehicle available is perhaps one of the strongest indicators of a potentially transit-dependent household. As shown in **Table 6**, seven of the ten block groups have no zero-vehicle households, but two have high percentages of zero-vehicle households. Census Tract 9643.08, block group 2 has 17.8% of households without a vehicle available, and Census Tract 9644.02, block group 1 has 11.0%, as depicted in Figure 16.



Zero Vehicle Households

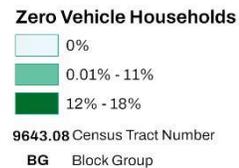


Figure 16. The population of Park City residents who currently do not own a vehicle. (Source: U.S. Census Bureau)

Transit Dependent Index

To better understand transit-dependent population needs, a Transit Dependent Index (TDI) was developed using the data previously described. This combined index compares each measure to the average for the Park City area and scores each metric on a 1 to 5 scale. Population density (per square mile) is also included in the index and rated on a 1-4 scale based on density.

Number of Vulnerable Persons/Households, AVNV or AVE or AVY or AVD or AVBP Value

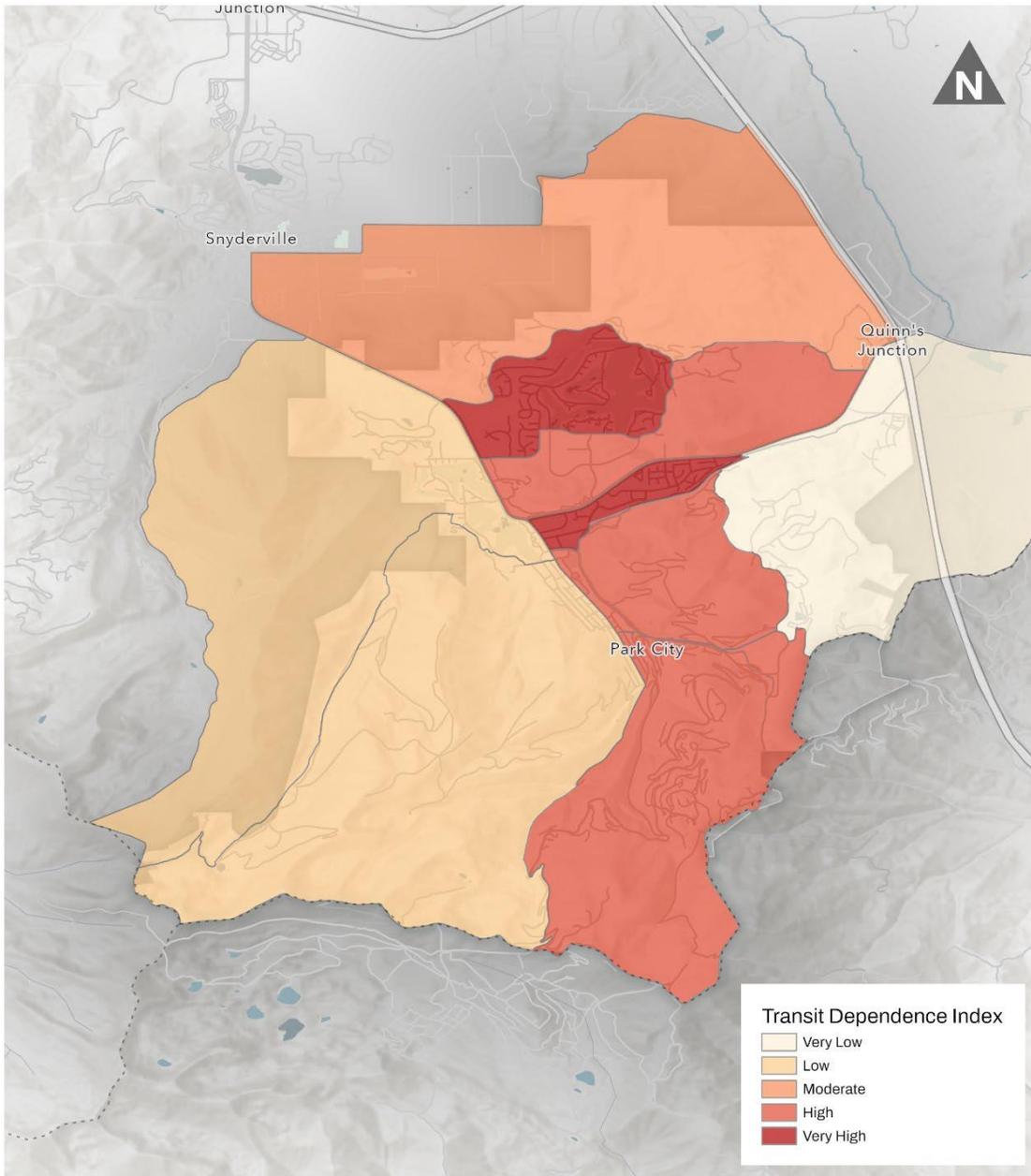
- < Study Area Average = 1
- Study Area Average and < 1.33 times the Study Area Average = 2
- 1.33 times the Study Area Average and < 1.67 times the Study Area Average = 3
- 1.67 times the Study Area Average and < 2.00 times the Study Area Average = 4
- 2.00 times the Study Area Average = 5

Population per Square Mile, PD Value

- 0 = 0
- 0 and < 500 = 1
- 500 and < 1,000 = 2
- 1,000 and < 2,000 = 3
- 2,000 = 4

These scores are combined to develop a TDI value for each census block group using the following formula. Results of the TDI are shown in Figure 17.

$$TDI = \text{population per square mile} \times [\text{zero vehicle household score} + \text{senior population score} + \text{youth population score} + \text{disability population score} + \text{poverty population score}]$$



Transit Dependence Index

Figure 17. The population of Park City currently dependent on transit. (Source: U.S. Census Bureau, Fehr & Peers)

The highest transit dependency appears to be in census tract 9643.08, block group 2, and census tract 9643.08, block group 3. Based on this, service to these two block groups should be a key consideration as both areas have a transportation equity concern and are also likely to generate higher ridership than others based on their demographic makeup.

Affordable Housing

Park City currently has 640 deed-restricted housing units, roughly a quarter of occupied housing units or approximately 19% of all households. Most of the housing units are within easy walking distance of Park City Transit routes (winter and summer services), except for 68 units at Park City Heights. However, Park City Heights is served by on-demand transit service.

A map of Park City Transit routes with affordable housing locations and the number of units is shown later in this document in Figure 30 and Figure 31.

Visitor Population

The visitor population drives a sizeable portion of transit demand within Park City, particularly during the winter ski season and increasingly in the summer and shoulder seasons. The Chamber of Commerce and Ski Utah track lodging visits and skier days, as described below.

Overnight Visitors

Data provided by the Park City Chamber of Commerce and Visitor's Bureau shows that over the past decade, there was an average of 4 million overnight visitors annually in Park City, as shown in **Table 7**. In the five years prior to the pandemic, there was an average of 4.5 million overnight visitors annually, but that number dropped to 3.1 million in 2020. Prior to the pandemic in 2020, winter season visitation increased by 26% during the previous decade, while summer increased by 78% and shoulder season by 87%, emphasizing the increasingly year-round popularity of Park City. Overnight visitors by season is depicted in Figure 18.

Table 7. Park City Visitor Nights by Month

Month	2011	2012	2013	2014	2015	2016	2017	2018	2019	% change 2011-19	2020	2021
January	439,745	447,549	467,070	511,845	502,940	554,812	575,715	548,897	548,897	24.8%	595,476	307,383
February	442,448	439,199	475,000	491,653	498,281	560,571	551,468	521,000	560,410	26.7%	613,595	459,402
March	457,888	439,199	510,090	519,747	494,239	552,199	550,457	550,642	609,982	33.2%	278,185	553,834
April	118,722	409,815	125,745	149,535	175,151	178,691	195,548	204,369	159,611	34.4%	2,580	182,177
May	82,074	142,672	125,547	144,862	184,469	175,937	176,808	200,710	219,035	166.9%	31,996	178,700
June	158,017	114,959	283,776	310,115	366,300	318,609	327,037	379,181	391,004	147.4%	101,492	365,321
July	354,215	243,732	446,877	443,365	496,849	470,327	491,230	474,722	503,519	42.2%	273,741	573,841
August	322,249	400,162	376,641	433,708	435,070	432,875	414,585	472,104	464,250	44.1%	295,072	
September	216,452	346,631	316,912	267,633	331,776	349,795	401,211	381,714	391,004	80.6%	282,973	
October	141,686	265,812	208,952	206,318	308,899	253,454	239,519	301,937	256,559	81.1%	245,301	
November	112,033	190,428	158,881	158,881	203,781	164,362	177,848	212,814	190,857	70.4%	166,859	
December	324,841	131,632	323,086	331,865	388,952	397,165	381,487	381,348	393,565	21.2%	307,514	
Year Total	3,170,370	3,571,790	3,818,577	3,969,527	4,386,707	4,408,797	4,482,913	4,629,438	4,688,693	47.9%	3,194,784	
Change over Previous Year		11.2%	6.5%	3.8%	9.5%	0.5%	1.7%	3.2%	1.3%		-46.8%	
Winter Total 1	1,558,019	1,650,788	1,583,792	1,846,331	1,827,325	2,056,534	2,074,805	2,002,026	2,100,637	34.8%	1,880,821	1,628,133
Summer Total 2	834,481	758,853	1,107,294	1,187,188	1,298,219	1,221,811	1,232,852	1,326,007	1,358,773	62.8%	670,305	--
Shoulder Total 3	670,967	1,355,358	936,037	927,229	1,204,076	1,122,239	1,190,934	1,301,544	1,217,066	81.4%	729,709	--

Park City Overnight Visitors by Season

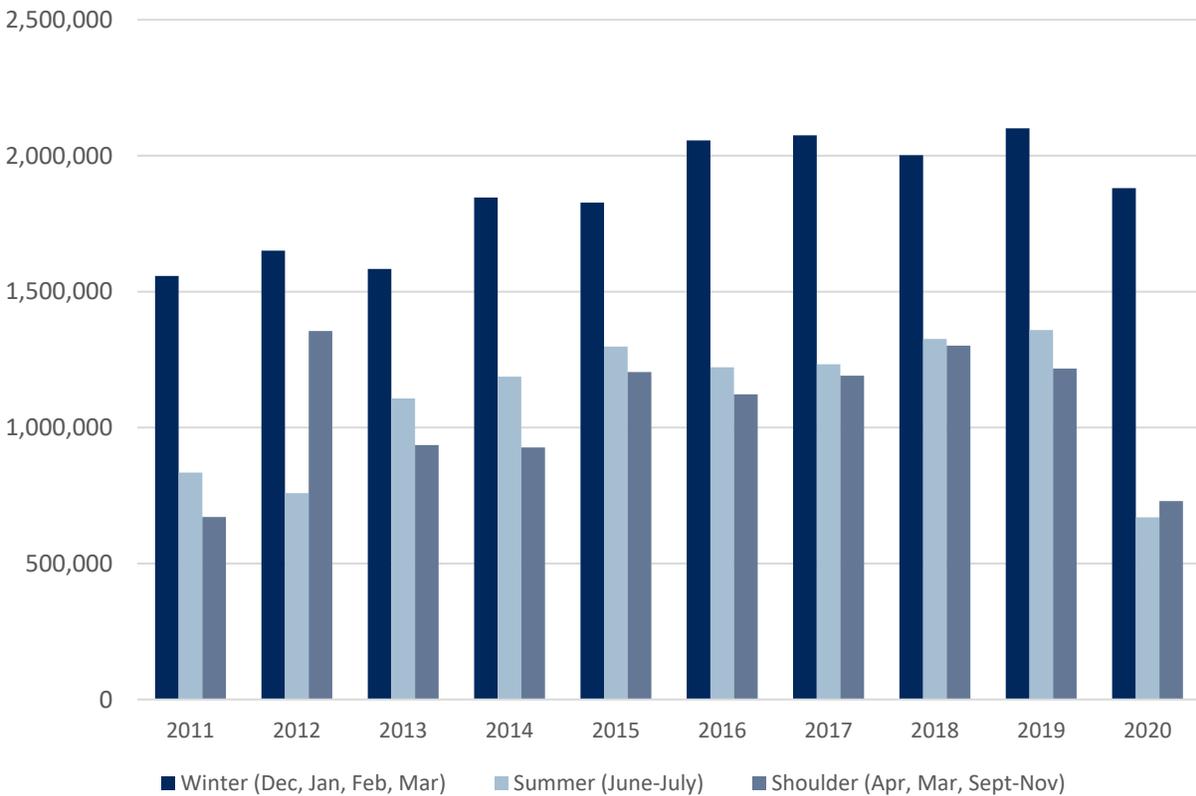


Figure 18. Park City Overnight Visitors by Season. (Source: Park City Chamber of Commerce/Convention & Visitors Bureau, Sept. 2021)

Skier Days

Given the ski-based industry of Park City, another important factor to consider is the number of skier days. Skier days are used to measure the total number of skiers in an area and include the skier visits in the area for both out-of-town guests and locals. Information provided by the Park City Chamber of Commerce and the Ski Utah organization shows that the winter 2020-21 season had a total of 2,186,863 skier days in Park City, as shown in **Table 8** and Figure 19. The 2020-21 ski season represents a record number of skier days despite the coronavirus pandemic. This was an increase of 19% from the previous year, though 2019-20 (mostly pre-pandemic) had a decrease of roughly 12.5% after growing by 17.2% the year before that. **Table 8** also indicates the proportion of Utah skiers that are at Park City resorts, which is consistently in the 44% range (as high as 48% and as low as 41%). While the number of skier days is ultimately reflected by ski conditions, the strong 2020-21 season shows visitors were comfortable with outdoor activities during the pandemic.

Table 8. Historical Skier Days

Year	State of Utah		Park City Area Resorts ¹		Park City Market Share of Utah	Skier Days per Overnight Winter Visitor
	Skier Days	% Change	Skier Days	% Change		
2011-2012	NA	--	1,782,212	-5.7%	NA	1.1
2012-2013	4,018,812	-5.7%	1,770,069	-0.7%	44.0%	1.1
2013-2014	4,148,573	3.1%	1,838,641	3.9%	44.3%	1.0
2014-2015	NA	--	1,705,492	-7.2%	NA	0.9
2015-2016	4,018,812	-3.2%	1,937,887	13.6%	48.2%	0.9
2016-2017	4,584,658	12.3%	1,937,718	0.0%	42.3%	0.9
2017-2018	4,145,321	-10.6%	1,790,650	-7.6%	43.2%	0.9
2018-2019	5,125,441	19.1%	2,099,135	17.2%	41.0%	1.0
2019-2020	4,392,698	-16.7%	1,837,730	-12.5%	41.8%	1.0
2020-2021	5,301,766	17.1%	2,186,863	19.0%	41.2%	1.3

Source: Park City Chamber of Commerce / Convention & Visitors Bureau; Ski Utah. NA = not available.

Park City Skier Days By Year

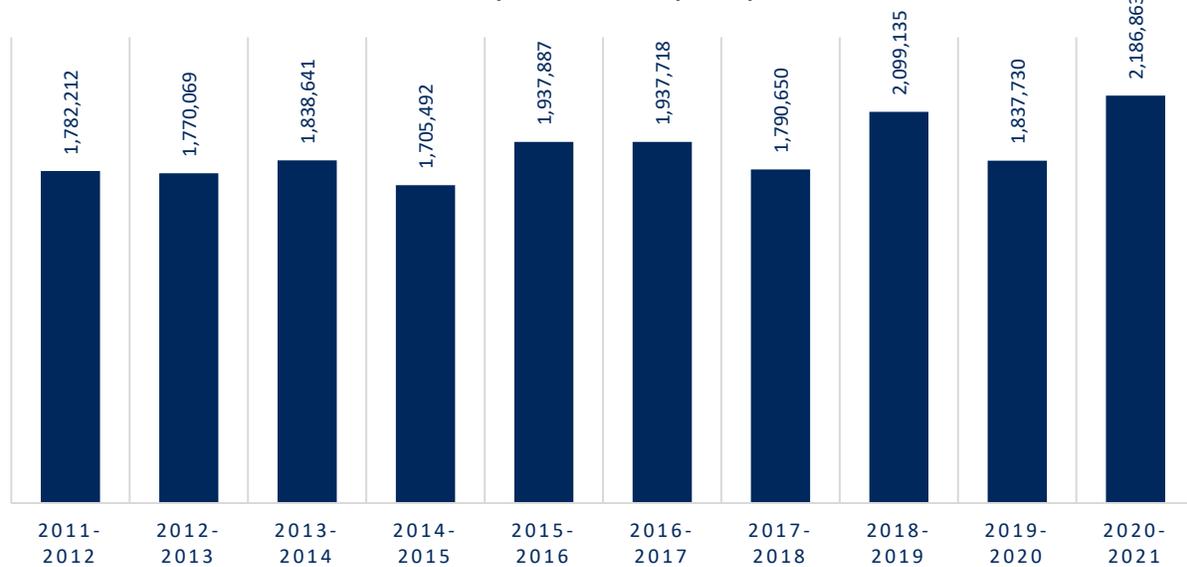


Figure 19. Park City Skier Days by Year. (Source: Park City Chamber of Commerce / Convention & Visitors Bureau & Ski Utah)

Finally, **Table 8** also shows the proportion of skier days per overnight visitor, which has been consistent. However, in 2020-21, there were more skiers per overnight stay than in prior years, indicating a likely increase in day-skiers who do not spend the night.

Chapter 3: Current Traffic and Travel Patterns

Chapter 3. Current Traffic and Travel Patterns

Origin-Destination Analysis

Understanding where people are going to and from is critical for successful transit planning. While onboard survey data provides this for current transit users, it does not provide a more global perspective of all potential users. In the past, this data has been difficult and expensive to collect. However, new technologies have made this more feasible. Big data sets from smartphones and GPS systems are able to provide a rich sample of travel patterns.

For the purpose of this analysis, StreetLight Origin/Destination data was utilized. StreetLight is a data vendor that provides datasets sourced from smartphones and vehicle navigation systems and tracks where people using these devices start and end their trips. StreetLight data does not represent every single trip that occurs in the zones identified but rather a sample of those trips based on the number of devices captured in the sample.

Methodology

Fourteen zones were developed for this analysis. The Park City area was divided into 12 zones, generally following the node definitions from the Park City Long Range Transportation Plan. The Summit County/Wasatch County Travel Demand Model (TDM) boundaries were also used to define the zones so that origin/destination data could be compared to the model outputs.

Two additional zones were developed to serve as gateways to Park City along SR-224 and SR-248. While there are other roadways that connect to the city, these two roadways are the primary ways in and out.

The following provides a brief overview of some key locations included in each analysis zone.

- **Zone 1:** Historic Main Street, Swede Alley, China Bridge, City Park
- **Zone 2:** Park City Mountain Resort, Park City Library
- **Zone 3:** Stein Eriksen Residences
- **Zone 4:** Masonic Hill
- **Zone 5:** Prospector Square, Bonanza Drive, Park City Clinic, Park City High School, Treasure Mountain Middle School, McPolin Elementary School, Park City Market, Double Tree
- **Zone 6:** Park City Golf Course, Glenwood Cemetery, Thaynes Canyon Drive, Payday Drive
- **Zone 7:** Park Meadows County Club, Park City Municipal Athletic and Recreation Center (PC MARC)
- **Zone 8:** Park City Hospital, Park City Sports Complex at Quinn's Junction, Richardson Flat Park and Ride, Park City Heights
- **Zone 9:** Lodges at Deer Valley, Comstock Lodge, Deer Valley Lot 1, Snow Park Lodge, Deer Pond
- **Zone 10:** St. Regis Hotel, Deer Crest
- **Zone 11:** Silver Lake Lodge, Stein Eriksen Lodge, Goldener Hirsch Inn, Black Bear Lodge
- **Zone 12:** Montage, Empire Canyon Lodge

- **Zone 13:** SR-224 Gateway just south of North Brookside Road
- **Zone 14:** SR-248 Gateway just west of US-40 interchange

Figure 20 provides a map of these zones.

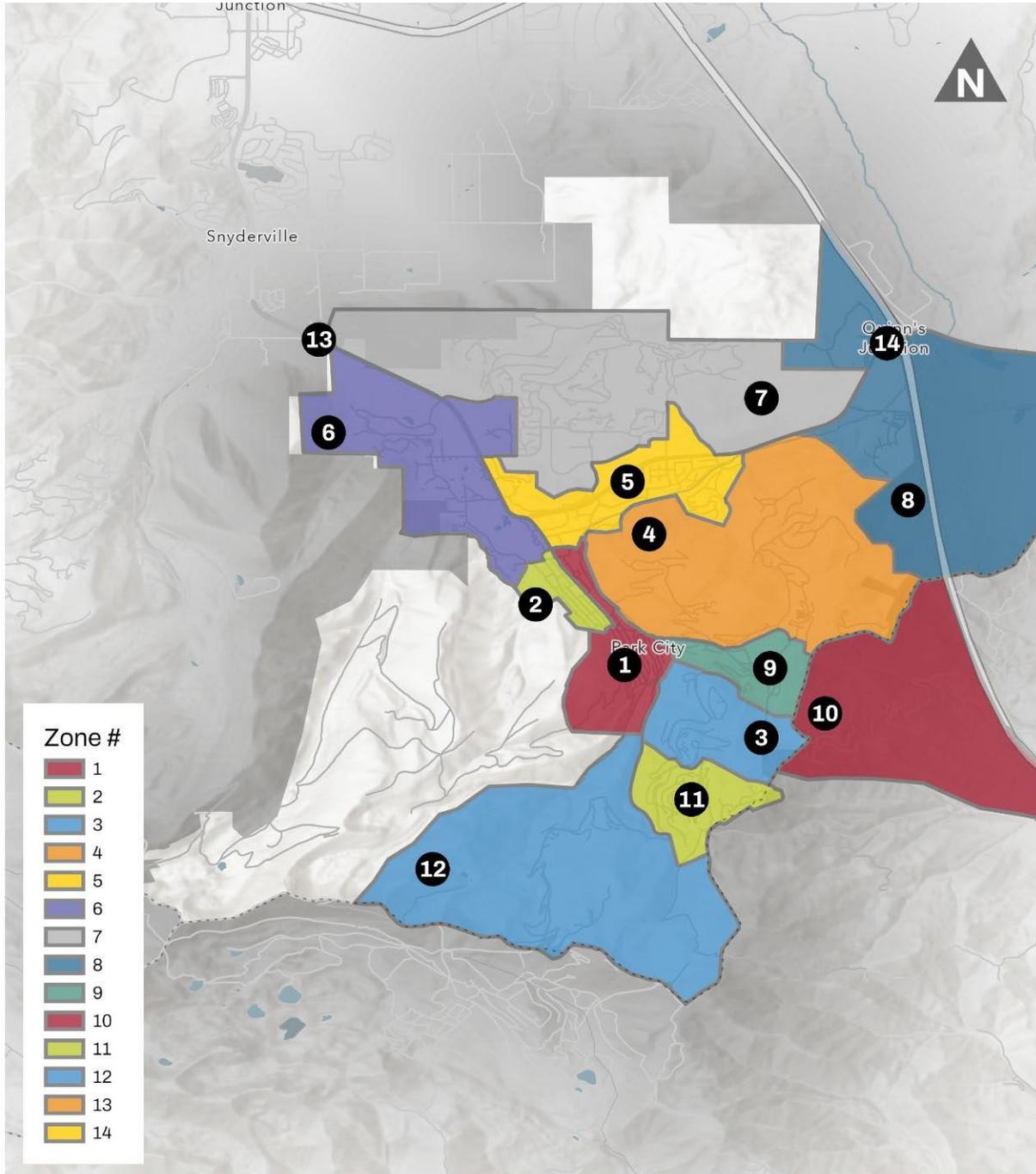


Figure 20. Analysis zones. (Source: Fehr & Peers)

Analysis Zones

Due to the Coronavirus pandemic and its ongoing impact on travel behaviors and mobility, particularly in 2020, 2019 data was used for the analysis. To understand how travel patterns change based on time of day, day of the week, and time of year, several datasets were downloaded and analyzed. The following parameters were used:

Date Ranges:

- January 1 through March 31, 2019, and November 1 through December 31, 2019 (Representing Winter conditions)
- June 1 through August 31, 2019 (Representing Summer conditions)
- April 1 through May 31, 2019, and September 1 through October 31, 2019 (Representing Shoulder Season conditions)
- Mode of Travel: All Vehicles (Location-Based Services Data)
- Day Type: All Days (Monday-Sunday), Weekday (Monday – Thursday), Friday (F), Weekend (Sa-Su)
- Day Part: All Day (12am-12am), Early AM (12am-6am), Peak AM (6am-10am), Mid-Day (10am- 3pm), Peak PM (3pm-7pm), Late PM (7pm-12am)

Local Travel Patterns

Winter Conditions Weekday (All Day)

The origin/destination pair with the highest concentration of trips is between Zone 1, which includes old Town Park City, and Zone 5, which includes the Bonanza District and Prospector areas. Trips to and from these pairs make up approximately 11% of all the trips that stay within the Park City area when removing intrazonal trips (those that stay within one zone). Zone 2, which includes Park City Mountain Resort (PCMR), also has a high number of origins and destinations and also has a strong relationship with Zones 1 and 5. Zones 11 and 12 show a relatively strong travel connection, although it is possible that some of this movement is actually skiers moving between these two zones as they explore Deer Valley Resort. Figure 21 shows the highest origin/destination pairs for winter weekday conditions all day.

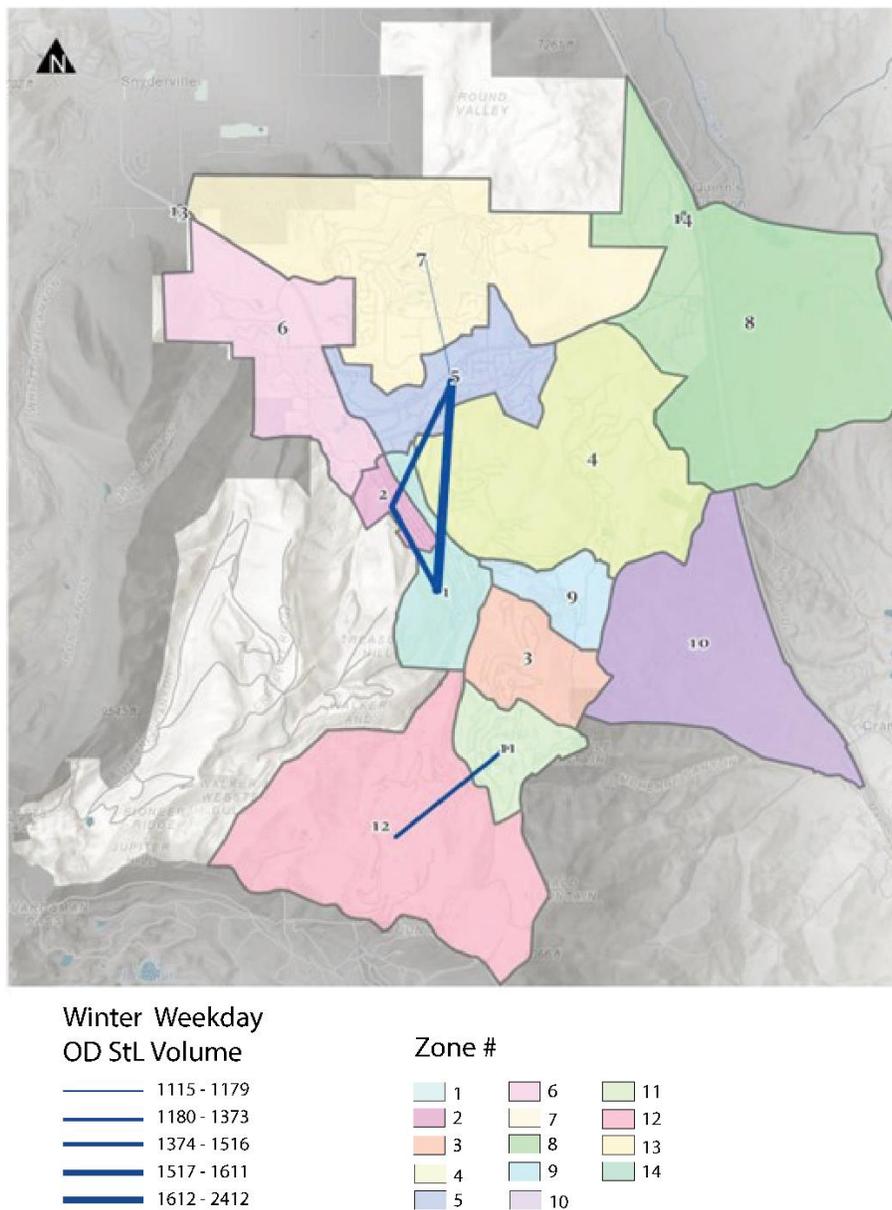
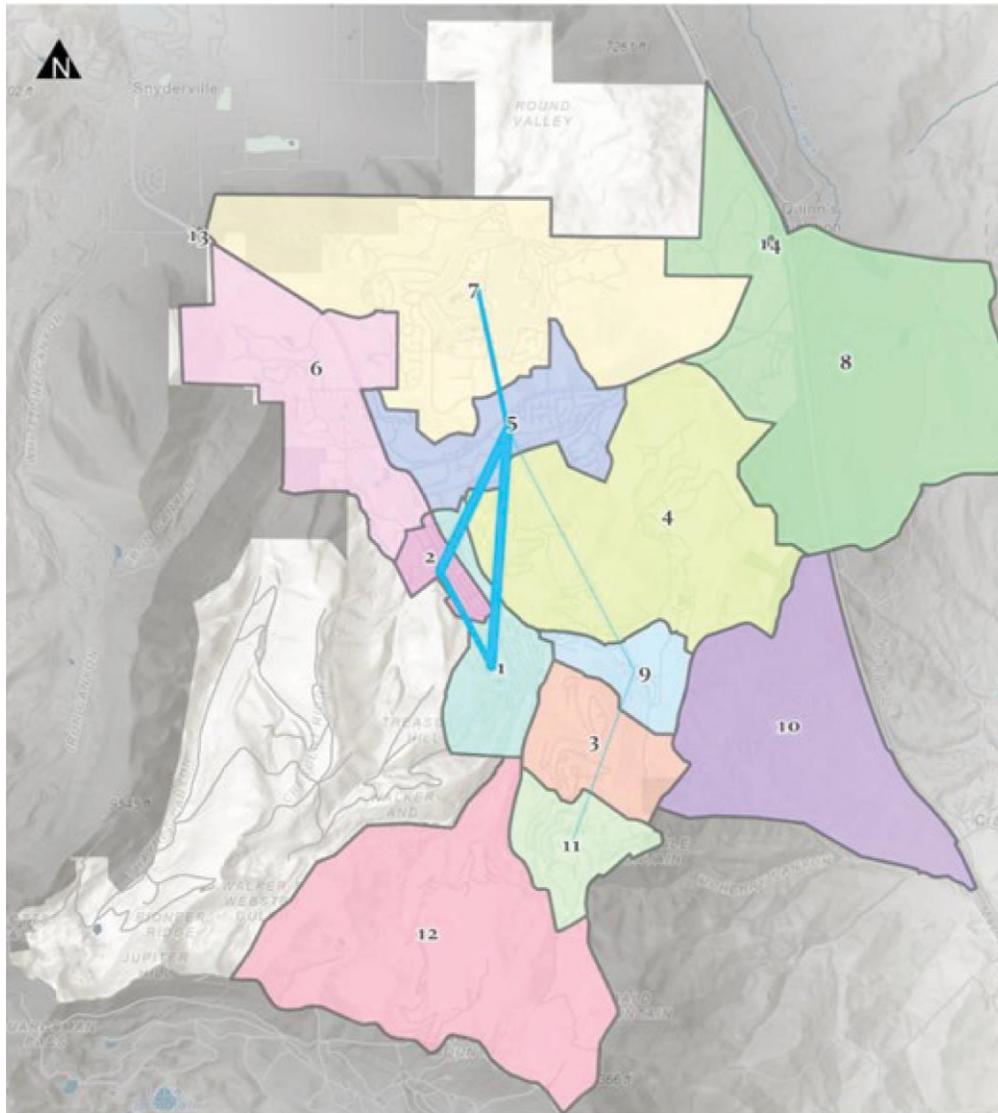


Figure 21. Winter Conditions Weekday (all-day). (Source: StreetLight and Fehr & Peers, Winter 2019)

Winter Conditions Weekday (Peak Periods)

To understand if origin/destination pairs differ depending on the time of day, analysis was also conducted on the peak travel periods (6am-10am and 3pm-7pm). Results are similar, with Zones 1 and 5 accounting for the largest percentage of trip origins/destinations (11%). During peak periods, there also seems to be a higher concentration of origin/destinations between Zone 5 and Zone 9 (which includes the Deer Valley Ski Resort) and Zones 9 and 11 (which includes the Silver Lake Lodge area and may have some skier movement included). Figure 22 shows the highest origin/destinations pairs for winter weekday peak periods.



Winter Weekday Peak StL Volume



Zone

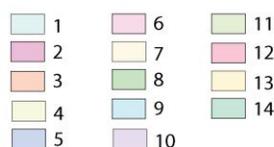
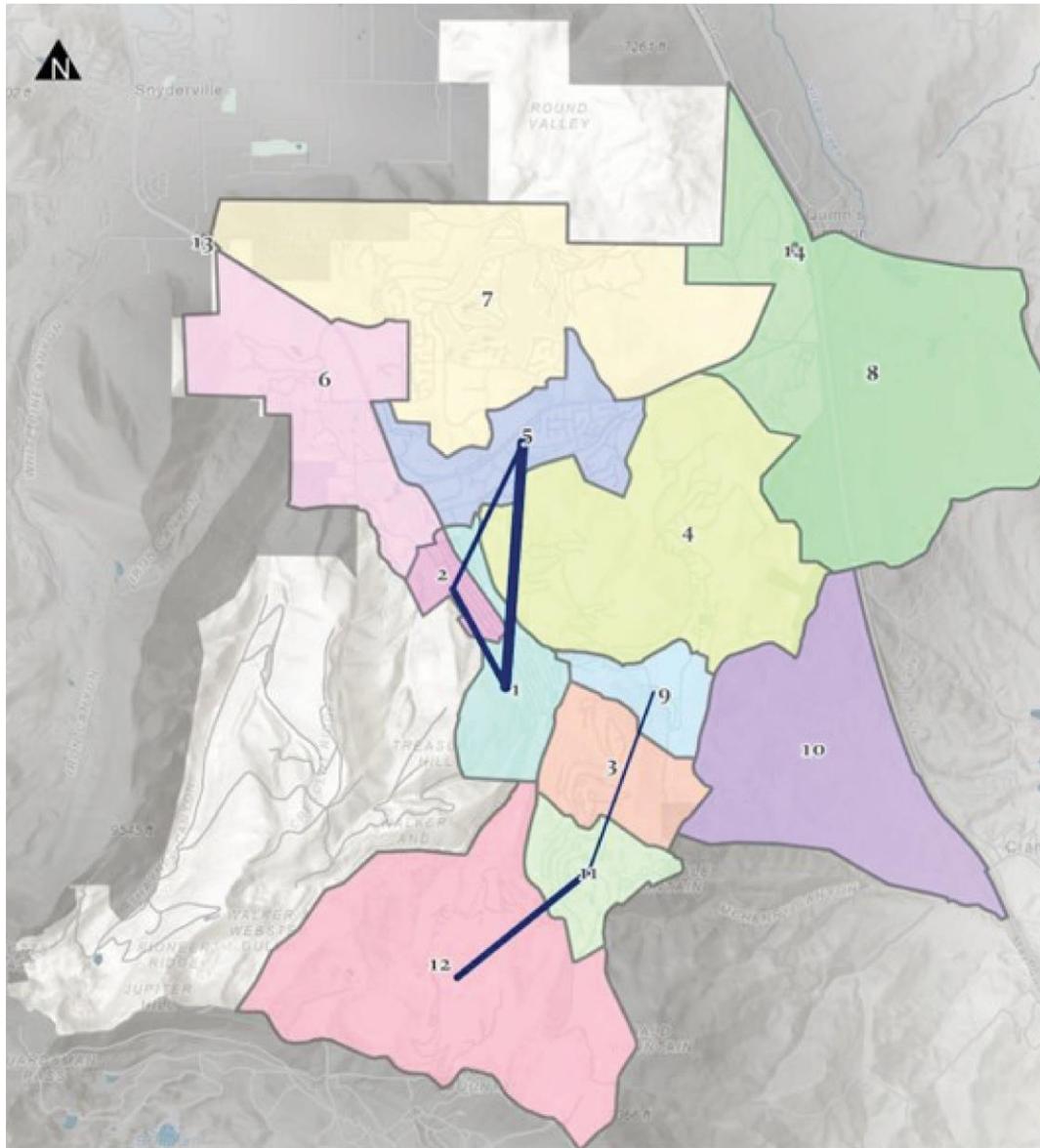


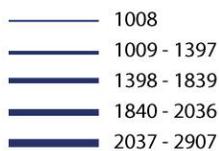
Figure 22. Winter Conditions Weekday (peak periods). (Source: StreetLight and Fehr & Peers, Winter 2019)

Winter Conditions Weekend (All-Day)

To understand if origin/destination pairs differ depending on the day of the week, analysis was also conducted on only the weekend periods (Saturday-Sunday). Similar to both weekday periods, weekend conditions show similar results, with Zones 1 and 5 accounting for the highest share of origin/destinations (12%). Figure 23 shows the highest origin/destination pairs for winter weekend conditions all day.



Winter Weekend
OD StL Volume



Zone #

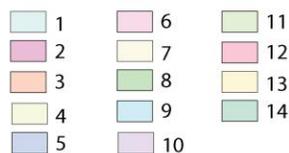
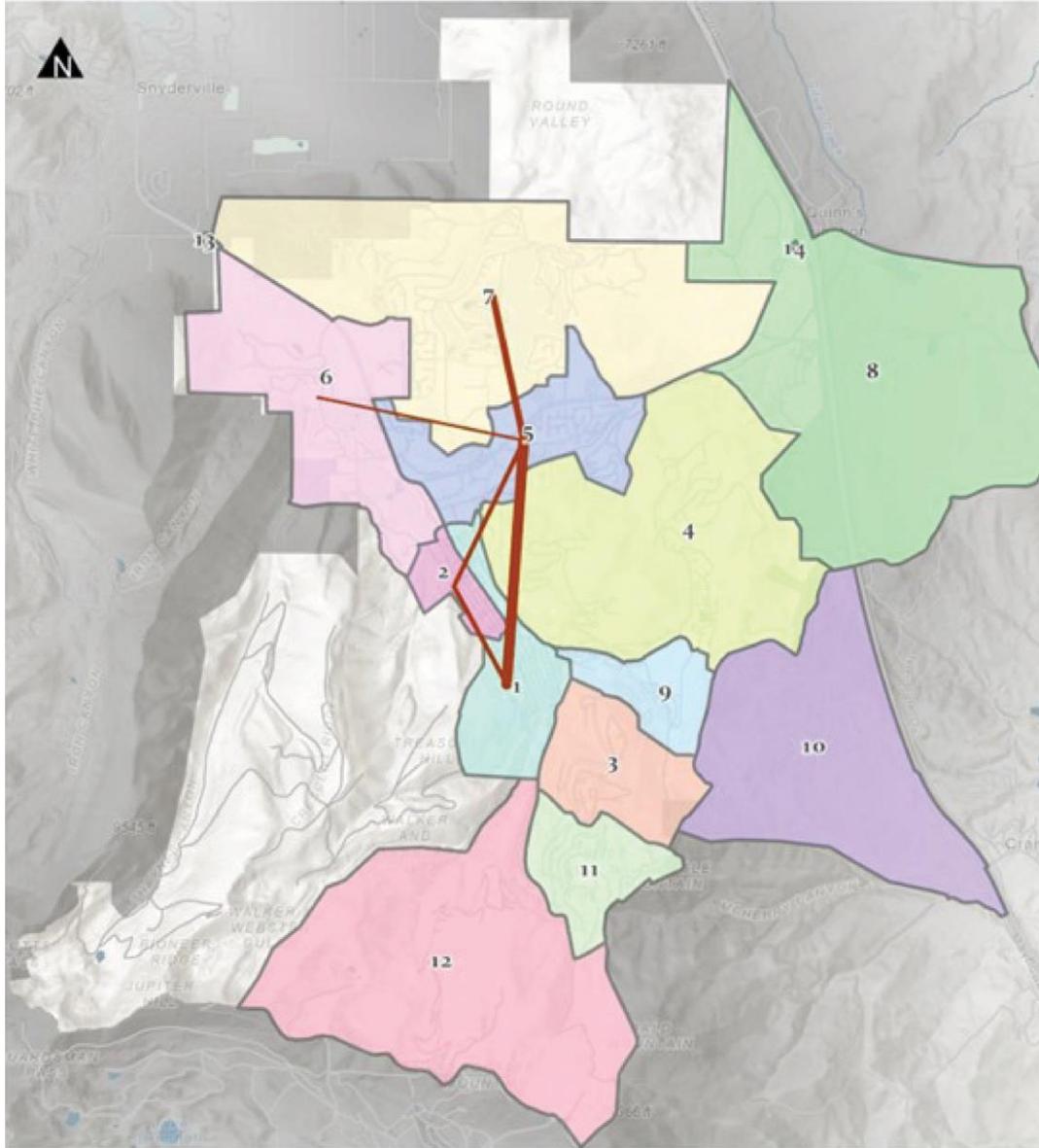


Figure 23. Winter Conditions Weekend (all-day). (Source: StreetLight and Fehr & Peers, Winter 2019)

Summer Conditions Weekday (All-Day)

Summer travel patterns appear slightly different than winter patterns. While Zones 1 and 5 continue to have the highest share of origins/destinations (15%), there is also a larger relationship between Zone 5, Zone 7, and Zone 6 (which includes the Park City Golf Course area). Figure 24 shows the highest origin/destination pairs for summer weekday conditions all day.



Summer Weekday
OD StL Volume



Zone #

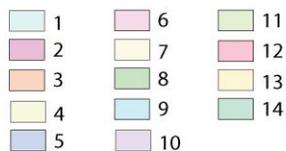
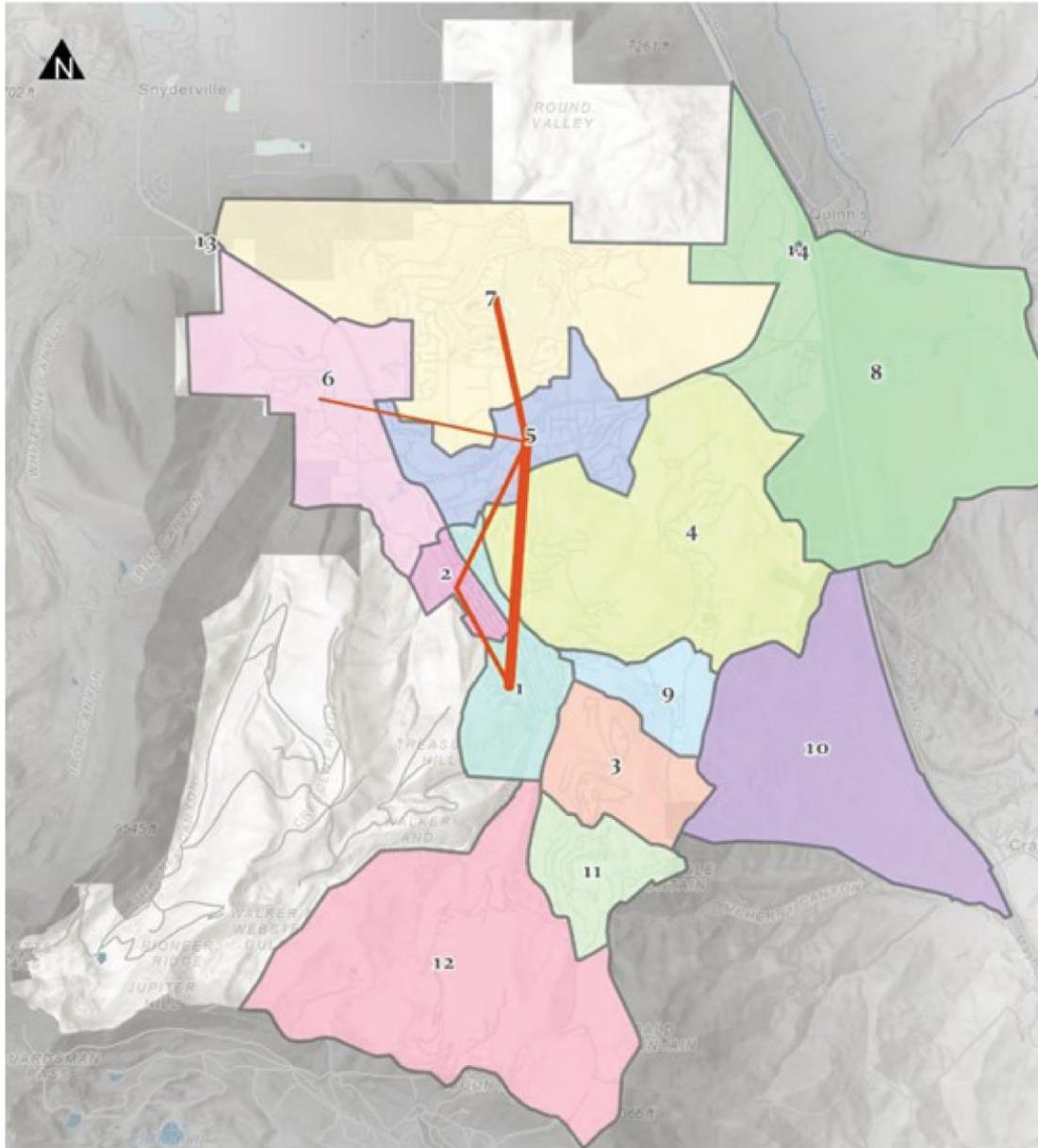


Figure 24. Summer Conditions Weekday (all-day). (Source: StreetLight and Fehr & Peers, Summer 2019)

Summer Conditions Weekday (Peak Periods)

Summer peak travel patterns are very similar to all-day patterns. Approximately 14% of origins/destinations are between Zone 1 and Zone 5. Connections between Zone 5 and Zone 7 are also high. Figure 25 shows the highest origin/destination pairs for summer weekday conditions during peak periods.



Summer Weekday
Peak OD StL Volume



Zone #

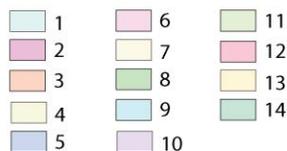
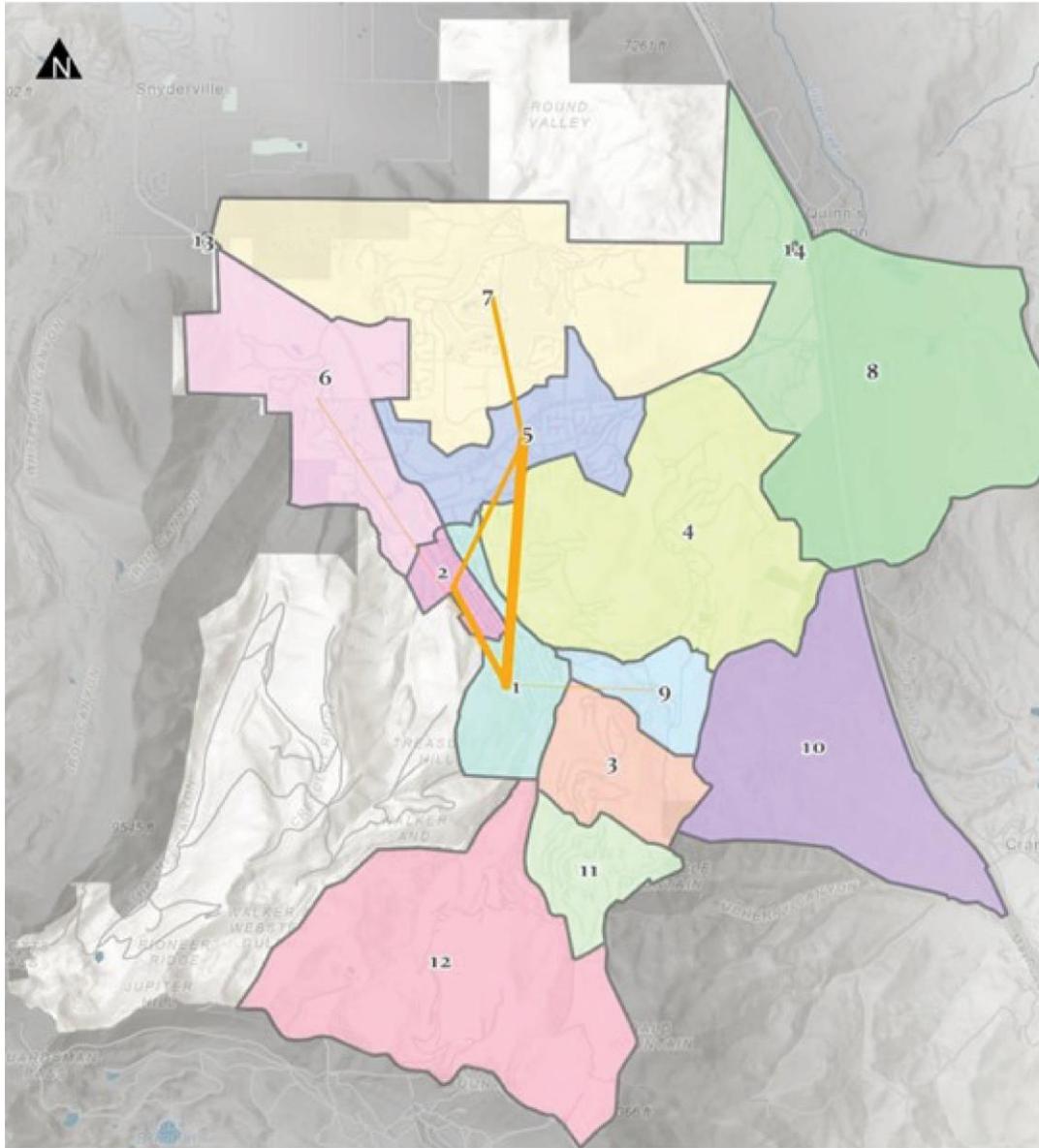


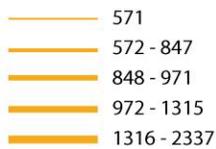
Figure 25. Summer Conditions Weekday (peak periods). (Source: StreetLight and Fehr & Peers, Summer 2019)

Summer Conditions Weekend (All-Day)

Summer weekend travel patterns are somewhat different. While approximately 17% of origins/destinations are between Zone 1 and Zone 5, Zone 1 also has a close origin/destination relationship with both Zone 6 and Zone 9, and there appears to be less of a connection between Zone 5 and Zone 6 than during weekday conditions. Figure 26 shows the highest origin/destination pairs for summer weekend conditions all day.



Sum of Average Daily
O-D Traffic (StL Volume)



Zone #

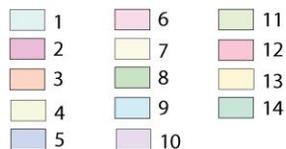
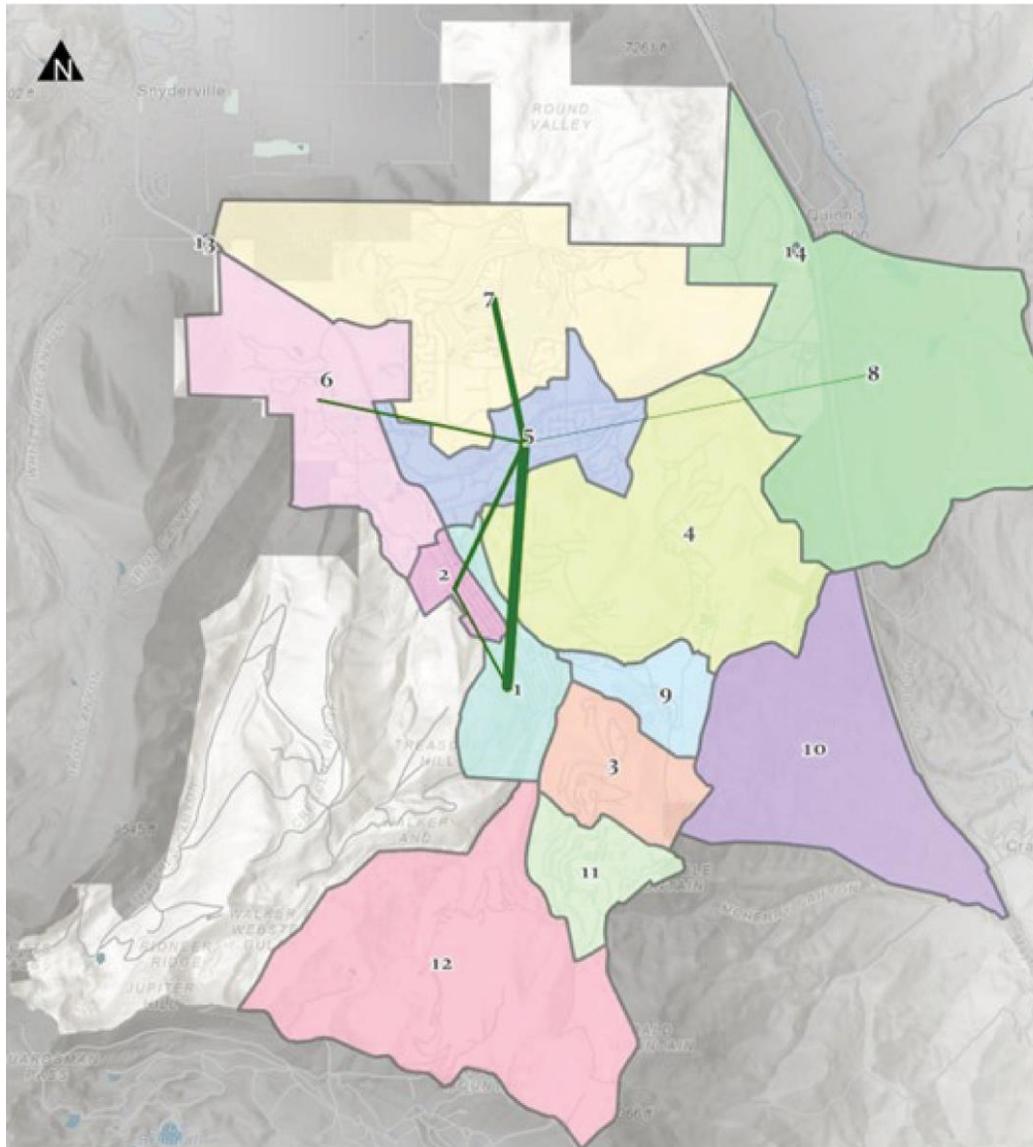


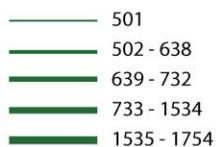
Figure 26. Summer Conditions Weekend (all-day). (Source: StreetLight and Fehr & Peers, Summer 2019)

Shoulder Season Conditions Weekday (All-Day)

Shoulder season weekday condition travel patterns also show the strong connections between Zones 1 and 5 (16% of all origin/destinations) as well Zone 5 and 2 (7% of all origin/destinations). Like summer conditions, there is also a strong relationship between Zones 6/7 and Zone 5. But there is also a strong relationship of origin/destinations between Zone 5 and Zone 8, which includes the Richardson Flat park-and-ride area. Figure 27 shows the highest origin/destination pairs for shoulder season weekday conditions all day.



Summer Weekday
OD StL Volume



Zone #

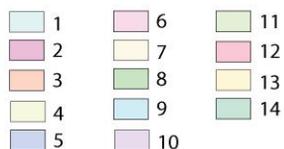
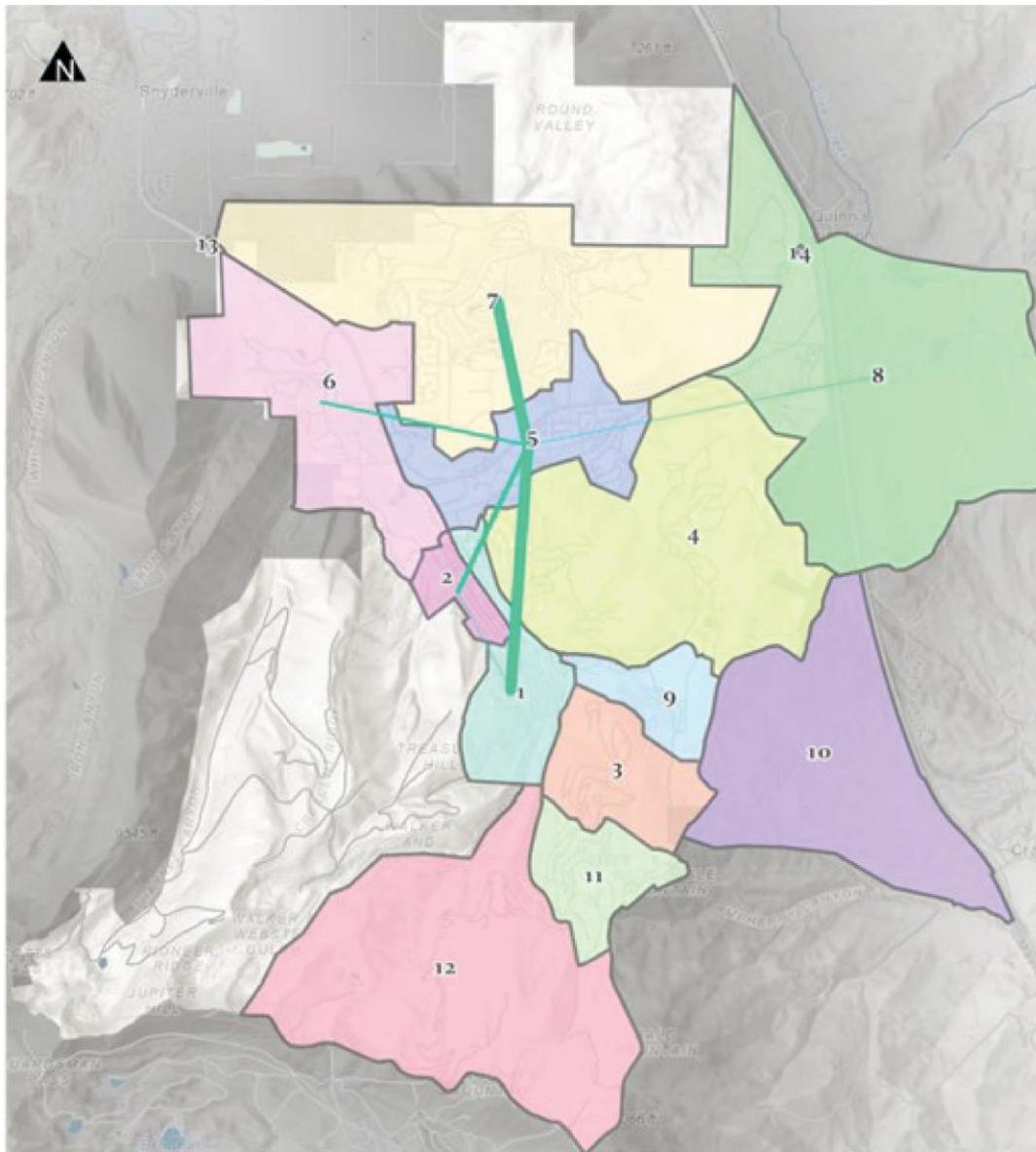


Figure 27. Shoulder Season Conditions Weekday (all-day). (Source: StreetLight and Fehr & Peers, Shoulder Season 2019)

Shoulder Season Conditions Weekday (Peak Periods)

Shoulder season weekday peak period condition travel patterns are generally the same as all-day patterns. Figure 28 shows the highest origin/destination pairs for shoulder season weekday conditions during peak periods.



Shoulder Weekday
Peak OD StL Volume



Zone #

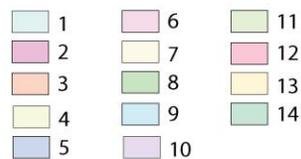
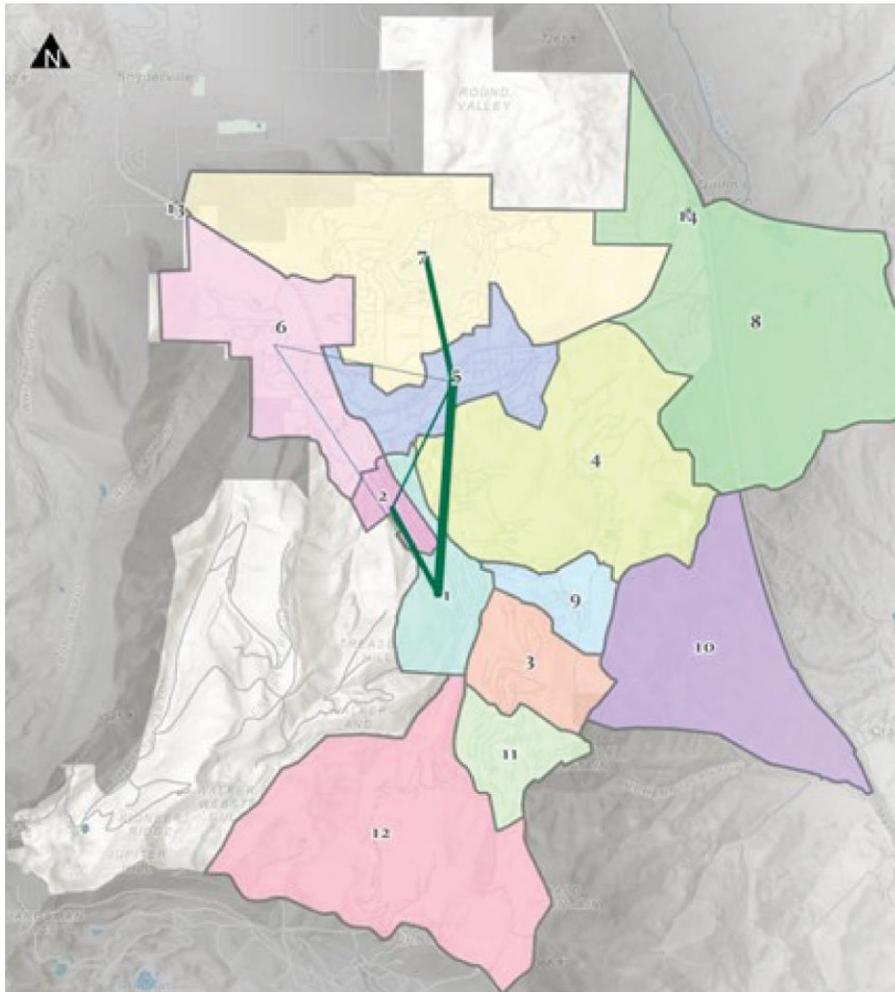


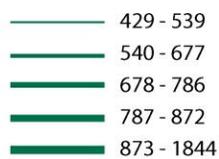
Figure 28. Shoulder Season Conditions Weekday (peak periods). (Source: StreetLight and Fehr & Peers, Shoulder Season 2019)

Shoulder Season Conditions Weekend (Peak Periods)

Shoulder season weekend condition travel patterns are similar to weekday conditions, although there is a slightly stronger relationship between Zones 1 and Zone 6. The relationship between zone 1 and 5 also seems to be even stronger, making up approximately 19% of the trips during this period. Figure 29 shows the highest origin/destination pairs for shoulder season weekend conditions during peak periods.



Shoulder Weekend Peak OD StL Volume



Zone

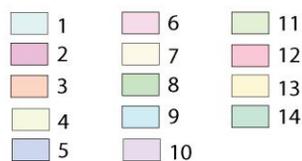


Figure 29. Shoulder Season Conditions Weekend (peak periods). (Source: StreetLight and Fehr & Peers, Shoulder Season 2019)

Key Takeaways

The origin-destination analysis of travel within Park City between the established zones reveals that:

- There is strong travel between Zones 1,2, 5, 6, and 7 in almost all analyses.
- Externally based trips make up a large share of trip patterns, and therefore making good connections to regional transit services is critical to serving the overall travel market.
- The shoulder season has a higher share of externally based origins/destinations, suggesting that commuting patterns make up a greater share of trips during this period.
- SR-224 has more origin/destination activity than SR-248. Both have strong connections to Zones 5, 2, and 1.

Commute Patterns

Commute data can provide insight into another potential group of transit riders. The US Census maintains the “Longitudinal Employer-Household Dataset,” which provides detailed data on the location of employment for an area’s residents, as well as data on the location of residence of an area’s workers. **Table 9** and **Table 10** present the commute data for the overall study area in 2019.

Table 9. Park City Commute Patterns

Where Park City Residents are Employed		
Location	# Jobs	% Total
Park City	1,798	44.7%
Salt Lake City	430	10.7%
Snyderville CDP	272	6.8%
Summit Park CDP	75	1.9%
Millcreek	72	1.8%
West Valley City	60	1.5%
Murray	56	1.4%
Ogden	50	1.2%
Silver Summit CDP	50	1.2%
Sandy	45	1.1%
All Other Locations	1,118	27.8%
Total Number of Jobs	4,026	

Source: US Census LEHD, 2019

Table 10. Park City Commute Patterns

Where Park City Workforce Lives		
Location	Persons	Total
Park City	1,798	14.4%
City of Heber	1,156	9.3%
Snyderville CDP	986	7.9%
Salt Lake City	914	7.3%
Summit Park CDP	896	7.2%
Silver Summit CDP	560	4.5%
Mill Creek	398	3.2%
Sandy	276	2.2%
Midway	249	2.0%
Holladay	206	1.7%
All Other Locations	5,022	40.3%
Total Number of Persons	12,461	

The table on the left represents where Park City residents are commuting for work. There are a total of 4,026 employed residents living in Park City, and 44.7% of them also work in Park City, while 10.7% commute to Salt Lake City, 6.8% commute in nearby Snyderville, and the remaining 37.9% commute to other various locations.

The table on the right shows where the 12,461 employees who work in Park City are commuting from. As shown, 14.4% of Park City employees live in Park City, 9.3% commute from Heber City, and between 7.2 to 7.9% commute from Snyderville, Salt Lake City, and Summit Park.

Means of Transportation to Work

Table 11 shows the commute travel mode split data for Park City, as identified in the 2019 American Community Survey. Within Park City as a whole, the majority of workers (63.6%) drove alone, while 7.6% walked, 6.9% carpooled, and 4.6% used public transportation (not including taxis). 13.6% of Park City workers worked from home and did not commute. Within block group 2 of census tract 9644.01, 18.5% of employees commuted by public transit, which is much higher than national averages.

Table 11. Commute by Mode of Travel

Census Tract	Block Group	Total Workers	Drove Alone		Carpool		Public Transportation		Walked		Bicycle		Mean		Other		Worked from home	
			#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
9643.08	1	394	239	60.7%	31	7.9%	0	0.0%	17	4.3%	0	0.0%	20	5.1%	87	22.1%		
	2	300	216	72.0%	0	0.0%	19	6.3%	27	9.0%	0	0.0%	0	0.0%	38	12.7%		
	3	1,069	817	76.4%	32	3.0%	17	1.6%	8	0.7%	17	1.6%	7	0.7%	171	16.0%		
9644.01	1	306	206	67.3%	0	0.0%	4	1.3%	4	1.3%	0	0.0%	0	0.0%	92	30.1%		
	2	623	383	61.5%	5	0.8%	115	18.5%	11	1.8%	0	0.0%	0	0.0%	109	17.5%		
9644.02	1	344	95	27.6%	0	0.0%	15	4.4%	152	44.2%	0	0.0%	0	0.0%	82	23.8%		
	2	526	324	61.6%	25	4.8%	0	0.0%	87	16.5%	24	4.6%	10	1.9%	56	10.6%		
	4	1,685	1,059	62.8%	268	15.9%	70	4.2%	94	5.6%	67	4.0%	67	4.0%	60	3.6%		
Total		5,247	3,339	63.6%	361	6.9%	240	4.6%	400	7.6%	108	2.1%	104	2.0%	695	13.2%		

Source: American Community Survey 5-year Estimates (2015-2019)

Existing Traffic Conditions

One of Park City Transit's biggest operational challenges is schedule delays due to traffic congestion. During ski season, peak summer, special events, and increasingly in shoulder seasons, the limitations of the road infrastructure have become a serious issue that will require multiple solutions in which transit plays a part. Numerous corridor studies have been completed to address the safety and travel issues in the region, focusing particularly on the State Route 224 and State Route 248 corridors. Recommendations for Bus Rapid Transit (BRT) are among the top and most impactful recommendations. Among the highlights of the findings from these studies:

- Traffic delays that impact transit operations are particularly prevalent at the Park Avenue/ Deer Valley Drive/Empire Avenue intersection, as well as the intersection of Park Avenue and Kearns Blvd (SRs 224/248).
- Traffic delays can be substantial at a variety of times but are particularly challenging at the beginning and end of the ski day in winter.
- Traffic delays on Bonanza Drive, between Kearns and Deer Valley Drive, can be substantial during peak conditions. There are also substantial delays along Kearns Blvd – SR 248 between Park City and Quinn's Junction during commute times and near school bell times.

Chapter 4: Park City Transit Overview & Analysis

Chapter 4. Park City Transit Overview and Analysis

Transit service in Park City began in the winter of 1975-1976 as a small, free transit program paid for by local hotels and resorts. After several years of operation, the residents of Park City passed a transit tax to continue support for transit. The system continued to grow, and the service area expanded. In 2006, Park City and Summit County entered into an agreement that formed a transit district that identified separate service areas but operated jointly. In 2017, Park City Transit began to operate its first electric buses. Over the years and with numerous name changes, the system grew to become one of the nation's most robust resort transit services.

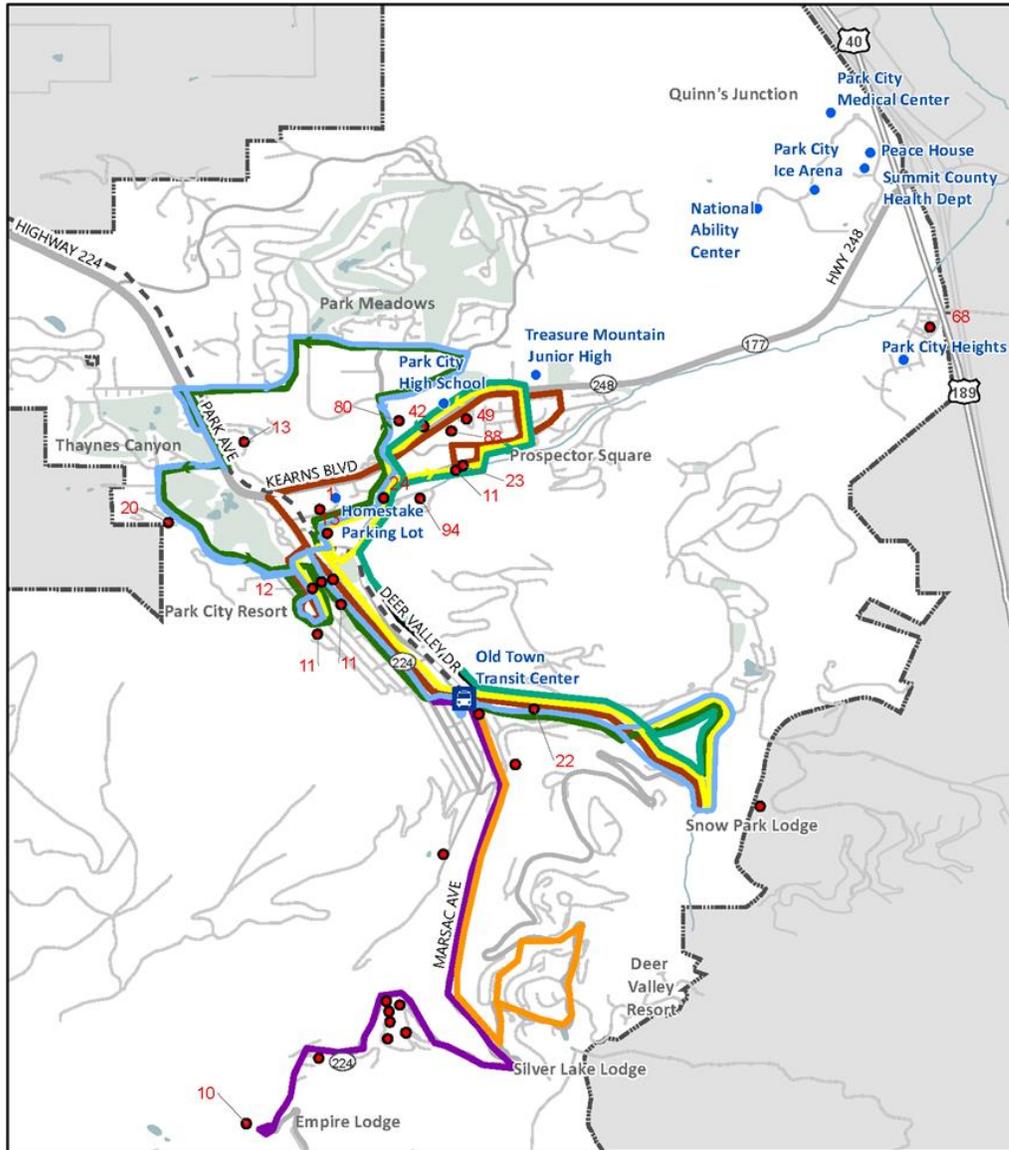
In July 2021, Park City and Summit County dissolved their joint operations. Each now operates independently of the other but in coordination. This SRTP is the first to be completed subsequent to the split and will focus on services operated within and on behalf of Park City while also evaluating neighboring services which impact the Park City Transit operations.

Organization and Staffing

Park City Transit is under the direction of the Transit Manager, who reports to the Transportation Director. The Transit Manager works in collaboration with three transportation planners and the ITS program manager and oversees staff, including an Assistant Transit Manager, Executive Assistant, Transit Community Outreach and Marketing staffer, Transit Service Planner, and Finance Administrator. Transit operations staff includes supervisors and lead operators, as well as safety and training staff. The organization plans for 57 full-time transit operators and 18 part-time seasonal operators, though driver shortages are an ongoing issue.

Park City Transit Service Overview

Park City Transit operates services that vary by season. Winter service begins in December and runs through March or sometimes into April. Spring service starts in early- to mid-April. Summer service starts in mid- to late-June, and Fall service begins in mid-September and runs through November. Specific dates are generally determined by the weather. The routes are depicted in Figure 30 (winter) and Figure 31 (summer) and reflect the 2021-2022 season and do not include pilot projects. The figures also show the proximity of affordable housing units to the routes, as shown with red dots and red text. The routes are described below.

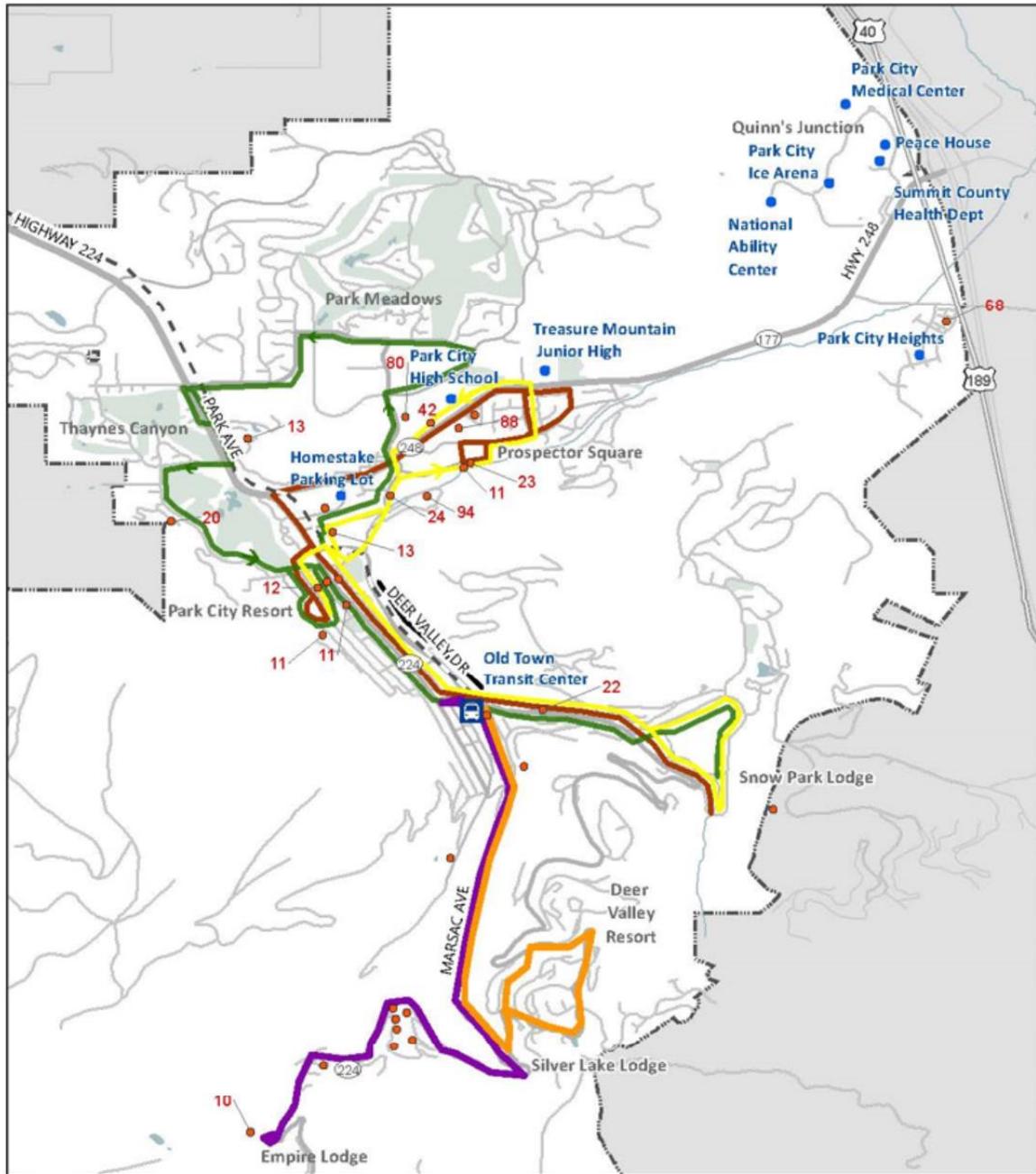


Park City Winter Routes

Based on Proposed Winter
2021-22 Service

- 1 Red: Prospector Square
 - 2 Green: Park Mdws/Thaynes Cnyn - Deer Valley Resort
 - 3 Blue: Winter 2019-2020
 - 4 Orange: Main St - Silver Lake Village
 - 5 Yellow: Prospector Square - Deer Valley Resort
 - 9 Purple: Main St - Montage Deer Valley
 - 10 White: Kimball Jct- Main St Express
 - 50 Teal:
 - 17: Main Street Trolley
 - On Demand Stops
 - Affordable Housing
 - 22 # of Units (listed if 10 or more)
 - ▭ Park City Boundary
- Note: Orange and Purple Routes are not operated in fall or spring.

Figure 30. Park City winter routes. (Source: Park City Municipal Corporation)



Park City Summer Routes

Based on Proposed
Summer 2021-22 Service

- 1 Red: Prospector Square
- 2 Green: Park Mdws/Thanes Cnyn - Deer Valley Resort
- 4 Orange: Main St - Silver Lake Village
- 5 Yellow: Prospector Square - Deer Valley Resort
- 9 Purple: Main St - Montage Deer Valley
- 10 White: Kimball Jct - Main St Express
- 17: Main Street Trolley
- Park City Boundary
- On Demand Stops
- Affordable Housing
- 22 # of Units (listed if 10 or more)

Note: Orange and Purple Routes are not operated in fall or spring

Figure 31. Park City Summer routes. (Source: Park City Municipal Corporation)

Park City Fixed Routes

All Park City routes operate on 30-minute headways except the Trolley, which is on 15-minute headways, and 10 White Express, which is operated on 15-minute headways during the day and 30-minute headways evenings on behalf of Summit County. However, several of the routes overlap to give a 15-minute frequency or higher on major corridors, such as 1 Red, 5 Yellow, 2 Green, 3 Blue, and 50 Teal. The routes are summarized in **Table 12** below.

Table 12. Summary of Park City Fixed-Route Transit Services

		Fixed Routes									
		1 Red	2 Green	3 Blue	50 Teal	4 Orange	5 Yellow	9 Purple	17 Trolley	Citywide	
		Prospector Square - Deer Valley Resort	Park Meadows/Thaynes Canyon—Deer Valley Resort	Deer Valley Resort—Park Meadows / Thaynes Canyon	Prospector & Main Street / Deer Valley Express	Silver Lake—Deer Valley Resort	Prospector Square - Deer Valley Resort	Main Street - Montage Deer Valley	Main Street Trolley	1 Red / 2 Green Combo	Total
Winter Service (2021-22 Estimate)											
Daily	Start of Service	6:00 AM	6:12 AM	6:45 AM	6:27 AM	6:42 AM	6:22 AM	6:42 AM	8:00 AM	11:40 PM	
	End of Service	11:58 PM	11:37 PM	5:41 PM	5:40 PM	11:40 PM	11:42 PM	11:05 PM	8:00 PM	1:40 AM	
Service Frequency (Minutes)	Daily	Daytime	30	30	30	30	30	30	15	NA	
	Evening	30	30	--	--	30	30	30	15	NA	
# Peak Buses in Operation	Daytime	2.0	2.0	1.5	1.5	1.0	2.0	1.0	1.0	0.0	12
	Evening	1.0	2.0	0.0	0.0	1.0	2.0	1.0	1.0	2.0	10
Daily Vehicle-Hours of Service ¹		25.8	33.9	20.9	21.5	17.2	33.6	17.2	14.7	5.42	190.1
Daily Vehicle-Miles of Service ²		12	11	10.9	7.4	6.1	9.8	7.4	1.6	14.0	80.3
Cycle Length (Min)		40	40	30	30	20	32	23	12	40	
Summer Service (2021)											
Daily	Start of Service	6:11 AM	6:18 AM			6:40 AM	6:32 AM	6:40 AM			
	End of Service	11:38 PM	11:33 PM			6:28 PM	11:37 PM	6:35 PM			
Wednesday to Saturday	Start of Service								12:00 PM		
	End of Service								10:00 PM		
Service Frequency (Minutes)	Daily	Daytime	30	30		30	30	30	15		
	Evening	30	30			30	30	30	15		
# Peak Buses in Operation	Daytime	2.0	2.0			1.0	2.0	1.0	1.0		9
	Evening	2.0	2.0			0.0	2.0	0.0	1.0		7
Daily Vehicle-Hours of Service ¹		34.0	33.8			11.8	33.8	11.9	10.0		135.2
Daily Vehicle-Miles of Service ²		12	11			6	10	7	2		48.1
Cycle Length (RT Min)		50	52			18	44	50	12		

Note 1: Revenue hours based on run sheets and printed schedules.

Note 2: Route miles per PCMC Transit Department.

Source: LSC Transportation Consultants, Inc.; published schedules at <https://www.parkcity.org/departments/transit-bus/routes-schedules> as of 7/12/2021; PCMC

- ▶ 1 Red: Prospector Square — Deer Valley Resort (year-round): operated from 6:15 AM to 11:30 PM.
- ▶ 2 Green: Park Meadows/Thaynes Canyon — Deer Valley Resort (year-round): operated from 6:15 AM to 11:45 PM. For most of 30 years, this route would discontinue service in Thaynes Canyon during winter and would instead service Snowcreek Drive and Park Avenue Condos before going to Park City Mountain Resort.
- ▶ 3 Blue: Deer Valley Resort – Park Meadows/Thaynes Canyon (winter only): operated from 6:15 AM to 11:30 PM and provides bidirectional service in combination with 2 Green.
- ▶ 50 Teal: Prospector & Main Street / Deer Valley Express (winter only): operated from 6:27 AM to 5:40 PM. This is a newer route developed to provide express service between Prospector Square, Main Street and Deer Valley.
- ▶ 4 Orange: Main Street - Silver Lake Village (winter and summer): operated from 6:40 AM to 6:30 PM.
- ▶ 5 Yellow: Prospector Square — Deer Valley Resort (year-round): operated from 6:40 AM to 11:40 PM.
- ▶ 9 Purple: Main Street — Montage Deer Valley (winter and summer) operated from 6:40 AM to 6:30 PM.
- ▶ Trolley: Main Street — Swede Alley operated from noon to 10:00 PM.
- ▶ City-wide Service: From 11:40 PM to 2:45 AM (winter only⁴). This after-hours route duplicates a combination of the 1 Red Route (from the OTTC to Monitor Drive outbound) and the 2 Green Route from Monitor Drive to Deer Valley.
- ▶ 1 Red, 2 Green, 3 Blue, and 4 Yellow provide service to Park City Mountain Resort and OTTC

Park City On-Demand Services

Park City Transit offers paratransit on-demand service and general public on-demand service. For passengers who have difficulty using the fixed-route service, curb-to-curb service is provided within ¼-mile of the fixed routes per the Americans with Disabilities Act (ADA). The service hours are consistent with the fixed-route service. Additionally, a zone-based on-demand service was introduced in 2019 for the general public. The “Citywide” on-demand service is operated late at night to ensure passengers can get home after regular service hours. The services are operated as described below and in Table 13.

- ▶ Paratransit Service: operated the same hours as fixed-route services in accordance with the ADA. Passengers must be ADA-eligible to use this service.
- ▶ General Public On-Demand Service: From 7:00 AM to 11:00 PM, any passenger can request a ride by phone to arrive within 15 minutes of a specified pick-up time. Rides are completed on a time- and space-

⁴ The Citywide Route is typically a winter only route but was operated from April to November 2020 throughout the day instead of the 1 Red, 2 Green or 5 Yellow due to COVID conditions.

available basis, so wait times vary. There are four established zones (see Table 12). Rides are offered between designated stops within each zone and cannot cross zones except in the Quinn’s Junction zone.

In 2019, 5,200 revenue hours of service were operated on demand, serving 10,655 passenger trips (an average of 2.1 passengers per hour). This increased to 5,496 revenue hours in 2020, but only serving 7,092 passenger trips (1.3 per hour) due to COVID. Through mid-September 2021, 3,288 hours have been operated, carrying 5,748 passenger trips (1.7 per hour).

Table 13. Summary of Park City On-Demand Services

		On-Demand Zones			
		Zone 1	Zone 2	Zone 3	Zone 4
Service Parameters		To / From Hospital or Health Clinic	To / From N.A.C. or Ice Arena	To / From Park City Heights	Homestake Parking Lot
Daily	Start of Service	7:00 AM	7:00 AM	7:00 AM	10:00 AM
	End of Service	11:00 PM	11:00 PM	11:00 PM	11:00 PM
Stops Served		1, 3, 4, 5, 6, 7, 8, 9, 10	1, 3, 4, 5, 6, 7, 8, 9, 10	1, 3, 4, 5, 6, 7, 8, 9, 10	1, 2
On Demand Zone Stops					
1 Old Town Transit Center		6 Peace House			
2 Homestake Parking Lot		7 People’s Health Clinic & Summit Co Health Dept			
3 Park City High School		8 Park City Ice Arena			
4 Treasure Mountain Jr High		9 National Ability Center			
5 Park City Medical Center		10 Park City Heights			
Calendar Year					
Operating Statistics		2019	2020	2021¹	
Revenue Hours		5,200	5,496	3,288	
Revenue Miles		70,170	54,156	40,323	
Ridership		10,665	7,092	5,748	
Passengers / Hour		2.1	1.3	1.7	

Note 1: Through September 13, 2021.

Note 2: Includes general public and paratransit on-demand services

Source: PCMC, LSC, published schedules.

High Valley Transit

The summer of 2021 has brought about a historic change to the Park City Municipal Corporation and Summit County Transit as the City and County have separated operations, and now two transit systems are serving the area. The Summit County service has been rebranded as High Valley Transit, and Park City no longer operates what used to be Routes 6, 7, 8, 11, 12, 13, and 18. However, Park City continues to operate Route 10 White (Park City to Kimball Junction) on behalf of Summit County under contract. This SRTP will consider connectivity with High Valley Transit Services, but in general, the Summit County services are not part of the SRTP analysis.

Park City – Salt Lake City (PC-SLC) Connect

The PC-SLC connect is offered through a cooperative effort between Utah Transit Authority, Park City, and Summit County to provide bus service between Summit County and Salt Lake City during peak commute times. Summit County stops include the Kimball Junction Transit Center (KJTC), with connecting Park City Transit buses to Main Street (Old Town Transit Center). Salt Lake City stops include Downtown Salt Lake City, Salt Lake Central Station, and the University of Utah. Fares are \$5.00 one-way or \$2.50 reduced fares for seniors and other qualifying passengers.

Evaluation of Park City Transit

In addition to Park City and Summit County separating operations, the coronavirus pandemic of 2020 (and beyond) has had a huge impact on operations. As this is a short-range plan, the focus will be on recovering from the pandemic as well as planning for a future with greater normalcy. As such, the “normal” operating seasons (winter 2018-19, summer 2019, and calendar year 2019) will be analyzed as the predictor of future operations for such things as ridership and service levels. Long-term trends, such as increased remote work and learning, trends in visitor travel patterns, and other factors impacted by COVID, will be considered.

Park City Transit Operations

Park City Transit requires nine peak and seven off-peak vehicles in summer (2021) and 12 peak and ten off-peak buses in winter (2021-22) for fixed-route services. In addition, on-demand and paratransit services are operated using shared vehicles, typically requiring two vehicles per day.

Historical Trends in Revenue Hours and Ridership

A review of the Park City routes over the past three fiscal years shows the trends in operations. In FY 2018-19, a total of 49,543 summer revenue hours were operated, serving 1,352,890 passenger trips (an average of 27.3 per hour). The following year, 46,177 revenue hours were operated, reflecting the reduced hours when the coronavirus pandemic began toward the end of the fiscal year. Ridership was 46,177 (an average of 25.0 passenger trips per hour). In FY 2020-21, service was substantially reduced to 28,080 vehicle hours of service, and ridership dropped to 611,430, or 21.8 passenger trips per hour. This data is shown in Table 14. Historical summer trends are depicted in Figure 32 and Figure 33, while winter trends are shown in Figure 34 and Figure 35.

Table 14. Park City Transit Fixed Route Operating Trends

Fiscal Year	Ridership	Revenue Hours	Passengers Per Hour
FY 2018-19	1,352,890	49,543	27.3
FY 2019-20	1,153,617	46,177	25.0
FY 2020-21	611,430	28,080	21.8

Note 1: Data is for Park City routes, which include 1, 2, 3, 4, 5, 9, 17 (Trolley)
Source: LSC, PCMC

Park City Transit Summer Ridership By Routes

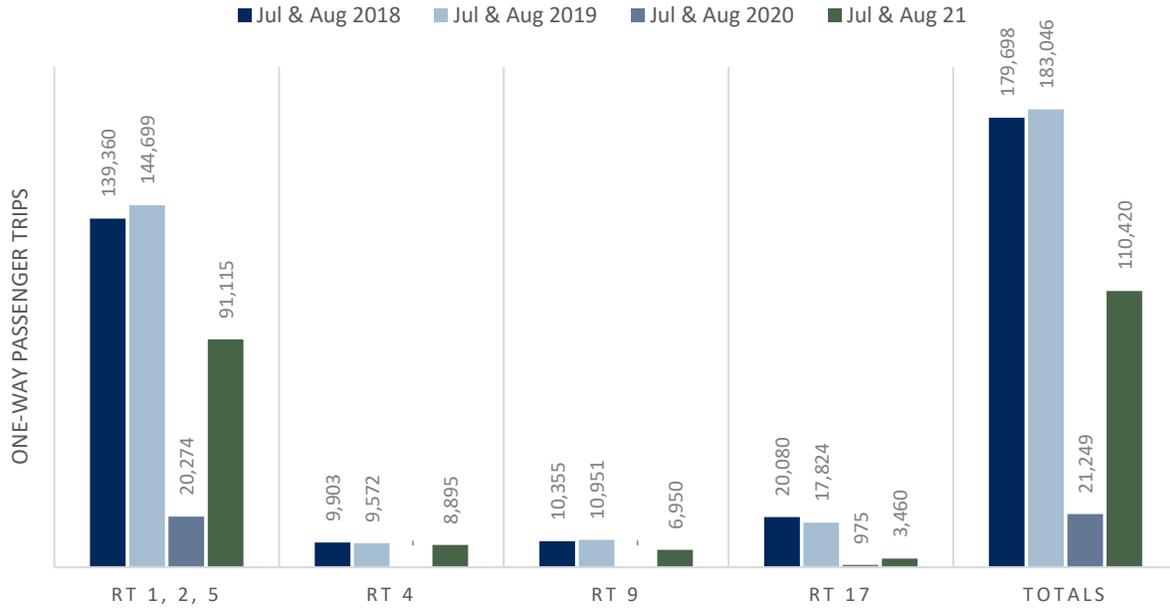


Figure 32. Park City Transit ridership by route - summer. (Source: Park City Municipal Corporation)

Park City Transit Passengers Per Hour By Routes In Summer

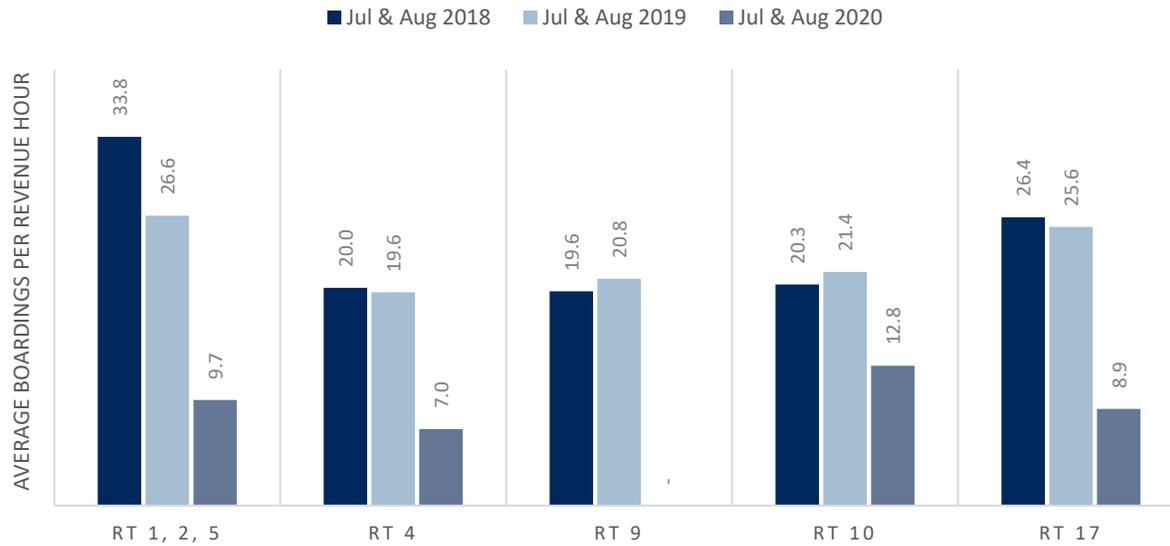


Figure 33. Park City Transit ridership per hour - summer. (Source: Park City Municipal Corporation)

Park City Transit Winter Ridership By Routes

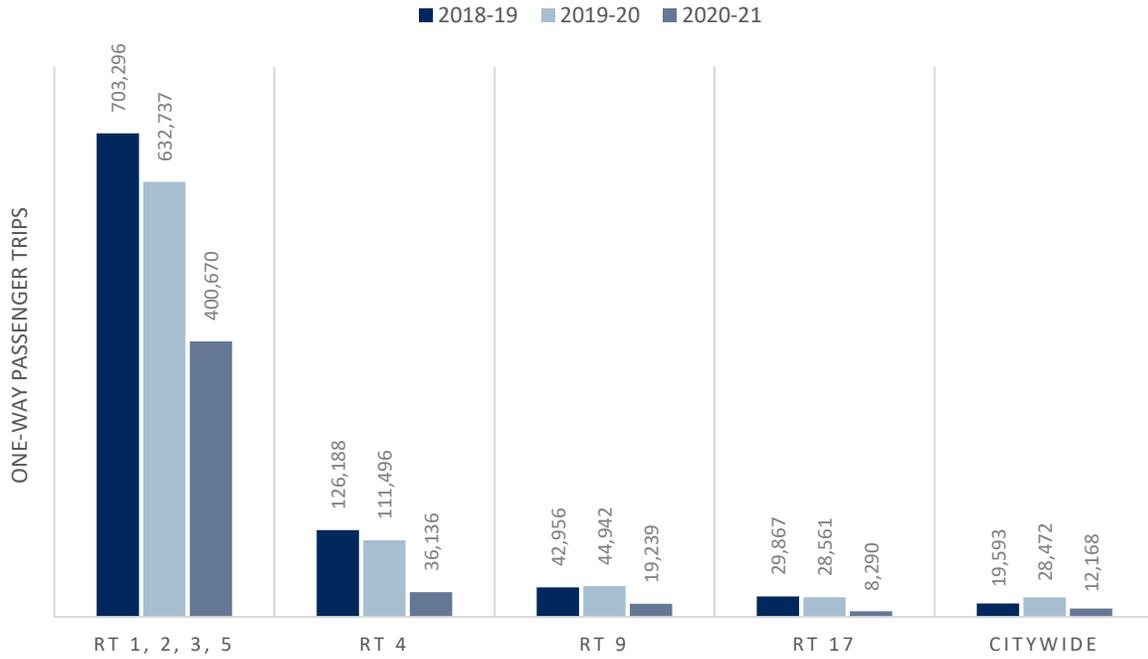


Figure 34. Park City Transit ridership by route - winter. (Source: Park City Municipal Corporation)

Park City Transit Passengers Per Hour By Routes In Winter

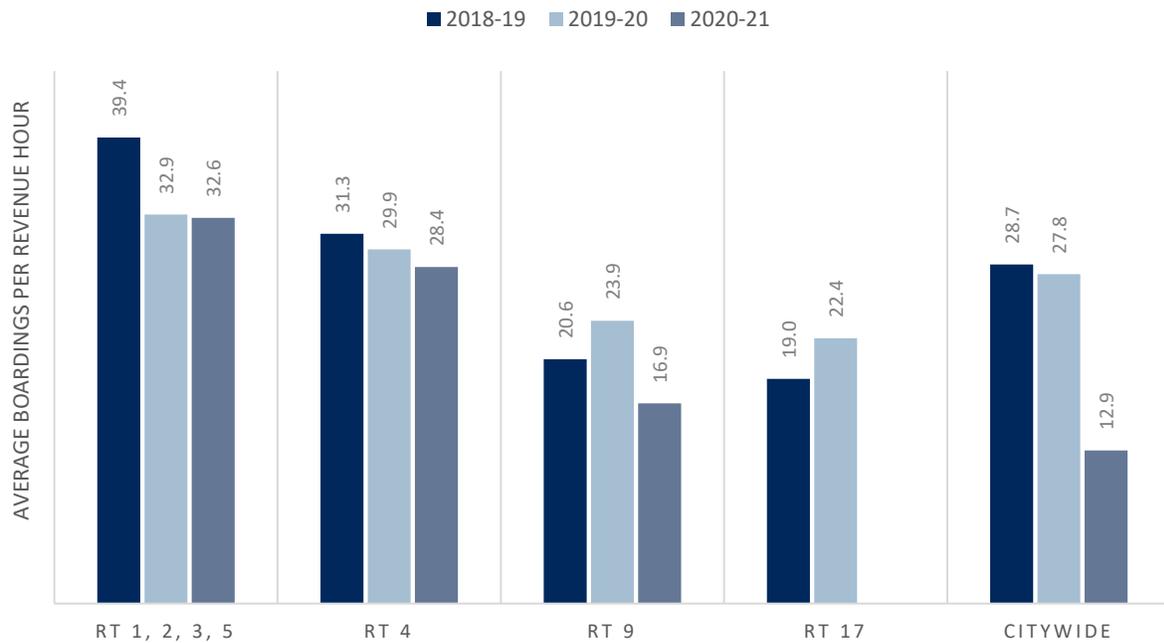


Figure 35. Park City Transit ridership per hour - winter. (Source: Park City Municipal Corporation)

Monthly Ridership by Route

Data from calendar year 2019 was reviewed to best represent pre-COVID trends. Table 15 shows Park City ridership by month. As indicated, the 1 Red route carried a third of the total annual ridership, followed by 2 Green (20%) and 5 Yellow (13%). Additionally, over half of the annual ridership was provided in January through March, reflecting the ski season activity.

Table 15. Park City Transit Monthly Ridership by Route, 2019

Month	Routes									Total	% by Month
	1 Red	2 Green	3 Blue	4 Orange	5 Yellow	9 Purple	17 Trolley	Citywide	On-Demand		
Jan	55,495	50,756	35,508	33,757	57,115	11,797	6,809	6,124	884	258,245	18.0%
Feb	56,080	50,470	40,968	33,894	47,856	10,938	6,591	5,090	869	252,756	17.7%
Mar	51,045	46,274	37,344	31,983	42,431	10,587	8,499	4,644	1,085	233,892	16.3%
Apr	20,848	9,918	3,694	2,999	4,587	1,963	4,364	414	979	49,766	3.5%
May	20,951	7,884	0	0	0	2,037	5,238	0	894	37,004	2.6%
June	34,428	14,922	0	3,027	645	4,305	8,682	0	786	66,795	4.7%
July	46,237	21,882	0	4,996	1,095	5,892	10,780	0	799	91,681	6.4%
Aug	45,017	20,899	0	4,576	9,569	5,059	7,044	0	859	93,023	6.5%
Sept	28,980	11,837	0	345	373	5,628	6,457	0	828	54,448	3.8%
Oct	22,558	8,548	0	0	421	3,875	5,599	0	984	41,985	2.9%
Nov	25,195	10,009	0	2,097	0	3,579	4,293	323	774	46,270	3.2%
Dec	66,446	33,641	24,626	27,536	25,060	11,673	8,290	6,660	924	204,856	14.3%
Total	473,280	287,040	142,140	145,210	189,152	77,333	82,646	23,255	10,665	1,430,721	
% by Route	33.1%	20.1%	9.9%	10.1%	13.2%	5.4%	5.8%	1.6%	0.7%		

Source: LSC, PCMC

Trip Patterns

Boarding Activity

Automatic vehicle location (AVL) and automatic passenger counter (APC) data for 2019 was reviewed to determine where passengers boarded buses. The data was adjusted to reflect the average daily passenger trips for winter (January, February, March, and December 2019) and summer (July and August 2019) and mapped. As shown in

Figure 36 (winter), there is steady ridership from Prospector Square to Snow Park Lodge, with the highest ridership at the Old Town Transit Center, Park City Resort, Snow Park Lodge, and Homestake Parking Lot. Summer trends are similar (Figure 37), though there is less activity along Iron Horse and Thaynes Canyon.

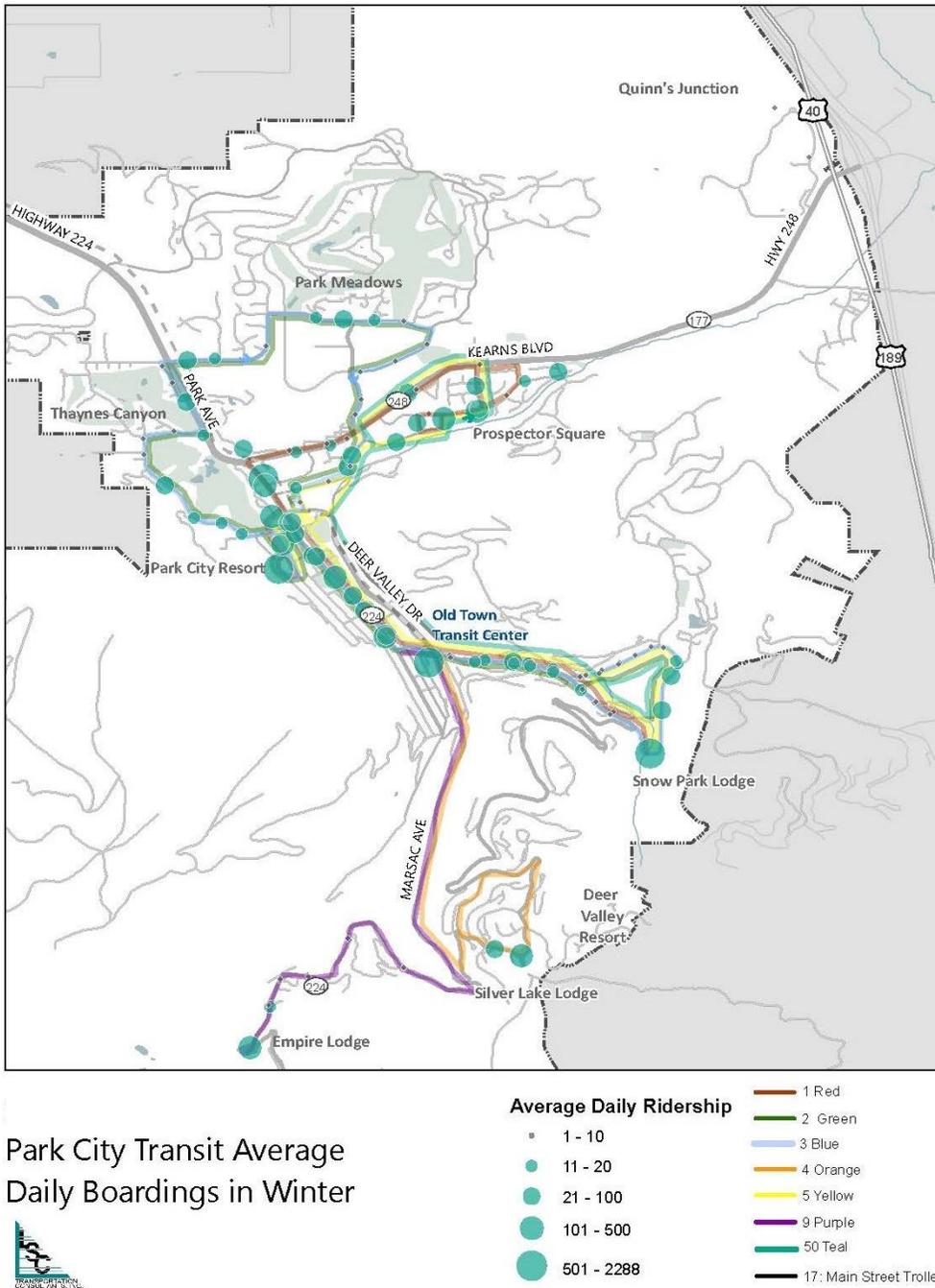
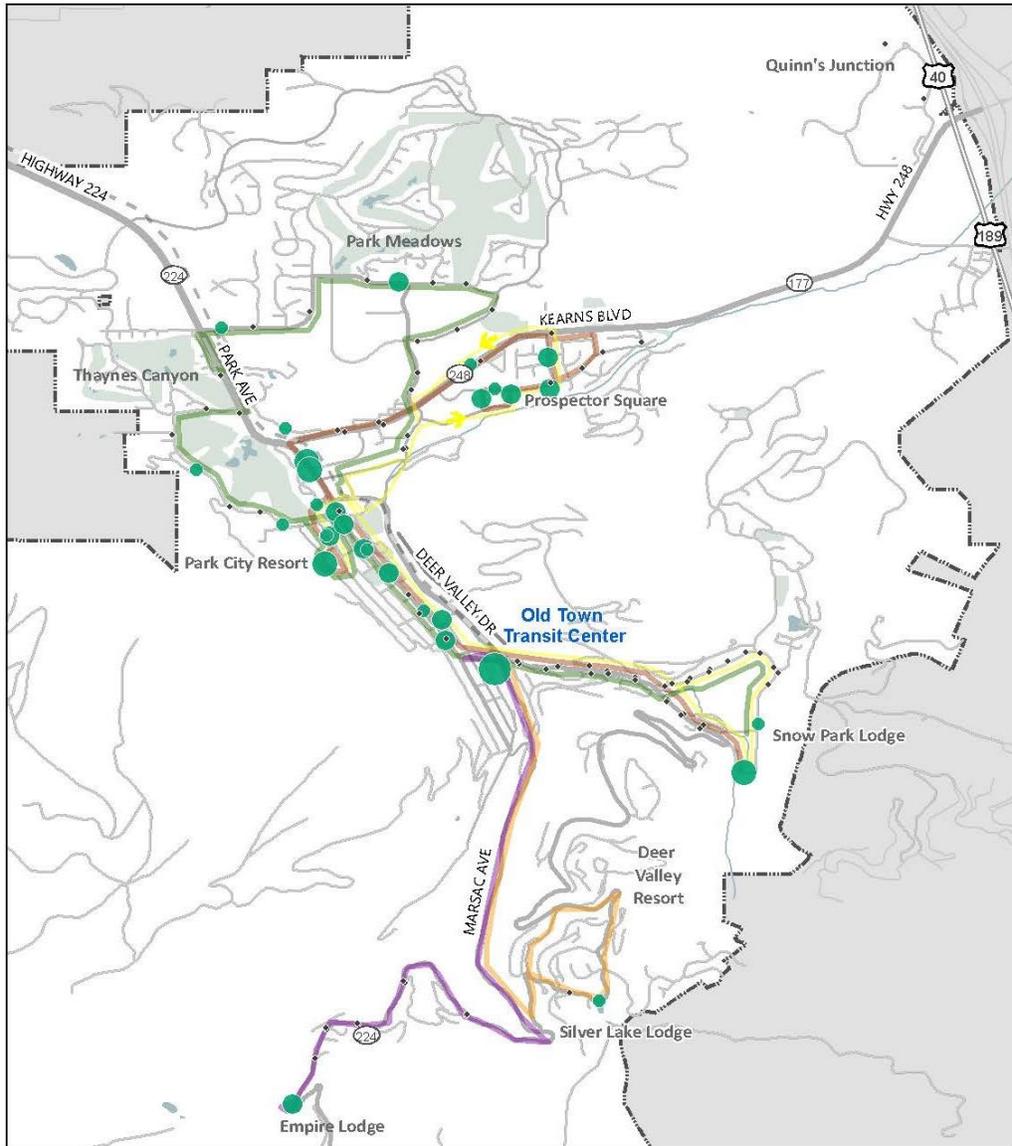


Figure 36. Park City Transit average daily boardings in winter. (Source: Park City Municipal Corporation)



Park City Transit Average Daily Boardings in Summer



Average Daily Ridership

- 1 - 10
- 11 - 20
- 21 - 100
- 101 - 500
- 501 - 1132

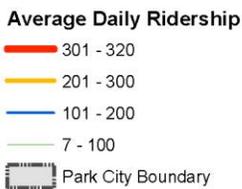
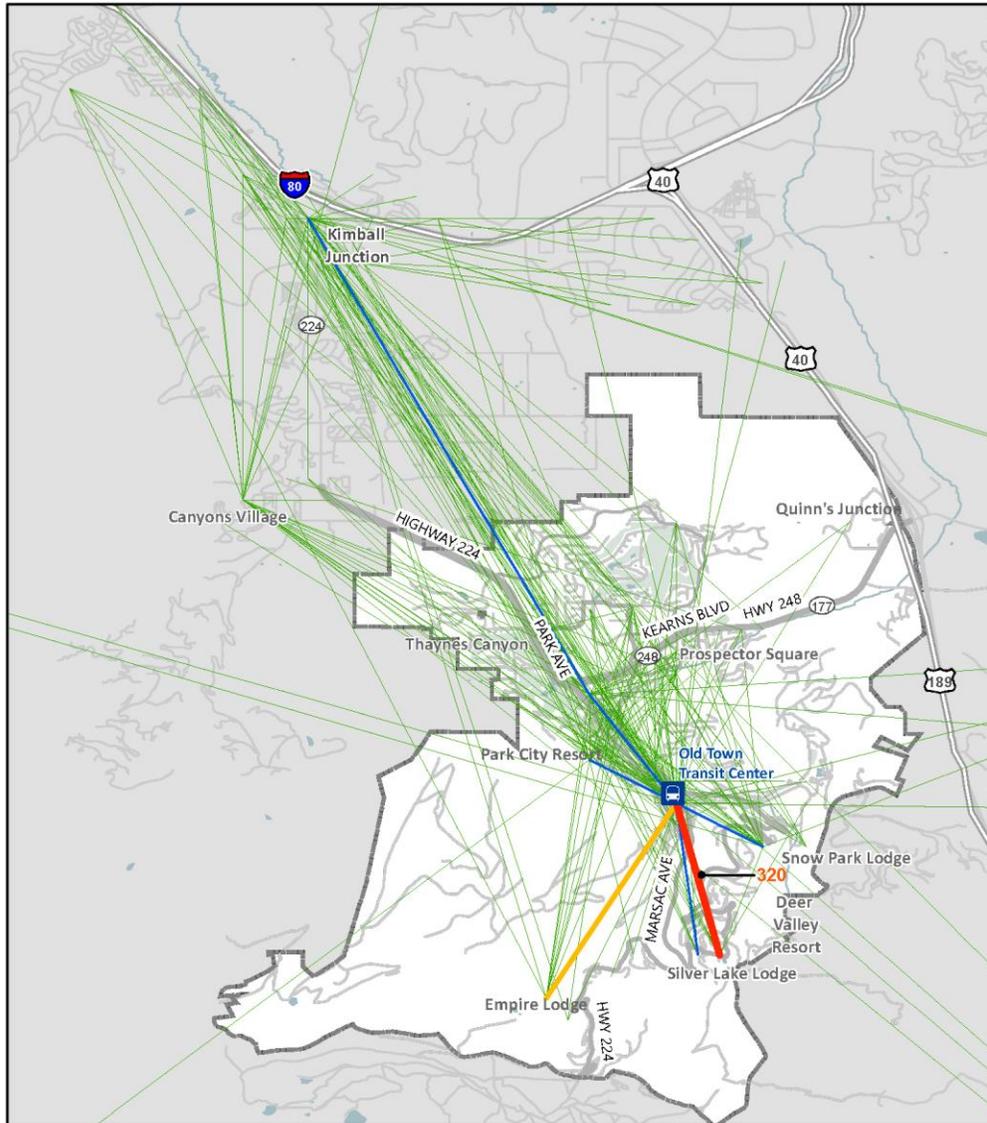
- 1 Red
- 2 Green
- 4 Orange
- 5 Yellow
- 9 Purple
- 17: Main Street Trolley

Figure 37. Park City Transit average daily boardings in summer. (Source: Park City Municipal Corporation)

Origin / Destination Patterns of Riders

Passengers surveyed in March 2019 and July 2019 were asked where they were boarding and where they would exit the bus. This data was compiled and adjusted by average daily ridership to portray origin and destination patterns.

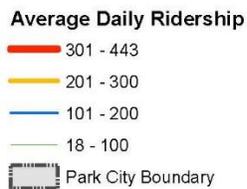
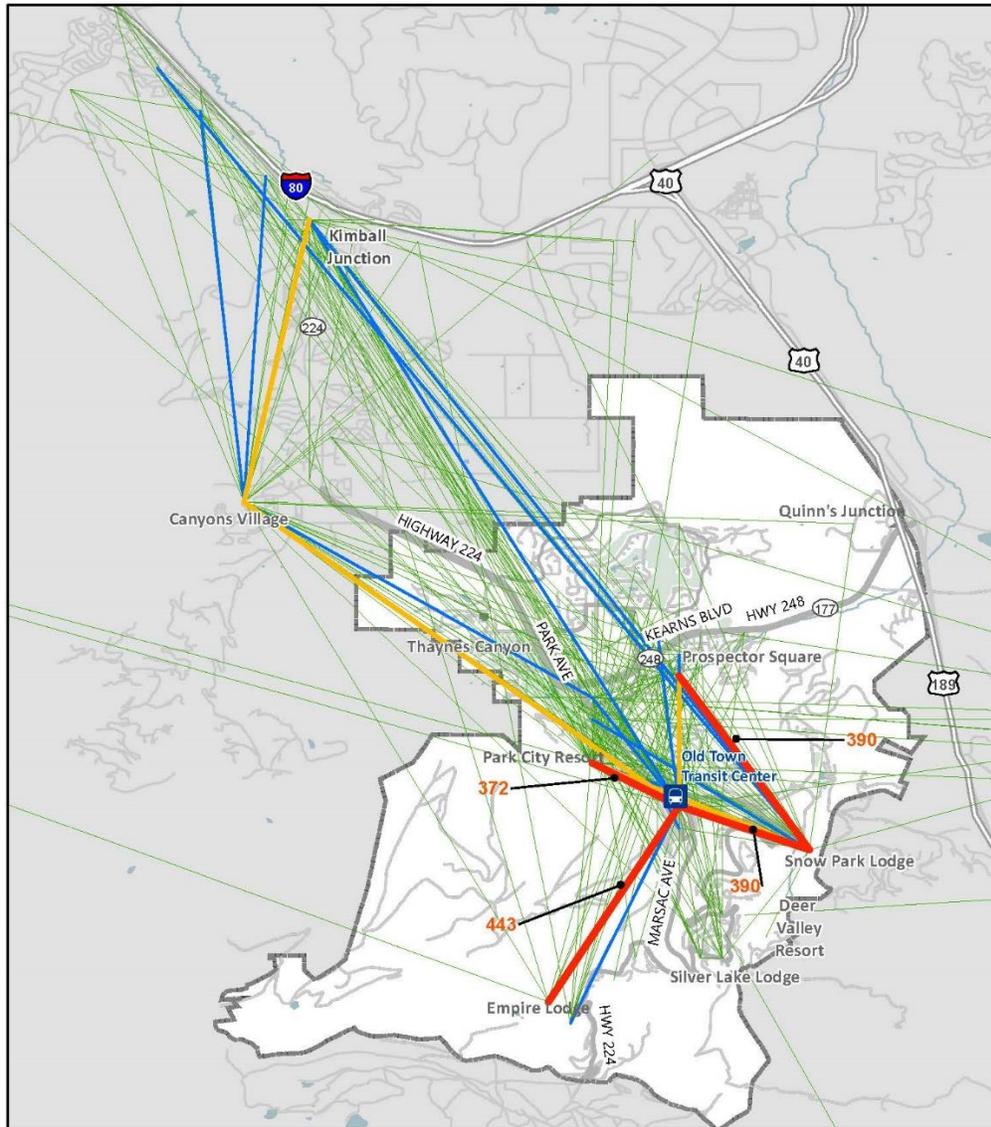
Figure 38 depicts the winter origin and destination patterns, and Figure 39 depicts the summer origin and destination patterns. This data helps determine where high-frequency demand is most warranted.



Transit Passengers by Origin-Destination – Average Summer Day

Based on July 2019 passenger survey factored for average daily ridership June to August 2019

Figure 38. Transit Passengers by origin-destination, Average Summer Day. (Source: Park City Municipal Corporation, Nelson Nygaard Transit Onboard Survey 2019)



Transit Passengers by Origin-Destination – Average Winter Day

Based on March 2019 passenger survey factored
for average daily ridership December 2018 to March 2019

Figure 39. Transit passengers by origin-destination, average winter day. (Source: Park City Municipal Corporation, Nelson Nygaard Transit Onboard Survey 2019)

In winter, the heaviest use of the transit system is between the Old Town Transit Center (OTTC) and Snow Park Lodge, Park City Resort, and Empire Lodge, as well as between Snow Park Lodge and Prospector Square. Other high-volume corridors are between the OTTC and Prospector Square, the OTTC and Canyons Village, and Canyons Village and Kimball Junction.

In summer, all of the heaviest use of the transit system has one leg of a trip start or end at the OTTC. The heaviest use is between the OTTC and Silver Lake Lodge, followed by trips between the OTTC and Empire Lodge. Other high-use trip pairs include the OTTC and Park City Resort, Snow Park Lodge, and Kimball Junction.

On-Time Performance

On-time performance data from peak winter (January 2019) was evaluated to determine at what times and which routes experienced significant delays. **Table 16** summarizes this data to include the total minutes a bus is late, the 90th percentile of late service, and the percentage of runs each route operates late by time of day. While the 10 White Route is a High Valley route, it was included as connections to Park City Transit are an integral part of the scheduled service in the area.

Table 16. Summary of Late Runs by Route and By Hour -- January 2019

ROUTE	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 AM	AVERAGE PER ROUTE
AVERAGE MINUTES LATE																				
01 Red	0	4	7	11	9	7	8	9	10	14	21	18	13	11	8	6	5	5	5	9
02 Green	--	3	2	3	3	3	3	2	3	6	8	10	8	4	2	2	1	1	--	4
04 Orange	2	4	4	5	5	4	4	3	4	5	9	10	10	8	7	4	3	4	--	5
05 Yellow	0	2	3	3	2	3	4	4	5	8	9	10	6	3	3	4	3	2	4	4
09 Purple	2	3	2	1	1	2	2	1	1	3	2	4	3	1	1	1	1	2	--	2
10 White	0	4	8	12	12	12	13	12	13	10	11	15	15	11	7	5	5	4	6	9
90TH PERCENTILE LATE (MINUTES)																				
01 Red	--	17	20	24	23	27	28	28	27	24	28	34	29	26	26	30	29	26	25	26
02 Green	--	--	19	25	34	32	30	26	24	26	26	29	30	30	28	28	25	19	--	27
04 Orange	--	22	22	22	31	33	30	24	21	27	27	27	30	33	26	20	23	31	--	26
05 Yellow	--	--	16	18	19	20	27	28	26	27	26	33	31	30	33	29	41	30	22	28
09 Purple	--	26	48	60	--	17	19	24	--	21	23	25	29	--	--	--	--	26	--	29
10 White	--	20	22	25	25	25	27	29	32	30	23	26	31	31	31	28	29	30	26	27
PERCENT OF ALL RUNS LATE (>5 MINUTES)																				
01 Red	--	26%	47%	62%	55%	40%	51%	55%	62%	83%	88%	64%	67%	60%	40%	27%	24%	24%	25%	50.0%
02 Green	--	23%	12%	19%	13%	10%	10%	12%	18%	38%	45%	45%	36%	14%	10%	7%	5%	8%	100%	23.6%
04 Orange	10%	28%	27%	33%	25%	18%	16%	16%	23%	28%	53%	52%	43%	45%	43%	29%	20%	17%	--	29.1%
05 Yellow	--	12%	19%	16%	12%	17%	18%	19%	27%	44%	49%	44%	26%	15%	14%	18%	10%	11%	29%	22.4%
09 Purple	6%	13%	5%	3%	1%	3%	5%	6%	3%	20%	10%	14%	12%	3%	3%	2%	5%	9%	100%	11.9%
10 White	--	22%	53%	62%	60%	61%	58%	51%	53%	53%	69%	74%	61%	49%	35%	29%	26%	24%	32%	48.4%
																				Total

Source: LSC

Buses are considered “late” if they depart a stop five minutes or more later than the published schedule indicates. As shown in the table, Routes 1, 10, and 17 (Trolley) operate late for the majority of the day, and all of the routes except Route 9 operate 8 to 21 minutes late during the afternoon peak (roughly 4:00-6:00 PM).

Table 16 also shows the minutes late for the 90th percentile of late runs. For example, while Route 9 averages just 2 minutes late, during its poorest performance (in the 90th percentile), it runs as much as 60 minutes late and averages 29 minutes late. All the routes run 26 to 29 minutes late in the 90th percentile.

Finally, **Table 16** shows the percentage of time each run of each route runs late throughout the day. As indicated, when service is running late, it does so on nearly half of the runs on Routes 1, 10, and 17, while Routes 2, 4, and 5 run late between 22 and 29% of the time. Route 9 only runs late 12% of the time but always runs late during its last hour.

Existing Peak Season (Winter) Service Quality Matrix

A useful tool in evaluating a transit service is to consider the quality of service from the point of view of the customer (rider) in terms of three key factors influencing individual trips:

- ▶ The actual travel time that is required to complete the trip via transit
- ▶ The frequency of service
- ▶ The need to transfer between buses (which is typically seen as a substantial negative factor)

A system of nine key trip origin/destination locations was defined, covering the Park City Transit service area. For each, a specific stop (on the existing bus schedules) was selected to represent the zone. For each trip origin/destination pair, the existing schedules were used to identify the typical travel time needed to complete the trip, as well as the overall frequency (based on the least frequent route) and the need to transfer. Note that on specific trips with multiple routes, the times between buses may vary; the analysis is based on the average headways during peak periods.

To reflect the average time required from when a passenger first desires to travel to when they arrive at their destination, the headway in minutes (on the least frequent service needed to complete the trip) was divided in half and added to in-vehicle travel time. In addition, a 10-minute travel time “penalty” was included for trips requiring a transfer, which is a standard transit planning means of reflecting the inconvenience felt by passengers who must transfer. For the Quinn’s Junction On-Demand service, a 15-minute wait time was assumed for pickup, along with the actual travel time of +10 minutes for time needed to serve other passengers.

The resulting travel time matrix is shown in **Table 17**. In addition to the total perceived travel times (in minutes), the need to transfer is noted. The various cells are shaded to reflect the average minutes between service times (frequency). A review of **Table 17** indicates the following:

- ▶ Individual trip times range from as short as 9 minutes to as long as 91 minutes.
- ▶ Trips between the key hubs of Old Town, Park City Mountain Village (old PCMR), and Deer Valley are provided with a high level of transit service quality, with an average frequency of service every 10 minutes and overall travel times (including wait times) of 20 minutes or less.
- ▶ On the other hand, trips to and from Quinn’s have a very high perceived travel time, reflecting the combination of wait times for a pickup, travel times that can include stops to serve other passengers, and (for many trips) transfers to fixed routes. At the extreme, a trip from Quinn’s to Thaynes Canyon can have a perceived travel time (incl. transfer penalty) of 91 minutes. Given the growth in Quinn’s, this indicates the current demand response service plan is likely not the appropriate strategy.
- ▶ Many trips fall within the range of 30-60 minutes in overall perceived travel time, particularly those not to or from the three key activity centers.
- ▶ Overall, weighting each origin/destination pair equally, the average perceived travel time is 43 minutes.

Table 17. Park City Transit Travel Times, Transfer Requirements, and Service Headways

26 Travel Time in Minutes
T = Transfer Required
Italics = Includes On-Demand Service

		Average Peak Period Service Frequency								
		10 Minute Frequency			15 Minute Frequency		30 Minute Frequency			
		ZONE TO								
Stop Name		Old Town Transit Center (OTTC)	Deer Valley Resort	Park City Mtn Village Transit Hub	Prospector Square	Bonanza Iron Horse	PC MARC	Silver Star - Thaynes Canyon	Silver Lake	PC Med Ctr - Quinn's Junction
Stop ID (Route/Letter)		1, 2, 5B or 4, 10A	1, 2, 5A or 6J	1, 2, 5D	1 I or 5F	5I	2F	2I	4B	11D, OD5
ZONE FROM	Old Town Transit Center (OTTC) <i>1, 2, 5B or 4, 10A</i>		9	12	26	34	32	41	23	41
	Deer Valley Resort <i>1, 2, 5A or 6J</i>	13		20	30	42	40	49	41	64
	Park City Mtn Village Transit Hub <i>1, 2, 5D</i>	12	16		15	27	24	33	40	54
	Prospector Square <i>1 I or 5F</i>	25	29	18		19	44	53	50	53
	Bonanza Iron Horse <i>5I</i>	28	32	21	40		40	49	61	37
	PC MARC <i>2F</i>	33	39	26	64	67		21	76	84
	Silver Star - Thaynes Canyon <i>2I</i>	27	33	20	58	61	66		70	78
	Silver Lake <i>4B</i>	25	43	44	55	76	61	70		76
	PC Med Ctr - Quinn's Junction <i>11D, OD5</i>	41	60	57	56	37	83	91	74	
			T	T	T		T	T	T	

Source: LSC Transportation Consultants, Inc.

Comparison of Auto Travel Times to Transit Travel Times

Research shows that travel time is a key consideration in an individual’s choice of travel mode. Given all the time constraints on daily activities, travelers tend to prefer the travel mode that gets them where they want to go in the shortest time. As a result, an important element in designing options for the private automobile (such as a transit system) is the relative travel time needed to complete a trip by transit compared to the travel time by car.

Table 18 presents the auto travel time (in minutes) between the various areas of Park City (using the zones defined in **Table 17** regarding transit travel times). These values are drawn from the median of the range of “typical travel time” between each trip origin and destination, as reported by Google Maps, based on actual cellphone tracking data. The transit travel time can then be divided by the typical auto travel time to identify the transit/auto travel time ratio.

Table 18. Comparison of Auto and Transit Travel Times

		ZONE TO									AVERAGE
		Old Town Transit Center (OTTC)	Deer Valley Resort	PC Mtn Village Transit Hub	Prospector Square	Bonanza Iron Horse	PC MARC	Silver Star - Thaynes Canyon	Silver Lake	PC Med Ctr - Quinn’s Junction	
ZONE FROM	Old Town Transit Center (OTTC)	13	6	7	7	4	9	10	8	16	
		3.2	3.1	4.7	8.5	3.6	4.1	2.9	2.6	4.1	
	Deer Valley Resort	6		10	10	8	12	12	10	18	
		3.8		3.0	3.7	5.25	3.3	4.1	4.1	4.1	3.9
	PC Mtn Village Transit Hub	7	10		7	4	9	5	12	16	
		3.1	2.6		3.1	6.75	2.7	6.6	3.3	4.0	4.0
	Prospector Square	7	10	7		3	4	8	12	12	
		4.6	3.6	3.6		6.3	11.0	6.6	4.2	5.0	5.6
	Bonanza Iron Horse	4	8	4	3		3	6	9	10	
		7.0	4.0	5.3	13.3		13.3	8.2	6.8	3.7	7.7
PC MARC	9	12	9	4	3		6	14	12		
	3.7	3.3	2.9	16.0	22.3		3.5	5.4	7.0	8.0	
Silver Star - Thaynes Canyon	10	12	5	8	6	6		14	13		
	2.7	2.8	4.0	7.3	10.2	11.0		5.0	6.0	6.1	
Silver Lake	8	10	12	12	9	14	14		18		
	3.1	4.3	3.7	4.6	8.4	4.4	5.0		4.2	4.7	
PC Med Ctr - Quinn’s Junction	16	18	16	12	10	12	13	18			
	2.6	3.9	4.2	5.3	3.7	6.9	7.0	4.1		4.7	
AVERAGE		3.8	3.4	3.7	7.2	8.9	7.0	5.6	4.5	4.6	5.4

Note 1: Based on Google Maps, typical travel times in busy traffic periods.
Source: LSC Transportation Consultants, Inc.

At the low end, travel by transit from the Park City Mountain Village to Deer Valley Resort and from Old Town to/from Quinn’s Junction has a transit/auto travel time ratio of 2.6. At the other extreme, this ratio is as high as 22.3 for the 3-minute auto trip from MARC to Bonanza, which requires two buses and a transfer by transit. In general, transit services to/from the key hubs of Old Town, Deer Valley Resort, and Park City Mountain Village have relatively low ratios compared with other portions of the service area. Some of the results also reflect the current one-way loops, such as travel from the MARC to Thaynes Canyon (a ratio of 3.5) compared to Thaynes Canyon to the MARC (11.0).

Park City Transit Revenues and Expenses

Park City Revenues

Park City Transit operations and capital projects are funded by a variety of sources, as shown in Table 19 and Figure 40. As indicated, revenues ranged from \$16.8 million to \$25.8 million. The largest source of funding is Federal Transit Administration (FTA) grants, which fund both operations and capital projects, and in FY 2020-21, included Coronavirus Aid, Relief, and Economic Security (CARES) Act funding. The next largest source of funding has been the Regional Transit Revenues, which were funds Summit County paid to Park City to fund services provided on behalf of the County. Now that Park City is no longer contracted for Summit County services (other than for the White Route through 2024), these monies will no longer flow to Park City. Regional Transit Revenues accounted for \$3.1 million in FY 2016-17 and peaked at \$7.3 million in FY 2018-19. In FY 20-21, the Regional Tax Revenue dropped to \$2.4 million, or half the amount the previous year and just a third of the amount received in FY 18-19. The reduction reflects the lower service levels during the pandemic and the discontinuation of Summit County services in June 2021.

Table 19. Park City Transit Revenue History

Revenue Source	FY16-17	FY17-18	FY18-19	FY19-20	FY20-21
Transit Sales Tax	\$2,790,839	\$2,940,337	\$3,220,361	\$4,703,322	\$5,280,075
Resort Tax (Transportation)	\$2,442,355	\$2,677,528	\$2,907,971	\$2,856,983	\$3,168,369
Business Licenses	\$658,504	\$813,278	\$818,991	\$814,444	\$775,741
Night Rental License Fee	\$105,903	\$142,733	\$131,867	\$133,120	\$132,045
Federal Grants ¹	\$15,972,589	\$2,686,154	\$3,891,860	\$5,674,532	\$11,032,958
State Contribution	\$0	\$0	\$0	\$0	\$70,000
Fare Revenue	\$29,735	\$29,492	\$31,886	\$18,495	\$1,735
Bus Advertising	\$51,358	\$37,980	\$32,800	\$17,100	\$2,220
Regional Transit Revenue	\$3,125,518	\$6,179,804	\$7,360,362	\$5,250,741	\$2,452,283
Interest Earnings	\$161,324	\$181,628	\$182,264	\$47,960	\$42,607
Rental Income	\$49,421	\$67,166	\$91,253	\$111,457	\$124,313
Sale of Assets	\$69,340	\$11,345	\$10,679	\$4,246	\$44,175
Other Miscellaneous	\$371	\$262,359	-\$111	\$1,638	\$1,933
Donations	\$176,922	\$215,156	\$208,254	\$288,796	\$305,496
Other Contributions	\$185,963	\$590,116	\$276,085	\$131,904	\$963,355
Total Transit Revenues	\$25,820,143	\$16,835,075	\$19,164,520	\$20,054,738	\$24,397,304

Note 1: Includes capital revenues. Source: Park City Municipal Corporation

Park City Transit Revenues by Source and Fiscal Year

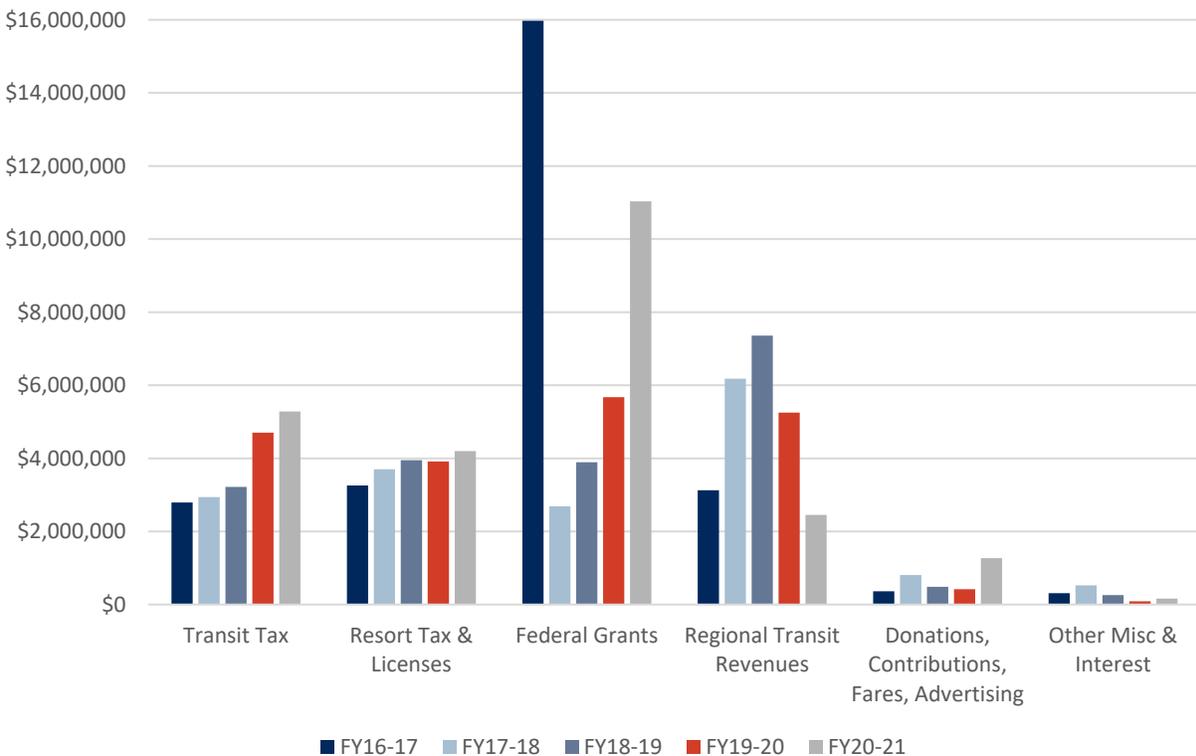


Figure 40. Park City Transit Revenues by Source and Fiscal Year. (Source: Park City Municipal Corporation Transit)

Sales Taxes also play a significant role in funding transit. Of the 9.05% sales tax on general purchases in Park City, the municipality levies a combined 1.25% transit tax, which generated \$2.7 million in FY 2016-17 and \$5.2 million in FY 2020-21 (increase partially due to new sales tax that started in 2020). Additionally, the Transit Resort Tax generates between \$2.4 million to \$3.1 million annually. Despite the reduced transit service levels in FY 2020-21 due to the pandemic, visitation to Park City was high, as reflected in both the sales tax and resort tax revenues. The city uses the transient room tax revenue to fund capital projects. “Other Contributions” include Flagstaff Transfer Fees, which are assessed as part of planned developments or, in some cases, property sales in planned communities.

Park City Expenses

Park City Transit expenses were reviewed for the past five years, as summarized in **Table 20** and Figure 41. This period included services for both Park City and Summit County. As of the writing of this section, the current budget without Summit County services is still under review and adjustment. While overall costs are expected to decrease significantly due to the reduced services, the administrative and overhead costs will not be proportionally decreased, which will bring new challenges to Park City Transit.

Table 20. Park City Transit Expense History

Expense Items	FY				
	16-17	17-18	18-19	19-20	20-21
Personnel Costs					
Salaries - Full Time / Benefitted	\$2,120,005	\$2,750,438	\$3,720,011	\$3,855,881	\$3,605,799
Salaries - Part-Time and Seasonal	\$1,277,424	\$1,556,899	\$1,419,811	\$1,550,458	\$886,815
Benefits	\$1,900,409	\$2,382,469	\$3,192,971	\$3,556,976	\$2,884,339
Overtime, Bonus Pay	\$233,540	\$573,875	\$742,158	\$556,095	\$259,710
Subtotal	\$5,531,379	\$7,263,681	\$9,074,951	\$9,519,409	\$7,636,662
Materials, Supplies, Services					
Subscriptions, Memberships	\$2,790	\$18,494	\$34,056	\$40,389	\$20,508
Recruitment, Training, Travel	\$87,029	\$110,872	\$118,654	\$46,081	\$20,762
Supplies, Office Equipment, Janitorial	\$148,342	\$133,274	\$94,077	\$114,272	\$156,785
Uniforms, Radios	\$58,663	\$49,219	\$62,925	\$25,751	\$66,532
Electric, Gas, Cellular, Waste, Sewer, Alarms, Rent	\$137,747	\$343,424	\$400,372	\$421,927	\$398,858
Contract Services, Professional Services	\$273,251	\$1,073,867	\$969,239	\$975,976	\$973,084
Contracted Bus Service	\$266,681	\$333,622	\$343,928	\$473,506	\$380,863
Public Notices, Postage, Print/Copy, Marketing	\$45,349	\$68,174	\$76,171	\$43,120	\$45,506
Bank Charges	\$3,891	\$3,856	\$14,342	\$17,365	\$17,545
Diesel fluid, testing, other	\$0	\$3,553	\$0	\$0	\$0
Equipment & manpower, street signs	\$25,113	\$13,499	\$39,274	\$8,917	\$42,880
Inventory adjustment	\$0	\$0	-\$80,366	\$72,068	-\$49,214
Subtotal	\$1,048,856	\$2,151,854	\$2,072,672	\$2,239,372	\$2,074,110
Capital					
Buildings	\$0	\$0	\$141,107	\$123,447	\$122,808
Office Equipment	\$13,681	\$10,055	\$4,511	\$10,537	\$6,309
Vehicles	\$52,903	\$54,398	\$62,330	\$1,299	\$0
Subtotal	\$66,584	\$64,453	\$207,948	\$135,282	\$129,117
Interfund Transfer					
Admin Charge	\$777,832	\$931,966	\$977,397	\$977,397	\$977,397
Garage Maintenance	\$1,025,000	\$1,135,000	\$1,334,000	\$1,316,000	\$1,220,000
Garage Gas	\$797,750	\$609,000	\$783,000	\$655,000	\$460,000
Insurance	\$144,100	\$174,834	\$288,883	\$331,620	\$386,104
Subtotal	\$2,744,682	\$2,850,800	\$3,383,280	\$3,280,017	\$3,043,501
Total	\$9,391,501	\$12,330,788	\$14,738,851	\$15,174,081	\$12,883,390

Source: Park City Municipal Corporation

As shown in **Table 20**, personnel costs make up the majority of the budget each year (59 to 63% of the total), followed by the interfund expenses (23 to 29% of the total). Personnel costs include salaries and benefits for operating and administrative staff. The interfund expenses include an administrative charge for using services of other City departments, as well as maintenance, fuel, and insurance costs. The capital costs are for building and equipment supplies and minor vehicle supplies and do not include vehicle purchases.

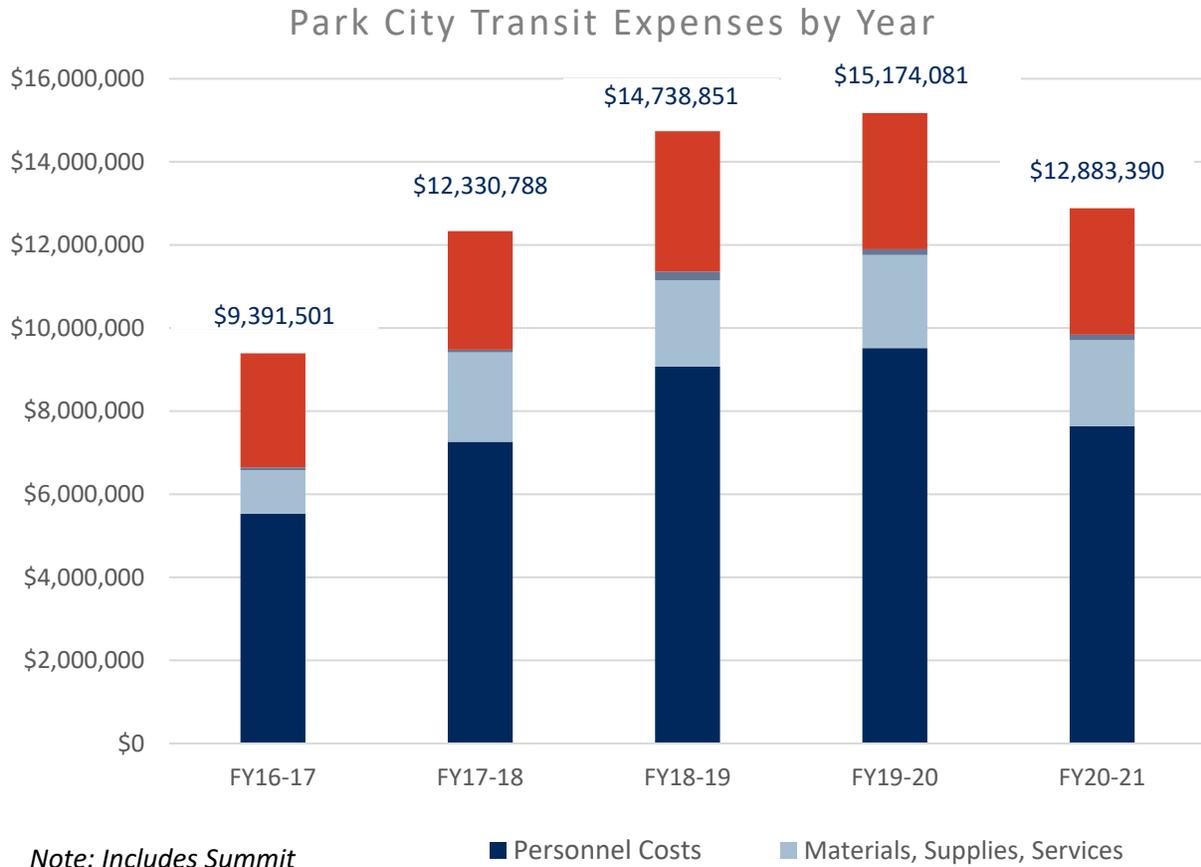


Figure 41. Park City Transit Expenses by Year. (Source: Park City Municipal Corporation)

As shown in Figure 41, the expenses increased significantly in 2017-18 (by 31%) and 2018-19 (by 20%), with increases reflected in nearly all categories. There was only a 3% increase in 2019-20 over the prior year, and a 15% decrease in 2020-21, primarily due to the reduced level of staffing due to COVID-19.

Park City Transit Cost Allocation

Each year, Park City Transit develops a cost allocation model to evaluate transit performance. Transit operating costs are analyzed to assess those factors that impact cost levels. Each cost item is allocated to that quantity (vehicle service hour, vehicle service mile, or fixed cost) upon which it is most dependent. Vehicle maintenance costs, for example, are allocated to vehicle service miles. When divided by the total quantity of service budgeted, a cost equation can be developed. In 2018-19, for example, Park City determined this equation to be:

$$\begin{aligned} \text{Operating Cost} = & \quad \$80.94 \times \text{annual vehicle service hours} + \\ & \quad \$2.31 \times \text{annual vehicle service miles} + \\ & \quad \$4,875,891 \text{ in annual fixed costs} \end{aligned}$$

This equation can be used to estimate the performance of services in FY 2018-19. In 2019-20, the cost formula was \$66.77 per hour and \$1.50 per mile, and in FY 2020-21, it was \$61.75 per hour and \$1.88 per mile. A new cost model is being developed for the current fiscal year, which can be used to evaluate changes in service, such as the operation of additional routes or changes in daily hours of operation. The new model will be used in subsequent tasks as part of this study to evaluate the cost impacts of service alternatives.

Park City Transit Cost Performance by Route

The cost formulas provided by PCMC were used to evaluate performance by route and by season, as shown in **Table 20**. The top half of the Table reports the operating characteristics (ridership, revenue hours, and revenue miles by route and season), and the bottom half of the table shows the marginal operating cost per route and per passenger trip for routes and seasons. The performance is also depicted in Figure 42 for summer and Figure 43 for winter.

Table 21. Park City Transit Summer Performance

Characteristics	Summer			Winter		
	ROUTES	FY18-19	FY19-20	FY20-21	FY18-19	FY19-20
Passenger Trips						
Rt 1, 2, 5	139,360	144,699	20,274	703,296	632,737	400,670
Rt 4	9,903	9,572	0	126,188	111,496	36,136
Rt 9	10,355	10,951	0	42,956	44,942	19,239
Rt 17	20,080	17,824	975	29,867	28,561	8,290
Citywide	0	0	0	19,593	28,472	12,168
Total	179,698	183,046	21,249	921,900	846,208	476,503
Revenue Hours						
Rt 1, 2, 5	4,121	3,365	2,093	17,859	19,247	12,294
Rt 4	496	489	0	4,037	3,724	1,271
Rt 9	527	526	0	2,081	1,880	1,137
Rt 17	760	697	110	1,573	1,274	0
Citywide	0	0	0	684	1,023	940
Total	5,903	5,078	2,203	26,234	27,148	15,642
Revenue Miles						
Rt 1, 2, 5	57,450	39,924	28,676	216,134	205,157	133,454
Rt 4	8,089	7,794	0	53,015	35,266	17,540
Rt 9	8,578	7,887	0	30,684	20,297	16,898
Rt 17	7,376	6,485	470	14,346	12,901	0
Citywide	0	0	0	10,372	10,866	13,149
Total	81,493	62,089	29,146	324,551	284,487	181,040
Marginal Operating Cost ¹						
Rt 1, 2, 5	\$466,144	\$284,549	\$183,122	\$1,944,334	\$1,592,865	\$1,010,017
Rt 4	\$58,816	\$44,373	\$0	\$449,107	\$301,570	\$111,428
Rt 9	\$62,453	\$46,982	\$0	\$239,272	\$155,987	\$102,002
Rt 17	\$78,498	\$56,297	\$7,677	\$160,429	\$104,416	\$0
Citywide	\$0	0	0	\$79,274	\$84,592	\$82,772
Total	\$665,912	\$432,200	\$190,799	\$2,872,416	\$2,239,430	\$1,306,219
Marginal Cost / Psgr Trip						
Rt 1, 2, 5	\$3.34	\$1.97	\$9.03	\$2.76	\$2.52	\$2.52
Rt 4	\$5.94	\$4.64	\$0.00	\$3.56	\$2.70	\$3.08
Rt 9	\$6.03	\$4.29	\$0.00	\$5.57	\$3.47	\$5.30
Rt 17	\$3.91	\$3.16	\$7.87	\$5.37	\$3.66	\$0.00
Citywide	\$0.00	\$0.00	\$0.00	\$4.05	\$2.97	\$6.80
Total	\$3.71	\$2.36	\$8.98	\$3.12	\$2.65	\$2.74

Note 1: Per PCMC, in FY18-19, \$80.94/hr and \$2.31/mi; in FY19-20, \$66.77/mi and \$1.50/mi; in FY20-21, \$61.75/hr and \$1.88/mi.
Source: LSC Transportation Consultants, Inc.

Marginal Cost Per Passenger Trip - Summers

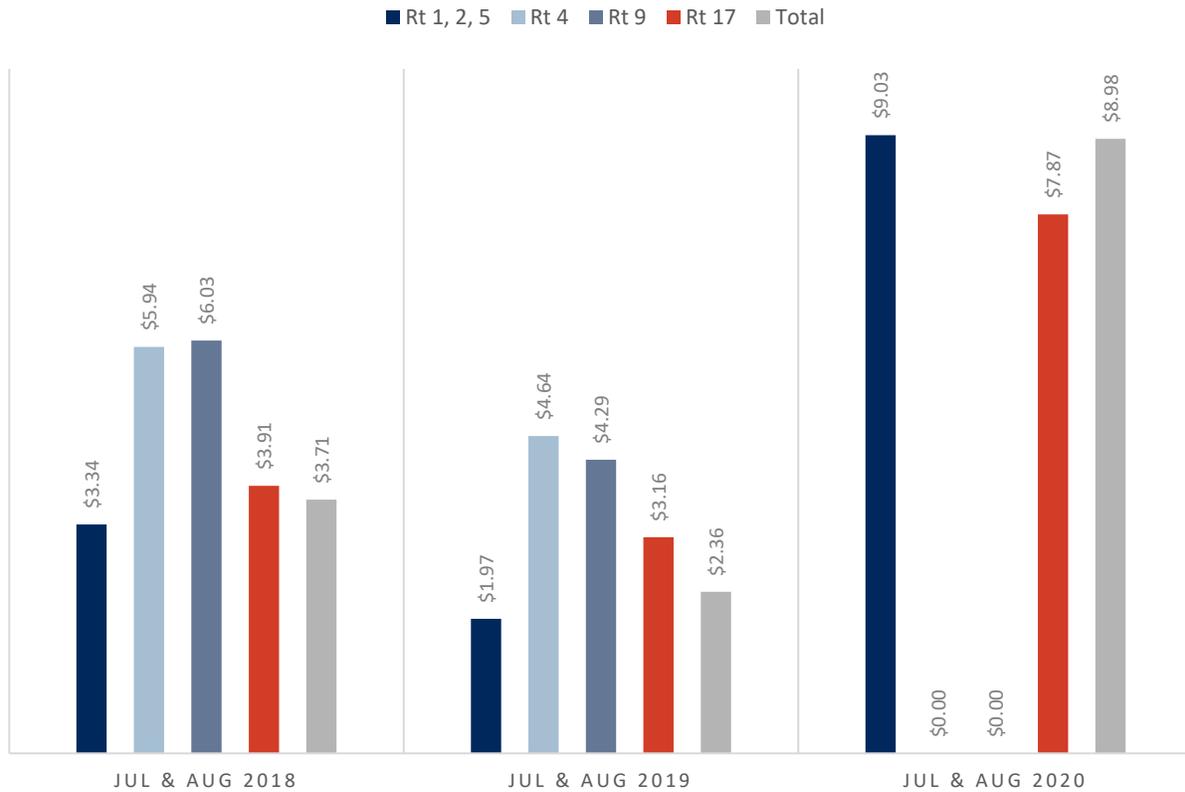


Figure 42. The marginal cost per passenger trip - summer. (Source: LSC Transportation Consultants, Inc.)

Figure 42 illustrates the cost-effectiveness of Routes 1, 2, and 5 (which were combined due to interlining and reporting) and Route 17 (Trolley) compared to Routes 4 and 9 in the summers of 2018 and 2019. In 2020, route service was reduced due to the pandemic, and all routes had significantly increased marginal costs per passenger trip carried.

Marginal Cost Per Passenger Trip - Winters

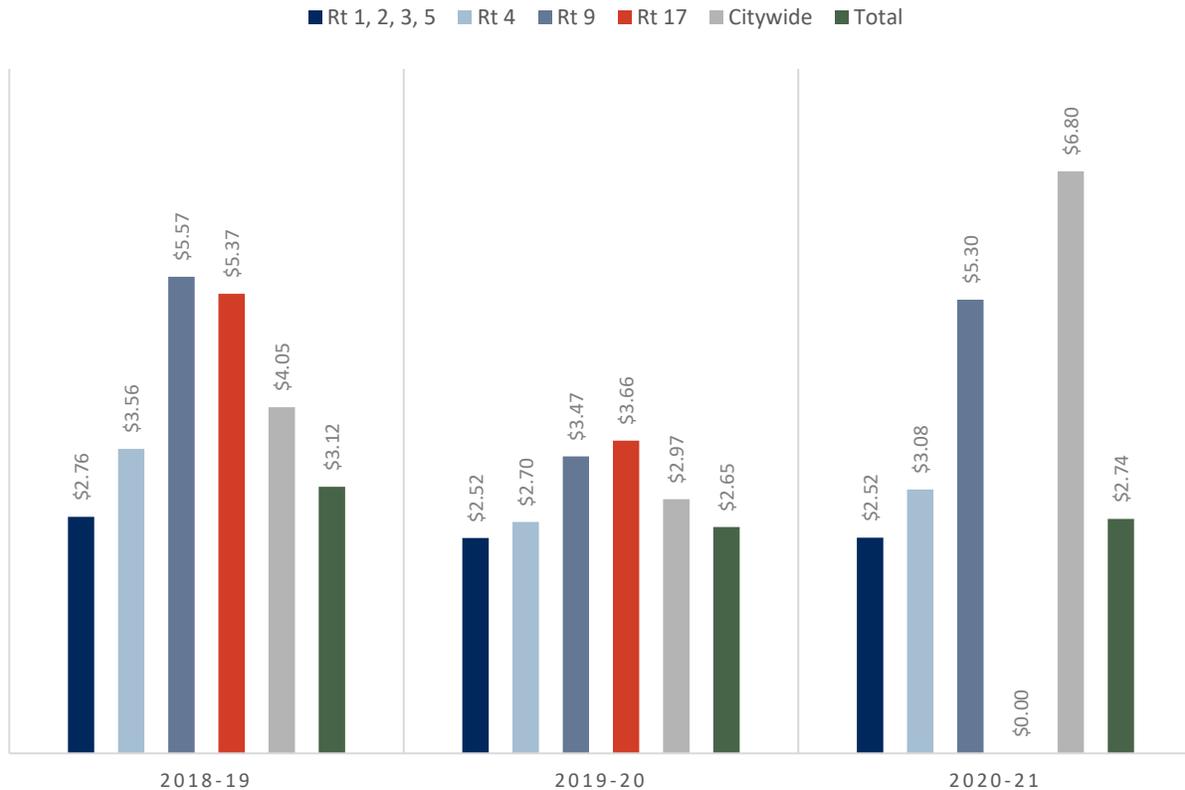


Figure 43. The marginal cost per passenger trip - winter. (Source: LSC Transportation Consultants, Inc.)

Figure 43 shows a similar pattern, although winter routes in 2018-19 and 2019-20 generally had greater cost-effectiveness than summer routes, especially in 2019-20. Service was just beginning to be impacted by the pandemic in the winter of 2020-21, with the Citywide route showing less effectiveness.

Park City Capital Assets

Vehicle Fleet

Park City Transit currently has a fleet of 40 revenue vehicles, all of which are wheelchair accessible. Three of the vehicles are Ford 450 cutaways used for on-demand service, and the remainder are larger vehicles and a trolley used for fixed-route service, including six 40-foot and seven 35-foot battery-electric Proterra buses. The non-electric buses are ultra-low-sulfur diesel. **Table 22** depicts the current fleet, grouped by type of vehicle.

Table 22. Park City Transit Vehicle Fleet

VEHICLE DESCRIPTION	MODEL YEAR	AVERAGE MILEAGE	FUEL TYPE	BENCH LIFE	# OF VEHICLES
Ford E450 Cutaway	2019	8,000	Ultra-low sulfur diesel	10	3
Gillig Low Floor BRT	2016	227,219	Ultra-low sulfur diesel	12	8
Gillig Low Floor BRT	2017	186,941	Ultra-low sulfur diesel	12	3
Proterra 35' Electric Bus	2018	70,690	Electric	12	3
Proterra 35' Electric Bus	2019	51,189	Electric	12	4
Gillig 35' Low Floor	2006	583,371	Ultra-low sulfur diesel	12	6
Gillig 35' Low Floor	2008	518,500	Ultra-low sulfur diesel	12	4
Gillig 35' Low Floor	2010	506,341	Ultra-low sulfur diesel	12	3
Proterra 40' Electric Bus	2016	242,392	Electric	12	2
Proterra 40' Electric Bus	2017	221,333	Electric	12	4
Total					40

*Note: Does not include service vehicles
Source: Park City Municipal Corporation*

The cutaways have a Useful Bench Life (UBL), which is an industry standard for the average useable life of a vehicle type of 10 years, and the remainder of the revenue fleet has a UBL of 12 years. The average age of the fleet is just over seven years, with 12 vehicles reaching their UBL in 2022/23 and 10 more reaching their UBL in 2028/29. However, with the city and county separating operations, Park City Transit will be adjusting its fleet to reflect future needs and recommendations from this study.

Park City Transit Centers

There are currently two transit center locations in Park City: Old Town Transit Center (OTTC) and Park City Mountain Resort. These locations provide important connections between routes and, in the case of the OTTC, to High Valley Transit. The OTTC includes visitor information services, indoor seating, and restrooms. There is a lower level that is utilized by transit staff for training. The Snow Park Village (Deer Valley) development is also envisioned to include a transit hub.

Park City Transit Bus Stops and Shelters

Park City Transit has a total of 122 active bus stops along all of the routes. Among these stops, there are currently a total of 21 bus shelters.

Recommended Bus Stop Access Improvements for Park City

Park City Transit bus stops were reviewed to determine if improvements are necessary and recommended. Several criteria were considered to determine if a bus stop needs a crosswalk, sidewalk, or both. For each stop, the bus stop activity (average daily boardings) was reviewed. Higher activity stops are prioritized for improvements. Additionally, the connectivity between stops was considered. The criteria for recommending crosswalks at a stop are based on bus stop activity and distance to the nearest existing crosswalk.

The recommendations are summarized in **Table 23**. The bus stops for the six routes that serve the city are listed generally from south to north, starting at Montage Deer Valley and continuing to Treasure Mountain Junior High School, but also by route (so not necessarily in directional order). Only stops in Park City limits are included. The name of each stop was copied directly from the Park City Transit website. Each stop listed includes route direction, the average number of daily winter boardings, routes served at the stop, and a recommended access improvement. Access improvements can either be sidewalks, crosswalks, or both. At crosswalks, either a rapid rectangular flashing beacon (RRFB) or a high activity walk (HAWK) signal would be appropriate. Determining which is preferred would require further study.

Table 23. Park City Bus Stop Recommended Access Improvements

Stops are generally listed south to north by route order.

Bus Stop	Direction		Average Daily Boardings	Route						Recommended Sidewalk	Recommended Crosswalk
	Out bound	In bound		Red	Green	Orange	Yellow	Purple	Trolley		
Hawkeye Place Up	✓		0					✓		Along Marsac Ave - Hawkeye to Grand Lodge	Across Marsac
Hawkeye Place Down		✓	9					✓			
Aimee Court Up	✓		0					✓			
Aimee Court Down		✓	3.3					✓			
Grand Lodge Up	✓		2					✓			
Grand Lodge Down		✓	2					✓			
Stein Ericksen	✓		29			✓					Across Royal St at Stein Way
Courchevel	✓		5		✓						Across Deer Valley Dr E
Courchevel		✓	45		✓						
Lake Side South	✓		5	✓							
In The Trees Condos		✓	5	✓			✓				Across Deer Valley Dr. S at Lakeside Cir
Lake Side North	✓		3	✓							
Aspenwood Condos South		✓	4	✓			✓				
The Lodges	✓		5		✓		✓				Across Deer Valley Drive @ Lodges at Deer Valley
The Lodges		✓	20		✓		✓				
Wildflower	✓		16		✓		✓				Across Deer Valley Dr. E at Queen Esther Dr
Queen Esther		✓	12		✓						
Solamere		✓	8		✓						Across Deer Valley Dr N at Solamere Dr
Daystar	✓		9		✓		✓				
Deer Valley Plaza	✓		8	✓							Across Deer Valley Dr. S at Deer Valley Grocery Café
Aspenwood Condos North		✓	11	✓			✓				
Mellow Mountain	✓		18	✓	✓		✓				Across Deer Valley Dr. at Mellow Mountain Rd
Stonebridge		✓	13	✓	✓		✓				
Park Station East	✓		67	✓	✓		✓				Across Park Ave at 10th St
10th Street		✓	31	✓	✓		✓				
11th and Park Ave	✓		28	✓	✓		✓				Across Park Ave at 11th St
12th and Park Ave		✓	8	✓	✓		✓				
City Park	✓		30	✓	✓		✓				Across Park Ave at 14th St
14th Street		✓	80	✓	✓		✓				

Sunflower Condos		✓	44	✓	✓	✓		
7-11 Park Ave	✓		40	✓	✓	✓		Across Park Avenue at 7-11 (15th and Park Ave)
Silvertown Condos		✓	93	✓	✓	✓		
Silver King	✓	✓	45	✓	✓	✓		Across Empire Ave Between Silver King Dr and Shadow Ridge Rd
Edelweiss Haus	✓	✓	211	✓	✓	✓		
Walgreens		✓	11			✓		Across Iron Horse Dr at Shortline Rd
Lot G		✓	21			✓		Across Prospector Ave in front of Saltbox parking lot
Liquor Store and The Market		✓	24	✓				Across Snow Creek Dr at Liquor Store
Homestake and Kearns	✓		14	✓	✓			Across Kearns Blvd East of Snow Creek Dr ¹
Zions Banks		✓	2	✓				
Adolphs		✓	78	✓		✓		Across Kearns Blvd at Sidewinder Dr ¹
Wyatt Earp	✓		22	✓			Through the neighborhood along Sidewinder Dr	Across Wyatt Earp Way at Coshise Ct
Buffalo Bill	✓		15	✓				
Building 7 North	✓		30	✓				Across Sidewinder Dr at Comstock Dr
Building 7		✓	117	✓		✓		
Carriage House		✓	53	✓				Across Poison Creek Dr Midblock
Lucky John and Monitor	✓		10		✓			Across Lucky John Dr at Monitor Dr
Little Kate and Lucky John		✓	6		✓			Across Lucky John Dr at Little Kate Rd
Prospector and Payday		✓	2		✓		W Side of Prospector Dr @ bus stop	
Hotel Park City		✓	19		✓		N Side of Thaynes Canyon Dr between Park Ave and Webster Dr	
Webster Court		✓	3		✓			
III Kings and Thaynes Canyon		✓	1		✓		3 Kings Dr Thaynes Cnyn Dr to Silver Star Dr	
Snows Lane		✓	5		✓			
Silver Star Condos		✓	27		✓			Across 3 Kings Dr at Payday Condominiums
Crescent Rd		✓	13		✓		3 Kings Dr - Crescent Rd to Silver King Dr	Across Crescent Rd.
III Kings Clubhouse		✓	19		✓			Across 3 Kings Dr

Note 1: Probably requires a high activity walk (HAWK) signal.

Source: Park City Municipal Corporation, LSC

The recommendation is for 28 crosswalks (which would serve a total of 47 bus stops in Park City). Additionally, six sidewalks are recommended in areas that would serve a total of 14 stops. In the analysis, there were no stops that warrant both a crosswalk and a sidewalk. It should be noted that Park City is carrying out a separate bus stop access improvement plan that addresses many of these identified issues and will be referenced in the capital infrastructure plan described later in this final plan.

Peer Analysis

While every transit system is unique, it can be instructive to look at how other transit systems are operated and what challenges and solutions apply. A general overview of peer transit systems was conducted in order to share lessons learned. The transit systems selected the following:

- ▶ Summit Stage serving Summit County, Colorado
- ▶ Roaring Fork Transit Agency (RFTA) serving Aspen, Colorado
- ▶ ECO Transit, serving Eagle County, Colorado (between Gypsum and Vail)
- ▶ Breck Free Ride, serving the town of Breckenridge
- ▶ Eastern Sierra Transit Authority (ESTA) serving the town of Mammoth and Mammoth Lakes Ski Resort
- ▶ Southern Teton Area Rapid Transit (START) serving Jackson, Wyoming

All of the peers serve ski resort towns, and each has varying levels of off-season and summer resort activity. The basic metrics of each transit system and the communities they serve are shown in Table 24. Below is an overview of each peer and a discussion of the lessons learned for Park City.

Table 24. Park City Transit Peers

METRIC	PARK CITY TRANSIT	SUMMIT STAGE	RFTA	ECO TRANSIT	BRECK FREE RIDE	ESTA	START	Average
Annual Ridership	2,677,927	1,747,746	5,212,525	1,117,311	1,308,780	1,123,564	1,098,706	2,040,937
Operating Expenses	\$12,602,292	\$10,630,010	\$34,825,962	\$10,067,616	\$4,721,751	\$4,413,734	\$4,660,951	\$11,703,188
Service Hours	138,529	81,428	276,514	83,246	53,545	58,337	63,255	107,836
Service Miles	2,241,211	1,476,471	4,946,740	1,806,527	496,347	944,365	869,784	1,825,921
Passenger trips/Hour	19.3	21.5	18.9	13.4	24.4	19.3	17.4	18.9
Passenger trips/Mile	1.2	1.2	1.1	0.6	2.6	1.2	1.3	1.1
Cost/Hour	\$90.97	\$130.54	\$125.95	\$120.94	\$88.18	\$75.66	\$73.69	\$108.53
Cost/Mile	\$5.62	\$7.20	\$7.04	\$5.57	\$9.51	\$4.67	\$5.36	\$6.41
Cost/Passenger Trip	\$4.71	\$6.08	\$6.68	\$9.01	\$3.61	\$3.93	\$4.24	\$5.73

SERVING	PARK CITY / SUMMIT	SUMMIT STAGE, CO	ASPEN, CO	EAGLE COUNTY, CO	BRECKEN-RIDGE, CO	MAMMOTH LAKES CA	JACKSON WY	Average
Year-Round Population	42,829	31,011	56,946	55,127	4,938	17,977	33,510	34,620
Skier Days	1,837,730		1,550,000	1,634,250	1,600,750	1,128,500	715,100	1,411,055
Overnight Visitors	4,688,693					965,000	1,802,000	2,485,231

Source: 2019 National Transit Database, Park City Chamber and Tourism Bureau, Jackson Chamber and Tourism. Skier Days are estimated from the best available data.

Summit Stage

Summit Stage is a well-developed regional transit system that connects communities in Summit County, Colorado, including Breckenridge, Keystone, Arapahoe Basin, Copper Mountain, and Silverthorne. Importantly, like Park City, it is free to the rider. Breck Free Ride provides local service in the town of Breckenridge, so the only local service provided by Summit Stage is in Silverthorne. Service is funded in part by a local ¾ cent regional sales tax.



Figure 44. Summit Stage bus. (Source: Summit Daily)

RFTA

The Roaring Fork Transportation Authority (RFTA) evolved from a relatively small system that served Aspen and Snowmass to become the largest of the peer systems, serving Pitkin County and much of Garfield County. RFTA is a Joint Powers Authority between nine jurisdictions, including Pitkin County and cities within Pitkin and Garfield Counties (excluding Garfield County and the City of Silt). There are many funding sources that vary by jurisdiction, including sales taxes, resort fees, and parking fees.



Figure 45. RFTA Bus (Source: Federal Transit Administration)

RFTA provides local and regional services. The main service is the 40-mile Roaring Fork Valley corridor between Glenwood Springs and Aspen, which includes Bus Rapid Transit (BRT) at 10-minute frequencies at peak times. RFTA also provides intercity services on the 70-mile stretch from Aspen to Rifle. The Roaring Fork Valley (Aspen to Glenwood) and Hogback (Glenwood to Rifle) services have

relatively high fares (up to \$10.00 per one-way trip for the full length). However, many employers subsidize the fares for their employees. The City of Aspen contracts with RFTA to operate five local Aspen routes and a Snowmass route, which are fare-free. The City designs and manages the service, which is operated by RFTA. It has been very effective in limiting traffic congestion, which has not significantly increased in 20 years.

ECO Transit

ECO is Eagle County, Colorado's regional transit service operating mostly commuter routes between Gypsum, Vail, and Minturn, as well as Leadville. The routes serve several park-and-rides along Interstate 70. Base fares between Vail and Gypsum, Vail and Minturn, and Vail and Edwards are \$4.00 one way, with an \$ 8.00-day pass or \$85 monthly pass available. Express service between Vail and Beaver Creek and service to Leadville are \$8.00 one-way (or a \$ 14.00-day pass or \$200 monthly pass).



Figure 46. ECO Transit bus (Source: Town of Avon, CO)

Breck Free Ride

Breck Free Ride is a fare-free transit system serving the town of Breckenridge and Breckenridge Ski Resort. They operate the Main Street Trolley, which is popular among tourists, and a number of bi-directional local routes and routes to the ski resorts. The services are operated on 20- to 30-minute headways. The service is supported in part by paid parking.



Figure 47. Breck Free Ride logo. (Source: Town of Breckenridge, CO)

Eastern Sierra Transit Authority (ESTA)

ESTA is a Joint Powers Authority between the towns of Bishop and Mammoth Lakes and the County of Inyo, California. ESTA provides several services, including:

- ▶ Intercity Routes along Interstate 395 (fare service)
 - ▶ Lone Pine, CA to Reno, NV (a 265-mile route, one way—one round trip operated each weekday)
 - ▶ Mammoth Lakes to Lancaster, CA (a 240-mile route, one way—connects to rail into Los Angeles—one round trip operated weekdays)
 - ▶ Lone Pine Express (Lone Pine to Bishop, 58 miles one way—3 to 4 round trips on weekdays)
 - ▶ Mammoth Express (Bishop to Mammoth Lakes, 40 miles one way—4 round trips on weekdays)
- ▶ The **community routes** (fare service) comprise the root of the ESTA service. They connect Benton to Bishop, Tecopa to Pahrump, and Bridgeport to Gardnerville.
- ▶ The **Town of Mammoth Lakes** provides free year-round bus service throughout Mammoth Lakes, including a year-round route, an all-day summer trolley, a winter evening trolley, and seasonally adjusted local routes (including some with 15-minute headways).
- ▶ **Mammoth Lakes Basin Trolley** provides free service from Mammoth Lakes to Lake Mary
- ▶ **Dial-a-Ride** is offered in Lone Pine, Bishop, Mammoth Lakes, and Walker (fares apply in Walker). DAR is open to the general public in Bishop.

The National Park Service contracts with ESTA to provide service in summer to the Devil's Postpile. Nearly all visitors to Devil's Postpile must take the Red Meadows Shuttle to visit in summer and must pre-purchase tickets (\$15.00 round trip, or \$7.00, discounted for children). ESTA was originally asked to operate eight buses per day but was unable to hire enough drivers to serve this level. Summer operations require more vehicles for operations than winter service.

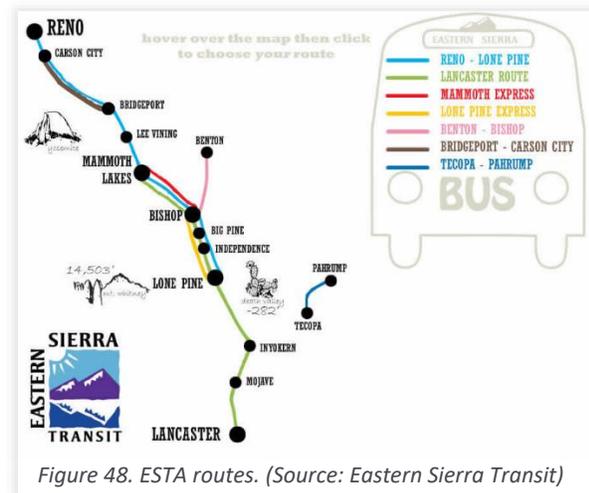


Figure 48. ESTA routes. (Source: Eastern Sierra Transit)



Figure 49. Mammoth bike shuttle. (Source: LSC)

Mammoth Lakes also provides access to trailheads, as it is a gateway to Yosemite and to the John Muir Wilderness area. On the transit website, they demonstrate the transit options available for through-hikers. Many of the transit vehicles also have bike capacity, even to the extent that summer trolleys pull a trailer to haul bikes. These activities enhance the summer and off-season attractiveness of the area.

Southern Teton Area Rapid Transit (START)



Figure 50. START Bus. (Source: Town of Jackson, WY)

The Southern Teton Area Rapid Transit (START) is operated as a department of the Town of Jackson, WY. Service includes fare-free in-town services and fare-based regional services, and commuter services. The bulk of ridership comes from transporting people from within Jackson to the ski resort 7 miles outside of town. Additionally, Jackson just selected a contractor to provide microtransit service, slated to begin in late November 2021. The microtransit service will replace some of the local fixed-route services, allowing START to operate more efficiently.

Though START is operated by the Town of Jackson, it also receives funding from Teton County. Federal grants provide the bulk of the operating revenues, but the Town pays for approximately 11% of operations, and contracts with resorts cover approximately 8% of revenues. Fares contribute a sizeable farebox income, and a transfer fee levied on the sale of properties helps support transit.

Peer Lessons

A review of peer transit systems reveals that there are numerous consistencies among ski resort communities.

- ▶ Transit is very popular in ski town communities
- ▶ Transit is an integral part of the overall transportation systems for providing mobility without over-reliance on private vehicles
- ▶ In many of these areas, the resorts could not function without transit. There is not enough parking or roadway capacity to support the number of visitors and employees in these communities
- ▶ Transit is important for maintaining a reliable workforce, particularly in resort communities where employees must commute significant distances
- ▶ Visitors and employees drive the demand for these systems
- ▶ Oftentimes it requires cooperation between multiple jurisdictions—for planning, operating, and funding the transit services
- ▶ Providing contracted services can be a means of getting more value out of available resources
- ▶ Providing summer and off-season transit enhances the attractiveness of resort areas

Chapter 5: Multimodal Assessment

Chapter 5. Multimodal Assessment

Bicycle and Pedestrian Needs

Of the 307 bus stops on the Park City network, 56 were identified for bicycle and pedestrian improvements. Figure 51 shows the locations of stops with fifteen or more average daily riders that were identified for pedestrian and bicycle improvements.

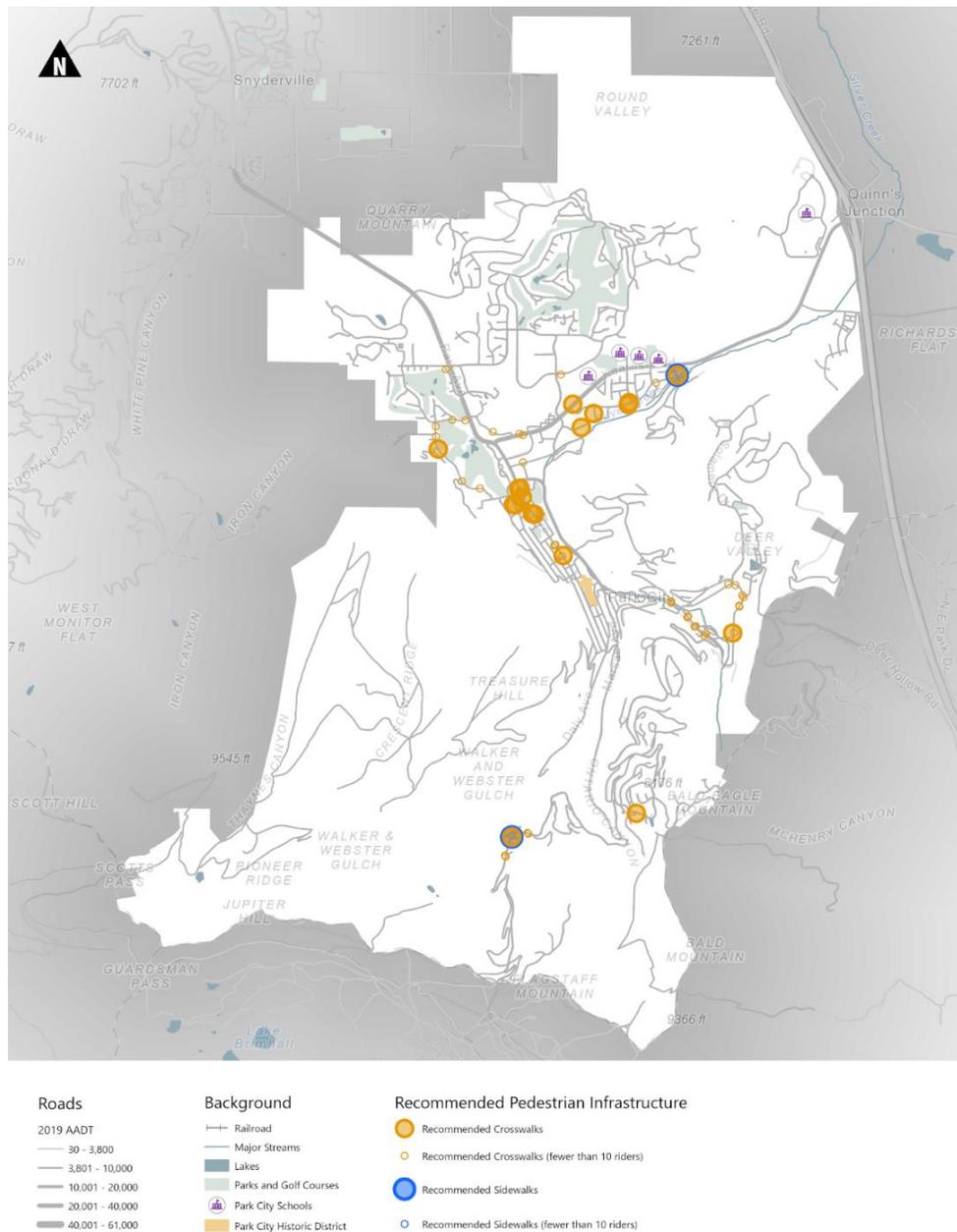


Figure 51. Recommended Bicycle and Pedestrian Infrastructure. (Source: LSC, Fehr & Peers)

These bus stops' specific locations and recommendations are found in **Table 25**.

Table 25. Recommended Bicycle and Pedestrian Infrastructure

Stop Location	Avg Daily Ridership	Recommended Sidewalk	Recommended Crosswalk	Notes
Edelweiss Haus	112	No	Yes	Across Empire Ave Between Silver King Dr and Shadow Ridge Rd
Adolphs	78	No	Yes	Across Kearns Blvd at Sidewinder Dr
Building 7	66	No	Yes	Across Sidewinder Dr at Comstock Dr
Silvertown Condos	49	No	Yes	Across Park Avenue at 7-11 (15th and Park Ave)
Courchevel	45	No	Yes	Across Deer Valley Dr E
City Park	41	No	Yes	Across Park Ave at 14th St
Park Station East	33	No	Yes	Across Park Ave at 10th St
Carriage House	32	No	Yes	Across Poison Creek Dr., Midblock
Sunflower Condos	31	No	Yes	Across Park Avenue at 7-11 (15th and Park Ave)
Aimee Court Down	23	Yes	Yes	Crosswalk across Marsac; Sidewalk along Marsac/Hawkeye to Grand Lodge
Lot G	23	No	Yes	Across Prospector Ave in front of the Saltbox parking lot
Stein Ericksen	22	No	Yes	Across Royal St at Stein Way
Silver Star Condos	17	No	Yes	Across 3 Kings Dr at Payday Condominiums
Wyatt Earp	15	Yes	Yes	Crosswalk across Wyatt Earp Way at Cochise Ct; Sidewalk through the neighborhood along Sidewinder Dr

These improvements will support first-mile and last-mile connections. It should be noted that these recommendations for improvements will be reviewed as part of the ongoing Park City Active Transportation Plan.

Park City Bike Share Program

Park City participates in the Summit County bike share program. Launched in 2017, the Summit County bike share program was the first electric-assist bike share system in North America. Providing a new active transportation option for its residents and visitors, the County currently operates 190 electric-assist bikes at 20 stations, nine of which are located within Park City, as shown in Figure 52.

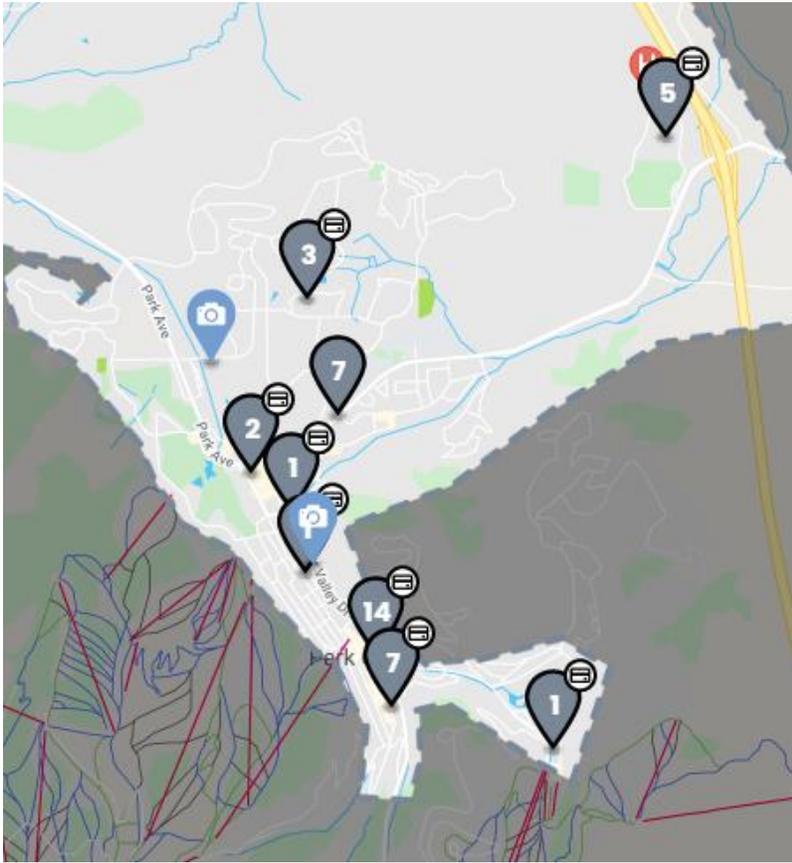


Figure 52. Summit County Bike Share Stations within Park City. (Source: Summit Bike Share)

Customers can unlock bikes via card at the kiosks or via the mobile app. Rides are available on a per-use or subscription basis, in addition to an employer membership package. After completing the payment process, riders unlock the bike from the dock and can return it at any station after their ride. From January 2021 through September 2021, riders have traveled over 75,000 miles on over 19,000 rides. Since the introduction of the system in 2017 up through September 2021, riders have traveled nearly 320,000 miles on over 125,000 rides. As of September 2021, Park Avenue, Newpark Plaza, and the Old Town Transit Center are the three most popular bike share stations on the system.



Figure 53. Summit County Bike Share Bike Station at OTTC. (Source: Bewegen)

Park City allows e-bike use on soft-surface trails wider than five feet and on all paved multi-use paths within city limits. E-bike use on single-track trails is prohibited, although individuals over the age of 65 or persons with mobility disabilities may ride Class I e-bikes (including the Summit Bike Share bicycles) on single-track trails. The City conducts outreach campaigns to educate riders on the safe and respectful use of e-bikes on trails. These programs cover the use of e-bikes on certain types of trails, as well as e-bike safety and general trail etiquette.

Related Bicycle and Pedestrian Planning

Park City is home to 150 miles of trails connected to another 150 miles of trails in greater Summit County, as shown in Figure 54.

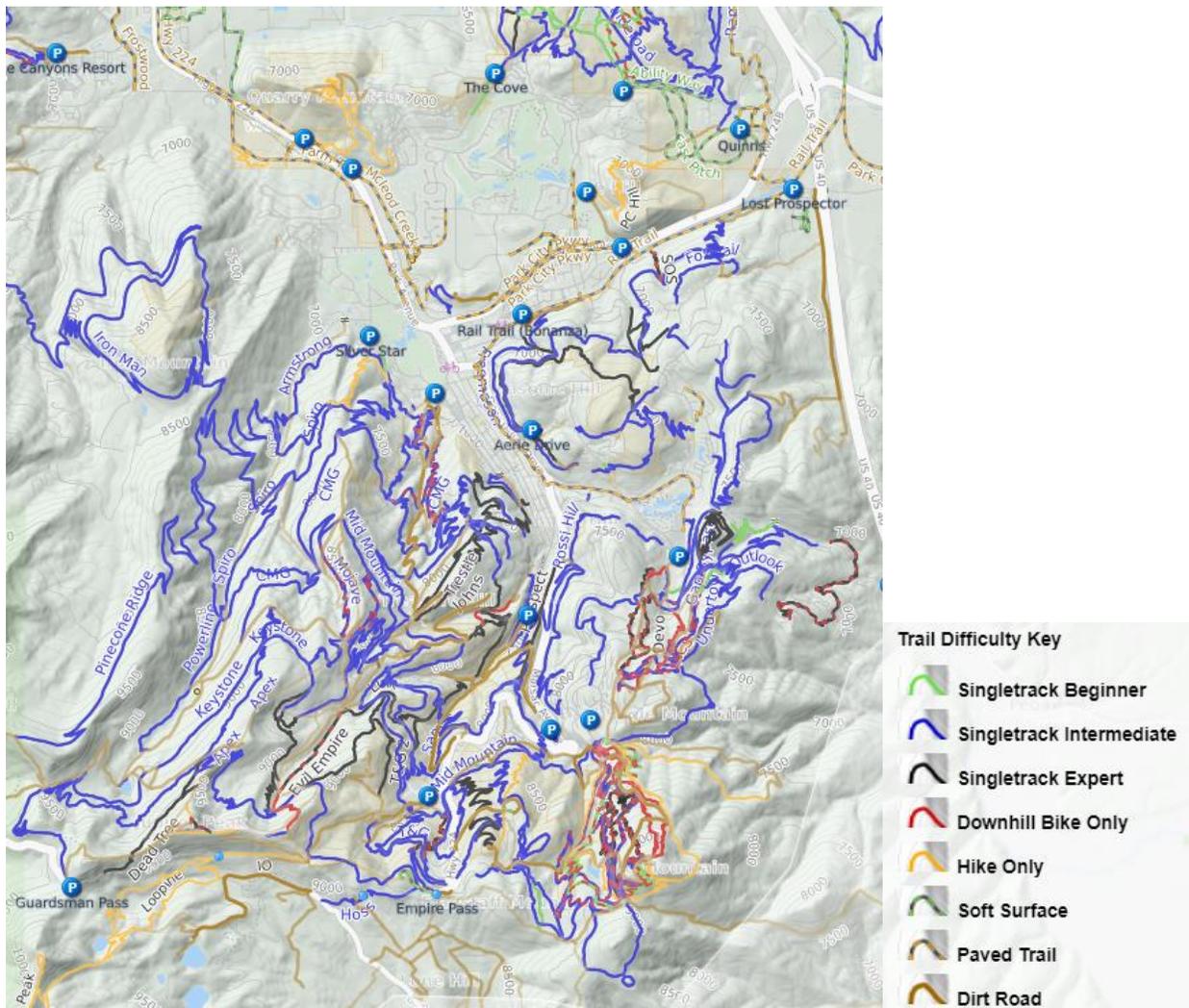


Figure 54. Park City Trail Map. (Source: Mountainland Trails)

Trails are vital to the active outdoor lifestyle of the City’s residents and tourists. The Park City General Plan (2014) focuses on four primary goals: small town, natural setting, sense of community, and historical character. Bicycle and pedestrian improvements are mentioned in the sense of community and historic character goals. Pedestrian-oriented developments preserve the city’s historic character, while safe active transportation infrastructure connections between parks and neighborhoods enhance the natural setting of residents’ daily lives. Improving

pedestrian and bicycle connections at Bonanza Park is listed as a specific strategy to increase the sense of community. Another strategy is to improve access to recreational facilities by ensuring that all residential neighborhoods have connective trail access to Parks and Recreation facilities. The General Plan calls for establishing a long-range active transportation plan to build upon the Walkability Study and Implementation Plan from 2007, which was only intended to address issues within a three- to five-year timeframe. A long-range plan should incorporate existing conditions, previous plans/studies, connectivity strategies and goals, a project list, funding opportunities, and a maintenance plan. The Park City Bicycle and Pedestrian Plan (PC BPP) is currently underway and should be completed by late summer 2023.

The Summit County Active Transportation Plan (2019) outlines recommended active transportation improvements throughout the County, with specific improvements for Park City shown in Figure 55.

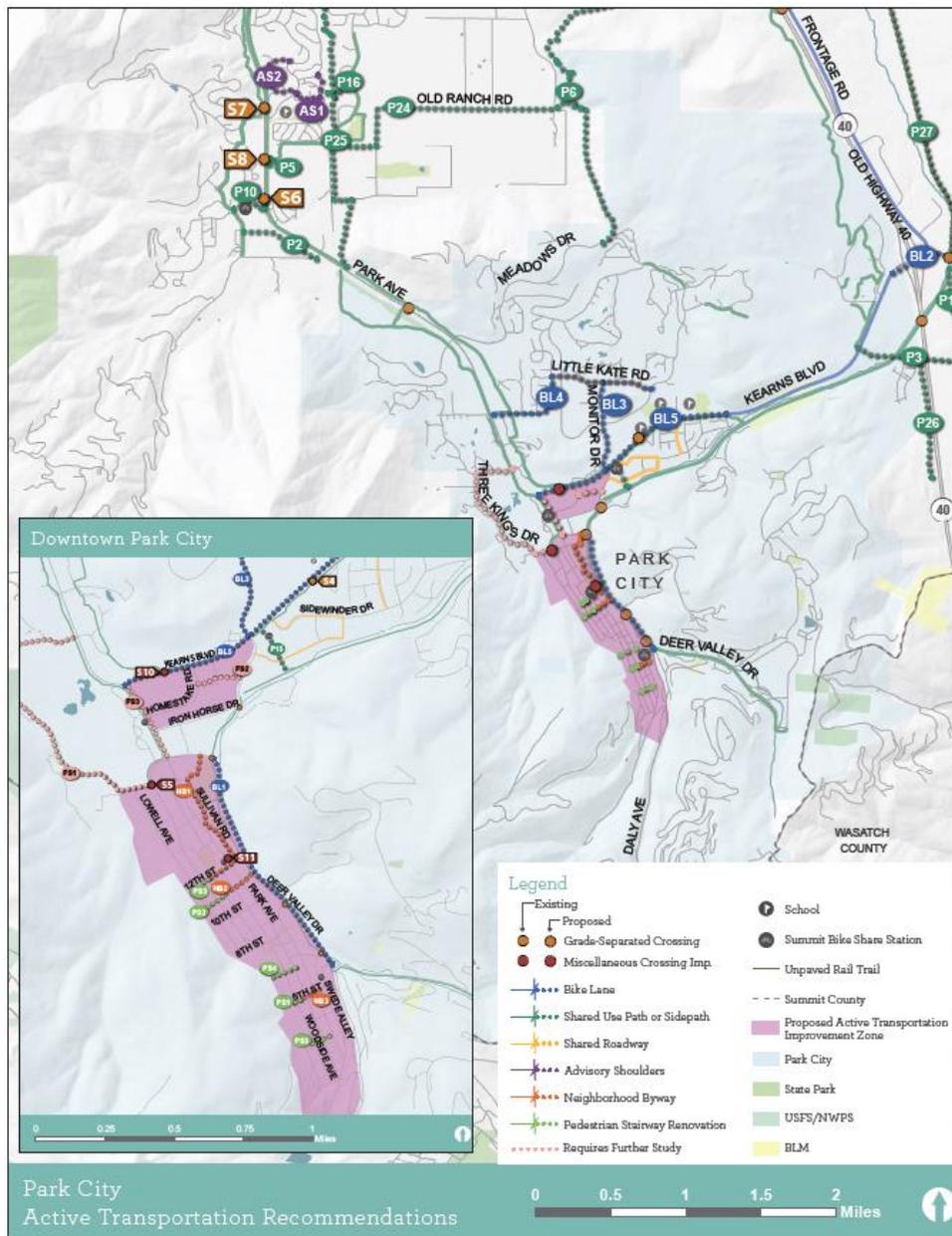


Figure 55. Park City Active Transportation Recommendations. (Source: Summit County)

The Plan identifies several projects for major improvements. The Rail Trail is the County’s longest trail connecting Park City to the Snyderville Basin, Wanship, Hoytsville, and Coalville. While the trail is currently primarily used as a recreational facility, it will become an important active commuter corridor as the area grows. The Plan recommends paving the trail between Silver Creek and SR-248 to improve bike commuting ease and efficiency. Although this paving improvement is slightly outside of Park City limits, this could open up long-term transportation opportunities as technologies develop and modes such as personal rapid transit (PRT) are considered for the corridor.

The Plan also proposes bike lanes on Marsac Ave, Monitor Dr, Little Kate Rd/Holiday Ranch, and SR-248, as well as neighborhood byways on 12th St, 11th St, and 5th St to create low-stress roadways that prioritize pedestrians and cyclists. Several Old Town stairways are identified for renovation to provide space for two-way pedestrian traffic, wayfinding, and cross-street safety improvements.

Chapter 6: Future Travel Demand and Markets

Chapter 6. Future Travel Demand and Markets

The Summit & Wasatch County Travel Demand Model (TDM) is a four-step travel demand model jointly developed and maintained by UDOT, Summit County, and the Mountainland Association of Governments (MAG). The model includes functionality to forecast different seasons and days of the week to better capture the different travel behavior specific to those time periods.

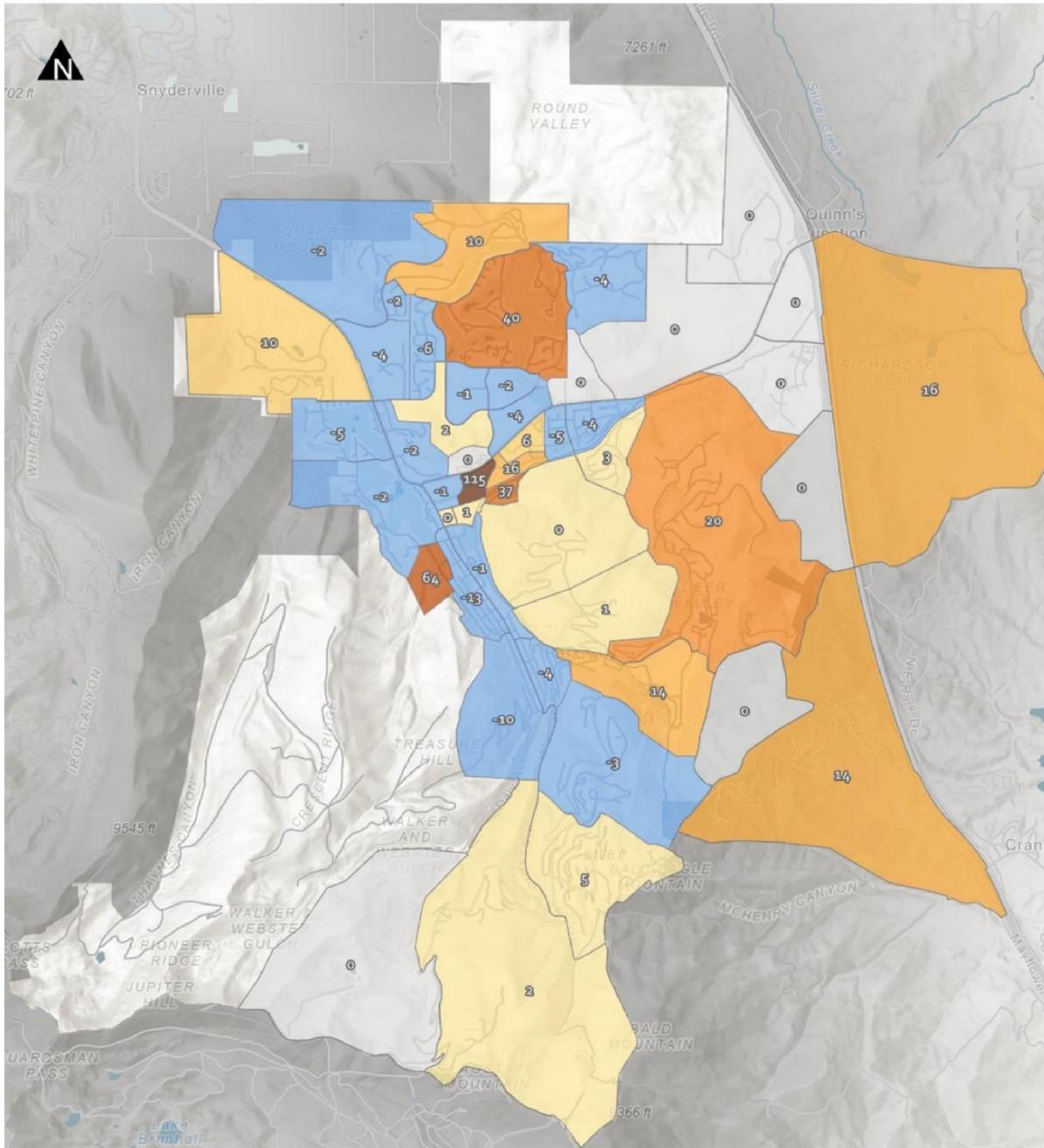
For the purpose of this plan, the travel model was used in several different ways. This includes:

- ▶ To estimate future household, population, and employment growth in the Park City area.
- ▶ To estimate future traffic growth on key gateway corridors (i.e., SR-224 and SR-248).
- ▶ To estimate future origin/destination pairs for the year 2026.

Population and Employment Forecasts

Based on Traffic Analysis Zone (TAZ) level socioeconomic forecasts from the Summit and Wasatch County TDM developed by UDOT and Summit County, the population of the Park City area is forecasted to grow by approximately 3.7% between 2021 and 2026. In addition, employment is forecasted to grow by approximately 5.8% over that same time frame. Both are slightly below the anticipated growth for Summit County, where the population is forecasted to grow by 8.4%, and employment is anticipated to grow by 8.6%.

Figure 56 shows the forecasted population growth by TAZ for the Park City area, Figure 57 shows the forecasted household growth, and Figure 58 shows the forecasted employment growth.



**Estimated Population
Change (2021-2026)**

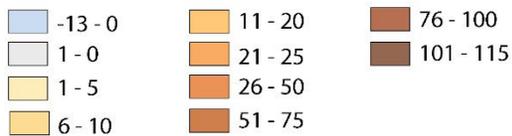
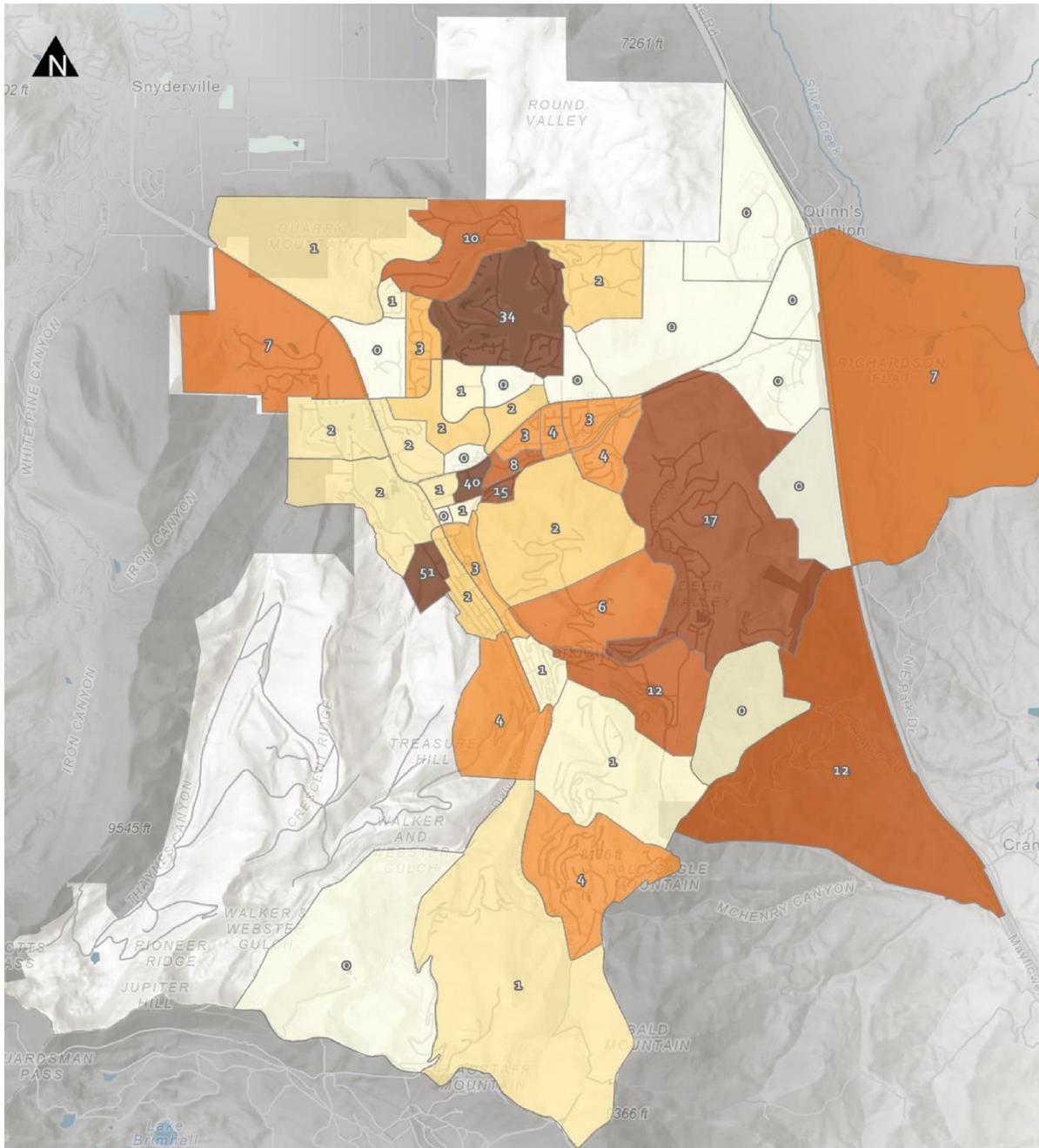


Figure 56. Estimated population change between 2021 and 2026. (Source: Summit & Wasatch County Travel Demand Model)



**Forecasted Household Change
(2021-2026)**

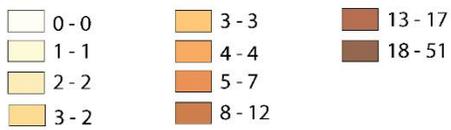
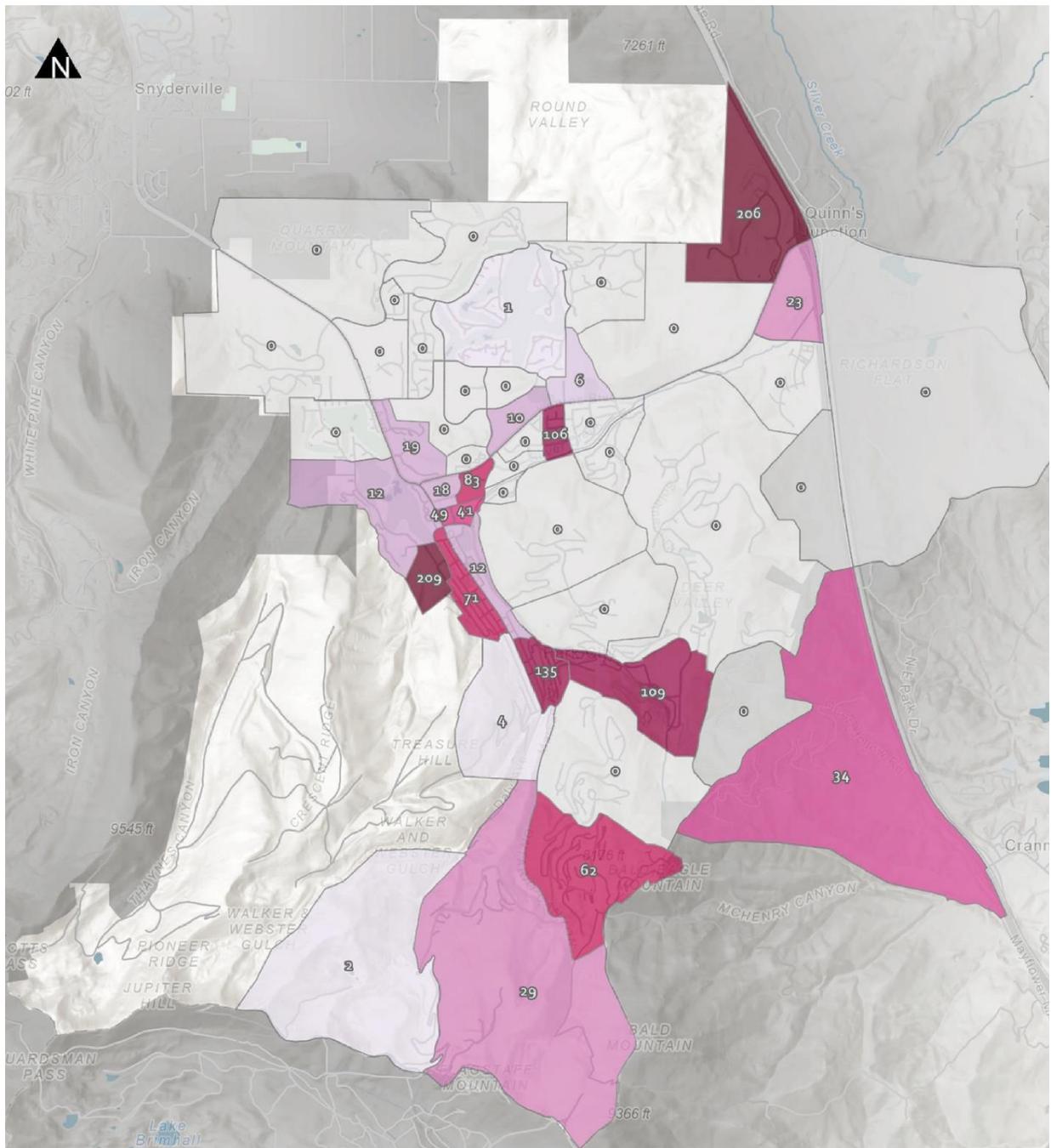


Figure 57. Forecasted change in households between 2021 and 2026. (Source: Summit & Wasatch County Travel Demand Model)



**Forecasted Employment
Change (2021-2026)**

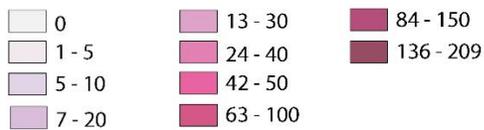


Figure 58. Forecasted employment change between 2021 and 2026. (Source: Summit & Wasatch County Travel Demand Model)

Many of the areas in the city are anticipated to have little population growth, and several are forecasted to lose population slightly. This is most likely due to an anticipated shift towards smaller household sizes. However, there are several locations where population growth is expected to increase, particularly south of SR-248 between

Homestake Road and Bonanza Drive, the Park City Mountain Resort area, and the area around the Park Meadows Country Club.

Employment growth is forecasted to occur most heavily near Park City Hospital and the Quinn’s Junction area, the area around Park City Mountain Resort, Old Town Park City, and the Deer Valley areas.

Planned Developments

The following are development projects within the study area that have the potential to impact transit ridership or operations.

- ▶ **Park City Mountain Resort Redevelopment:** Proposes redevelopment of the existing Park City parking lots along Lowell Ave and Empire Ave to provide new residential development. Envisioned to include a 249-room hotel and 233 condominium and apartment units (including 89 employee units). It also includes 73,000 square feet of retail floor area.

- ▶ **Snow Park Village Development:** As shown in Figure 59, this project involves approximately 15 acres where the Snow Park Lodge parking lots are located. According to the conditional use permit submitted to the city, the project will transition the current surface-level parking to underground paid parking. Other aspects of the proposal include



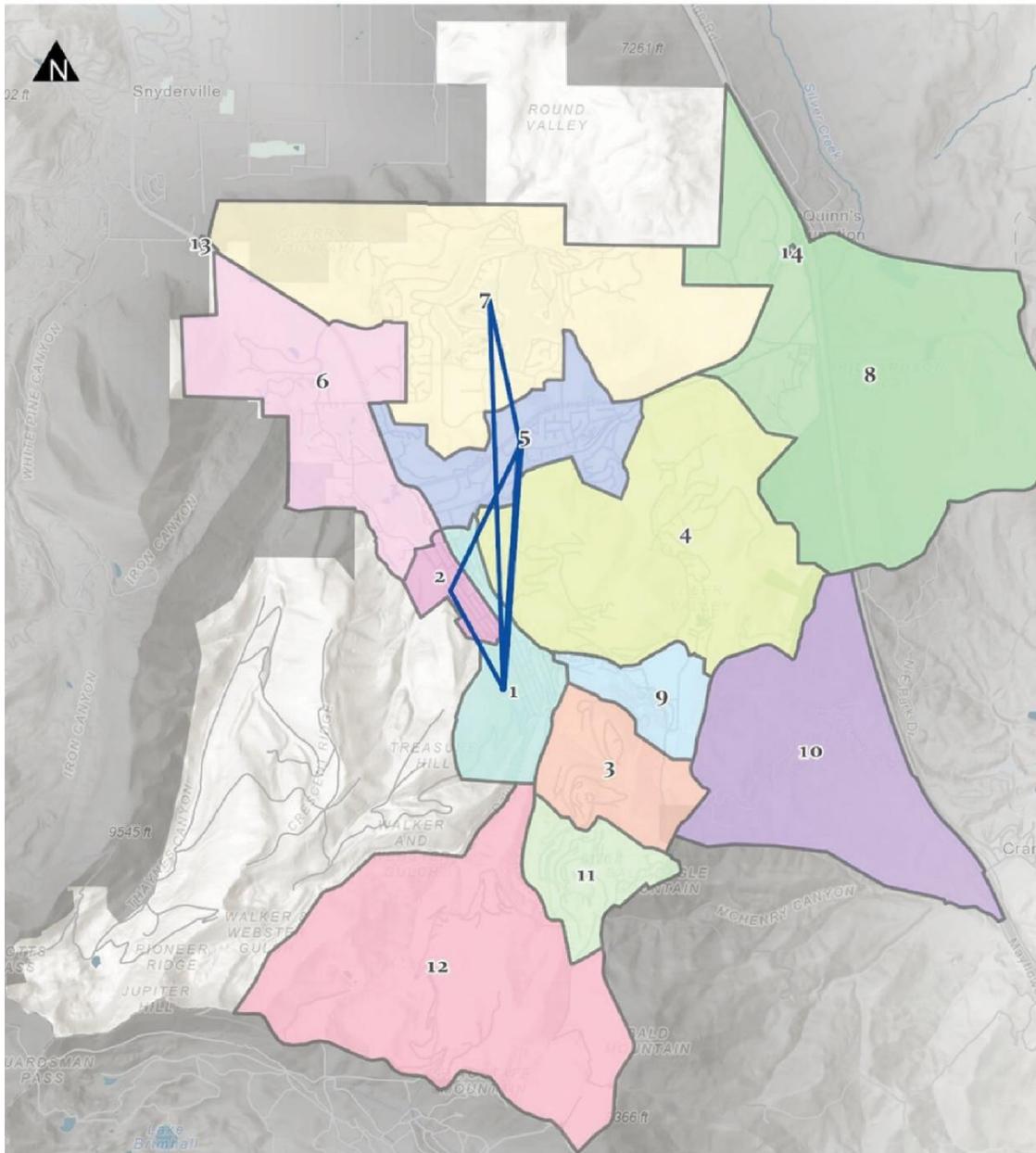
Figure 59. Snow Park Village Development Site Map. (Source: Deer Valley Resort)

- dedicated pickup and drop-off zones, a transit hub, and expanded lodging, retail, and dining options. The project is proposed in three phases, the first of which is the overall site plan and south parcel parking structure, and transit and mobility hub (already submitted). The next two phases will be residential and hotel developments.
- ▶ **Bonanza District:** As mentioned under review of plans in Chapter 1, just over five acres at Bonanza Way and Kearns is being developed and a Small Area Plan is being developed.

Forecasted Traffic and Travel Patterns

Local Travel Patterns

Utilizing the seasonal functionality of the Summit & Wasatch TDM, future 2026 origin/destination patterns were developed. Figure 60, Figure 61, and Figure 62 show the top origin/destination pairs for winter, summer, and shoulder season conditions.



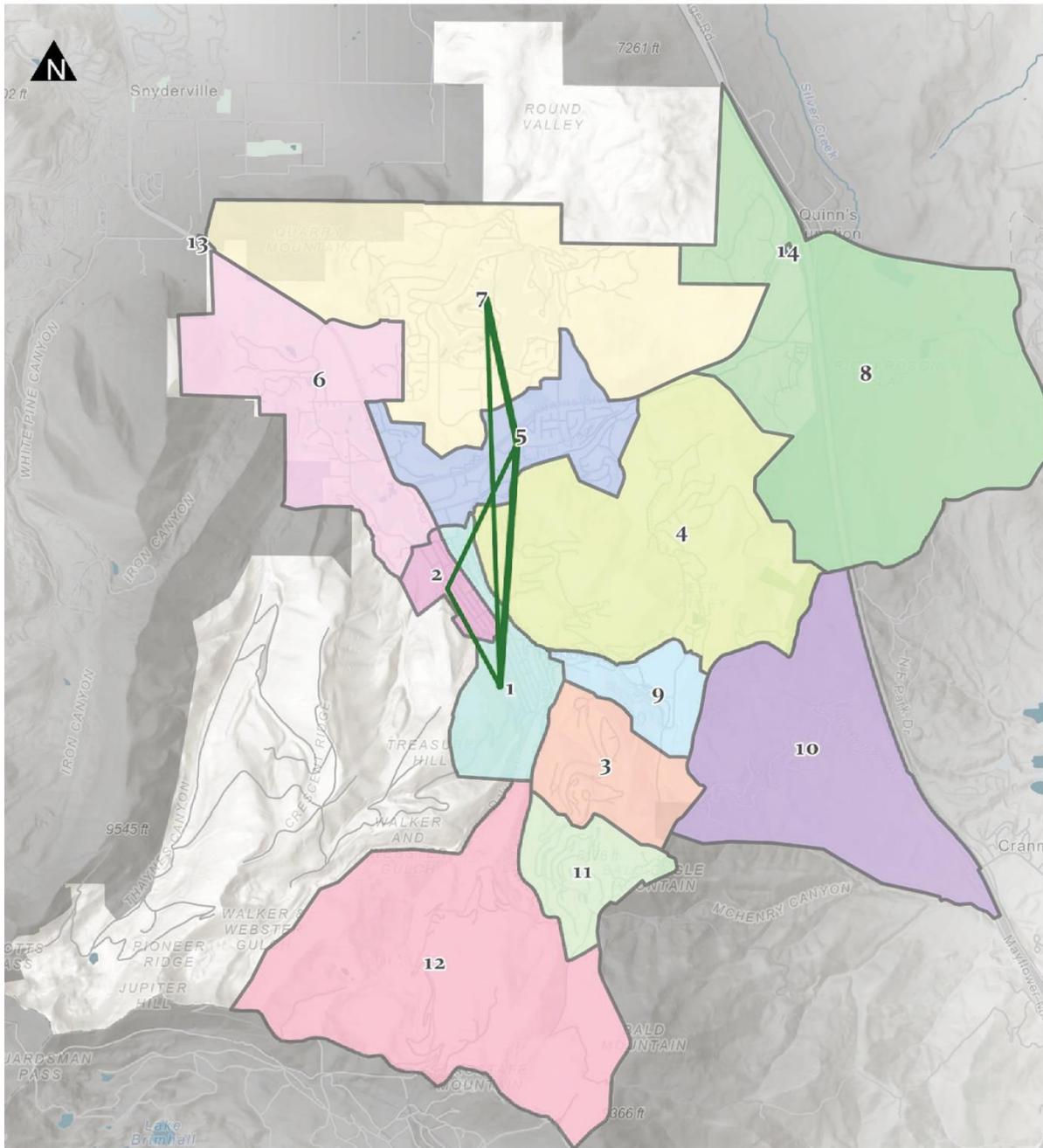
Winter Forecasted O/D Trips

- 0 - 65
- 66 - 212
- 213 - 448
- 449 - 903
- 904 - 1627

Zone #

- | | | |
|--|--|--|
| ■ 1 | ■ 6 | ■ 11 |
| ■ 2 | ■ 7 | ■ 12 |
| ■ 3 | ■ 8 | ■ 13 |
| ■ 4 | ■ 9 | ■ 14 |
| ■ 5 | ■ 10 | |

Figure 60. Forecasted 2026 origin and destination trips for winter. (Source: Summit & Wasatch County Travel Demand Model)



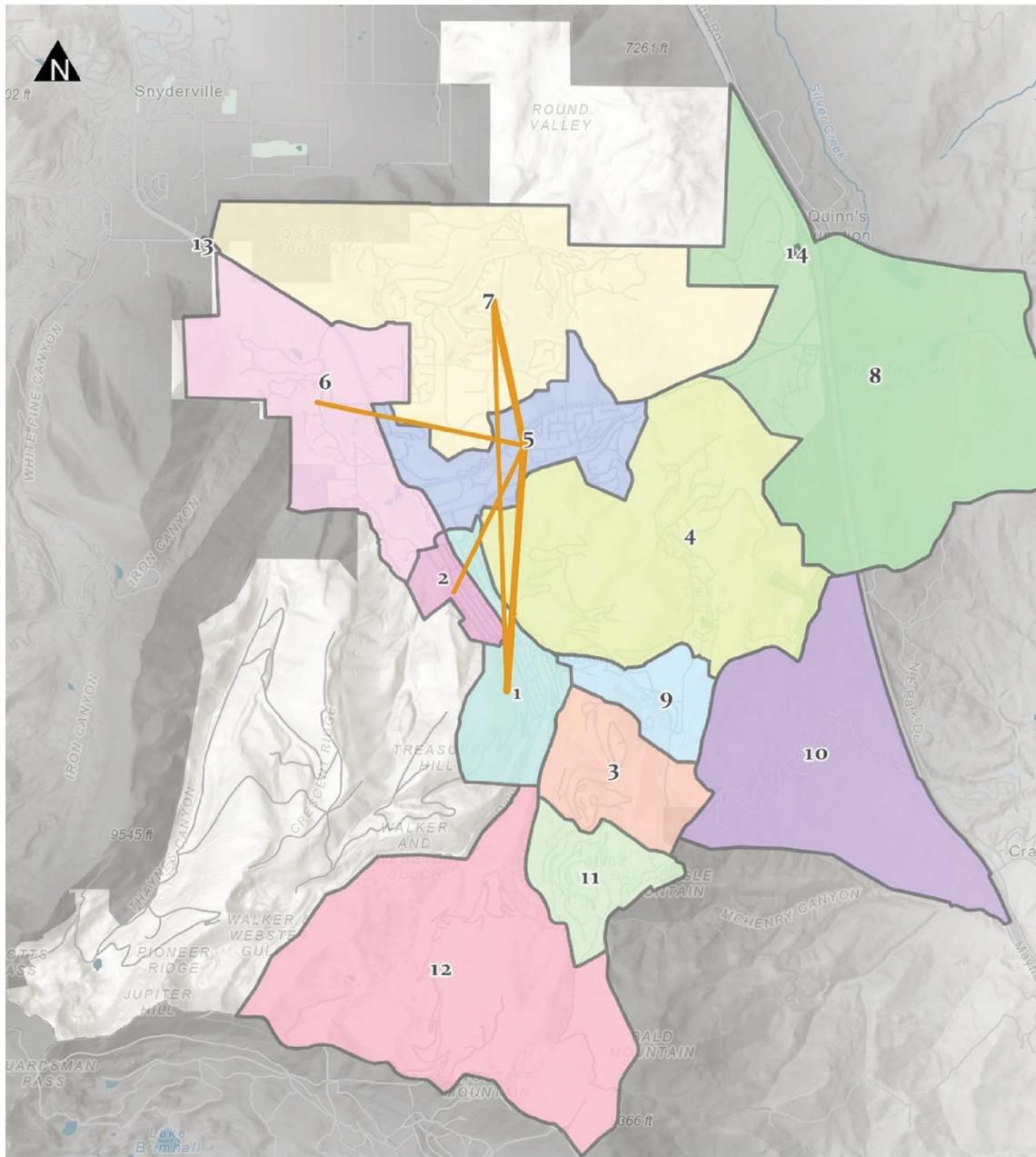
Summer Forecasted O/D Trips

- 0 - 65
- 66 - 212
- 213 - 448
- 449 - 903
- 904 - 1627

Zone #

- | | | |
|---|--|--|
| 1 | 6 | 11 |
| 2 | 7 | 12 |
| 3 | 8 | 13 |
| 4 | 9 | 14 |
| 5 | 10 | |

Figure 61. Forecasted 2026 origin and destination trips for summer. (Source: Summit & Wasatch County Travel Demand Model)



**Shoulder Season Forecasted
O/D Trips**

- 0 - 65
- 66 - 212
- 213 - 448
- 449 - 903
- 904 - 1627

Zone #

- | | | |
|--|---|---|
| ■ 1 | ■ 6 | ■ 11 |
| ■ 2 | ■ 7 | ■ 12 |
| ■ 3 | ■ 8 | ■ 13 |
| ■ 4 | ■ 9 | ■ 14 |
| ■ 5 | ■ 10 | |

Figure 62. Forecasted 2026 origin and destination trips for shoulder seasons. (Source: Summit & Wasatch County Travel Demand Model)

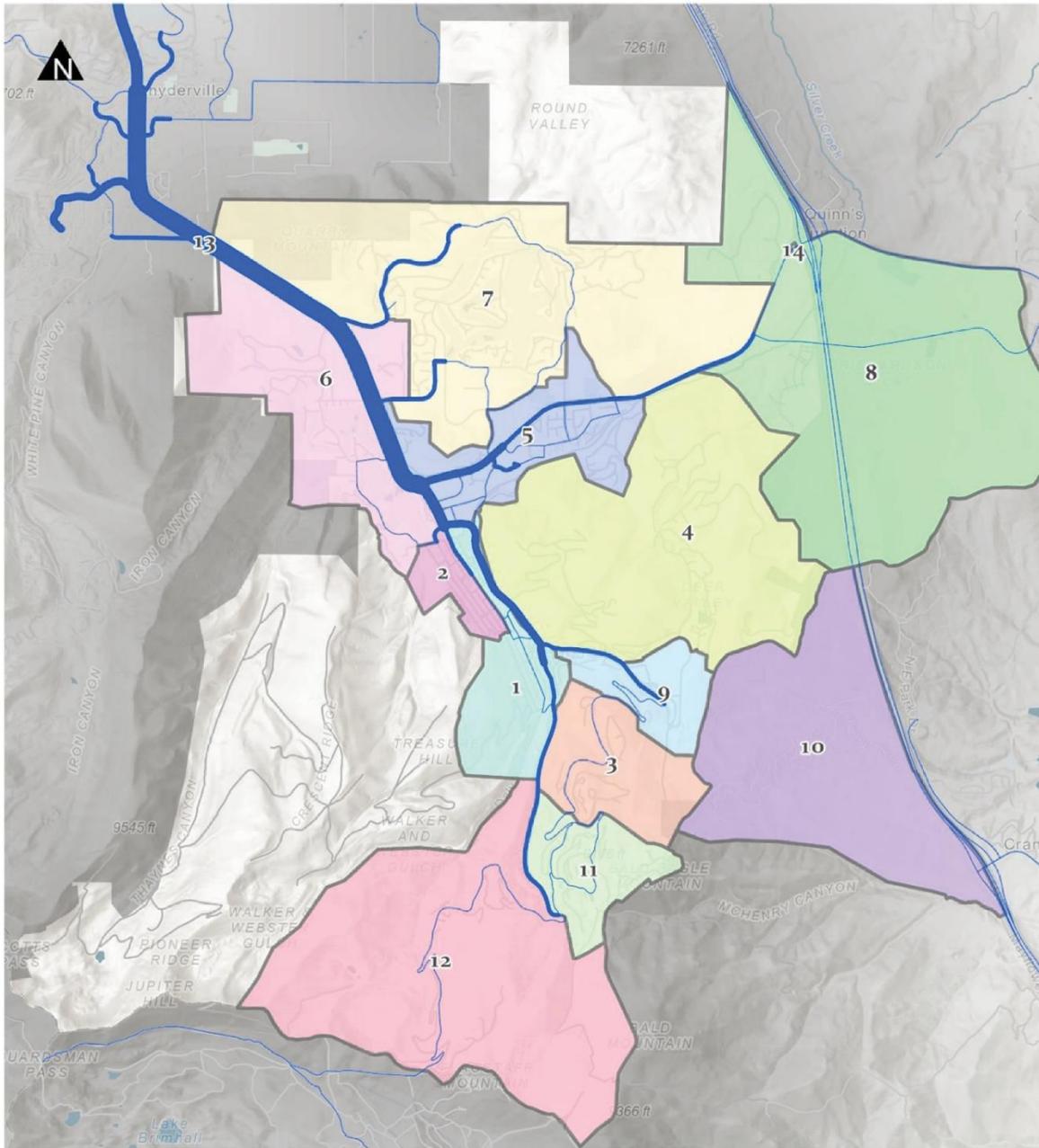
The forecast suggests that future patterns will remain fairly similar to existing conditions, at least for where the strongest origin/destination pairs are anticipated to be. Zones 5, 1, and 2 all continue to have a strong origin/destination relationship, no matter the season. Zones 5 and 1 have the strongest connection under all conditions.

The model suggests that under all conditions, there will be a large share of trips going to/coming from Zone 7 to Zones 5 and 1. This suggests that transit services that serve these key areas with quick and reliable service will continue to be in demand in future years, even when employment growth is expected to be further dispersed.

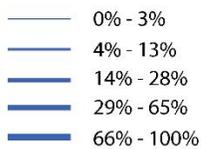
Regional Travel Patterns

A select link analysis was performed to understand the travel patterns of trips passing through the SR-224 and SR-248 gateway areas using the 2026 Summit & Wasatch TDM. While this was performed for all three seasons (winter, summer, and shoulder seasons), outputs did not differ substantially.

Results were similar to the findings from the regional StreetLight data analysis, where SR-224 trips seemed to be heavily related to Zones 5, 2, and 1 and, to a lesser extent, Zones 9, 7, and 11. Figure 63 shows the result of the SR-224 select link output.



% of SR-224 Gateway Trips



Zone #

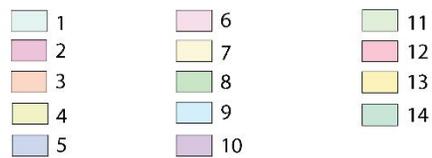


Figure 63. Percent of SR-224 gateway trips. (Source: Summit & Wasatch County Travel Demand Model)

SR-248 also had similar results to the StreetLight analysis, where trips using the SR-248 gateway were closely associated with zones 5, 1, and 2. However, it also appears that zone 9 also has a high relationship with trips utilizing SR-248. This is likely driven by the increase in jobs forecasted in that area. Figure 64 shows the result of the SR-248 select link output.

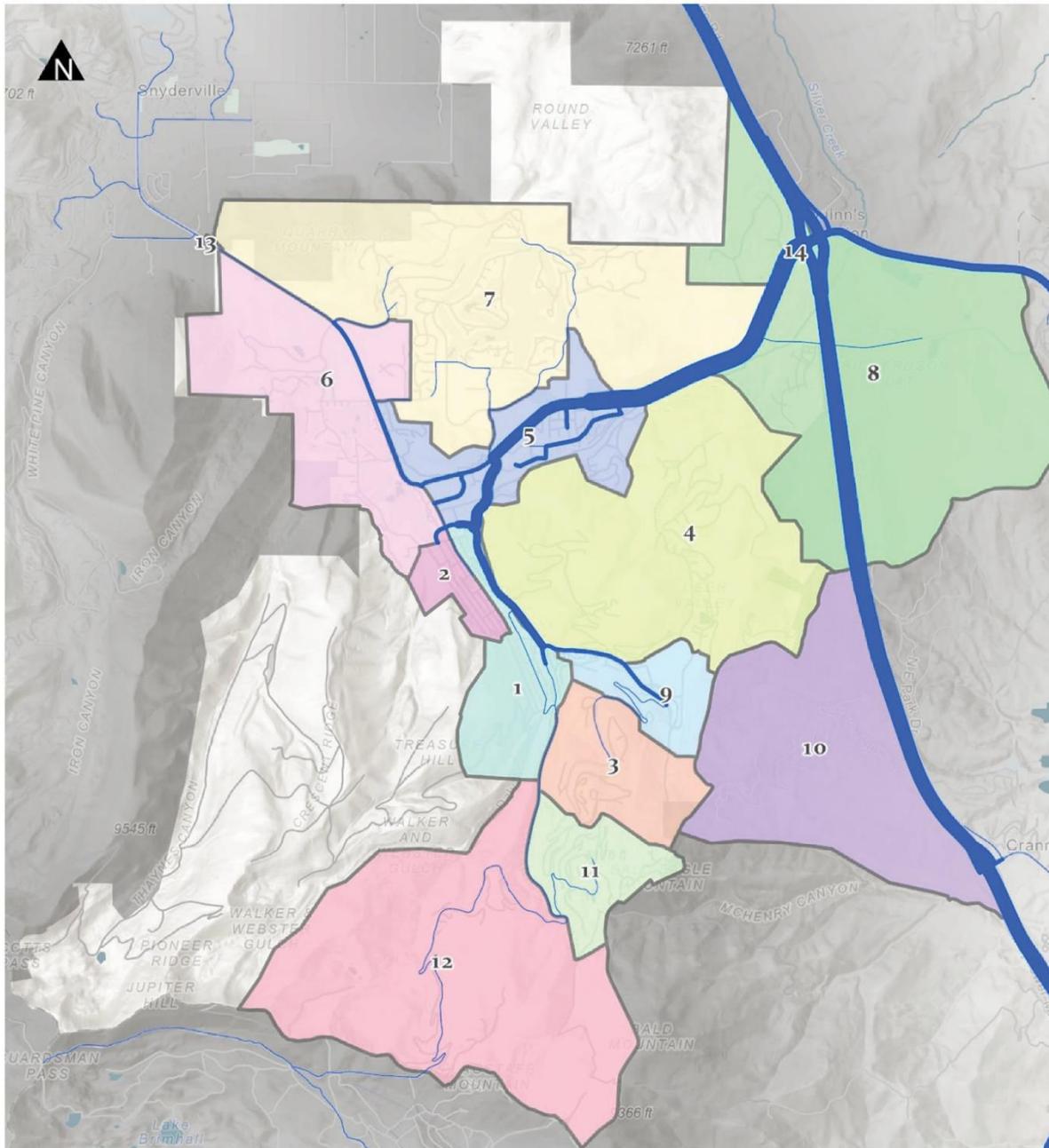


Figure 64. Percent of gateway SR-248 trips. (Source: Summit & Wasatch County Travel Demand Model)

This suggests that travel patterns stay fairly similar to existing conditions in the short term, with potentially higher regional demand to zone 9 as employment is expected to grow.

Future Traffic

The two key gateway corridors to Park City are SR-224 and SR-248. Congestion on these two roadways presents a challenge for transit operations, and the growth expected on them is relevant for transit service. The driver to traffic growth is the location and amount of development in and around Park City. The population and employment forecasts show higher growth near Quinn’s Junction (SR-248/SR-224), south of SR-248, and in downtown Park City, with little to no growth in areas along SR-224. The Summit & Wasatch TDM, which takes into account the location and amount of development, indicates an annual growth of 1% and 1.5-3.5% for SR-224 and SR-248 near Park City. With the current issues both corridors currently experience and the expected growth, traffic will likely present issues similar to the current conditions.

Emerging Mobility Trends

Transportation Demand Management

Transportation demand management (TDM) refers to the range of voluntary programs and municipal ordinances designed to reduce single-occupancy vehicle trips to places of employment and other highly frequented locations. Numerous towns, cities, counties, and even states have implemented trip reduction ordinances, which require large employers to implement a range of strategies to incentivize employees to travel to work by carpooling, transit, bike, or walking. These strategies include employee education, financial commute benefits and subsidies, preferential parking for carpools and vanpools, employer-run shuttles, and more. However, many employers and large destinations like stadiums choose to implement TDM programs on their own to make efficient use of parking and improve environmental sustainability. Park City works to advocate for TDM programs, including Ride Amigos, with local employers to implement TDM programs at the workplace to spark behavior change among their employees. Ultimately, TDM programs have the potential to reduce congestion by getting people out of their cars and onto transit, bikes, and other modes.

A relevant example of a successful TDM program in a mountain ski resort community comes from the Jackson Hole Mountain Resort (JHMR), as shown in Figure 65. In 1998, Teton County, Wyoming, approved the Teton Village Resort Master Plan that reduced the bed base and skier capacity while providing a framework

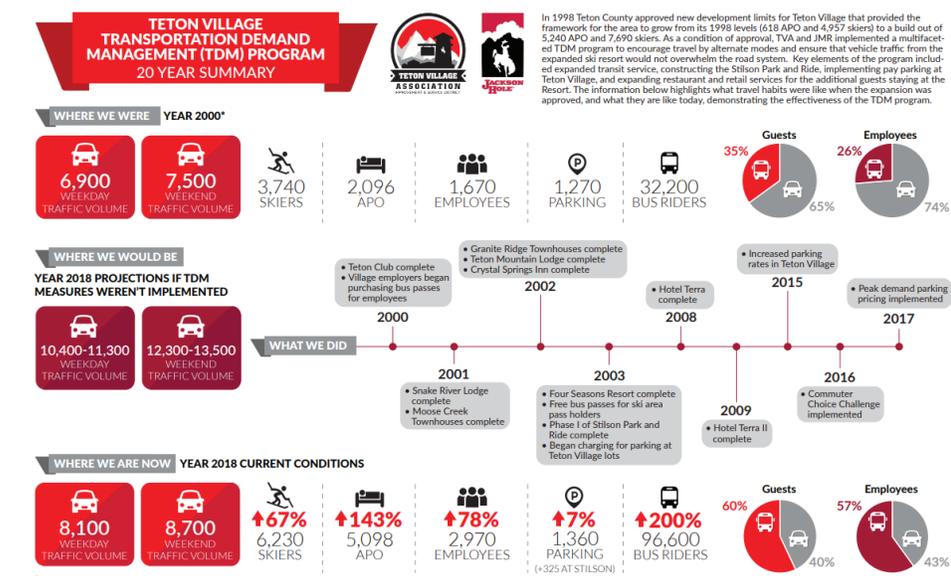


Figure 65. Teton Village Transportation Demand Management Program. (Source: TVA)

for the area to grow from its 1998 levels. As a condition of approval, an association was created to help JHMR implement a multifaceted TDM program to encourage travel by alternate modes, thereby ensuring that vehicle traffic from the expanded ski resort would not overwhelm the local road system. Key elements of the program included expanded transit service, constructing the remote Stilson park and ride lot located six miles from the JHMR, and implementing paid skier parking at Teton Village. The 20-year data from Teton Village, shown here, indicates that the TDM program has helped keep overall traffic to the year 2000 winter levels.

Microtransit

Microtransit is a form of demand response transit that leverages smartphone technology using a smartphone app to match trip requests in real-time to dynamic/flexible routes in a defined service area. For users, it is similar to using ride-hailing services such as Uber or Lyft with the ability to request a trip within a short timeframe (typically 15 minutes or less) and be picked up and dropped off within a short distance of their origin and destination points (typically 1-2 blocks or less). Microtransit typically operates with smaller vehicles, such as cars, vans, or shuttle buses (example shown in Figure 66), and microtransit passenger trips are often combined as the vehicle moves along a dynamic route or pattern.



Figure 66. Example of microtransit. (Source: Fehr & Peers)

Microtransit service is typically established by a city, county, or agency through a contract with a microtransit provider, which can be a turn-key provider of the technology platform, vehicles, and drivers or a provider of the technology platform only and utilizing agency or service contractor vehicles and drivers.

Microtransit operates in a defined geographic service area. In some cases, microtransit service operates completely on-demand within the service area, while in other cases, microtransit can often incorporate predefined stops and/or a predefined trip pattern with on-demand zones where passengers can request pick-up or drop-off locations at or near their destination.

At least a portion of a microtransit vehicle fleet is accessible for people in wheelchairs or using mobility devices, and a call-in option is incorporated into the service for those without smartphones. The microtransit vehicles are also clearly branded as a public transportation service.

Microtransit Success Factors

In the past five years, microtransit has matured as a public transportation service option. As a result, many lessons have been learned about what success factors contribute to a successful microtransit program:

- ▶ Service area size of two to five square miles per vehicle, depending on the density
- ▶ Key destinations within the service area, such as shopping/retail, employment centers, transit hubs or high-frequency transit, medical services, and social services
- ▶ A mix of population densities within a service area, often matching low to medium-density housing with higher-density commercial areas
- ▶ Ability to group trips to/from key destinations at similar times

- ▶ Fare structure that balances convenience, affordability, and ridership goals
- ▶ Robust marketing and public education
- ▶ ADA-accessible vehicles and call-in option for those without smartphones

Microtransit Performance

Setting reasonable financial and ridership performance expectations is necessary prior to establishing microtransit service. When comparing typical applications and results, microtransit does not perform as well as most fixed-route bus routes in terms of riders per vehicle service hour or cost per rider, but microtransit performs better in terms of cost per vehicle service hour. It also performs better than most paratransit or demand response systems in terms of ridership per hour and cost per passenger. Microtransit ridership productivity can vary widely, ranging from two passengers per vehicle service hour to eight passengers per vehicle service hour, based on service characteristics and service area.

Autonomous Vehicles, Shuttles, and Rapid Transit



Figure 67. Autonomous and Connected Vehicles. (Source: US DOT)

Autonomous vehicles and shuttles (AV), connected vehicles (CV), and autonomous rapid transit (ART) are three rapidly evolving technologies with the potential to significantly impact future travel patterns and behavior. AVs sense the environment and move through the street network with either little or no human intervention. CVs communicate with one another and connected infrastructure like traffic signals to improve roadway safety and efficiency. This technology allows roadway operators like UDOT to send notifications about traffic, road conditions, and more directly to drivers to improve

travel time and help avoid dangerous situations. Both technologies are still being perfected and more widely implemented but will have major implications for infrastructure soon.

The costs and benefits of AVs have been widely debated in the transportation and infrastructure community. AVs will increase transportation access for youth, older adults, and disabled individuals by allowing them to independently operate a vehicle when they otherwise couldn't. Though the validity of this claim remains to be seen, a major argument in favor of AVs is that they will improve traffic safety by reducing or removing human operation of vehicles, with human error cited as the cause of 94% of crashes. If transportation network companies replace their current model with a shared fleet of autonomous, electric vehicles that continually circle, picking up and dropping off passengers, space currently used for private vehicle parking could be converted to other public use like parks, seating, pick-up/drop-off areas, and delivery vehicle parking.

On the other hand, they have the potential to drastically increase vehicle miles traveled (VMT) and demand for public space for parking and travel lanes in the alternate scenario that every current car owner and new users, drawn by the ability to multitask or to independently operate a vehicle, purchase an AV. Like transportation network companies, AVs could also draw users from transit due to the appeal of new technology. It's also been suggested that they will incentivize sprawling land use development as users don't mind longer commutes because they are

able to make more effective use of their time.

Although perfected technologies are not currently on the market, Park City can preemptively implement policies to lay the groundwork for positive outcomes from AVs and CVs in relation to transit. These strategies include setting land use policies that promote compact, walkable development; encouraging shared AVs and the use of AVs for transit; repurposing space for people walking and people biking; reducing or eliminating parking requirements; and requiring data sharing from AV companies.

AV Shuttles



Figure 68. Autonomous Shuttle at Yellowstone National Park. (Source: Fehr & Peers)

There have been over two dozen AV shuttle pilots and early deployments in the US and a handful of demonstrations of AV technology operating on full-sized buses in revenue service. The shuttles have been limited to protected “geofenced” routes and areas where they could operate at low speeds and with few conflicts with pedestrians, cyclists, and other vehicles. Most also require a safety driver to be onboard to assist the vehicle through difficult situations.

According to a 2018 study by the Federal Highway Administration, slow-speed autonomous shuttles “are undergoing frequent hardware and software updates and should still be considered prototypes. Many systems have somewhat limited technical capabilities and may require frequent intervention from an onboard attendant.”⁵ They also state that, at present, making frequent service stops in congested areas with high volumes of vulnerable road users in varying road and weather conditions can present particular challenges for current-generation sensing systems and control algorithms.

Concerns of operating currently available AV shuttles in active mountain resort settings include:

- ▶ Operating in snow and other poor weather conditions or periods of low visibility,
- ▶ Operating speeds that are, in most cases, too slow for vehicles to mingle smoothly with general traffic,
- ▶ The need for a safety driver to deal with unusual or overly complex on-street situations.

Autonomous Transit

The operation of autonomous transit at higher speeds in dedicated lanes is ongoing in many locations with full-size buses in Bus Rapid Transit (BRT) operating environments. ART is already in operation in China and in on-road testing in the Netherlands, Singapore, Minnesota, and Oregon.

In the US, testing on public roads includes:

- ▶ Automated bus operations on freeway shoulders in Minnesota, which resulted in similar on-time performance to human-driven shoulder service with significantly fewer customer complaints, and a slight improvement in reported driver satisfaction.

⁵ *Low-Speed Automated Shuttles: State of the Practice Final Report*, Cregger et al, 2018, <https://rosap.ntl.bts.gov/view/dot/37060>

- ▶ ART substitution for a conventional BRT service in Lane County, Oregon, that demonstrated favorable rider responses on vehicle control, smoothness, and speed performance.

Connecticut DOT was recently awarded a federal grant to operate full-size autonomous buses on an existing BRT corridor between New Briton and Hartford, CT. In addition, the Michigan DOT has selected a partnership between Sidewalk Labs and Waymo (subsidiaries of Alphabet) and Ford, GM, BMW, Honda, and Toyota to perform a feasibility analysis for the development of the corridor between Detroit and Ann Arbor for connected autonomous vehicles (CAV) for buses and shared mobility vehicles.

The timeframe for the operational readiness of ART or AV shuttles in snowy, mixed road conditions at existing Park City roadway speeds is outside of this study's timeframe, based on the current state of the technology.

Mobility-as-a-Service



Figure 69. Mobility-as-a-Service. (Source: Skedgo)

Mobility as a Service, or MaaS, is a newer concept in transportation planning that describes the integration of multiple transportation modes into a single app where a user can pay for, reserve, and plan trips. This app integrates modes including transit, bike share, scooter share, car share, ride-hailing, and more. In the most advanced systems, within a single app, a user could plan a transit trip, book a rideshare service, reserve a carshare vehicle, or search for nearby scooters or bikes, unlock one, and pay for the ride. As Park City Transit and High Valley Transit operate a free fare service, applicability maybe be limited to non-transit services.

The idea is that rather than any individual owning a private automobile and paying for costs like the loan, insurance, parking, and fuel, personal transportation spending could instead shift to paying for trips on a fully operational network of transportation options tailored to what someone needs in any given moment, with the holistic landscape of transportation options creating an economy of scale to reduce the costs of each trip. Paying for transportation “as a service” in this way could be through a subscription to the system or pay-as-you-go (with a range of options tailored to your habits) through the app. For example, subscriptions could range from a package including unlimited reservations of car and transit trips to a subscription for people that make fewer trips and only want to include a few scooter, bike, and transit trips per month. This has the dual benefit of reducing individuals’ transportation costs while also decreasing congestion, reducing emissions, making efficient use of public infrastructure, and informing transportation providers with the data they need to be effective.

Though MaaS systems are limited in the U.S., transportation providers are beginning to integrate services. For example, RTD (Denver, CO) has partnered with Uber and Lyft to be able to book transit services in their apps and vice versa. Uber and Lyft also allow users to search and pay for their scooters, bikes, and car rides within the same app.

PCT can encourage and facilitate MaaS by requiring private providers to share data on the most common origins and destinations with the City to facilitate better transit trip planning. PCT could pursue a partnership to integrate trip planning and payment with transportation network companies. Finally, PCT could explore using private providers to complement and supplement public transit, as discussed in the microtransit section below. These partnerships can also help improve human service transportation provision.

Transportation Network Companies

Ride-hailing, also known as technology-enabled ride-sharing, is a privately-operated form of demand response transportation that uses a smartphone app and an online platform to pair passengers needing a ride in real-time with drivers operating their own personal cars to perform the ride. Ride-hailing utilizes smartphones with GPS capability to identify the rider's pick-up location and inform the rider how long it will take for the driver to arrive, which is often 15 minutes or less. Payment is exchanged entirely through the application. The companies that provide ride-hailing are generally known as Transportation Network Companies (TNCs), the largest of which are Uber and Lyft.

TNC vehicles are generally not accessible for people with mobility devices, and drivers do not meet Federal Transit Administration (FTA) drug and alcohol requirements and are not trained in accommodating people with disabilities.

The cost of a ride with a TNC increases with the distance traveled. Therefore, TNCs are most popular for short-distance trips, where they are more convenient than a city bus or dial-a-ride service.

In recent years, cities, counties, and transit agencies have experimented with partnering with TNCs companies to provide a form of public transportation whereby the TNC ride is subsidized by the agency according to the terms of a cost-sharing agreement. Under this scenario, the passenger is able to request a trip using their smartphone, or in some cases by calling a dispatcher, and the trip is fulfilled by a TNC driver, just as it would be if anyone else were using a ride-hailing app. The difference is that for the passenger, the cost of the ride-hailing trip is subsidized by the public agency – trips are often free or significantly discounted, subject to certain restrictive parameters that limit when, how, and where the trip takes place (e.g., only to/from a rail station during commute hours within a two-mile radius of the station).

TNC Partnership Success Factors

Public agency TNC partnerships for subsidized ride-hailing services have generally found that success is dependent on:

- ▶ Clear definition of subsidy limits and eligibility that determine who can use the service and for what types of trips (this often determines whether the program succeeds long-term)
- ▶ Addressing the accessibility challenges of how someone without a smartphone or with a mobility device uses the service (providing ADA-accessible service can often come at a high price that can make the overall TNC program cost prohibitive)
- ▶ Determining the right price point for the passenger portion of the fare
 - ▶ If a passenger pays too little, demand may exceed the project budget
 - ▶ If a passenger pays too much, the service may struggle to attract enough users
- ▶ Addressing FTA funding eligibility and driver requirements, which can be difficult to resolve for TNC partnerships
- ▶ Having robust marketing and public education

TNC Partnership Performance

The performance of TNC partnerships can be hard to determine due to the lack of transparency and performance data provided by TNCs. These data and information are often considered proprietary; therefore, it is difficult to gain complete insights into how a ride-hailing program is performing.

Generally, ride-hailing trips are one passenger in one vehicle at a time without combining passenger trips, although one TNC vehicle can serve multiple trips per hour by performing multiple single-passenger trips in succession, given that trip lengths are typically short.

Micromobility

Park City's suite of micromobility options – shared bicycles, scooters, and other lightweight personal vehicles – is currently limited to the Summit Bike Share program previously described. This program offers affordable and environmentally sustainable options for trips in and around the Park City / Kimball Junction area. Other types of micromobility, like electric scooter share, might support people making connections to transit. Summit County currently bans electric scooter share companies.



Figure 70. E-scooter (Source: Fehr & Peers)

Chapter 7: Initial Public Outreach & Engagement

Chapter 7. Initial Public Outreach & Engagement

At the beginning of the project, a Public Involvement Plan (PIP) was developed to define and guide the Plan's public involvement and community outreach activities. This chapter summarizes the first community outreach phase, where problems, issues, needs, and opportunities were identified. For the second section of community outreach, which focused on collecting feedback on three proposed alternatives, see Chapter 9.

Guiding Principles

The overarching goal of the Park City SRTP public involvement process is to provide opportunities for mutual learning, increased awareness, and meaningful input. Residents, community groups, partner agencies, City departments, and other stakeholders came together to define a shared vision for Park City Transit in the coming years.

The plan's public outreach and engagement efforts are based on the following guiding principles:

- **Meaningful and Participatory.** We deployed outreach tools and structured activities to enable participants to provide specific, usable inputs to the technical team. The Fehr & Peers team prioritized engagement tools that also allow participants to learn about community transit issues and options and consider a wide range of ideas.
- **Responsive and Flexible.** Using a mix of creative and traditional approaches, City staff and the project team proactively reached out and engaged diverse community and stakeholder groups in a variety of settings within Park City. While setting clear expectations, the process was structured to adapt to findings and conditions throughout the project and to deftly shift available resources based on lessons learned at each phase of the process.
- **High-Touch and High-Tech.** Many people respond well to personal, face-to-face communication. Outreach methods such as intercept events and meetings with existing boards and organizations allowed for “high touch” face-to-face interactions. In addition, the project employed parallel digital tools to provide a “high tech” aspect to engagement through online platforms.
- **Clear, Focused, and Understandable.** Activities had a clear purpose and use for the input and were described in language that was accessible and easy to understand.

Key Audiences

The SRTP study process allowed Park City to further build a network of diverse and engaged community members to collectively contribute to improving Park City's transportation system. In particular, the public involvement process sought out and considered the viewpoints of hard-to-reach groups, such as communities of color, low- and moderate-income residents, seniors, youth, and people with disabilities, in the course of conducting public outreach and involvement activities. As a result, the key audiences listed below were targeted through the appropriate public involvement and outreach methods.

- Park City residents and community members
- Elected and appointed officials, including City Boards
- City staff
- Other local and regional transportation agencies
- Transportation, public health, and community advocacy and resource groups
- Large employers and local businesses
- Chamber of Commerce and visitor-focused organizations
- Residents and families with limited mobility and access
- Spanish-speaking residents, employees, and visitors
- Seniors and older residents
- Youth and students
- People with disabilities
- Visitors and second homeowners

Engagement Activities

Given the recent public involvement through *Vision 2020* and the *Park City Forward* Long Range Transportation Plan (LRTP) process and the timeframe for project completion, public outreach and stakeholder engagement were focused on maximizing input using the most efficient and targeted means. As a result, the following methods of public outreach were employed:

- One-on-one stakeholder interviews at the beginning of the project to solicit input on the planning process and desired outcomes
- A project Advisory Committee (AC) that includes PCMC staff, engaged community members, and other members of relevant transportation advisory groups
 - The SRTP AC met to identify needs, review the preliminary system design, and review the preferred system alternative
- An online community survey about transit needs, gaps, and priorities within the Park City Transit service area
- An online AC and stakeholder survey about possible evaluation criteria for system alternatives
- A public open house to present future conditions and potential transit system scenarios
- Three pop-up open houses plus additional self-guided or PCMC staff-led pop-up open houses
- Facebook Live for Spanish Speaking Audience
- Review and summary of the public input from Vision 2020 and LRTP
- Two presentations to PCMC City Council

Public outreach and engagement efforts were compatible with ongoing public health guidelines and CDC COVID-19 protection recommendations. As a result, some outreach components were hosted online instead of in person for community safety.

Schedule

The initial public involvement schedule is shown below and corresponds with key milestones in the study development process.



Figure 71. Initial public involvement schedule

Stakeholder Committee

Introduction

This section details the initial community outreach carried out to inform the development of the Park City Transit Short-Range Transit Plan. Included in this memo is a review of:

- Stakeholder input gained from stakeholder interviews with key community representatives
- Input from members of the project advisory committee
- An online community survey in both English and Spanish.
- An online survey to staff and advisory committee members regarding the establishment of evaluation criteria

Key Stakeholder Input

To solicit input on the challenges, needs, and opportunities for developing the SRTP, key stakeholders from throughout the Park City community were brought into the process through stakeholder interviews and the formation of an AC.

Stakeholder Interviews

To better understand the unique transportation needs of the Park City area, ten stakeholder interviews were conducted by Fehr & Peers between the project kick-off in late June and mid-October 2021. These stakeholder interviews afforded more in-depth conversations with representatives from a broad cross-section of community leaders and organizations within Park City. The stakeholders interviewed (and the constituents they represent) were identified by Park City staff to incorporate an array of perspectives from people who are interested in or impacted by potential changes to Park City Transit.

The stakeholders, organizations, and groups interviewed included:

- Park City Mountain Resort
- Deer Valley Resort
- Summit County
- Park City Municipal Corporation
 - City council members (2)
 - Mayor
 - Staff, including City Manager and Deputy City Manager
- Park City Transit
 - Supervisors and management team
 - Bus operators

Advisory Committee

In the first months of the project, the AC was formed to help guide the SRTP development process and provide input at key points throughout the project process. AC members were identified by Park City staff based on interest, past involvement in transportation issues, and association with community organizations. In some cases, there was overlap between the stakeholders interviewed and those who volunteered to participate in the AC.

The AC is comprised of members with the following interests or affiliations:

- Park City Chamber of Commerce
- Utah Department of Transportation (UDOT), regional and state representatives
- Existing Park City Transit riders
- The National Ability Center
- Multiple homeowner associations (HOAs) or neighborhood groups
- Christian Center of Park City
- Recycle Utah
- Park City School District
- Parents of school-age children in the Park City School District
- Park City Community Foundation
- Historic Park City Alliance
- Summit County
- Park City City Council
- Vail Resort - PCMR
- Deer Valley Resort
- High Valley Transit (HVT)

Common Stakeholder Themes

Peak Traffic Concerns

The most prominent concern we heard was around the impact to both visitors and locals of peak traffic at

certain times of the day during the peak tourist seasons, as well as during commute hours on certain roadways

such as SH 248 and SH 224. Many stakeholders also expressed concerns that the bus has to sit in this same traffic within Park City and, as a result, is not able to operate efficiently during peak traffic periods.

Bottlenecks and Current Roadway Limitations

Related to traffic concerns was a general recognition by stakeholders that the existing roadway network is physically constrained and is laid out in such a way that creates bottlenecks and delays for cars and buses. A few stakeholders wondered if an aerial transportation solution such as a gondola would be a way to move people more efficiently, avoiding the congested bottleneck areas.

Need for More Direct and Faster Connections

Another common theme we heard from stakeholders was the need to improve routes so that connections between key destinations are time competitive with personal vehicle travel times. Many stakeholders expressed the need for direct, fast connections between major activity centers such as Bonanza/Prospector, Old Town, and Deer Valley.

Microtransit Interest (and Caution)

Many people we met with and spoke to expressed interest in microtransit, perhaps as a result of High Valley Transit's new microtransit service. Many saw opportunities for microtransit in areas of Park City, while some expressed doubts about the ability of microtransit to move large numbers of people. Most of the conversations around microtransit concluded that it could be part of the solution for certain areas of Park City where running large fixed-route buses may not make sense. There was also a concern from some people about microtransit being detrimental to the local taxis.

Clean Slate Approach

Some people felt it was important to take a fresh look at how transit operates within Park City and the surrounding areas and incorporate a clean slate approach to thinking about the future of Park City Transit. Those who expressed this idea thought that nothing about the current system should be viewed as sacrosanct.

Coordination of Services with High Valley Transit

Another common topic was the need for proactive and ongoing coordination with Summit County's new transit agency, High Valley Transit (HVT). A few people were concerned that having two transit agencies would be confusing to riders, may create longer travel times, and may result in possible duplication of service (perception of inefficiencies of two agencies versus one). It was mentioned that this is a current problem for paratransit (ADA) riders in navigating whom to contact for trip requests.

Defining Who is Served by Park City Transit

A common discussion point was whom Park City Transit should focus on from a travel market perspective. There was no consensus on this point, as some people felt visitors and day skiers should be the focus, others thought locals were the primary market, and others thought commuters should be the focus.

Service to Quinn's Junction Area

Most stakeholders believed that a new connection to the Quinn's Junction Area was important, especially with the construction of a new park-and-ride lot planned for SH 248 and US 40. Many people thought it would be helpful to local traffic if commuters were to park at Quinn's and take the bus into Park City, while others saw a new Quinn's route as important in connecting to the various medical and recreation

destinations in Quinn’s and the Park City Heights affordable housing area. An additional park-and-ride opportunity was also identified for the city-owned Gordo lot.

Better Bus Stops and Wayfinding

Some stakeholders identified the need for much-improved bus stops (through the development of bus shelters, lighting, benches, sidewalk and pathway connections, etc.) as a way to build ridership and make transit more attractive. There was also discussion around how the current bus stop signage and route information, as well as general transit system wayfinding, need to be easier for users to understand. With many users of Park City Transit being visitors who are new to the system and likely not regular transit riders generally, this need was identified as particularly important.

Integrated Multimodal System

Some stakeholders expressed a desire for transit to connect more seamlessly with other modes, such as walking and biking. Ideas for improvement included building safe crosswalks near bus stops, building new sidewalks to connect to bus stops, having bike racks at all bus stops, and locating more shared mobility options such as the Summit Bike Share at more bus stops. The need for more complete parking management as a tool to move people from driving to taking the bus was also mentioned.

Account for Major New Development

Another topic of conversation among stakeholders was the need to consider how new property developments and redevelopments will create the need for different transit solutions. We were encouraged to account for the impact of these planned developments, especially the Deer Valley Snow Park Lodge project and the PEG Park City Mountain Resort Base Area redevelopment project.

Takeaways

Some key comments included:

- *“Make sure you include underrepresented groups in the planning process and develop service with an eye towards equity.”*
- *“Everyone knows our roads are overcapacity at certain times, but there is no room for carving out bus lanes or expanding intersections.”*
- *“With High Valley Transit now focusing on regional service, this is Park City Transit’s chance to take a completely fresh look at how best to provide services and how to incorporate innovation.”*
- *“We need the public to know that there is no silver bullet when it comes to reducing congestion – if we really want to get serious about making transit the best option for getting around, then there are serious trade-offs we should talk about.”*
- *“Let’s make sure that transit moves the greatest number of people quickly between key nodes.”*
- *“The easiest and most important thing we should do is improve the bus stops.”*

Community Survey Results

A public survey in English and Spanish was conducted to help best identify transit needs, gaps, and priorities within the Park City Transit (PCT) service area. The survey consisted of 26 questions, separated by whether the respondent had or had not ridden PCT before taking the survey. The survey was open from September 22 to November 8, 2021, and received 574 total responses (544 in English and 30 in Spanish).

Common Themes

When asked to describe their transportation challenges, common issues were:

- Transit service is too infrequent/limited frequency
- Transit travel time is too long
- Bus stops are too far from their origin or destination, or there is no service in their area
- Service on Royal Street

When asked how they would prioritize potential improvements, people's preferences were:

- Increasing bus frequency (more buses per hour)
- Making bus routes more direct with shorter travel time between destinations (more comparable to car travel time)
- Improve connectivity between neighborhoods, downtown, and other major destinations
- Convenience and frequency of busses are high priorities.

Those Who DID Ride Park City Transit

Over 90% of survey respondents had ridden PCT before. The respondents who said they did ride PCT rode one to four times per month before the onset of the COVID-19 pandemic. Their primary trip purpose was skiing, snowboarding, or other recreation, and they rode PCT to avoid dealing with parking. While they had ridden less since then, the majority stated that after the pandemic is over, they plan to return to riding PCT as much as they did before.

Those Who Did NOT Ride Park City Transit

Of the 43 respondents who indicated they did not ride PCT, 45% indicated that it was because they don't have bus service or bus stops where they live or want to board. This is also supported by the 12 comments received concerning what might encourage people to try riding PCT. When asked how they would prioritize potential improvements, the top-ranking options were:

- Increase bus frequency (more buses per hour)
- Make bus routes more direct with shorter travel time between destinations (more comparable to car travel time)

General Demographic and Travel Behavior

In total, three-quarters of respondents live in Utah, with the majority in Park City. In terms of age, respondents were mostly adults between the ages of 36-65.

When respondents were asked what they thought were the top three most important trips PCT should serve for locals and visitors, the highest-ranked option was neighborhoods to and from Old Town. Conversely, the lowest-ranked option was neighborhoods to and from Prospecter.

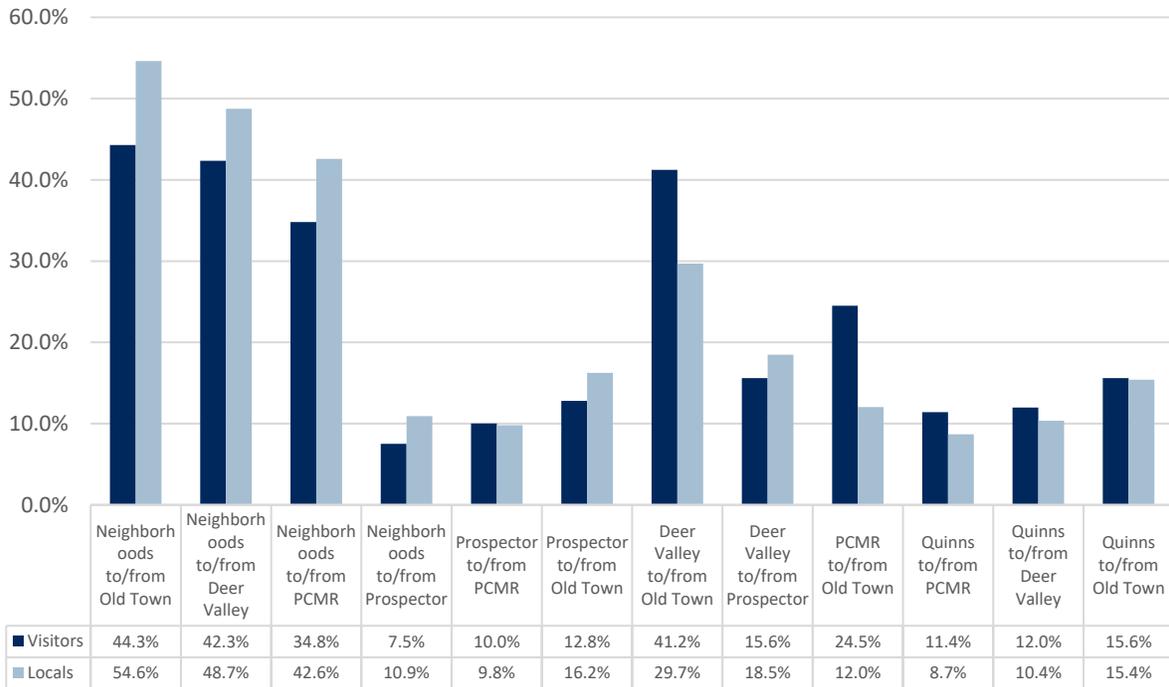


Figure 72. The most important trips PCT should serve, according to survey respondents.

Source: Fehr & Peers, 2021.

Project Website

Park City created a website: <https://www.parkcity.org/departments/transportation-planning/transportation-plans/short-range-transit-plan>, to update the public on upcoming events and the project process.

Community Engagement via Social Media

Park City staff also engaged with the community through city social media channels throughout the project, regularly giving updates on open houses, project progress, and promotion of online surveys.

**Chapter 8:
System
Alternatives
Development
and Analysis**

Chapter 8. System Alternatives Development and Analysis

Route and Service Opportunities

Based on input from the community, stakeholders, Park City and High Valley Transit Agencies, and the data analysis, three transit service alternatives were identified as options for future transit service.

- **Alternative 1: Cover New Areas**
- **Alternative 2: Fast Direct Service Between Key Points**
- **Alternative 3: Minimize Transfers**

These alternatives were reviewed against the evaluation criteria and presented to local stakeholders and community members for feedback to determine which service would best address community transportation needs. Each alternative focused on a specific set of benefits but it was broadly communicated that the final alternative would combine the best parts of these three alternatives. The details of each alternative are discussed on the following pages.

Alternative 1: Cover New Areas

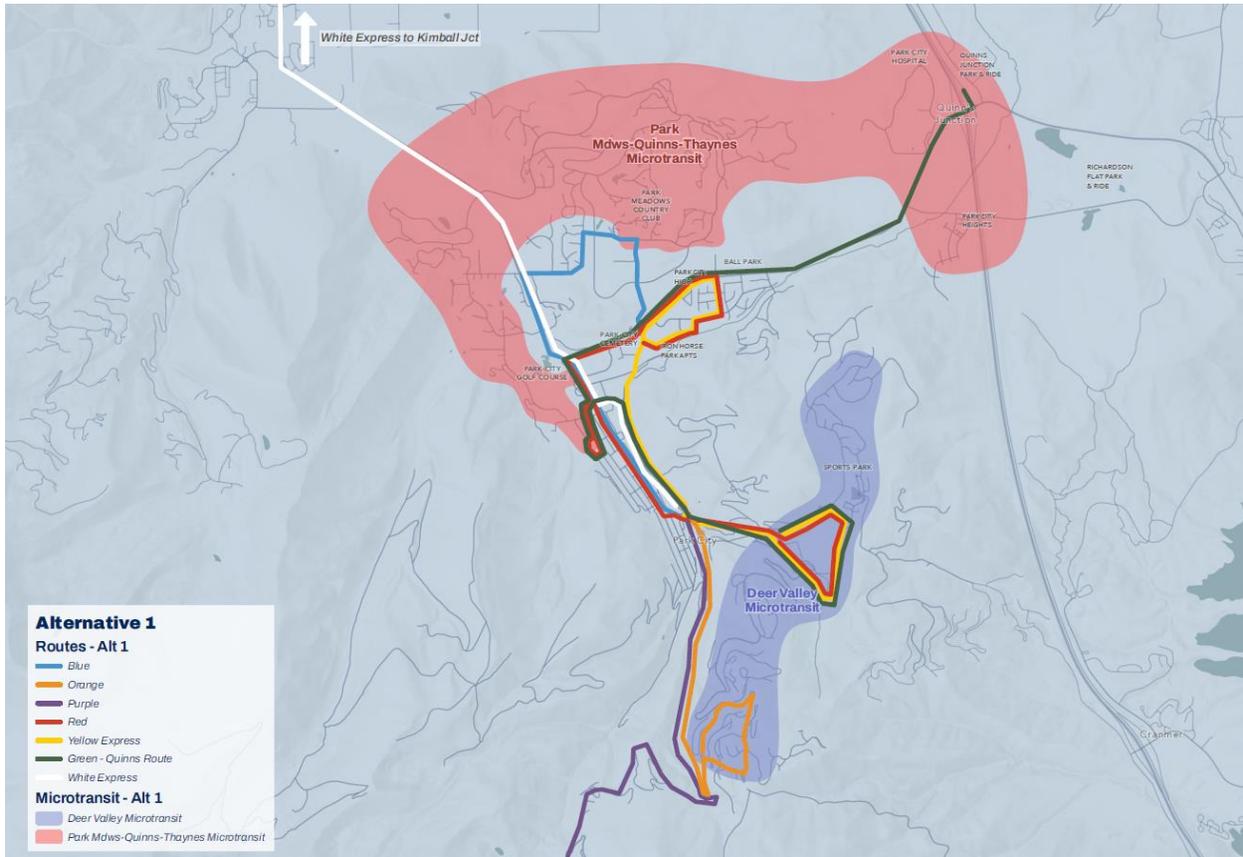


Figure 73. Alternative 1 conceptual routing. (Source: Fehr & Peers)

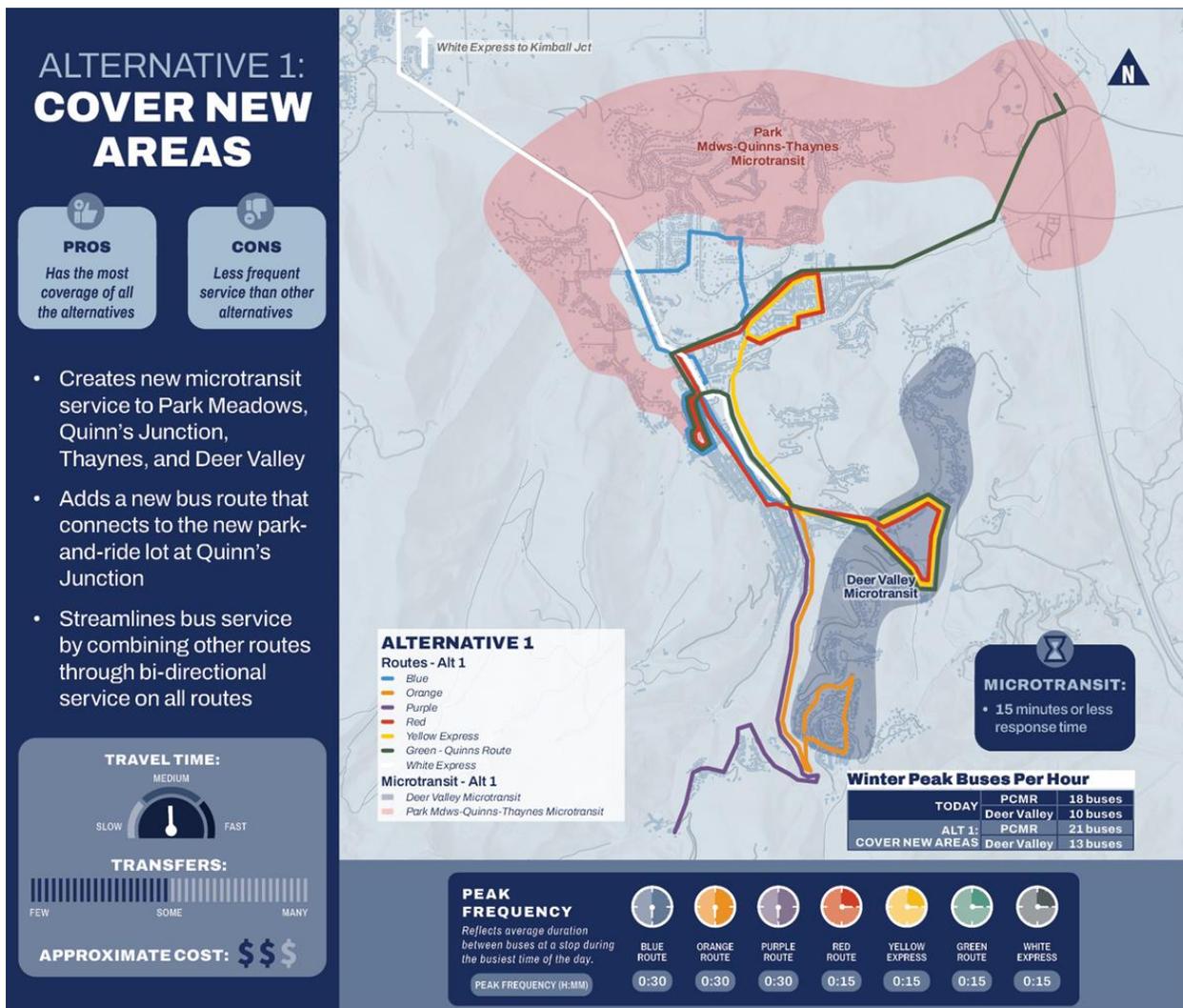


Figure 74. Alternative 1 overview. (Source: Fehr & Peers)

The first alternative would extend service out to areas previously not served by transit. This includes a new bus route connecting the Quinn's Junction area and any existing or new park-and-ride lots and a new microtransit service to Park Meadows, Quinn's Junction, Thaynes, and Deer Valley. In addition, this alternative would streamline bus service by combining other routes with bi-directional service on all routes. The Alternative 1 conceptual route map is shown in Figure 73, and the analysis of performance and considerations is shown in Figure 74.

Key Advantage: Has the most coverage of all the alternatives

Key Disadvantage: Less frequent service than other alternatives, involves more transfers to make certain trips

Alternative 2: Fast Direct Service Between Key Points

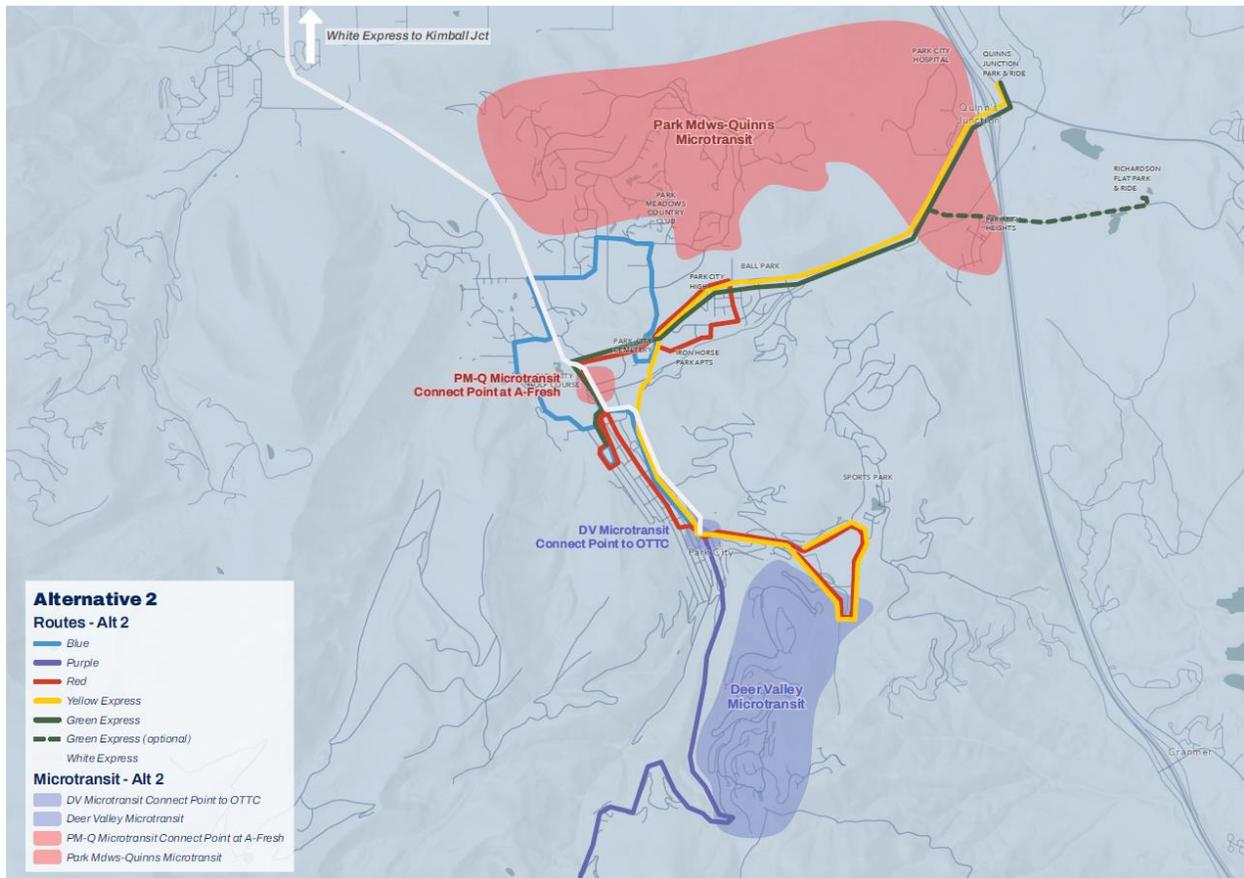


Figure 75. Alternative 2 conceptual routing. (Source: Fehr & Peers)

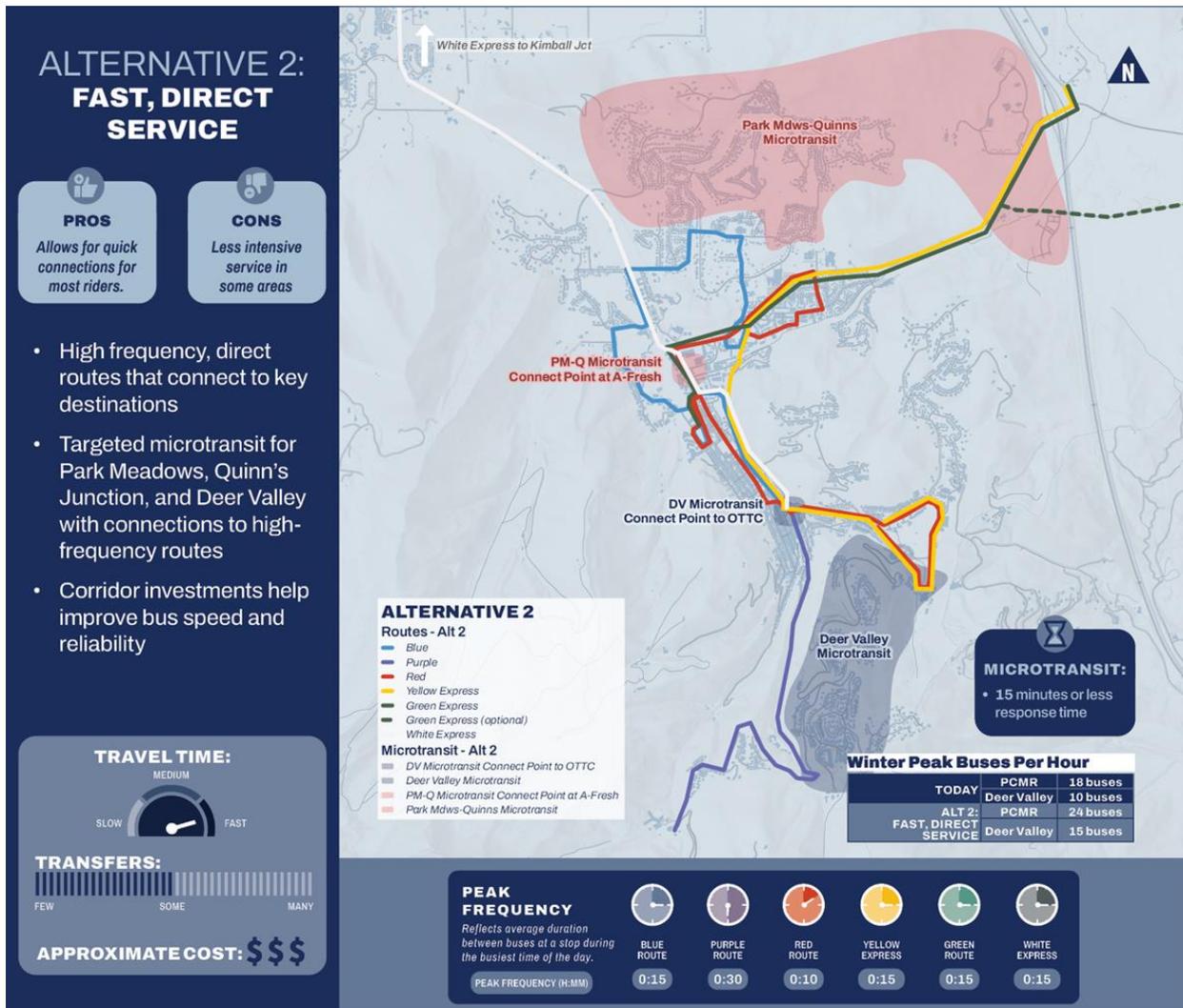


Figure 76. Alternative 2 overview. (Source: Fehr & Peers)

The second alternative would provide faster and more direct service than the other two alternatives. These high-frequency, direct routes connect riders to key destinations in addition to targeted microtransit for Park Meadows, Quinn's Junction, and Deer Valley areas with connections to high-frequency routes. Overall corridor investments would also help improve bus speed and reliability. The Alternative 2 conceptual route map is shown in Figure 75, and the analysis of performance and considerations is shown in Figure 76.

Key Advantage: Allows for quick connections for most riders

Key Disadvantage: Less intensive service in some areas

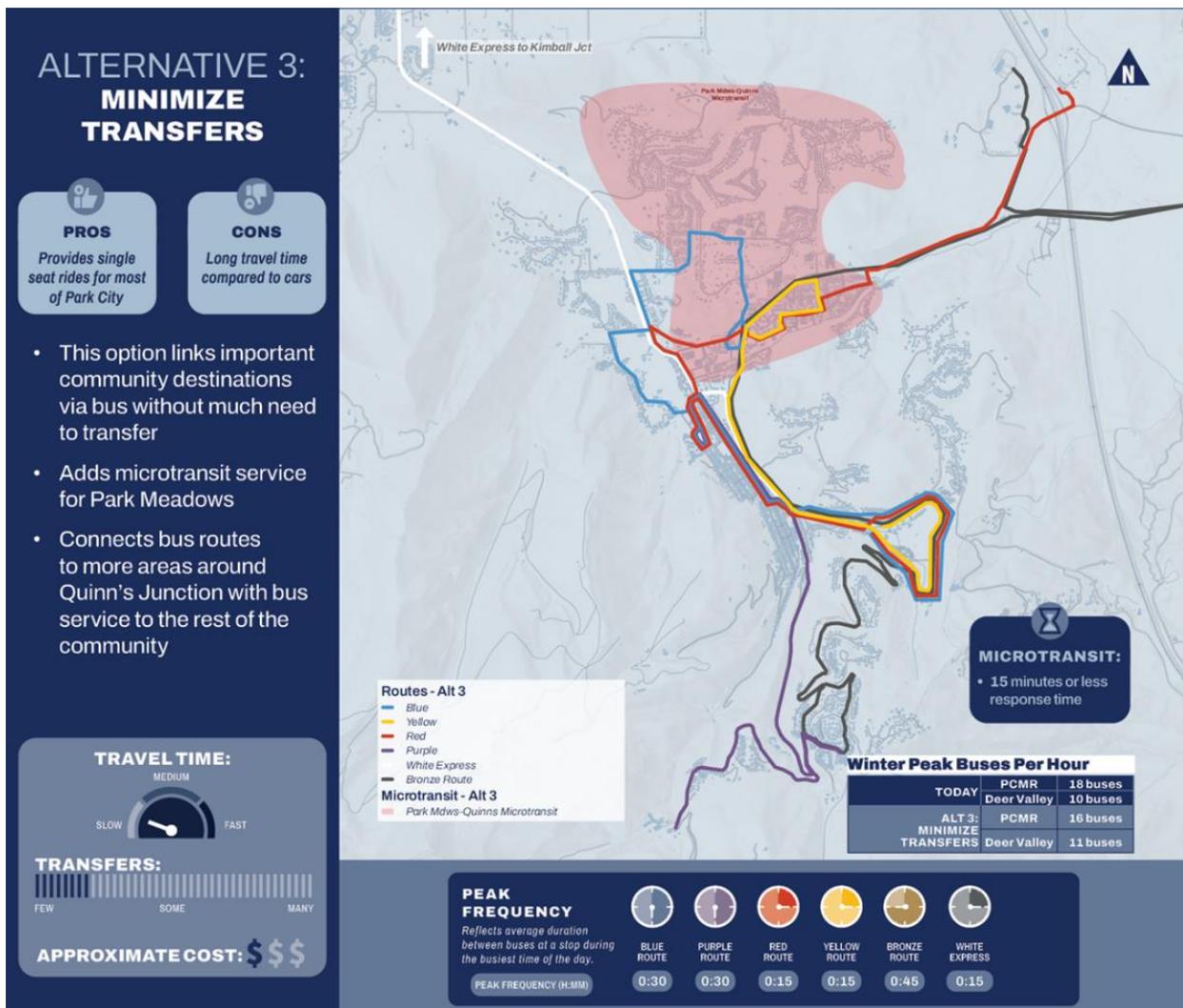


Figure 78. Alternative 3 overview. (Source: Fehr & Peers)

The third alternative would link to important community destinations via bus without much need to transfer. Moreover, it connects bus routes to more areas around Quinn's Junction with bus service to the rest of the community. In addition, this alternative would add a microtransit service for Park Meadows. The Alternative 3 conceptual route map is shown in Figure 77, and the analysis of performance and considerations is shown in Figure 78.

Key Advantage: Provides single-seat rides for most of Park City

Key Disadvantage: Long travel time compared to cars

Evaluation of Alternatives

Identification of Evaluation Criteria

A short online survey was created and distributed to the AC and Project Management Team regarding criteria for evaluating potential route and system alternatives. The goal of the survey was to create the top evaluation criteria to be used for rating new route and system alternatives.

As shown in **Table 26**, the top four evaluation criteria identified by survey respondents were:

- Potential to increase total ridership
- Potential to make connections between key destinations quicker, more direct for the majority of riders (impact on overall travel time)
- Ease of use for passengers, especially new riders (are routes and services easy to understand and convenient?)
- Potential to reduce peak traffic

All four of these criteria were ranked as important by at least 50% of the respondents. Close behind these four was the “Impact on the number of transfers,” rated as important by 46% of respondents. All other evaluation criteria were rated at 25% or lower.

Table 26. Results of Evaluation Criteria Survey

EVALUATION CRITERIA OPTIONS	NUMBER OF RESPONSES	PERCENT OF RESPONDENTS
Potential to increase total ridership	16	66.67%
Potential to improve productivity (riders served per hour)	6	25.00%
Potential to make connections between key destinations quicker and more direct for a majority of riders	19	79.17%
Potential to serve a larger area of Park City	3	12.50%
Potential to reduce peak traffic	12	50.00%
Ease of use for passengers, especially new riders	15	62.50%
Impact on fleet needs	1	4.17%
Impact on transit department staffing needs	1	4.17%
Impact on ongoing transit operational budget	2	8.33%
Impact on street infrastructure (how do current streets operate?)	4	16.67%
Impact on transit infrastructure (bus stops, transit centers, etc.)	4	16.67%
Impact on the number of transfers between routes/buses required	11	45.83%

Source: Fehr & Peers, 2021.

Evaluation of Alternatives

The alternatives were reviewed against the evaluation criteria, and the summary of findings for that analysis is shown in **Table 27**. The results of the community and stakeholder input on these alternatives are outlined in **Chapter 9**.

Table 27. Alternatives Evaluation Summary

	Ridership Potential	Fast, Direct Service for most passengers	Ease of use	Reduce peak traffic
Alt 1 Covers New Areas	 Medium	 Medium	 Medium	 Medium
Alt 2 Fast Direct Service Between Key Points	 Most	 Fast	 High	 Most
Alt 3 Minimize Transfers	 Least	 Long	 Medium	 Least

 Favorable,  Somewhat Favorable,  Unfavorable

Alternatives Analysis of Travel Time Impacts

As shown in Table 28, an analysis of impacts on travel time and service quality (frequency) was performed for the three alternatives between key origins and destinations. Green indicates an improvement in travel time and service quality, while gray indicates no real change, and red indicates a worsening of quality and travel time, as compared to the current system.

Table 28. Summary of Overall Service Quality Impact by Trip Origin/Destination Pair

Origin/Destination Pair		Alternative 1	Alternative 2	Alternative 3
<i>Between</i>	<i>And</i>	<i>Alternative 1. Coverage for New Areas Focus</i>	<i>Fast Direct Service Focus</i>	<i>Minimize Transfers Focus</i>
Old Town Transit Center	Montage	No Change	No Change	A small increase in Travel Time
Old Town Transit Center	Silver Lake	No Change	Increase in travel time due to transfer between route and microtransit service, but larger service area	No Change
Old Town Transit Center	Deer Valley	More service in winter peak, less service in other periods	More service in peak winter and summer, less service in winter off-peak and evening	More service, except for a small reduction in evenings.
Old Town Transit Center	PCMR	More service in winter and summer peaks, less service in other periods	More service in peak winter and summer, less service in winter off-peak and evening	More service in winter evenings and summer, less service in winter daytime
Old Town Transit Center	Prospector	More service in all periods, more express service in peak winter and summer	Substantial increase in peak service and express service, and in winter off-peak service	Increase in service and express service, particularly in winter off-peak service
Old Town Transit Center	Quinn's	Convenient fixed route service to PnR, less convenient service to other activity centers via microtransit	Convenient fixed route service to PnR with high frequency, less convenient service to other activity centers via microtransit	Convenient fixed route service to PnR and direct service to other activity centers
PCMR	Prospector	Additional service in winter and summer peak periods, no change in other periods	Additional service in winter and summer peak periods, smaller expansion in winter off-peak	Two fewer departures in the winter peak period, no change in other periods
PCMR	Park Meadows / Thaynes Canyon	No Change	Two additional buses per hour in peak winter, no change in other periods	No Change
Deer Valley	Quinn's	Slight improvement in frequency in peak winter	Additional departures in all periods, with up to 8 (summer) with direct service	Additional departures in all periods, with up to 5.3 buses per hour (winter) with direct service
Deer Valley	Park Meadows / Thaynes Canyon	No change in frequency, but transfer required	Improved frequency, but transfer required	No Change
Prospector	Park Meadows	No Change	Two additional buses per hour in peak winter, no change in other periods	No Change
Prospector	Quinn's	Convenient fixed route service to PnR, less convenient service to other activity centers via MT	Convenient fixed route service to PnR with high frequency, less convenient service to other activity centers via MT	Convenient fixed route service to PnR and direct service to other activity centers
Quinn's	PCMR	Convenient fixed route service to PnR, less convenient service to other activity centers via MT	Convenient fixed route service to PnR with high frequency, less convenient service to other activity centers via MT	Convenient fixed route service to PnR and direct service to other activity centers

Chapter 9: Public Outreach & Engagement on Alternatives

Chapter 9. Public Outreach & Engagement on Alternatives

Public outreach was vital in developing the Park City Short-Range Transit Plan alternatives. Surveys, open houses, and targeted events were open to the public, many of which were available in English and Spanish. In addition, a stakeholder group informed the alternatives development throughout the process, representing residents, resorts, and government agencies. Feedback from all groups and events was used to refine the transit alternatives and develop the final plan.

Common Themes

Throughout all means of public outreach and input, several common themes were mentioned:

- Dedicate and use bus-only lanes (particularly on SR-224 and SR-248)
- Questions about microtransit as it is a recent technology
 - Microtransit may work better to serve new areas rather than replacing current areas served by fixed-route transit
- Increase bus hours and frequencies to better meet the needs of service and hospitality industry employees with non-traditional works shifts (6:00 am shift starts to 11:00 pm/12:00 am shift ends)
- Connections to park and ride lots are vital for increasing transit ridership and reducing traffic
- The increased frequency will decrease reliance on timetables and increase the ease of use of the system
- Need for fast, direct connections for most riders and a general preference for elements of Alternative 2
- Certain elements of Alternatives 1 and 3 should be incorporated into the final plan

Stakeholder Committee Alternative Evaluation Meeting

Stakeholders met with Park City Transit on March 17th and March 18th, 2022, to discuss the proposed transit alternatives:

Alternative 1

The group would like to see better service to and from Quinn's Park & Ride, as well as a possible connection to Richardson Flat Park & Ride. Microtransit coverage in Alternative 1 for Park Meadows and Deer Valley areas was well-received overall. There was a discussion of whether microtransit would have enough capacity to serve the Thaynes Canyon area. The introduction of Alternative 1 brought up some general comments on microtransit and service options, as discussed in the Overall Comments section below.

Alternative 2

The stakeholder group noted that maintaining consistent service to park and ride lots will be important for employees to establish transit as a reliable commuter mode in all seasons. The group was also interested in establishing an optional Yellow express route and an interim route to Richardson Flats Park & Ride until the Quinn's Park & Ride is completed.

The efficiency of microtransit, particularly at Park Meadows/Quinn's, came into question as connecting at a fixed-route stop might be faster than connecting to a specific drop-off/pick-up point. The group also noted that the Deer Valley microtransit does not account for the commuter based on service hours and lack of

service to Solamere, whose residents have been vocal about the lack of transit service; suggested considering expanding the Deer Valley microtransit service area to include this community.

Alternative 3

This alternative was noted as being a simpler option that might be better for visitors but does not necessarily meet all the needs of residents and workers. Deer Valley mentioned they were considering starting a shuttle service into Solamere and wondered if establishing a public-private partnership would be possible to service residents (an encompassing Solamere and up Empire Pass).

Overall Comments

The group expressed a desire for express lanes on SR-224 as High Valley Transit reported that their microtransit experiences the most delays due to traffic congestion. It was also noted that microtransit might perform better at Deer Valley than at PCMR due to the easier flow of traffic within Deer Valley. There were overall questions about the efficiency of microtransit and how microtransit could support the hauling of passenger ski gear. Additionally, the group questioned if microtransit would increase the number of vehicles on the roadways.

Open House

To communicate information on the development of the SRTP, Park City and Fehr & Peers conducted an Open House on Wednesday, March 16th, 2022, in the Park City Library. In addition to promotion across social media and newsletters, invitations were mailed to every residential address in Park City.

Informational boards were displayed around the library's Community Room, with team



Figure 79. Attendees at the March 16th open house

members available throughout to answer questions. All materials were presented in both English and Spanish, and a fluent Spanish-speaking team member was present to assist. For those unable to attend in-person, the materials were also made available online, both in English and Spanish. Boards were also left in a prominent location of the library for approximately one week and received 12 additional comments. Sticky notes and pens were provided for library patrons to write comments in the same format as the open house. The online option also included numerous opportunities to provide feedback. Open house participants learned about the current service, the options considered for this short-range transit plan, and the proposed transit alternatives.

Transit Services and Elements

Open house participants liked high-intensity bus routes that run frequently to reduce reliance on timetables. Participants also appreciated the electric vehicles and hoped that the High Valley Transit vehicles will also convert to electric soon. Microtransit was noted as a good option for neighborhoods not currently served by transit. Participants liked express buses for peak winter season travel to/from the park and ride lots to the ski resorts. Direct connections to key destinations from park and ride lots were noted as important to increase ridership. Specialty transit was seen as helpful for Park City's outdoor recreational amenities. Overall, people would like to see increased frequency and extended service hours. Pedestrian and bicycle connections were common issues, and people expressed support for dedicated bus lanes and transit signal priority to improve transit service speed and reliability. Many people like using the smartphone transit app for reliable information on bus services and would like to see integration with High Valley Transit routes.

Alternative 1

Participants primarily had questions and comments about microtransit, the park and ride lots, and eliminated service to Wyatt Earp and Sidewinder areas. Participants liked that the Yellow express route bypassed all the traffic at PCMR, the expanded coverage, and the frequent connections to the park and ride lots. However, participants didn't like some of the lost connections (Canyons, Trailside, Park City Heights), having Deer Valley and PCMR on the same route, and the lack of connection to the hospital, dog park, and ice arena.

Many participants liked the concept of microtransit, particularly for Park Meadows and Deer Valley, resulting in a simpler Blue route, while others had questions about its feasibility and

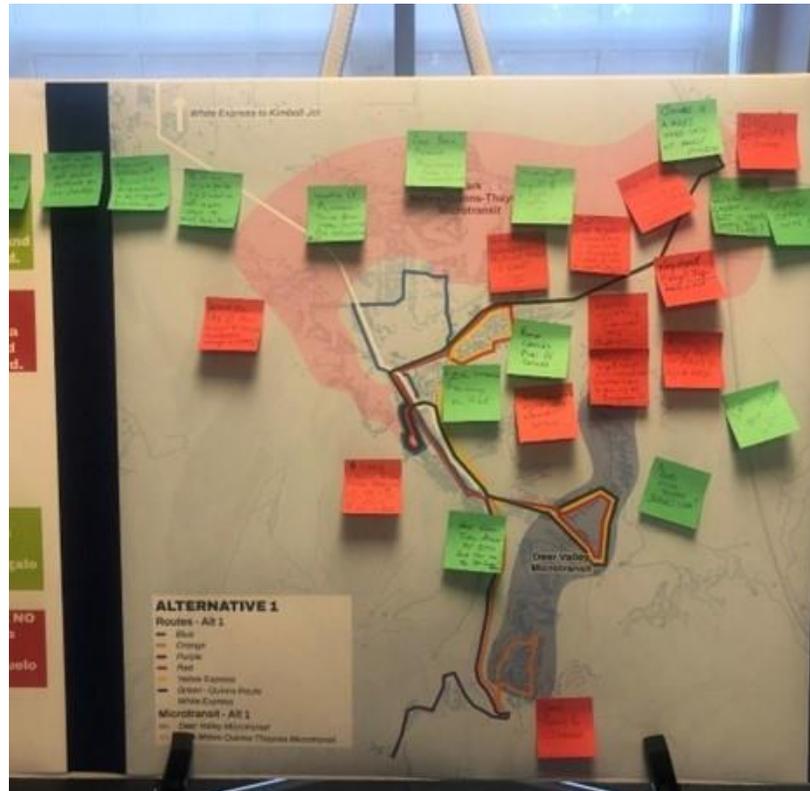


Figure 80. Community feedback on Alternative 1

effectiveness. There were also some mixed opinions on the service to the park and ride lots – some wanted as much service as possible to encourage ridership, but others questioned if Quinn's Park Ride had enough demand for two routes. There were several concerned comments about the elimination of direct service at Wyatt Earp/Sidewinder and Butch Cassidy. One comment was disappointed with the elimination of the McPolin Elementary pick-up stop.

More general comments included a request to make parking more expensive to encourage folks to ride the bus, to have the Green route turn around at OTTC and not go to Deer Valley, to combine the Purple and Orange routes, and to increase ski lockers at the resorts and around town to reduce reliance on personal vehicles.

Alternative 2

This alternative received the most support overall. Participants liked the increased frequencies, the separate routes for PCMR and Deer Valley resorts, the coverage, and the fast travel times. However, participants did not like losing the Orange route, the inconvenience for Prospector residents to reach the Yellow express route, the lack of a direct connection between Quinn's Junction and the resorts, and the high cost.

This alternative also received comments about eliminating the stops at Wyatt Earp/Sidewinder and Butch Cassidy. Comments concerned the feasibility and safety of crossing SR-248 to catch the inbound bus. There was a request to add the Thaynes Canyon area to the microtransit zone. There was also a desire for an express connection from the Richardson Flat Park & Ride to both resort base areas. One comment suggested replacing bike lanes with bus lanes, especially on Park Avenue, to improve bus travel time.

Alternative 3

Participants noted the dangerous inbound left-turn from Quinn's at Wyatt Earp. They also requested an improved pedestrian crossing at the bus stop on the 1300 block at Park Avenue and a "No Parking" sign along the stop. Participants liked the reduced transfers, although it was noted that it might be more helpful for visitors than residents who know where they are going. They also liked the coverage, cost, microtransit in Park Meadows, Royal Street bus, and the direct route to the hospital. Participants did not like the circuitous routes and their long travel times, lack of express buses, reduced routes for PCMR and Deer Valley, infrequent service, and reduced coverage.

Overall Comments

In general comments about the overall service, participants seem to struggle with the separation of Summit County Transit into High Valley Transit and Park City Transit. The High Valley Transit service received more critical comments than the Park City Transit service, most commenting on reliability. A few comments expressed a need for service into Silver Lake as well as increasing the frequency and/or service window of the Purple and 101 routes. There was a request to bring back the Lime route (#6) to access Park Avenue from Kimball Junction. While the High Valley Transit Route provides service from Kimball Junction to OTTC, it runs along Deer Valley Drive rather than Park Avenue. Snow Creek Drive was noted as a potential transit hub for most routes. Another comment requested that buses run later weekends. Participants stressed the importance of improved pedestrian and bicycle infrastructure and connections, extended service hours to serve commute trips, as well as quality service to park and ride to encourage transit use. Dedicated and utilized bus lanes were noted for their potential to improve travel times for transit.

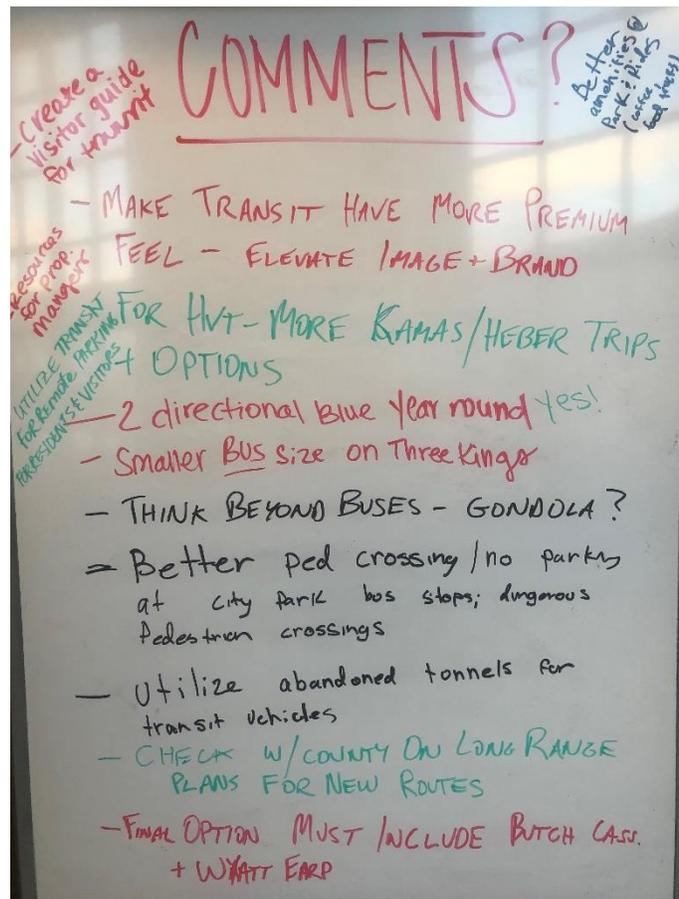


Figure 81. Overall comments collected at community open house

Online Interactive Survey

An online interactive survey was another public input tool utilized to solicit input on the draft alternatives. The survey was active from mid-March until early May of 2022 and was available in both English and Spanish. Survey participants were shown the various transit vehicles and service types that were explored in this short-range transit plan. Most participants found all of the options to be helpful in enhancing transit options and traffic mitigation in Park City. Express buses received several positive comments as participants noted the touristic nature of the city – most people have the same few key destinations, and the quicker they can get there, the better. Participants also indicated that a bus rapid transit (BRT) service would also be useful in decreasing travel time if buses could utilize the bus-only lanes. Microtransit received mixed reviews, as some participants thought it could be helpful for areas not currently served by transit, and others thought it did

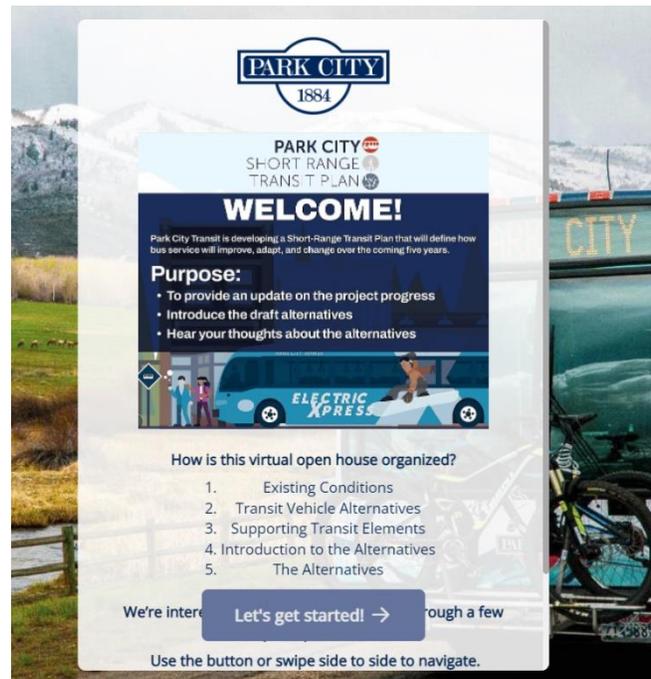


Figure 82. Landing page of the online interactive survey/virtual open house

not apply to Park City’s specific transit needs and abilities. Outside of the options presented, many participants expressed a need for higher frequencies of routes, particularly during peak season.

Participants were then shown various corridor enhancements and supporting infrastructure elements of a transit system to improve comfort, reliability, and travel time. These included bus stop improvements, integrated transit apps, park and ride lots, transit signal priority, and queue jumping. Next, they were asked for their thoughts and comments regarding the supporting transit elements in corridor enhancements. Most participants stated that all the options shown would be helpful in increasing rider comfort, transit convenience, and overall travel time and reliability. Some participants submitted their own ideas, including providing reliable Wi-Fi on buses and stops, bike racks/lockers, and bus stop operations and maintenance improvements, especially in the winter, for improved snow removal.

Comments received on Facebook promoting the survey:

- *“Be on time. I check the app and it states the minivan will be coming. They never come. I have never been able to book a microtransit. App always states none are available.”*
- *“Reinstate the Pink route through Sliver Springs”*
- *“Address the lack of options for those whose trip into PC starts outside of PC. There are zero reasonable bus options for those traveling 248.”*
- *“No more big buses with fixed routes, more microtransit covering ALL of park city (e.g., 84098 and 84060 as a whole).”*

The online survey then presented the three alternatives for feedback.

The Alternatives

Next, you will see three alternatives. You will then be asked for your thoughts on each one. Your feedback will be used to inform the final plan.

These aren't final. The final alternative will combine the best parts of these three alternatives.

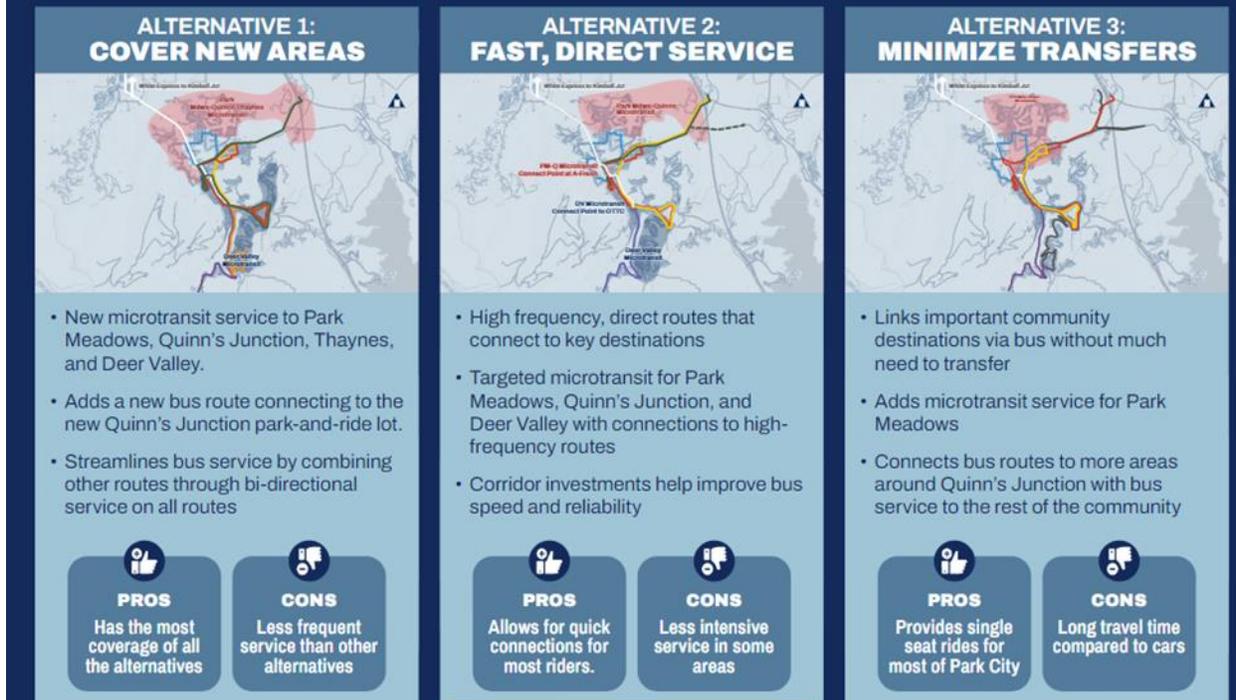


Figure 83. Overview of the Alternatives

When presented with Alternative 1, participants liked:

- 15-minute frequency from Quinn's Park & Ride to the resorts
- Added coverage (primarily due to the routes near Quinn's Junction and the new microtransit service areas)
- The Yellow express route to Old Town, bypassing PCMR traffic
- Low cost

Participants did not like:

- Lack of service along Snow Creek Drive
- PCMR and Deer Valley being on the same route
- Leaving out Park City Heights
- Stops between Quinn's Junction and the resorts – should be express
- Lower frequency in Park Meadows
- Lack of service to the ice rink

Regarding Alternative 2, participants liked:

- High-frequency routes
- Quick connections for most riders
- Good coverage of the area by standard routes, supplemented by targeted microtransit
- Focus on potential regional transit market capture

Participants did not like:

- Less service in some areas, including Snow Creek Drive and Aerie Drive
- The high cost
- Microtransit and potential problems staffing microtransit
- Less access to ski resorts

For Alternative 3, participants liked:

- Transfers between routes were not necessary for many connections
- The microtransit zone in Park Meadows
- Red Route service on Snow Creek Drive

Participants did not like:

- Circuitous routes with long travel times
- That Aerie and other neighborhood areas were not included
- The lower amount of microtransit overall
- No express route options

The survey concluded by asking participants if they had any further comments related to this project or the Park City Transit bus services in general. General comments included:

- *"Look at Gordo Lot for park and ride instead of proposed Quinn's lot"*
- *"Microtransit for Park Meadows will work well"*
- *"Think about more consistent service for Snow Creek Drive with possible mobility hub"*
- *"Finding enough drivers for expanded service will be a challenge in today's labor market"*
- *"Concerns about service quality, coordination, and route connectivity since the split of Park City Transit and High Valley Transit and changes to schedules and routes"*
- *"Microtransit should serve locals, and big buses should serve skiers and commuters"*
- *"Pedestrian safety improvements and improved sidewalks and crosswalks are needed, especially crossing SR-224 or SR-248"*
- *"Dedicated bus lanes are needed as traffic gets worse, especially noticeable increase recently on SR-248"*
- *"Buses need to be more frequent (every 15 minutes or less) during winter mornings and late afternoons"*
- *"Need large park and ride lots outside of town to reduce in-town traffic"*

Targeted Group Outreach

McPolin Elementary School PTO Meeting

Park City staff participated in a Parent/Teacher Organization (PTO) meeting at McPolin Elementary School on February 1st, 2022. The group spoke about the need to address the workforce transit needs in Park City and Summit County. While recreational trips for visitors are a critical issue, many who commute to work in and around Park City could make their trips via transit. The group mentioned that transit would be useful for students if it went to primary destinations without many transfers. In addition, most thought transit was safe for older kids.

Park Silly

Park City conducted a meeting with the Executive Director and the Director of Operations for Park Silly on February 2, 2022. Reliability was pointed out as an issue, as well as service hours not reaching employees' commuting times. Park Silly staff also noted that people did not seem to be aware of the Homestake lot and that the target users were not being reached. As Park Silly staff suggested, an effective way to reach the target users was to encourage the translation of messages from managers to the target users. In addition, real-time apps were of interest as buses often get delayed at the ski resorts.

Park Silly visitors are often repeat visitors and can be influenced from one year to the next. People seemed to like the messaging on reader boards. Future potential messaging strategies could include reaching out to local non-profits and businesses, hosting a creative booth for transit at the Park Silly event, or providing stickers for riding the bus and/or riding a bike to the event (Tahoe has a similar program). Staff noted that it is difficult to convince wealthier residents and tourists to ride the bus and that many people are unaware of microtransit (or

that it's free). Spreading messaging about the varied services and their cost (or lack thereof) will make others aware of alternative transportation options.

Montage Resort

On February 10, 2022, Park City staff held a virtual meeting with 34 Montage resort staff members. Staff expressed the need for transit to run earlier and later than current operations as some employee shifts start at 6:00 am, and others end at 11:00 pm. The resort remains open into May and will need transit service up until then. Transit service is important to employees but less so to guests – most guests prefer to take the shuttle operated by Montage into Old Town. Staff expressed a desire for a direct connection between Prospector Square and the resort as most employees live in Prospector and Old Town. As the affordable housing supply runs low, staff are living further from the resort, and microtransit seemed desirable as a way to connect employees outside of the current service area to fixed-route service. Staff were concerned, however, about needing to download a separate app for microtransit services. Finally, bus-only lanes were of interest to speed up service and increase reliability.

Park City Restaurant Association

Park City staff met with the Park City Restaurant Association on February 14, 2022. The group was mostly interested in increasing bus frequencies and service hours on weekends if the City had the capacity to do so. Improved weekend service was of interest; the City and the ski resorts could work together to establish possible weekend service routes. The conversation around microtransit was primarily introductory as most were unfamiliar with the service.

Historic Park City Alliance (HPCA)

The Park City team met with the Historic Park City Alliance (HPCA) on February 15th, 2022. HPCA provided positive feedback for High Valley Transit’s microtransit service, although they were wary of it becoming similar to private TNC companies (such as Uber and Lyft) and wanted to see microtransit usage continue to be restricted to certain boundaries. They liked that the service ran earlier and later than traditional transit so that employees could commute to and from work and that, overall, it was preferable to traditional transit. The group also noted that some popular parking lots, such as China Bridge or the library, overflow and that they look forward to Richardson Flat Park & Ride becoming more popular. The group also acknowledged that it is difficult to convince reluctant transit riders to sit in the same traffic as personal vehicles – a dedicated lane for buses would provide a visible advantage to riding the bus. Exploration of an underground option was encouraged to further avoid surface-level traffic delays. The Transit to Trails project seemed to be appreciated, and the group suggested allowing access to city vehicles in exclusive areas to promote ridership for recreational activities.

Park City Library

The Park City Library leadership and employees met with Park City on February 15, 2022, to discuss their experience with transit and recommendations for the Short-Range Transit Plan. Staff noted that many employees utilized transit before the COVID-19 pandemic. Staff noted that traffic is an issue when it comes to transit reliability – providing and using dedicated lanes would greatly improve service. It was noted that the traffic signal at Richardson Flat causes congestion and that motorists use alternative backroads to avoid the congestion. Staff would like to see better connections to and from park and ride lots: Quinn’s Park & Ride should connect to the Rail Trail,

noting that a pedestrian crossing would be of interest; the Richardson Flat Park & Ride would also be an advantageous connection due to the upcoming development in that area; Heber traffic into the Richardson Flat Park & Ride is difficult and needs improvement; and Ecker Hill and Kimball could also benefit from improved access.

Library staff discussed microtransit with Park City staff, noting that some were reluctant to use the service due to a perceived lack of training of the current High Valley Transit microtransit operators and that they would feel safer with Park City staff conducting the vehicles. Staff noted that Upper Deer Valley might not be a successful microtransit service area due to the lack of affordable housing options in the area.

Overall, the library staff liked Alternative 3 for its frequency, proximity to desired destinations, and one-seat rides (transfers were noted as prohibitive for some riders). An additional barrier brought up by library staff were first/last-mile issues – walking to a bus stop and waiting at the stop is not often a pleasant experience. Staff recommended installing heaters at bus stops, allowing dogs on buses, and improving the loading and unloading process with gear (ski and bike). Alternative transit modes such as gondolas and underground options were brought up as additional ideas to overcome existing issues.

Deer Valley Resort

Park City staff met with Deer Valley managers in a virtual meeting on February 17, 2022, to discuss the three proposed transit alternatives. Alternative 3 was the least preferred option due to the long ride and wait times. A combination of Alternatives 1 and 2 was preferred. Staff would like to see higher utilization of the park and ride lots, suggesting that direct express buses from the park and ride lots to the resorts would encourage higher utilization. Furthermore, dedicating and using bus-only lanes would further decrease the travel time and encourage an alternative option to a

personal vehicle. Even promotional items such as free coffee on buses could incentivize workers and others to take the bus. Staff recognizes that getting people out of personal vehicles and into transit will be the most effective way to reduce traffic and travel times. A permit system for local personal vehicles into Park City bounds, paired with regional high-speed transit with Wasatch County, could effectively reduce the number of personal vehicles in town.

Deer Valley staff also provided input as to where employees live. They estimated that 50% of employees live in the Salt Lake valley, 30% live in Heber or Kamas, and 20% live in Kimball Junction or Park City. Due to the majority of the employees commuting from outside Park City bounds, park and ride lots with efficient connections are vital. Express buses to and between resorts were of great interest to serve those working at or visiting one or multiple resorts. These express buses could be limited to peak commuting and/or visiting hours of the day – other time periods could have the more traditional longer routes. Finally, Deer Valley staff noted that High Valley Transit and Park City Transit could have more cohesion to limit confusion between services.

Park City High School CAPS

On February 18, 2022, Park City staff presented the Short-Range Transit Plan alternatives to the Park City High School Centers for Advanced Professional Studies (CAPS), a national hands-on learning program. Students placed dots on a map indicating where they would like to transit to/from. A handful of students live or want to travel outside Park City boundaries. While many student questions revolved around High Valley Transit, they suggested providing more service near Kimball Junction and Heber City. In addition, they liked the idea of integrating park and ride lots and microtransit in neighborhoods to encourage alternative modes of transportation to the personal vehicle.

Stein Erickson Resort

On February 22, 2022, Park City staff set up a table presentation in the lunchroom of the Stein Erickson resort to gather feedback from resort employees. Common themes noted were a desire for earlier and later service to accommodate work staff. Early shifts start just before 7:00 am, and late shifts end around 11:00 pm or midnight. Staff also noted that even if Park City buses ran late enough, the SLC-PC Connect bus does not operate late enough to serve transfers after work. As a result, some staff utilize vanpools to travel to and from the valley.

Staff expressed a desire for separate, reliable routes to the different resorts with minimal transfers. They did not like Alternative 2 because it required a transfer from a fixed route to microtransit in order to reach Stein Erickson resort. Staff noted that dedicated bus lanes would increase reliability and that providing information inside the bus about how to get around before and after service hours would be extremely helpful. A manager of events also noted that summer is her busiest time with events such as company retreats – she would like to see higher frequency service kept all year.

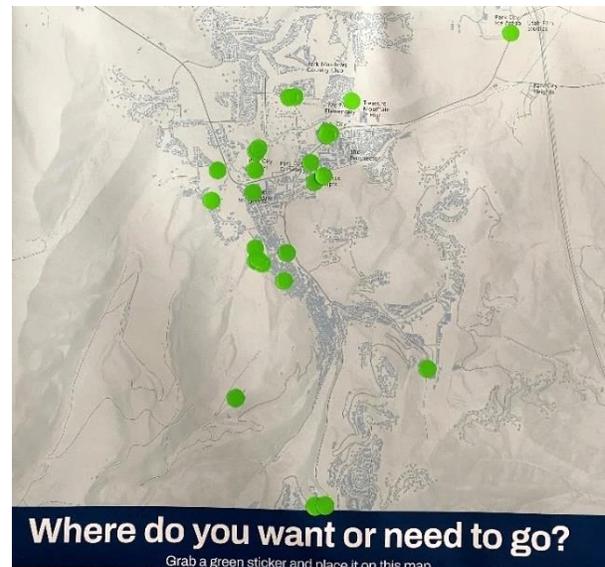


Figure 84. Community feedback from pop-up events

Ski Utah

Park City staff met with Ski Utah on February 23, 2022, at the group's monthly meeting. Park and ride lots for skiers were noted as a good plan for encouraging mode shifts, but the service has to be good enough to convince people to no longer drive to the resorts. At this point, paid parking at resorts was not being discussed. One attendee stressed the need to get resorts involved in and paying for more since much of the traffic is directly related to them.

Park City Lodging Association

The SRTP alternatives were discussed with the Park City Lodging Association on March 2, 2022. The association mentioned that many of their guests use the bus system, and that Park City Transit effectively reaches major destinations from the larger hotels in the area. Smaller or nightly rentals would likely use a microtransit service, but some higher-end hotels either provide transit or the customers would use a higher-cost taxi/TNC/shuttle service. Though this project is not working on this topic, airport service is a principal issue for this group.

Park City Council

Park City presented the proposed alternatives to the Park City Municipal Corporation (PCMC) Council on March 17, 2022. Microtransit received much of the attention at the meeting. Operationally, there were concerns about staffing, required licenses, and budget. Councilmembers Ryan Dickey and Becca Gerber were interested in a microtransit pilot to extend service to communities that are not able to support a fixed route and to better understand the operations, funding, and public reaction to the service. A constituent requested that Park City staff and council educate the public on how microtransit works and that it isn't a free TNC service.

There were also some comments about bus stops and a

request for clarification between a bus shelter and a bus stop. There was a request to learn which bus stops do not receive high ridership and how the proposed service changes would impact these stops. A public comment noted too many buses on Park Avenue and Heber Avenue and suggested adding a transit center to the resort center and unifying regional transit. However, it was noted that this would likely lead to reduced service for the Park City community. A constituent also requested a plan for bus stop improvements that includes unique, community-led designs to reflect the local character.

Overall, the group liked the goal-focused approach and outreach efforts and are aware of the decision between service offerings and associated costs.

Park City Heights Open House

Park City staff met with Park City Heights residents at an open house event on April 19, 2022, to discuss transportation needs for the neighborhood and review how the different alternatives could benefit Park City Heights. Residents indicated that they appreciate the existing on-demand service and stated that they like having the call-in option. Many people said they did not like to transfer at Park City High School and would rather transfer at the A-Fresh market stop. Staff indicated that they could add this as a courtesy stop going forward. Many residents said they commute to Salt Lake City and were not sure they would use any new service for commuting. The most important trip purposes indicated for getting into Park City were for youth and youth activities, shopping/dining, and accessing services.

Regarding the possible improvement of service through the development of a microtransit zone covering Park City Heights, residents were interested in this possibility and were curious about how it would work and where it would connect. Some residents wondered if a sidewalk could be added to Richardson Flat Road to connect to a possible new route on SR 248. Generally,

Park City Heights residents did not prefer microtransit to a route as long as easy connectivity into Park City was provided.

Park City Transit Operations Staff

On April 14, 2022, the project team met with PCT staff to review the alternatives in detail. Generally, PCT staff believe that incorporating new microtransit zones and new routes connecting to park and ride lots outside of the core of Park City are both viable concepts. The groups discussed that microtransit should complement and not compete with fixed-route service and that there are mixed perceptions of microtransit in the community.

For Alternative 1, the PCT staff liked the Green Route connection to Quinn’s but thought that a connection to Quinn’s might not be needed in the off-season. The Yellow Route was viewed positively and would be effective with a 15-minute peak frequency. In addition, the staff liked the microtransit areas.

For Alternative 2, PCT staff thought that fast, direct connections would move the most people and be successful, although the need for service to Quinn’s Park & Ride and Richardson Flat Park & Ride was deemed less necessary during spring and fall. The Deer Valley microtransit zone was viewed favorably and making the zone larger was discussed. Improvements noted for Alternative 2 included adding Orange Route back and making sure that the Quinn’s route could be operated independently of the rest of the system.

For Alternative 3, PCT staff did not favor this option overall but did like aspects such as the routing of Blue Route and connection to Richardson Flat Park & Ride for the winter season only.

Other general comments centered around the need for the system to be more adaptable to seasonal service needs with perhaps different service models for different seasons (e.g., fixed-route during peak season,

microtransit in off-seasons).

Old Town Transit Center Pop-Up Open House

On Friday, March 25, Park City Transit Staff and a fluent Spanish-speaking team member set up a “pop-up” open house at the Old Town Transit Center to discuss the service alternatives with transit riders. Staff spoke with about 20 people, including five bus operators from both Park City Transit and High Valley Transit. Major themes included service reliability and performance of High Valley Transit routes. Other comments included the need for all-day service, every 30 minutes or better, to Quinn’s Junction. One comment mentioned the need for better service on Park Avenue between Kimball Junction and Deer Valley (like the service offered on the 6 Lime route prior to the High Valley Transit split). Other comments stressed the importance of service that ran earlier and later in the day, especially on weekends. One participant commented about loving the idea of no transfers in Alternative 3. Among bus operators, staff availability for microtransit was a concern in the current labor market. Other comments from bus operators stressed the need for better service information at bus stops to reduce the number of questions asked at major bus stops, which drastically slows down service and increases boarding times in already-congested areas, such as the Park City Mountain base area.

Following the pop-up open house, the boards were left in the transit center for one week, and 27 new comments were received on the three alternatives. While not related to this project, one of the most common themes were concerns about the reliability and performance of High Valley Transit routes, specifically the 101 Spiro. One comment mentioned the need for better frequency on the 101 and the 9 Purple. Multiple comments were received in support of the yellow express and teal express routes, stressing the need for express buses that skip the traffic of Park City Mountain. Multiple comments noted the need for fixed-route service to Silver Lake. One comment praised the

cleanliness of Park City Transit bus routes and the excellent customer service provided by PCT drivers.

Spanish-Language Events

In addition to materials at the open houses being provided in both English and Spanish, as well as a dedicated team member fluent in Spanish at these events, the project team recognized the need to capture additional feedback from Spanish-speaking stakeholders. On Monday, June 13, staff attended the Noches de Verano en Parque de la Ciudad Park City concert, part of an annual Spanish-language concert series with free music and food targeted at Spanish-speaking members of the community. Two team

members fluent in Spanish were present to discuss the Short-Range Transit Plan and provide an update on the preferred alternative for the final plan. On Wednesday, June 15, the project team also conducted an online Spanish-language event with updates on the preferred alternative, in addition to other transportation and parking topics. The project team heard from around 25 people at the in-person event, and seven people attended the online event.

Especially among Spanish-speaking participants, the reliability/performance of High Valley Transit routes was a major concern. This was brought up on the boards left in the Library, OTTC, as well as the Noches de Verano concert and virtual event comments.

**Chapter 10:
Final
Service
Plan**

Chapter 10. Final Service Plan

This chapter details the final service plan and defines the vision for Park City Transit route and service development for the next five years. The final service plan is informed by the system analysis, the community, stakeholder, and staff input, the project Advisory Committee, industry best practices, and a realistic approach to achievability over the next five years.

Five-year Route and Service Plan

The five-year route and service plan detailed in this chapter is largely built from Alternative 2 with specific elements of Alternatives 1 and 3 of the three alternatives outlined in Chapter 8. System Alternatives Development and Analysis.

Overview

The final five-year service plan envisions a more effective, efficient, and connected Park City Transit system. The service plan seeks to create a transit network that is easier and more convenient for riders to use with more direct connections, higher peak frequencies on core routes, innovative new services for currently unserved or underserved areas, and a new focus on high levels of service along the SR-248 corridor. This envisions high frequency / express routes to connect to park-and-ride lots for reduced commuter traffic in town, as shown in Figure 85. The location and function of park-and-ride lots is being discussed and a joint project with Summit County is being developed. It should also be noted that the 10 White route is being developed as a full BRT route to serve as the spine of the SR-224 corridor.

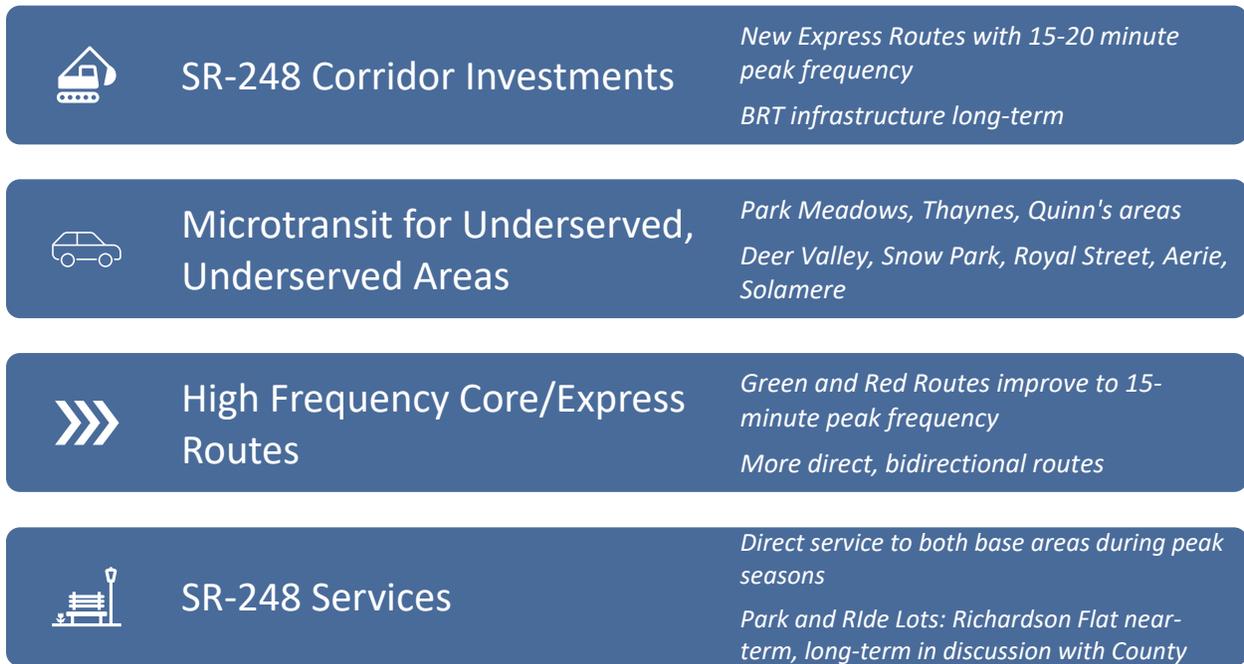


Figure 85. Core tenets of the Five-year Service Plan

Route Hierarchy

The SRTP vision is for three levels of routes that provide different levels of connectivity and service, as shown in Figure 86.

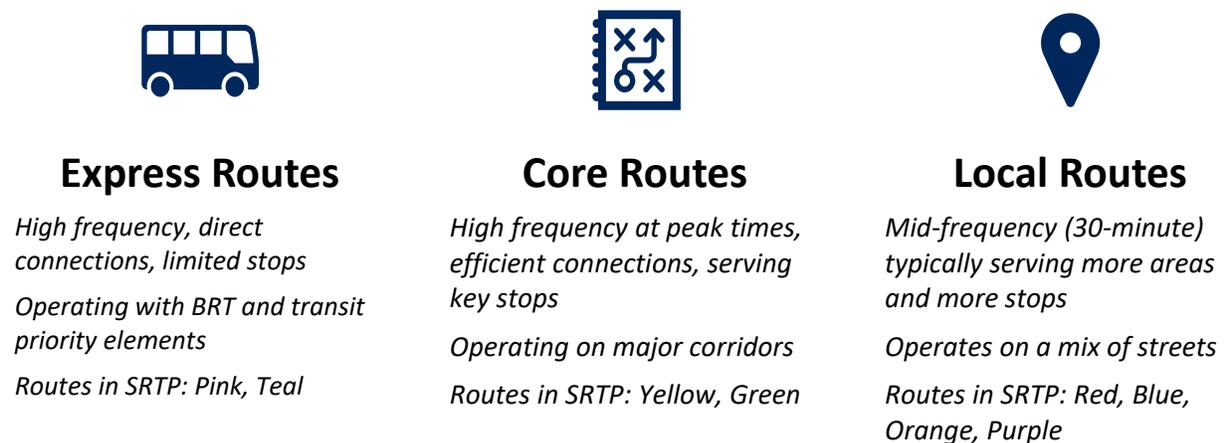


Figure 86. Levels of routes providing different levels of connectivity and service

Base System

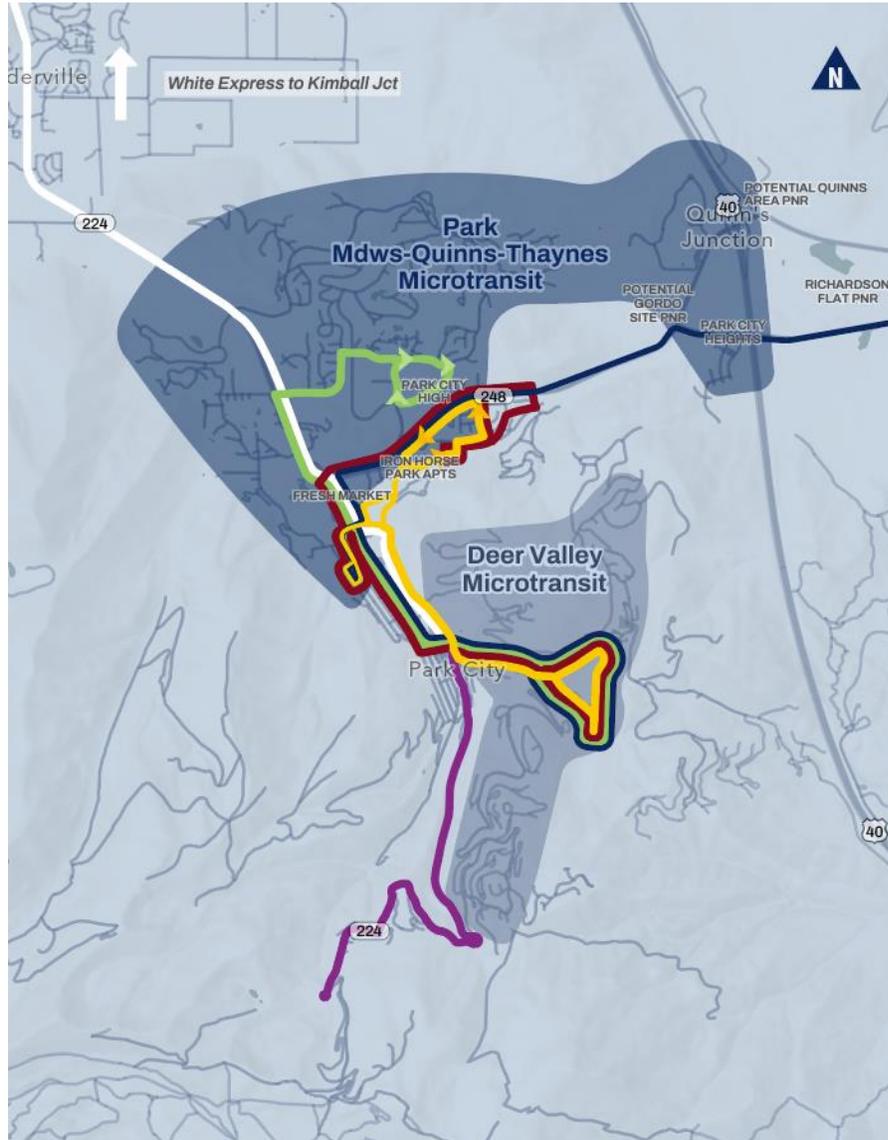


Figure 87. System map for the base (non-peak) final alternative

The five-year vision for the core base system for the spring and fall shoulder seasons is shown in . Frequency and connectivity are added to this base system for peak winter and summer seasons, but the core route structure stays constant. This system also simplifies the overall system with primarily bidirectional routes, a 15-minute frequency on Yellow Route, and a 30-minute peak frequency on all other routes. Microtransit is added year-round. Red and Yellow routes are similar to the current routing, with the possibility of retooling the Red Route to serve the Park City Hospital area based on future needs. A new Blue Route is added to serve Richardson Flat in the short term and Quinn's Junction in the long term. The Green Route is retooled to serve destinations on SR-224 north of Kearns Blvd/SR-248

more efficiently and no longer serves Thaynes, which is now served by microtransit.

Characteristics

- Five primary Park City routes plus White Express (through 2024, when White becomes a High Valley Transit route) and Trolley
- Two microtransit zones
- Requires 12 buses and three microtransit vans
- 8% more vehicle service hours than the current system
- The Trolley route remains the same as it is currently and is not shown on the map for simplicity

Peak System

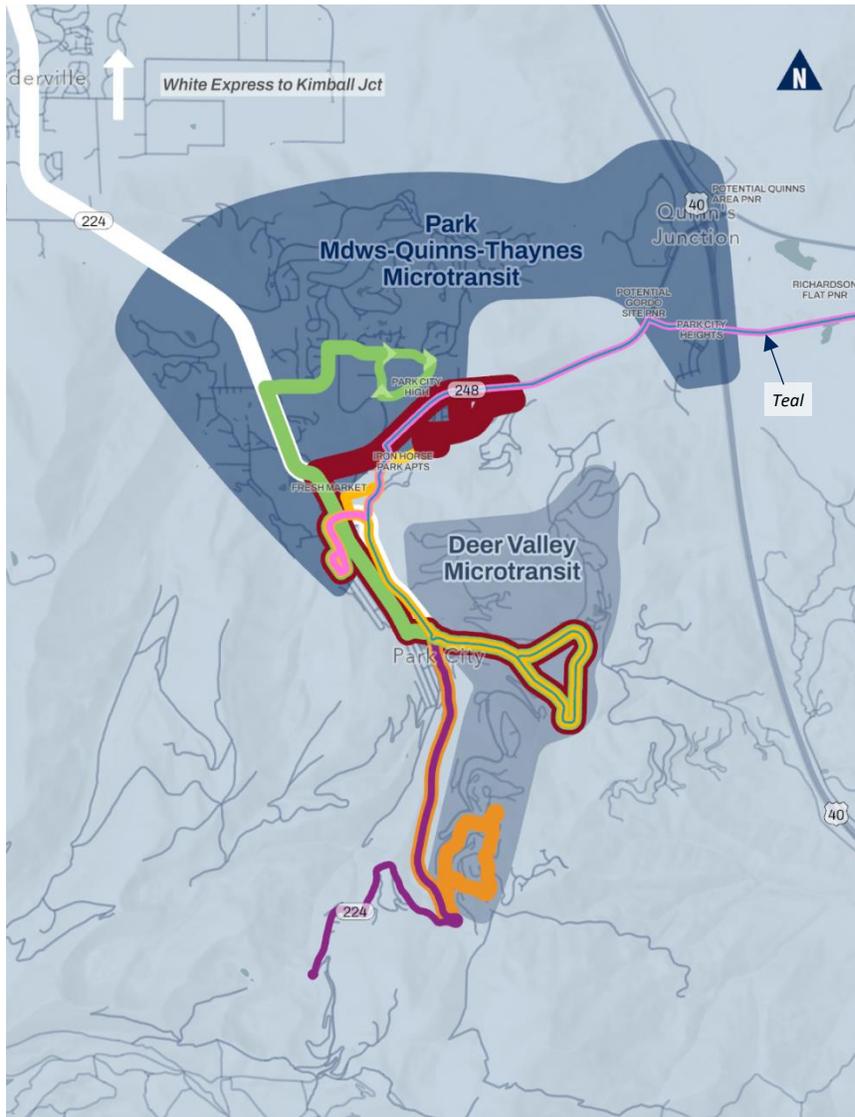


Figure 88. System map for the peak final alternative.

As shown in Figure 88, the peak system increases service levels across core year-round routes. New peak express routes (retooled Teal Route and a new Pink Route) to serve Richardson Flat in the short term and Quinn's Junction in the long term. Core routes have 15-minute peak frequencies. The Orange Route is retained as a peak season route (same as current). Microtransit zones have more vehicles added to retain responsiveness during peak times.

Characteristics

- Seven Park City routes plus White Express, Citywide, and Trolley
- Two microtransit zones
- Requires 21 buses and seven microtransit vans at peak hours
- 23% more service hours in the winter peak season and 37% more service hours in the summer peak season than the current system (without the White route)
- Trolley and Citywide Night Service (winter) remain the same as current and are not shown on the map for simplicity

Microtransit

Two new microtransit zones are established as part of the five-year vision. One zone serves Quinn’s, Park Meadows, PC Heights, and Thaynes with transfer points at Park City Municipal Athletic & Recreation Center (PC MARC), Park City Mountain Resort (PCMR), Bonanza, and Park City High School. The second zone serves Aerie, Solamere, Deer Valley Snowpark, Royal Street, and Silver Lake, with transfer points at Snowpark and Park City’s Old Town Transit Center (OTTC). Same zones year-round.

A new peak winter flex route (shown as a white dotted line) is added for Thaynes as part of the microtransit service for two hours in the morning

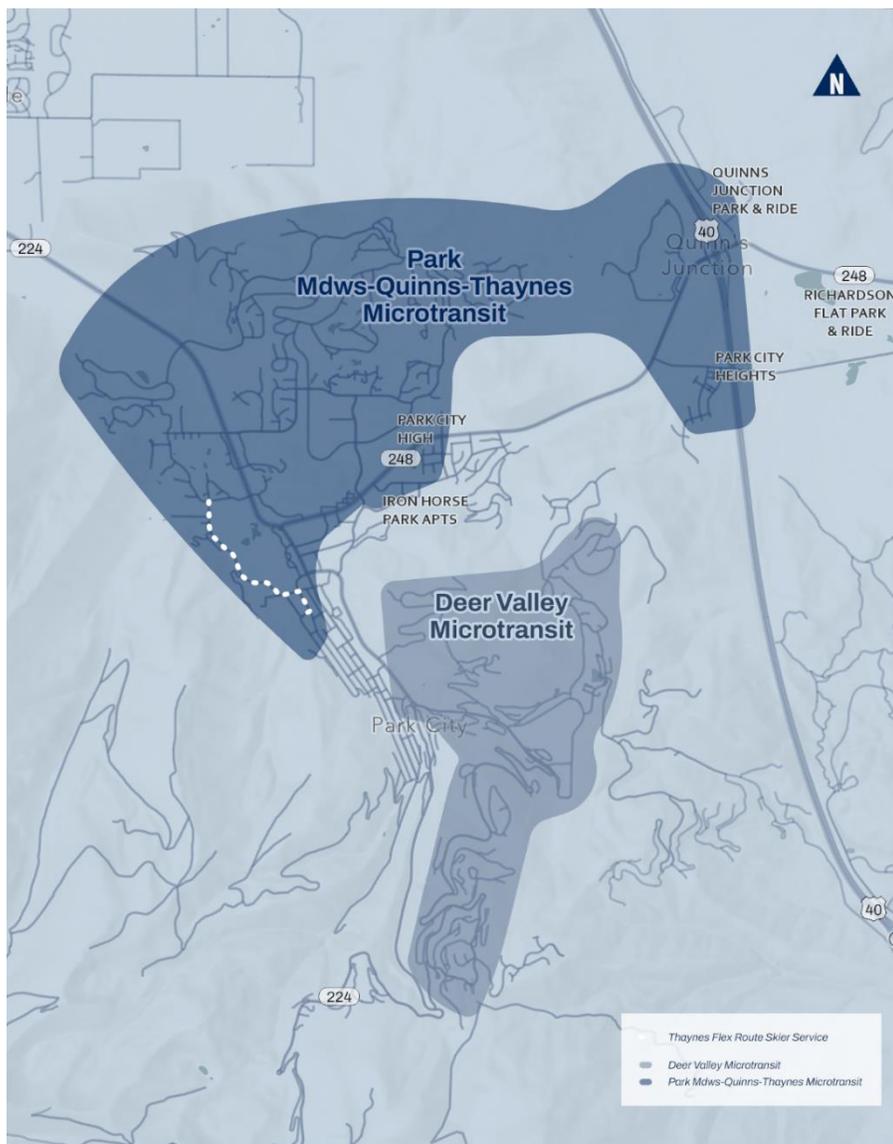


Figure 89. Microtransit zones and Thaynes Flex Route skier service

and two hours in the afternoon to get skiers to/from Park City Mountain Resort on a regular, frequent schedule (no reservation required).

Characteristics

- 15-minute response time for peak season, 20-minute for base season
- 6:30 AM until 10:30 PM service year-round with additional late night service during peak winter season
- Requires 5-7 vans during winter/summer peak seasons and three during base/shoulder seasons
- 44-81 vehicle service hours per day, depending on the season
- Flex route established for Thaynes for peak skier demands

Red Route

The Red Route serves as a local route with consistent service levels year-round. As shown in Figure 90, the routing matches the current Red Route, with the long-term possibility of serving Park City Hospital and Studio Crossing Development. Route frequency and travel time will need to be reviewed prior to implementation of the extension.

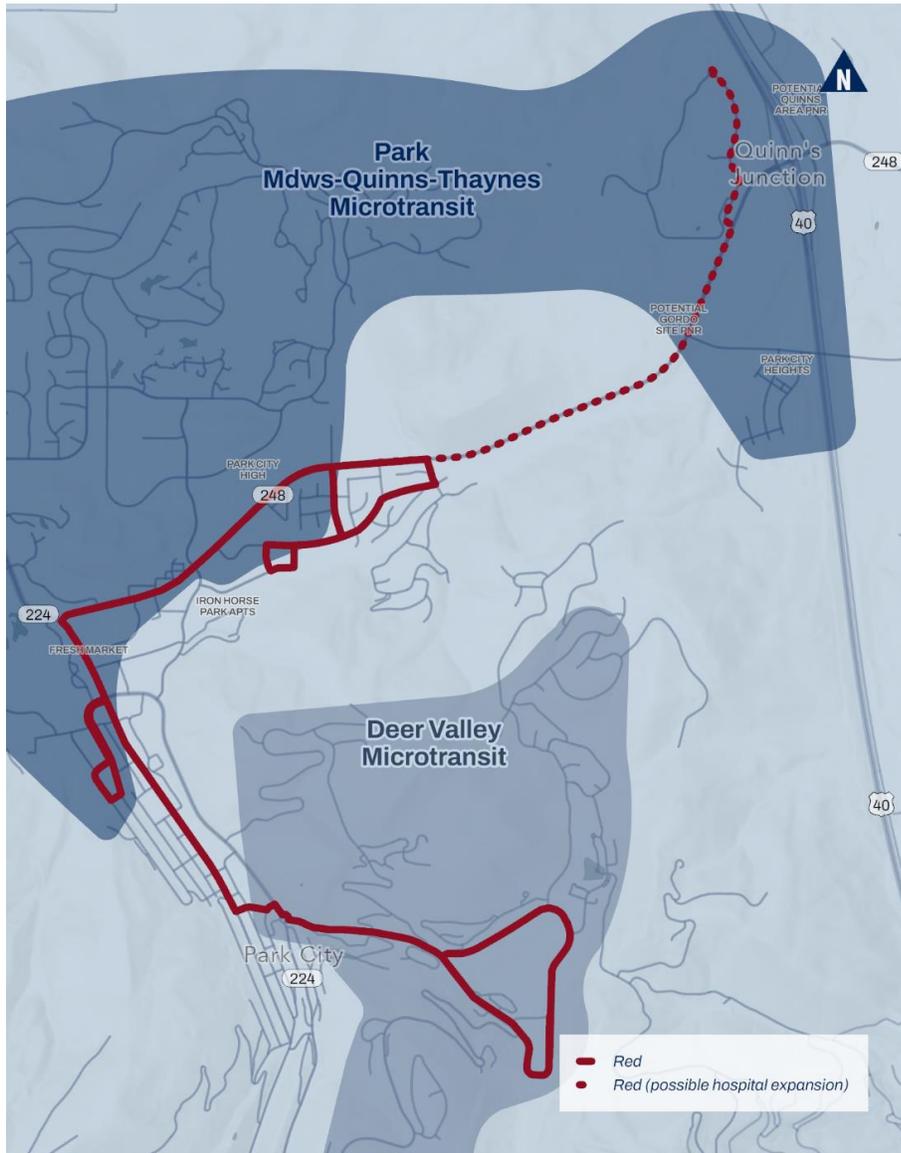


Figure 90. Routing for the Red Route

Characteristics

- Peak and Base seasons: 30-minute frequency all day and evening
- 60-minute roundtrip cycle time with recovery
- Two buses all day and evening

Yellow Route

The Yellow route is a core route, similar to the current Yellow Route but uses Deer Valley Drive as shown in Figure 91. Service frequency is increased for peak hour and peak season service levels.

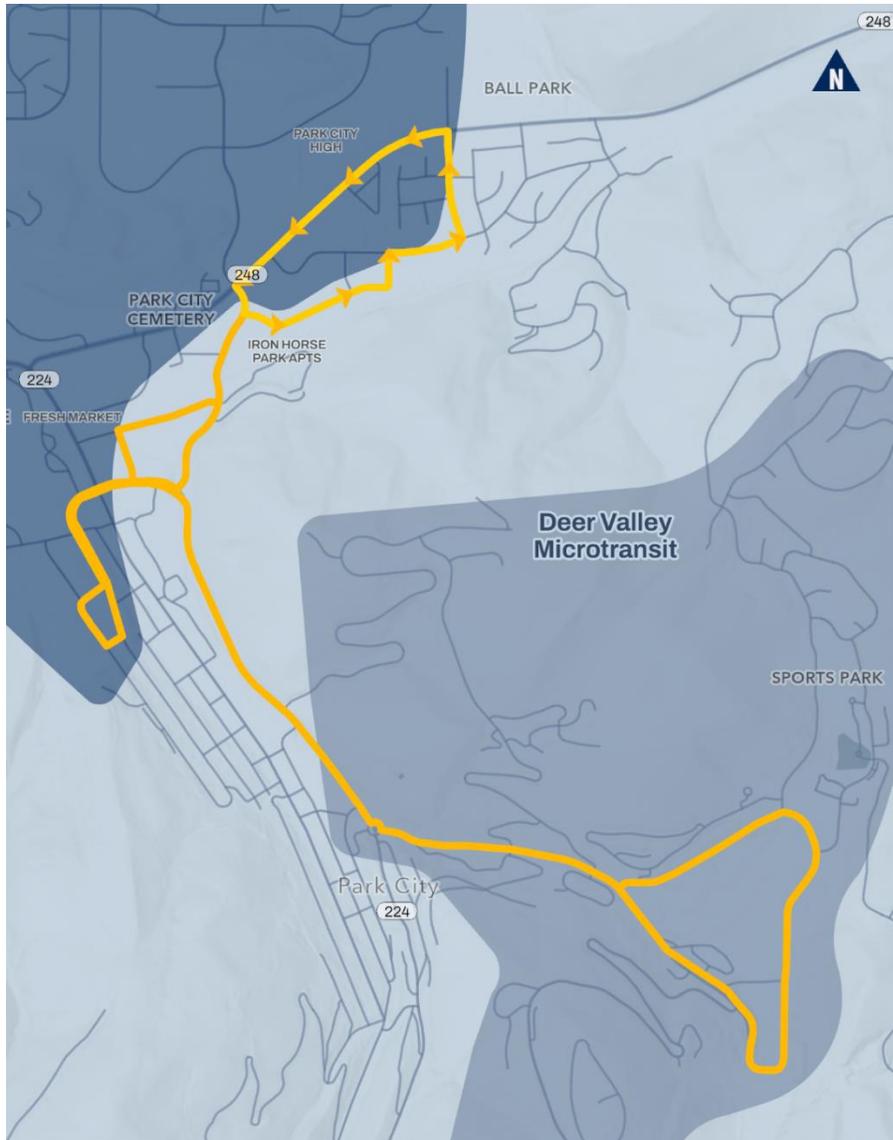


Figure 91. Routing for the Yellow Route

Characteristics

- Winter season: 15-minute frequency 6:30 AM until 6:30 PM and 30-minute during evening hours
- Summer and base seasons: 15-minute frequency during peak AM and PM commuter hours; 30-minute frequency midday and evening
- 60-minute cycle time with recovery
- Four buses for peak 15-minute frequency, two buses for 30-minute off-peak frequency

Green Route

The Green Route is a core route that works in conjunction with the Park Meadows microtransit zone. It provides a more direct, bi-directional service to hotels on SR-224, north of Kearns Blvd. In addition, this route keeps buses out of Bonanza/Prospector area, which is now well-served by other routes. The Green route is operated more directly because Thaynes is now served by microtransit. The Green route, shown in Figure 92, runs as a bidirectional route for the entire route, apart from the loop near Park City Municipal Athletic & Recreation (PCMARC).

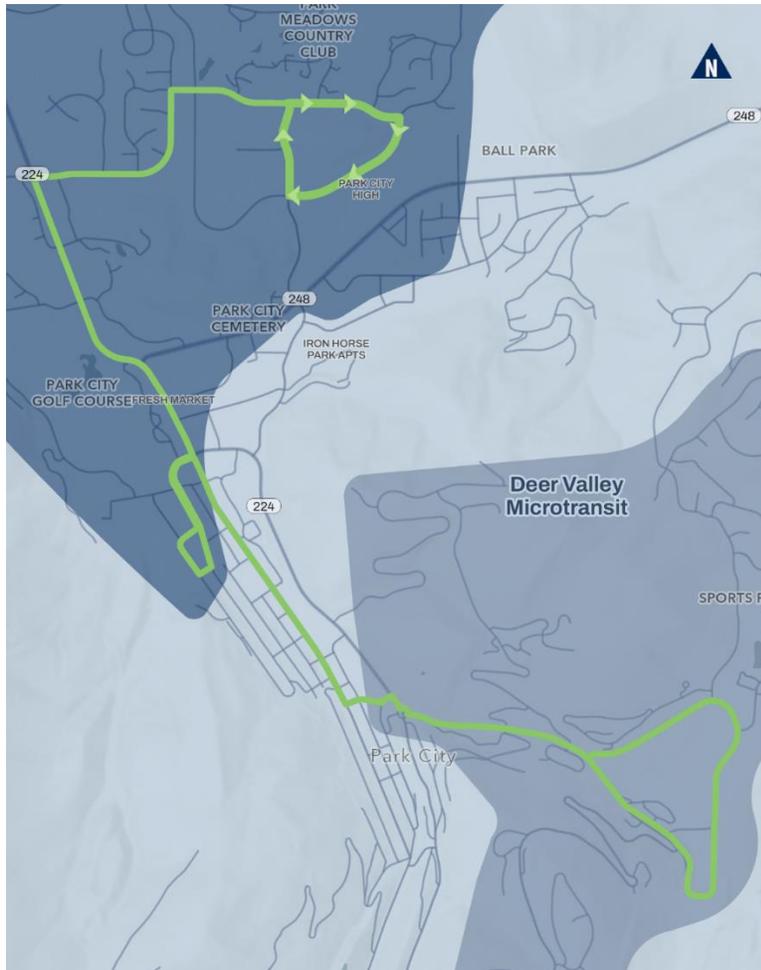


Figure 92. Routing for the Green Route

Characteristics

- Winter season: 15-minute frequency 6:30 AM until 6:30 PM and 30-minute during evening hours
- Summer season: 15-minute frequency during peak AM and PM commuter hours; 30-minute frequency midday and evening
- Base seasons: 30-minute frequency all day and evening
- 60-minute cycle time with recovery
- Four buses for peak 15-minute frequency, two buses for 30-minute off-peak frequency

Purple Route

The Purple Route, as shown in Figure 93, is a local, year-round route that is the same as the existing Purple Route, with the potential to consider adding a connection to Silver Lake during base shoulder seasons when Orange is out of operation.



Figure 93. Routing for the Purple Route

Characteristics

- Peak seasons: 30-minute frequency all day and evening (extended evening hours during winter)
- Base seasons: 30-minute frequency all day, no evening service
- 30-minute cycle time with recovery
- One bus for peak and base seasons

Orange Route

The Orange Route, shown in Figure 94, is a peak season local route that is the same as the existing Orange Route. It is recommended that Park City Transit considers changing this route to a long-term route once microtransit is in place, especially during the summer.



Figure 94. Routing for the Orange Route

Characteristics

- Peak seasons: 30-minute frequency all day and evening (extended evening hours during winter)
- Base seasons: No service
- 30-minute roundtrip cycle time with recovery
- One bus required

Teal Express Route

The new Teal Express route is based partially on the current Teal Route but operates as an express route during winter and summer peak seasons to Richardson Flat park-and-ride lot short-term (or Quinn’s Junction area park-and-ride long-term if/when built) to provide a direct park-and-ride connection to Park City’s Old Town Transit Center and Deer Valley Snow Park, as shown in Figure 95.

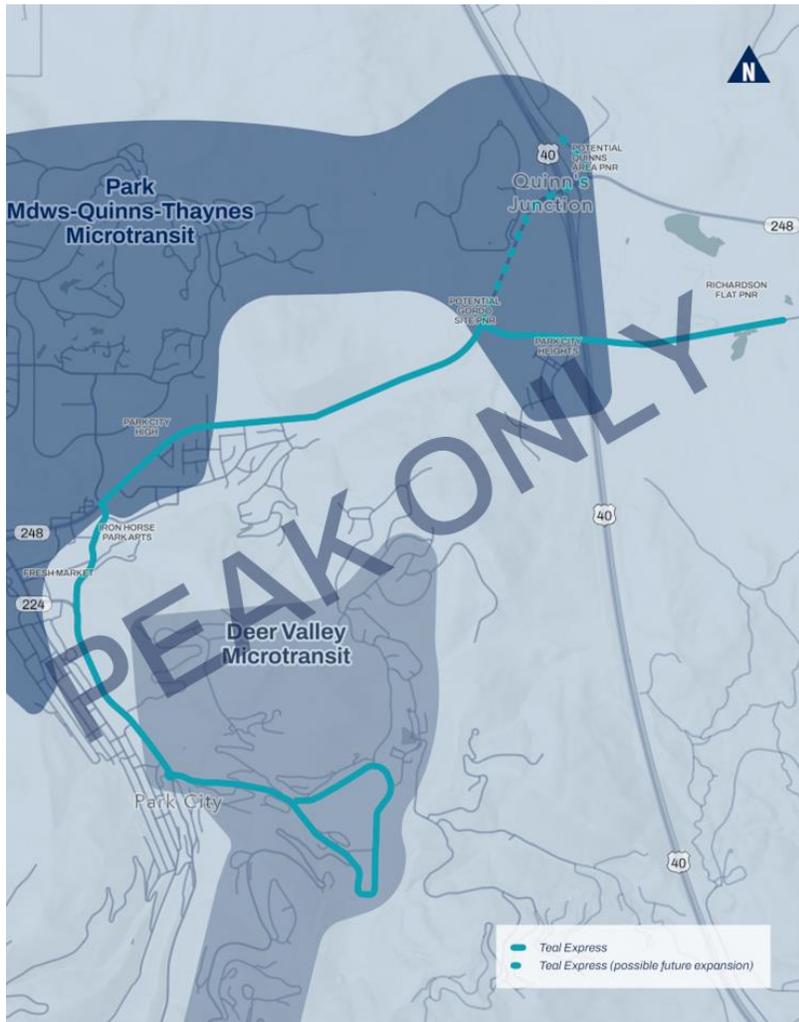


Figure 95. Routing for the Teal Route

Characteristics

- Peak seasons: 15-minute frequency during peak AM and PM commuter hours, 30-minute frequency midday and evenings
- Base seasons: no service
- 60-minute roundtrip cycle time with recovery
- Four buses during peak hours, two buses during midday and evenings

Pink Express Route

As shown in Figure 96, the new Pink Express Route is a peak season express route that provides a direct park-and-ride connection from Richardson Flat park-and-ride (or Quinn’s Junction area park-and-ride long-term if/when built) to Park City Mountain Resort.

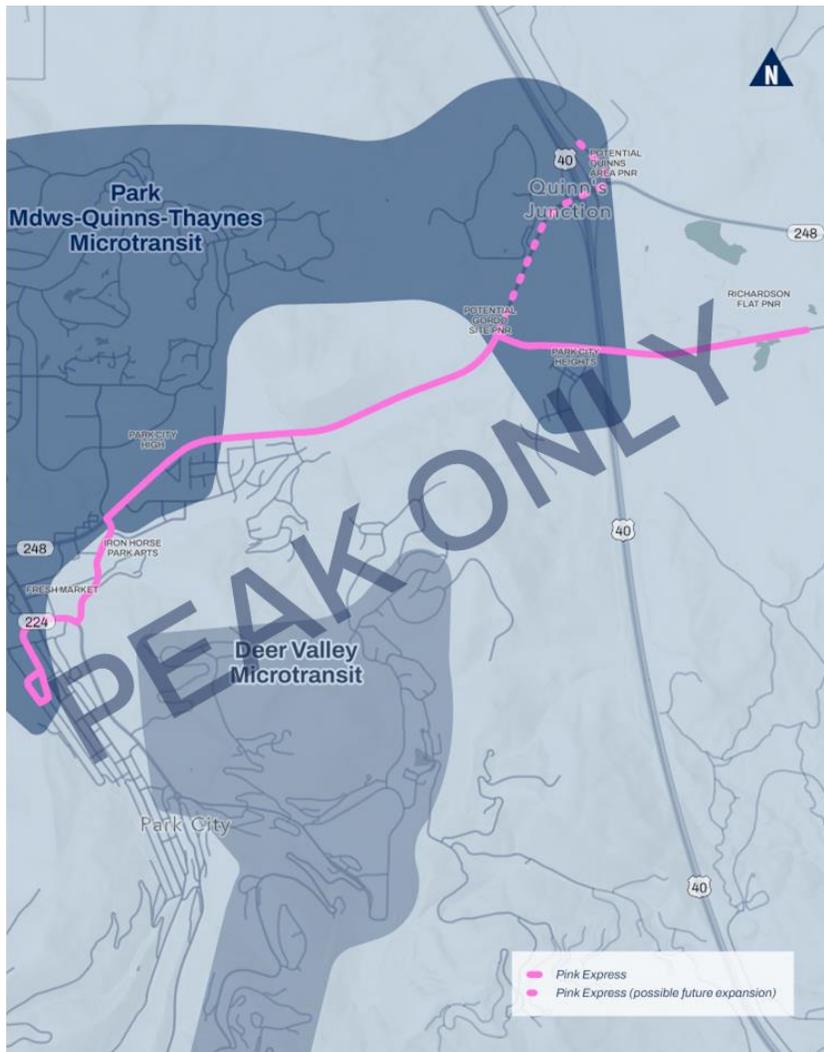


Figure 96. Routing for the Pink Route

Characteristics

- Winter peak season: 10-minute frequency during peak AM and PM commuter hours, 20-minute frequency midday; No evening service
- Summer peak season: 20-minute frequency all day
- Base seasons: no service
- 40-minute roundtrip cycle time with recovery
- Four buses during peak hours, two buses during midday

Blue Route

The new future Blue Route would connect Richardson Flat in the near-term and Quinn’s in the long-term to both resort base areas, as shown in Figure 97. It would operate during base seasons when Teal and Pink are not operating. In addition, it would only operate when/if base (shoulder) season demand for park and ride connection is warranted.



Figure 97. Routing of the new Blue Route

Characteristics

- Base season: 30-minute frequency 6AM until 6PM
- 60-minute roundtrip cycle time with recovery (assume less base season traffic)
- Two buses required

White Express

The White Express, shown in Figure 98, is the same as the current White Route with no planned service level changes. However, in mid-2024, the White Express Route will become a High Valley Transit route.

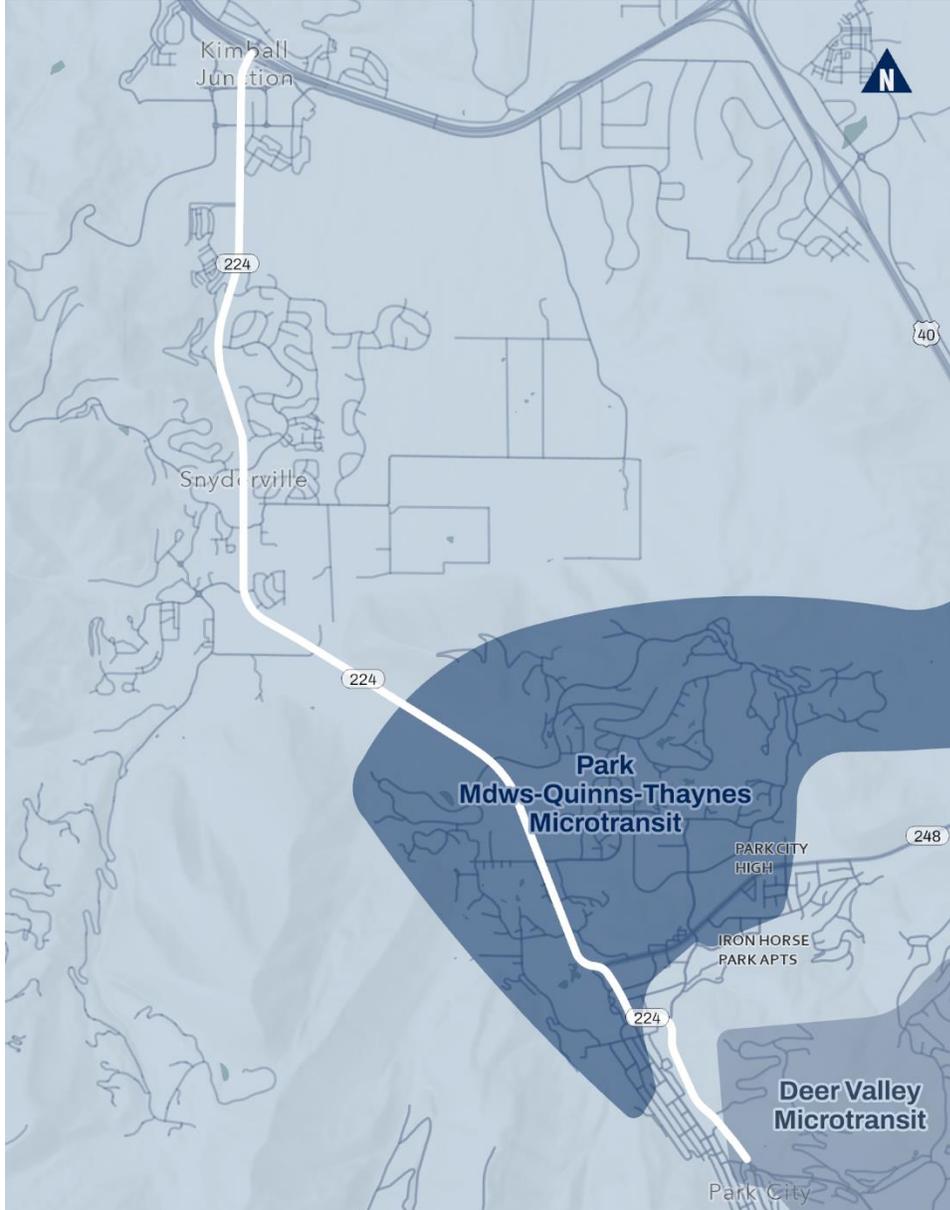


Figure 98. Routing of the White Express Route

Characteristics

- 15-minute peak, 30-minute off-peak frequency
- Requires four peak buses

Analysis of Final Service Plan

The final service plan presented within this chapter improves service quality through more direct routes that operate more frequently. The following sections detail the exact service levels for each route and service by season, as well as presenting the estimated ridership.

Seasonal Service Levels

As shown in **Table 29**, **Table 30**, and **Table 31**, seasonal service levels, not including 10 White, are:

- 56,800 winter peak season revenue service hours, 23% more than current
- 24,900 summer peak season revenue service hours, 37% more than current
- 22,400 base season revenue service hours, 8% more than current
- A total of 104,100 revenue service hours, which is 19,000 more service hours than current (22% more)

Table 29. Winter Service Levels

		Fixed Routes									On-Demand/Microtransit			Total Hours per Day	Total Season Days	Total Seasonal Hours	
		Red	Green	Teal Express	Pink Express	Purple	Orange	Yellow	Trolley	Citywide	Total Fixed Route	Park Meadows Microtransit	Deer Valley Microtransit				Total Microtransit
Winter Service																	
Daily	Hours of Daytime Service	8	8	8	8	8	8	8	9	-		7	7				
	Peak	4	4	4	4	4	4	4	-	-		4	4				
	Hours of Evening Service	5	5	5	-	5	5	5	3.5	2.5		4	4				
Service Frequency (Minutes)	Daily Daytime Off peak	30	15	30	20	30	30	15	15	NA		15-minute or less average response time	15-minute or less average response time				
	Daytime Peak	30	15	15	10	30	30	15	15	NA							
	Evening	60	30	30	-	30	30	30	15	30							
# Peak Vehicles in Operation	Daytime Off peak	2	4	2	2	1	1	4	1	-	17	3	2	5	22		
	Daytime Peak	2	4	4	4	1	1	4	1	-	21	4	3	7	28		
	Evening	1	2	2		1	1	2	1	2	12	3	2	5	17		
Cycle Length (Min, with Recovery Time)		60	60	60	40	30	30	60	15	60		--	--				
Daily Vehicle-Hours of Service		29	58	42	32	17	17	58	11	5	269	49	32	81	350	160	56,000

Table 30. Summer Service Levels

		Fixed Routes								On-Demand/Microtransit				Total Hours per Day	Total Season Days	Total Seasonal Hours
		Red	Green	Teal Express	Pink Express	Purple	Orange	Yellow	Trolley	Citywide	Total Fixed Route	Park Meadows Microtransit	Deer Valley Microtransit			
Winter Service																
Daily	Hours of Daytime Service	8	8	8	8	8	8	8	6			8	8			
	Peak	4	4	4	4	4	4	4	-			4	4			
	Hrs of Evening Service	4	4	4	-	-	-	4	4			2	2			
Service Frequency (Minutes)	Daily Daytime Offpeak	30	30	30	20	30	30	30	15			15-minute or less response time	15-minute or less response time			
	Daytime Peak	30	15	15	20	30	30	15	15							
	Evening	60	30	30				30	15							
# Peak Vehicles in Operation	Daytime Offpeak	2	2	2	1	1	1	2	1		12	2	1		14	
	Daytime Peak	2	4	4	2	1	1	4	1		19	3	2	5	24	
	Evening	1	2	1	-	-	-	2	1		6	2	2		8	
Cycle Length (Min, with Recovery Time)		60	60	60	40	30	30	60	15			--	--			
Daily Vehicle-Hours of Service		28	40	40	24	12	12	40	10		206	32	20	52	258	24,500

Table 31. Base Season Service Levels

		Fixed Routes						On-Demand/Microtransit				Total Hours per Day	Total Season Days	Total Seasonal Hours	
		Red	Green	Blue (new)	Purple	Yellow	Trolley	Total Fixed Route	Park Meadows Microtransit	Deer Valley Microtransit	Total Microtransit				
Shoulder Season Service															
Daily	Hrs of Daytime Service	12	12	12	12	12	6				12	12			
	Hrs of Evening Service	4	4	--	--	4	4				4	4			
Service Frequency (Minutes)	Daytime	30	30	30	30	15	15				20-minute or less response time	20-minute or less response time			
	Evening	30	30	--	--	30	15								
# Peak Vehicles in Operation	Daytime	2	2	2	1	4	1		12	2	1	3	15		
	Evening	2	2	--	--	2	1		7	1	1	2	9		
Cycle Length (Min, with Recovery Time)		60	60	60	30	60	15				--	--			
Daily Vehicle-Hours of Service		31	32	24	12	55	10		164	28	16	44	1208	109	22,400

Ridership Estimation

Using assumptions about boardings per hour, also known as productivity, informed by historical Park City Transit productivity by route, ridership estimations have been calculated and are presented in **Table 32**. As shown, the full SRTP implementation will result in an annual ridership of almost 2.5 million. This is 89% higher than today's equivalent ridership (2022 calendar year excluding White Express) of 1.3 million.

Table 32. Estimated Ridership

ROUTES	Total Annual Hours	Productivity Assumption	Estimated Ridership
Existing/ongoing services			
Red	12000	34	410,000
Yellow	12000	32	385,000
Green/Old Blue	16000	26	415,000
Purple	6000	20	120,000
Orange	4000	24	100,000
Trolley	4000	18	70,000
Citywide	800	24	20,000
Paratransit/on-demand	2800	2	5,000
SRTP recommendations			
Microtransit - peak	18000	6	110,000
Microtransit - year-round	4800	4	20,000
Pink - peak seasons	7500	24	180,000
Teal - peak seasons	10600	24	255,000
Blue Route P&R (base seasons)	2700	18	50,000
Green Route 15 minute	700	35	25,000
Yellow Route 15 minute	7300	35	255,000
TOTAL ESTIMATED RIDERSHIP AT FULL SRTP IMPLEMENTATION			2,420,000

Service to Resort Base Areas

At full SRTP implementation, the service to resort base areas will increase by 83% to PCMR and 50% to Deer Valley, as shown in **Table 33**.

Table 33. Estimated service increase with SRTP implementation

Winter Peak Bus Arrivals Per Hour at Resorts		% Increase with SRTP	
Existing	PCMR	18	n/a
	Deer Valley Snow Park	10	n/a
Final SRTP Plan	PCMR	33	83%
	Deer Valley Snow Park	15	50%

Chapter 11: Financial Plan

Chapter 11. Financial Plan

This chapter presents the five-year operating and capital projects and associated budgets required to implement the SRTP recommendations, as well as reflecting ongoing priorities and projects of Park City Transit.

Five-Year Financial Plan

The five-year financial plan for the SRTP is shown in **Table 34**. The table contains columns for each implementation year and rows for the various revenue and expense categories according to the recommended SRTP strategies.

Items important to note about the financial plan include:

- This plan uses Park City Transit’s cost allocation model for 2022/23 as the basis for expense calculations by route/service (\$71.17 per hour and \$2.43 per mile), except for microtransit which uses \$75 per hour plus \$1 per mile.
- An annual inflation rate of 4% is assumed and calculated in cost escalation by year.
- SRTP recommendations are implemented in three phases between FY 2023/24 and FY 2025/26.
- Federal funding is assumed to be a minimum of \$4.5 million per year but may vary depending on changes to Federal Transit Administration 5311 funding levels and UDOT’s allocation formula.
- For the SRTP recommendation of increased frequency on Yellow and Green routes, the costs shown are for the additional hours only versus current service levels which are captured in the base route costs.
- Future years’ expenses and revenues are estimations only and will be subject to change and refinement through Park City Transit’s annual service planning and transit budget processes.

Table 34. Park City Transit Five-Year Financial Plan for Operations

FIVE-YEAR OPERATING FINANCIAL PLAN	FY2023/24	FY2024/25	FY2025/26	FY2026/27	FY2027/28
OPERATING EXPENSES¹					
Fixed Costs	\$ 4,243,563	\$ 4,413,306	\$ 4,589,838	\$ 4,773,431	\$ 4,964,369
Variable Costs (based on route hours and miles)					
<i>Base routes</i>					
Existing Red, Yellow, Green/Blue, Purple, Orange, Teal, Trolley, Citywide	\$ 6,293,566	\$ 6,347,219	\$ 6,601,107	\$ 6,865,152	\$ 7,139,758
Paratransit/on-demand ²	\$ 349,765	\$ 295,955	\$ 307,793	\$ 320,105	\$ 332,909
White Express ³	\$ 2,688,400	\$ -	\$ -	\$ -	\$ -
<i>S RTP recommendations</i>					
Microtransit - peak seasons, both zones	\$ 1,566,000	\$ 1,628,640	\$ 1,693,786	\$ 1,761,537	\$ 1,831,999
Microtransit - base seasons, both zones	\$ -	\$ 434,304	\$ 451,676	\$ 469,743	\$ 488,533
Pink and Teal Express routes - peak seasons	\$ -	\$ 2,071,581	\$ 2,154,444	\$ 2,240,622	\$ 2,330,247
Blue P&R Route, serving Richardson to both resorts - base seasons	\$ -	\$ 309,020	\$ 321,381	\$ 334,236	\$ 347,606
Green Route change w/Thaynes micro-flex route, plus 15 min. peak frequency	\$ -	\$ -	\$ 75,962	\$ 79,000	\$ 82,160
Yellow Route peak frequency to 15 min.	\$ -	\$ -	\$ 792,174	\$ 823,861	\$ 856,815
Annual Operating Expenses Total (fixed costs plus total variable costs)	\$15,141,294	\$15,500,025	\$16,988,161	\$17,667,688	\$18,374,395
OPERATING REVENUES⁴					
Federal	\$3,824,000	\$2,840,000	\$4,131,000	\$2,370,000	\$2,370,000
Local	\$11,317,294	\$12,660,025	\$12,857,161	\$15,297,688	\$16,004,395
Operating Revenues Total	\$ 15,141,294	\$ 15,500,025	\$ 16,988,161	\$ 17,667,688	\$ 18,374,395
NET	\$ -				
<ol style="list-style-type: none"> 1. Operating expense escalation is assumed at a 4% annual rate of inflation. 2. Existing paratransit/on-demand service is estimated to go down by 35% with peak season microtransit in place and down by 45% when microtransit exists year-round. 3. White Express will shift to High Valley Transit in mid-2024, so expenses are not included for 24/25 and beyond. 4. Local funding includes all non-federal operating sources, such as the transit sales tax and transit share of resort tax, business license fees, and nightly rental license fees, as well as other local sources, such as bus ads, rental income, and donations. 5. All operating revenues are estimates only. Federal and local revenues are subject to fluctuation and adjustments. 					

Source: Fehr & Peers, 2022.

Capital Improvement Plan

Overview

This chapter provides details on capital projects (e.g., fleet, bus stop improvements, corridor and intersection safety improvements) and associated costs over the next five years for Park City Transit.

Major Capital Projects

Fleet Replacements

Park City Transit owns and maintains 54 vehicles, most of which are 35-40' low-floor buses. About one-third of these low-floor buses are battery electric. There are five smaller cutaway vehicles or vans for on-demand and paratransit services. The fleet also includes various vehicles for facility maintenance and daily use, including SUVs, pick-up trucks, and a skid steer. The average age of the fleet is 6.7 years old.

Park City Transit's current plan is to replace 19 vehicles within the next five years. This section alters this course of action based on the service plan, as shown in **Table 35**. Electrification includes funds allocated to support the electrification of the city fleet in the continued transition to a full battery electric bus (BEB) fleet, including funding for depot and overhead chargers and supporting electrical equipment. Some internal combustion engine (ICE) vehicles (diesel buses and gas or diesel cutaway buses) are retained over the course of the next five years to provide redundancy and increased spare needs to support battery electric vehicles that have lower operating mileage ranges.

The final service plan presented in Chapter 10 requires the following peak vehicles to be in service:

- Peak winter: 21 fixed route buses plus paratransit
- Peak summer: 19 fixed route buses plus paratransit
- Base seasons: 12 fixed route buses plus paratransit

Park City has not decided on how it may operate microtransit. If Park City were to operate microtransit directly, as opposed to using a vendor who would provide vehicles, there would need to be an additional nine microtransit vehicles (seven peak vehicles in operation plus two spares), likely vans, required to be purchased in addition to the vehicles identified in this capital plan.

Table 35. Fleet Replacement Plan

Vehicle Type/Quantity		TOTALS		REPLACEMENTS/ADDITIONS by YEAR				
		5 year fleet need – retained buses	5 year fleet need – new	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Low-floor diesel bus (10 diesel buses retained)	Quantity	10						
	Purchase Cost (\$1m each)	n/a						
Cutaway/body-on-chassis (2 ICE shuttles retained)	Quantity	2						
	Purchase Cost (\$160k each)	n/a						
Vans for paratransit	Quantity	2	2	2				
	Purchase Cost (\$100k each)	n/a	\$200,000	\$200,000				
Other (SUV, pick-up, skid steer)	Quantity	6	3					3
	Purchase Cost (var.)	n/a	\$225,000					\$225,000
Low floor bus (BEB)	Quantity	22	16	5	5	2	2	2
	Purchase Cost (\$1.15m each)	n/a	\$18,400,000	\$5,750,000	\$5,750,000	\$2,300,000	\$2,300,000	\$2,300,000
Cutaway/body-on-chassis (battery electric)	Quantity	0	7	2	2	2		1
	Purchase Cost (\$250k each)	n/a	\$1,750,000	\$500,000	\$500,000	\$500,000		\$250,000
ANNUAL COST			\$20,575,000	\$6,450,000	\$6,250,000	\$2,800,000	\$2,300,000	\$2,775,000

Source: Park City Transit and Fehr & Peers (2023)

Bus Stop Improvements

Throughout the SRTP process, a major community priority heard was to improve Park City bus stops. In recent years, Park City Transit embarked on a Bus Stop Accessibility Study to score the condition of all bus stops in the city to evaluate overall condition and compliance with the Americans with Disabilities Act (ADA). Stop grades shown in Figure 99 considered amenities, sidewalks, ridership, accessibility, and final grading of each stop. Park City Transit ultimately prioritized ten stops and secured competitive grant funding to advance a total of 72 stops through design and construction through FY 2024/2025. These upgrades will be implemented over the next three years, with basic stop maintenance continuing in the following two years.

Improvements to bus stops may include work on surrounding infrastructure, such as trail or sidewalk connections, crosswalks, ADA compliance, retaining walls, concrete flatwork, electrical utilities, shelter pads, and land availability.



Figure 99. Bus Stop Grades (source: PCMC).

As shown in Figure 99, bus stop improvements in 2023 will upgrade deficient stops in Park Meadows, Thaynes Canyon, Prospector Square, Marsac Avenue, the Arts & Culture District, and McPolin & Meadows. 2024 bus stop improvements address poor scoring stops in Park Meadows, Thaynes Canyon, Prospector Square, and Old Town.

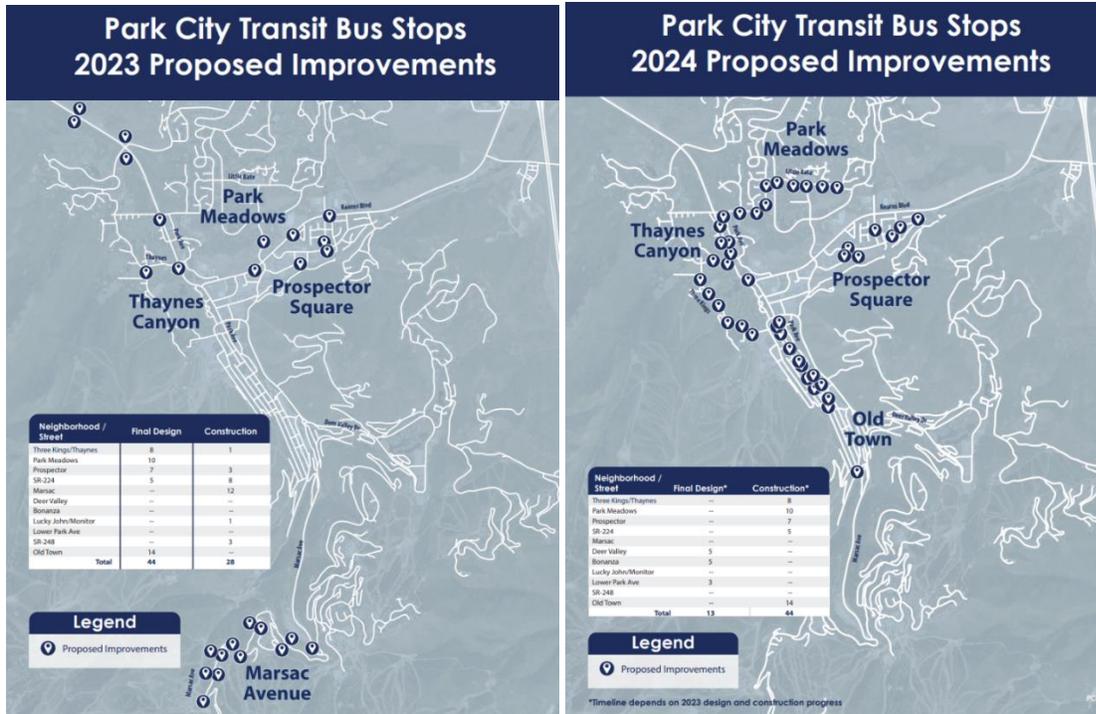


Figure 100: 2023 and 2023 Proposed Bus Stop Improvements (source: PCMC)

Park & Rides

The capital budget includes \$660,000 in FY2023/2024 for the SR-248/US 40 Quinn’s Junction Park & Ride Lot. In following years, the SRTP estimates Park & Ride maintenance expenses of \$250,000 per year. This figure will continue to be discussed at the policy level. Additional park and ride expenses may be needed to support improvements at the Richardson such as new/refurbished bus shelters, signage, and real-time customer information.

Corridor & Intersection Safety Improvements

One of the top transportation priorities identified in the SRTP public outreach, and in *Park City Forward: Long Range Transportation Plan*, is faster and more direct bus and transit routes. Park City has partnered with High Valley Transit and Summit County to develop bus shoulder lanes along SR-224, and, ultimately the 224BRT to replace the White Express in the next five years. While this corridor has been the first evaluated and advanced toward design, the SR-248 corridor is another key transit facility for the City and County.

In 2019 Park City elected officials and residents moved away from a road widening project along 248 but supported exploring transit or other improvements that did not require a significant ROW expansion. Park City Forward (PCF) identified two projects for SR-248. Phase I of PCF SR-248 High-Capacity Transit improvements. Working with UDOT, PCMC will determine designs for the corridor that improve transit speed and reliability functionality, without requiring ROW expansion or significant environmental analysis.

In the Big Concept Projects phase of PCF, SR-248 Corridor Mobility Improvement Project recommends evaluating alternatives and needs to determine the design and function of future transportation and transit improvements.

PCMC envisions a process with regional transportation partners that looks at multiple modes of transit and alignment alternatives. This process will look beyond the current roadway alignment/ROW, and work with partners and the community to determine and advance the best transportation option for Park City.

Corridor and intersection safety improvements budgeted for in the five-year timeframe of the SRTP capital plan include projects along Park Avenue, Deer Valley Drive, and SR 224. In FY 2023/2024, \$7.1 million is allocated for the reconstruction of Park Avenue and for corridor safety improvements along SR 224. The Park Avenue project includes intersection improvements and street reconstruction, which encompasses installation of sidewalks and curb and gutter. These will be completed in tandem with bus shelter improvements.

In FY 2025/2026, \$3 million is allocated for the Deer Valley Drive Complete Streets and Transit Access Project. Along with separate improvements the city is making to the bicycle and pedestrian network, this project will improve transit access on the corridor.

Five-year Capital Expenses

The five-year capital improvement plan that incorporates all of the associated capital projects for Park City Transit is shown in **Table 36**.

For revenues, an 80% federal share with 20% local share was assumed – actual federal share may vary depending on grant program and newly lowered local match requirements for some federal funding programs. The annual Park City budget process will refine and detail capital expenses.

Table 36. Capital Expenses and Revenues

Capital Expenses					
Category	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Fleet Replacements	\$6,450,000	\$6,250,000	\$2,800,000	\$2,300,000	\$2,775,000
Electrification	\$130,000	\$546,920	\$300,806	\$0	\$0
Bus Stop Improvements	\$4,545,000	\$5,000,000	\$1,411,974	\$1,000,000	\$1,000,000
Park & Rides	\$300,000	\$360,000	\$250,000	\$250,000	\$250,000
Corridor & Intersection Safety Improvements	\$7,095,134	\$0	\$3,000,000	\$0	\$0
Mobility as a Service Curbside Improvements	\$0	\$0	\$0	\$1,050,000	\$0
Transportation Demand Management	\$250,000	\$250,000	\$0	\$0	\$0
Technology	\$146,172	\$16,172	\$0	\$0	\$0
Equipment	\$175,000	\$78,000	\$0	\$0	\$0
ANNUAL EXPENSES	\$19,091,306	\$12,501,092	\$7,762,780	\$4,600,000	\$4,025,000
Capital Revenues					
Category	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28
Local/County/State	\$3,818,261	\$2,500,218	\$1,552,556	\$920,000	\$805,000
Federal	\$15,273,045	\$10,000,874	\$6,210,224	\$3,680,000	\$3,220,000
ANNUAL REVENUES	\$19,091,306	\$12,501,092	\$7,762,780	\$4,600,000	\$4,025,000

Funding Mechanisms

Park City Transit currently utilizes a variety of local and federal funding sources as primary funding mechanisms.

Local

Local funding encompasses all non-federal funding sources that are eligible for use as local match including city, county, and state sources. City funds come from the transit fund, transit sales tax, redevelopment funding, resort sales tax for transportation, bond proceeds, and business license fees. County funding sources include the third quarter county tax, and county/special district contribution.

Federal

For federal funding sources, Park City has primarily utilized FTA 5311 operating assistance program and the 5339 capital assistance program. These sources are anticipated to continue to support transit operations, and through the recently passed Infrastructure Investment and Jobs Act (IIJA) (also known as the “Bipartisan Infrastructure Law”), there are new and/or expanded funding opportunities for capital projects through a variety of programs including:

- Bus and Bus Facilities Competitive Grants
- Mobility Innovation Programs
- Bus and Bus Facilities Formula Grants (5339)
- Charging and Fueling Infrastructure Grants
- Low or No Emission Bus Grants
- Local and Regional Project Assistance Grants (RAISE)
- Federal Land Access Program (FLAP) for transportation linking to federal lands and gateway recreation communities

It is recommended that Park City Transit work with UDOT to prepare for and apply for these programs, as appropriate, to help support the various capital projects identified herein. More information on the Bipartisan Infrastructure Law can be found at <https://www.transportation.gov/bipartisan-infrastructure-law/bipartisan-infrastructure-law-grant-programs>.

Chapter 12: Implementation

Chapter 12. Implementation

Implementation Strategies

As Park City Transit moves forward with the implementation of this SRTP, there are many strategies that should be considered to help stay nimble, flexible, and data-driven in considering possible changes to the timing, scope, and refinements to the strategies.

Stay Opportunistic and Flexible

As Park City moves ahead with the implementation of the SRTP system vision, unforeseen opportunities and potential challenges may make it necessary to adjust implementation, moving quicker or slower. In addition, both capital and operating funding may not follow the plan and create the need to follow the strategies shown in Figure 101 to help stay opportunistic.

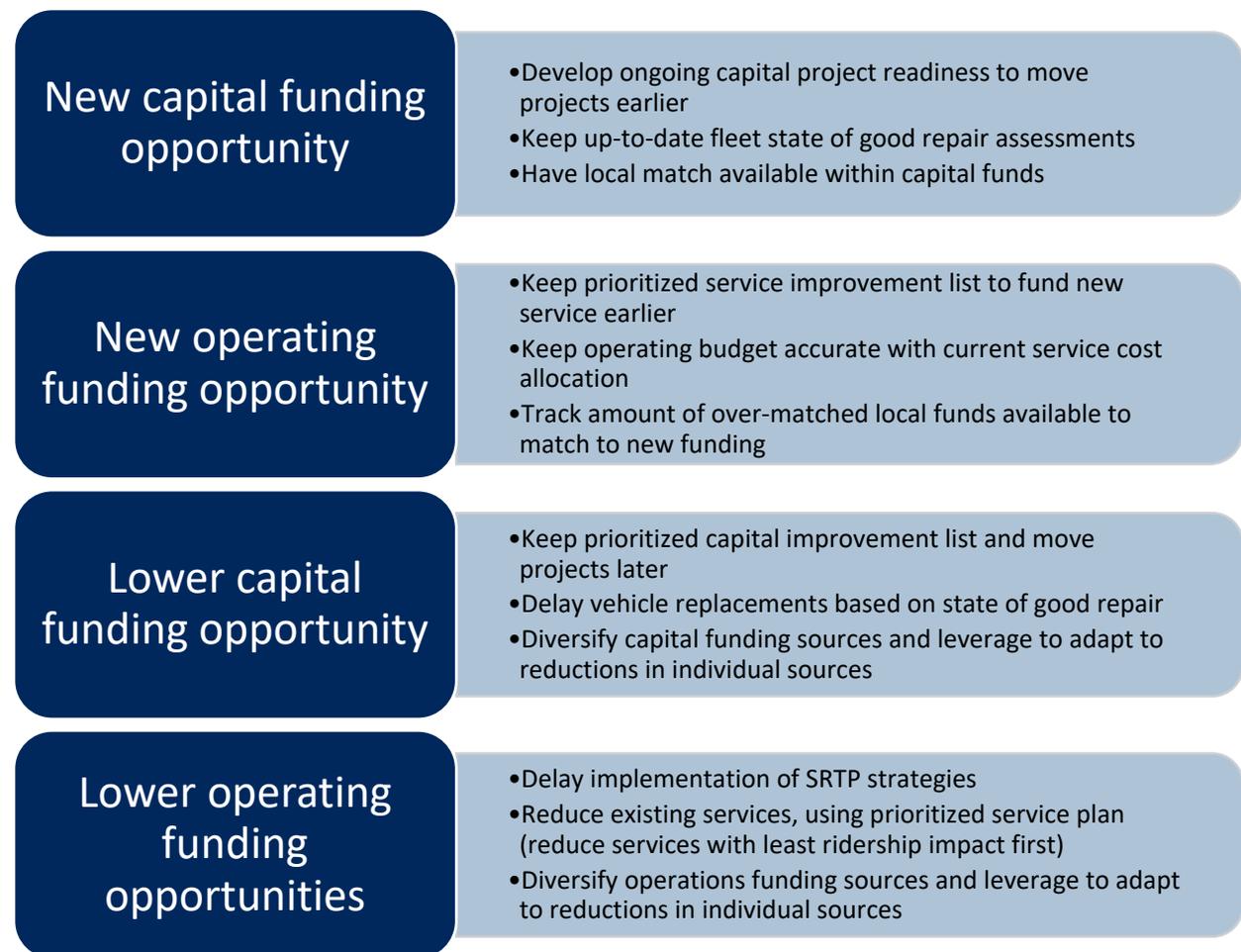


Figure 101. Opportunistic strategies

Unknown Ridership Recovery

Another key factor related to funding needs is ridership and how it continues to recover to 2019 ridership levels and higher. Park City Transit has seen ridership recover strongly, with many routes at 85% of 2019 ridership or better. If this trend continues, it may require more funding to implement the strategies of the SRTP more quickly. Through performance monitoring, Park City Transit should be looking at monthly, quarterly, and seasonal ridership trends to identify how and where ridership is recovering and what resource adjustments may be needed to respond.

Strive for Seamless Integration with Regional Transit

A common theme throughout the SRTP outreach process was the confusion around the separation of regional services into recently formed High Valley Transit – many community members are still unclear on the implications of the split. Additionally, there are operational coordination issues that continue to be addressed and will need ongoing dialogue to solve. Key strategies for maximizing seamless integration include:

1. Quarterly leadership meetings with key staff and elected officials represented.
2. Monthly staff meetings between operations staff from Park City Transit and High Valley Transit.
3. Cooperation on the development of jointly used or needed facilities and associated capital improvement projects.
4. Identification of duplication and development of strategies to maximize coordination.
5. Sharing of data and resources to the maximum extent possible.
6. Continued joint marketing of the overall transit system with identification of who provides different services.

Continued Public Dialogue

Before this SRTP is implemented, additional public outreach and community input should be sought out on the specific goals and recommendations. While the online community survey had a relatively strong response rate, it did not include enough community representation from frequent riders, Spanish-speaking riders, and those living outside of Park City (but working in Park City) who are potential users of the new Quinn’s area park-and-ride routes.

A series of public information sessions ahead of any route/service changes should be considered, similar to the process that Park City Transit has recently employed ahead of the launch of winter 2022-2023 service changes.

Marketing and Outreach

At every step in the implementation process, marketing and public outreach are key to the successful launch of any new route or start of any service change. Therefore, funding should be dedicated to marketing and outreach for the next five years of SRTP implementation. This is especially important for completely new routes that need repeated messaging to attract potential new riders and build ridership.

Specific strategies for enhanced marketing and outreach include:

- Develop more resources for continued improvements in traveler information through website improvements and real-time customer information (apps and at stops).
- Build a different brand, with a cohesive look and feel to the current brand, for unique transit services such as microtransit – this allows the community to identify the service as something new.
- Increase local advertising of the transit system on traditional local media and social media.
- Leverage the existing network of community groups to raise awareness and promote service improvements. Key stakeholders should be invited to serve as ambassadors for the new service. This role can be as simple as committing to including Park City Transit as a discussion topic in community events or promoting the service on an organization’s website and social media pages.
- Specific partnerships with key employers and ski resort operators to increase awareness and use among employees and commuters.
- Have a presence at all local events, such as markets, sporting events, community meetings, and neighborhood parties. Setting a table with brochures and a friendly community ambassador is a relatively low-cost way to build awareness and trust in the new service.

Develop Organizational Capacity

There are several organizational recommendations necessary to help support the other S RTP goals and recommendations.

Address the Driver Shortage

Park City Transit has faced a significant shortage of drivers over the past three to five years, and the shortage does not show any signs of abating soon. Park City Transit has recently increased driver pay, offered an end-of-season bonus, and provided short-term housing. These are important strategies and should be continued. Additionally, Park City Transit should consider:

- **Enhance and expand local recruiting**
 - A strategy used successfully by many other agencies is to build a messaging campaign around all the positive aspects of driving, such as schedule flexibility, fun environment, customer service focus, and impact on the local community. For example, a local campaign could include traditional ads, online videos, social media, and local earned media and could be targeted at audiences such as retirees who may want to drive part-time or existing drivers (school bus or private shuttles) who may want to pick up more hours.
- **Market to drivers in summer resort areas**
 - Park City has already had some success with marketing to drivers in other summer resort markets – in late summer of 2022, Park City Transit staff traveled to Alaska to meet with bus drivers who work at cruise ship ports moving passengers from the cruise ship docks to hotels and local attractions. This same strategy could be used at other summer recreation destinations that have

significant summer transit operations, such as beach communities, national parks, and amusement parks.

- **Continue to monitor the competitiveness of the driver's wage**
 - Park City Transit recently increased its starting driver wage but is still below some other local driving opportunities. Park City Transit should continue to compare its driver wages to other similar local and regional wages and consider additional wage increases in the future.
- **Continue to invest and partner in increased housing opportunities**
 - Park City Transit has adequate driver housing currently, but more may be needed in the future in order to grow services and meet the demand for both its seasonal and year-round full-time employees. Housing remains challenging and is a key differentiator in recruiting and retaining drivers.

Invest in Support Staff

With a new direction for Park City Transit focused on local services, the indirect support staff roles may need to grow and/or be organized differently. This recommendation is to ensure that transit service is supported adequately with enough support staff in key functions such as planning, customer/community relations, transit technology, driver training and safety, bus cleaning, administration, special projects, dispatch, or scheduling. Park City Transit and the overall transportation department should assess its support staff and adjust to facilitate high-quality service delivery. It is common for peer transit agencies to be underfunded and understaffed in support functions.

Bring Drivers into System Planning and Improvement

In addition to the strategies listed above to address the driver shortage, there are other opportunities for engaging drivers and increasing a sense of pride in Park City Transit. These can include:

- **Regular employee surveying paired with an actionable follow-up:** Online surveying of bus operators regularly about their level of workplace satisfaction is an effective tool for determining opportunities to make Park City Transit an enjoyable place to work. Pairing online surveying with visible responses to feedback submitted by drivers demonstrates a willingness to make decisions about transit operations collaboratively.
- **Forming a service planning committee:** Collaborating with drivers on planning and implementing service changes can instill a sense of ownership in the system among bus operators. The committee can convene at regular intervals and serve as an opportunity for drivers – the set of Park City Transit employees who are most intimately aware with the system – to weigh in regarding opportunities for improving the system and being more responsive to customer demand. Alternatively, this committee could be facilitated through online means and online surveys for service improvement ideas.
- **Instituting a spot bonus program for drivers:** If Park City begins inviting riders to rate their trips through a smartphone app, then information about the customer's interaction with the driver may also be available. Park City could periodically recognize drivers who are routinely receiving high ratings from riders with a spot bonus. This strategy would require a minor addition to the personnel budget.

Implementation Timeline and Phasing

Table 37 shows the implementation timelines for the major routes and services for the five years of the SRTP. It should be noted that ongoing challenges with hiring drivers and acquiring new buses may necessitate delayed implementation that may require more than five years.

Table 37. Implementation Timeline and Phasing

SRTP Recommendation	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028
Microtransit - peak seasons, both zones					
Microtransit - base seasons, both zones					
Pink and Teal Express P&R routes - peak seasons					
Blue P&R route, serving Richardson to both resort base areas - base seasons					
Green Route change w/Thaynes micro-flex route, plus 15 min. peak frequency					
Yellow Route increased peak frequency to 15min.					

Service Adjustments and Performance Monitoring Plan

An important aspect of the SRTP implementation is monitoring Park City Transit’s performance over time through tracking and benchmarking performance measures. Typically, performance measures are organized into performance categories:

- ✓ Ridership
- ✓ Safety
- ✓ Financial
- ✓ Customer Satisfaction

Many possible metrics within each of these categories could be measured, benchmarked, and reported, but it is important to develop a small list of two to three performance measures for each category so that the tracking of these measures over time is not overly burdensome or time-consuming.

Based on current measures, historical performance, and best practices, a list of updated measures and goals are presented in **Table 38**.

Table 38. Performance Monitoring Plan

Category	Performance Measure	Suggested Goal	Frequency of Measurement	Comments
Ridership and Service Delivery	Overall Productivity (passengers per hour)	25	Monthly and YTD	Based on historical performance, this goal is reasonable. Excludes paratransit.
	Core and Express Routes Productivity	28	Monthly and YTD	Based on historical performance, this goal is reasonable.
	Local Route Productivity	20	Monthly and YTD	Based on historical performance, this goal is reasonable.
	On-time Performance (within 0-6 minutes of scheduled time)	92%	Monthly and YTD	Requires accurate CAD/AVL technology. Staff indicate that this goal is reasonable.
	Missed Trips	0	Monthly and YTD	This is an aspirational goal – may not be possible during large snow events.
Safety and Quality	Preventable Crashes per 100,000 miles	< 1.5	Quarterly	Based on goals from similar agencies. Important indicator of safe operations.
	Vehicle Uptime	85% or higher	Monthly	Having maintenance performed quickly and buses available for service is important to service quality.
	Road Calls	< 1 per 15k service miles	Quarterly	Reducing breakdowns that require a bus replacement helps improve service quality.
Financial	Budget vs. Actual	< 10% variance	Monthly and YTD	Tracking budget variance helps identify budget revenue and/or expense issues.
	Cost per Vehicle Service Hour	< \$125	Quarterly	Based on similar systems and current costs, this goal is reasonable. Adjust annually for inflation.
	Cost per Passenger	< \$6.00	Quarterly	Based on historical performance and similar systems, this goal is reasonable. Adjust annually for inflation.
Customer Experience	Rider Survey Rating	90% or more satisfaction rate	Annually	An annual rider survey should ask passengers their overall satisfaction with PCT (90% or more indicating they are satisfied or highly satisfied across various metrics)
	Verifiable Complaints per 100,000 boardings	< 10 (0.1% complaint rate)	Monthly and YTD	Customer complaints registered and reviewed internally to assess legitimacy are a good way to track customer experience.
	Spanish Translation Rate for Schedule and Route Info	100%	Annually	Having all route and schedule information translated into Spanish is important to the overall accessibility of system info.

Source: Fehr & Peers, 2022.

Microtransit Performance

Microtransit performs differently with several unique performance characteristics. **Table 39** shows some recent performance of five different microtransit systems in the western U.S., with a couple of urban examples and a few resort examples.

Table 39. Microtransit system comparison

Metric	Montbello Connector (Denver, CO)	Citibus On-Demand (Lubbock, TX)	High Valley Transit (Park City, UT)	START On Demand (Jackson, WY)	TART (Tahoe City, CA)
Data time frame	Oct 2021 – July 2022	Jan 2022 – July 2022	Jan 2022 – July 2022	Jan 2022 – July 2022	Aug 2021
Ridership	32,000	69,000	172,000	88,760	5,689
Passengers per service hour	5.7	1.9	3.6	8.9	4.4
Average Wait Time	19 minutes	28 minutes	N/A	8 minutes	9 minutes
Average Customer Rating	4.8/5	96%	4.7/5	4.92/5	4.94/5
Shared Rides	25%	53%	N/A	32%	31%
Call-in Rides	7%	60%	N/A	N/A	N/A
Average requests per rider	N/A	30	N/A	N/A	N/A
Average Ride Distance or Time	N/A	N/A	4.75 miles	5 minutes	9 minutes

Source: Various performance reports as provided by each agency (2021, 2022).

Park City Microtransit Goals

As a new service that will likely require service adjustments in terms of hours, service zone, and seasonality, it will be important to track microtransit performance separately. Suggested microtransit performance metrics are shown in **Table 40**.

Table 40. Suggested microtransit performance metrics

Performance Measure	Suggested Goal	Frequency of Measurement	Comments
Productivity – peak seasons	5	Monthly and YTD	Based on smaller zone sizes and experience from other agencies, this goal is reasonable.
Productivity – base seasons	3.5	Monthly and YTD	Based on smaller zone sizes and experience from other agencies, this goal is reasonable.
Average Trip Fulfillment (time from request to vehicle arriving)	15 minutes or less	Monthly and YTD	Service should be responsive to help build ridership.
Average Customer Rating	4.8 out of 5	Monthly and YTD	Passengers are asked to rate each trip in the app after trip completion.
Shared Rides	50%	Monthly and YTD	The more rides that can be shared, the more efficient the service is.

Source: Fehr & Peers, 2022.

Reporting and Adjustments

In addition to the measurements and goals recommended above, Park City Transit should regularly report on these metrics to elected officials, key partners, and the general public. Transparency allows for better decision-making and informed service adjustments.

If certain performance metrics are not being met, it is important to evaluate the causes and understand the context. First, evaluate to understand if the unmet measures are a short-term problem or a long-term trend. Having a long-enough period of time to identify problems is key. Staff should also evaluate if some external factor has negatively impacted performance and may be skewing results. And consideration should be given to any service changes, such as implementing a new route, that may take 18 months or more to achieve the suggested goals. New routes and services need time to build awareness and ridership.

Next Steps

As Park City begins to implement the system vision of the SRTP, several next steps should be considered ahead of implementation.

Winter 2022-2023 Service Plan

Park City Transit has already taken the first step in SRTP implementation with the development and launch of its new winter 2022-2023 service plan, which includes pilot programs for many of the SRTP recommendations, including microtransit and park-and-ride routes to Richardson Flat.

The lessons learned from this 2022-2023 season will be important to incorporate into the implementation of the

SRTP, including possible adjustments to route and service plans.

SRTP Plan Approval

The SRTP should be formally adopted by the PCMC city council so that it can be an official guiding document that helps supplement and support the Park City Forward Transportation Master Plan.

Community Awareness Building

As previously recommended, it will be important to engage the community ahead of any major route and service changes.

Steps Ahead of New Service Launch

As each year of the SRTP is implemented, the process for readying for launch is shown in Figure 102.



Figure 102. Process for readying service launch