CITY OF ASPEN

WALKER CONSULTANTS

Recommendations and Action Steps

Aspen GETS US THERE.

January 2025

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1. Parking and Transportation in Aspen

This plan, Aspen Gets Us There, describes a series of high-level strategies closely guided by community vision, data analysis centered on how users experience each mode of transportation and parking, and example best practices from communities nationwide. These strategies are intended to advance the project mission and specifically address challenges and opportunities faced by Aspen's transportation and parking system. The strategies include initiatives to improve the operation of city transportation/parking services to support short-term, mid-term, and long-term gains in customer experience and perceived value, mobility freedom, and reduction of emissions/vehicle miles traveled.

Basis for The Recommendations

During the Discovery and Visioning phases, the project team drew the following overall conclusions:

Through the support, vision, and high-level direction of the City Council, the City of Aspen currently operates an admirable transportation and parking system comprising many different and interdependent components, including fixed-route transit, on-demand transit, carshare and bike-share, bicycle and pedestrian infrastructure, and paid parking. For years, system operation has centered on the maximization of offerings and exceptional service at an individual level. While this robust focus on customer service is commendable and worth maintaining, at times, it has led to unclear goals, a lack of flexibility and contextuality, and difficulty with allocating available resources in a sustainable way. It has become even more important to address these issues head-on, given the demographic shifts in our community, changes in transportation choices and behaviors in a post-COVID world, and universal issues around hiring and staffing in the parking and transportation space.

Strategy Framework

Our Vision for Transportation and Parking in Aspen

Aspen is ready for a transportation and parking system that truly *Gets Us There*—at every turn, getting us closer to meeting the steadfast ideals and values we've committed to as a community. We envision a transportation and parking system that meets our needs over time with flexibility, adaptability, and innovation. We envision a transportation and parking system where everyone who lives, works, and plays in our community can feel its exceptional positive impact in their daily lives.

Our Guiding Principles

We seek strategies and actions that are:

- Capable of advancing mobility freedom and choice for all, not just a select few—including residents, employees and commuters, customers, visitors, recreators, and beyond—in keeping with the Aspen Area Community Plan commitment to keeping traffic volumes below 1993 levels.
- Bold and ambitious—we can go where others haven't dared to go.
- Rooted in data and the latest industry intelligence.
- Understanding of the critical role parking and curb access plays, and will continue to play, in our community's economic vitality and success.
- Regenerative and future-forward with outcomes that serve generations beyond our own by advancing longer-term impacts over quick but short-lived wins.

- Flexible and responsive to change without unnecessary delay by the ins and outs of the political cycle.
- Contextual, with tools and options that acknowledge and embrace the difference between the City's neighborhoods.
- Progressing harmony and collaboration between the public and private sectors.

Strategy Direction

Drawing from these principles, the recommended *Aspen Gets Us There* strategies describe:

- **A clear goal for every mode,** enabling clarity and purpose for each transportation and parking choice's role in the larger system.
- **Regimented data collection and reporting practices** to create data-driven, impartial, responsive decision-making and demonstrate a transparent commitment to our community.
- **Clear protocols for change and expansion** to support objectivity, equity, consistency, and accountability to users and taxpayers and help the community understand decisions.
- **Technology as a tool for efficiency and excellence**, both for the end user and the people who operate our systems.
- **Maximized impact of our existing infrastructure and funds** so that we can provide quality service that is sustainable for both staffing and the community.

Transportation Strategies Alignment with City of Aspen Organizational Values:

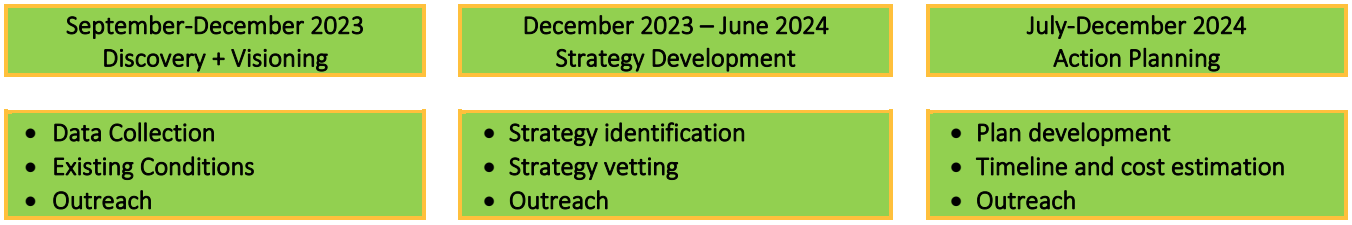
- **Service:** These strategy ideas embody the Service value by increasing the efficiency of our limited available parking inventory, building more opportunities for more people to use our transportation services, reducing frustrations that can arise when parking isn't available, and finding ways to improve and enhance transparency and communication.
- **Partnership:** These strategies embody the Partnership value by enhancing the parking and transportation system's responsiveness to the needs of our various communities and user groups.
- **Stewardship:** These strategies embody the Stewardship value by increasing the efficiency, utility, and usability of our existing parking system and transportation services to as many users as possible and reducing pressures on the City to build more expensive, trip-generating parking inventory.
- **Innovation:** These strategies embody the Innovation value by centering the specific experiences, needs, and vision of the singular Aspen community.

2. Project Background

In the summer of 2023, Aspen City Council adopted its top six goals, one of which states: *Improve and expand our efficient, multi-modal, and integrated transportation system to reduce vehicle miles traveled (VMT) and air pollution.* As a step towards this important goal, a contract with Walker Consultants was approved to undertake a comprehensive parking and transportation study.

The study, which ran from Fall 2023 to Winter 2024, considers both transportation services and parking policies holistically as VMT-reduction tools. The project was executed in three phases, 1) Discovery + Visioning, 2) Strategy, and 3) Action Planning.

Figure 1 Project Execution Phasing



Community Conversations

The *Aspen Gets Us There* project has included community collaboration as a driving force at every stage in the project. The project has leveraged small group interactions, online engagement through an Aspen Community Voice webpage, surveys, pop-ups, a community open house, and small-group conversations with people representing 11 different community organizations/groups to identify challenges and opportunities, build a vision, and articulate a strategic path forward.

Community groups/organizations involved in focus group meetings include the Aspen Chamber Resort Association (ACRA), Aspen Institute, Aspen Skiing Company, bike shops, Commercial Core and Lodging Commission (CCLC), lodging companies, emergency responders, private transportation providers (e.g., taxis, and rickshaws), local employers through the City of Aspen Transportation Options Program, members of the former Next Generation Advisory Committee, and Elected Officials Transportation Committee (EOTC) staff.

Appendix B: Phase 1 Community Engagement Summary and Appendix C: Phase 2 Community Engagement Summary summarizes key themes from community feedback, detailed notes from focus group meetings, and survey results.

Existing Conditions

Through site visits, outreach, data review, and interviews with staff and vendors, the project team developed a thorough understanding of existing conditions related to transportation and parking in Aspen and the region. The full Existing Conditions Report can be found in Appendix A. Some existing conditions are described with each strategy topic to help describe the current situation that the strategy seeks to modify or improve.

3. Parking and Curb Use

The project team developed four “avatars”, or typical types of people who use downtown parking and curbs, to help tell the story of how parking supply and management improvements can benefit users while staying true to the City’s ambitious goals to reduce climate impacts and curtail unnecessary driving.

Table 1 Parking and Curb Use "Avatar" People

The User	How Their Parking Needs Are Met in the Near Future
The Visitor Short-Term Paid Parking: Convenient parking for your work and play needs of four hours or less.	Aspen’s visitor parking options offer convenient, well-managed parking for people playing in, working in, and all-around enjoying our Downtown Core for four hours or less. Smart parking pricing helps increase the likelihood of finding a space available on every block. At the same time, active enforcement encourages turnover and adherence to other important rules—like no double-parking or no parking in a crosswalk—so everyone can use our parking options efficiently and safely.
The On-The-Go Loading, Pick-Up and Drop-Off: Designated, and managed space for active loading, delivery, pick-ups, and drop-offs.	For those on the go, Aspen offers designated spaces for active loading, pick-up, and drop-off options in places throughout the Core with the highest need, based on the data. These spaces are actively enforced so that they are used only for intended purposes—like unloading a delivery or dropping off a passenger—and so they can be offered equitably to anyone in our community who needs them.
The Multi-Day Longer-Term Parking Options: Simple, digital payment and permit options for longer or multi-day stays.	Aspen’s stay-and-play options allow longer-term and multi-day visitors to park worry-free in designated areas within walking distance to key destinations like skiing, shopping, dining, transit options, hotels/lodges, and more. With digital payment and verification, there’s no need to worry about losing a paper tag. Single-day Stay-and-Play parking can be purchased directly through the existing parking payment apps, and participating hotels and lodges can purchase single- or multi-day parking on behalf of their guests.
The Regular Resident & Commute Worker Parking: Predictable access to parking for people who live and work in Aspen.	For people who frequently park in central Aspen because they live or work there, more straightforward permits for residents and low-wage employees will provide affordable, well-managed parking options. People seeking hourly or daily parking will have an easier time finding a parking space because prices will be adjusted to manage demand, and some of the extraneous existing parking permits, which often create confusion about who can use them and where, will be eliminated or reformed.

Recommendations

Summary of Recommendations

Table 2 Summary Table of Parking and Curb Use Recommendations

Key Code	Recommendation	Potential Impact	Timeline*
PC-1	Add location-based demand pricing	Distribute demand, discourage some parking activity	Medium
PC-2	Change Rio Grande Garage pricing	Increase price, modify multi-pass options	Near
PC-3	Extend parking payment and enforcement hours	Add more morning enforcement hours and potentially add Sunday enforcement	Medium
PC-4	Reform or eliminate parking permits	Eliminate some permit options and reform others	Medium
PC-5	Amend city code to allow pricing flexibility	Enables other strategies, adds flexible management	Near
PC-6	Update citation fine amount for various infractions	Revise fines to focus on safety hazard parking acts	Medium
PC-7	Improve parking and mobility wayfinding	Organize and expand physical and app wayfinding	Near
PC-8	Revise commercial and passenger loading operations	Adjust some loading zone locations	Near
PC-9	Execute a regular data collection and analysis process	Measure and analyze further parking/curb data	Near

*Near-term: 1-3 years; Medium-term: 4+ years

The City and its partners can begin efforts on all recommendations immediately but may choose to prioritize some actions over others. The timeline reflects the horizon in which it may be practical to have the new or revised program or policy operating.

Recommendation Details

PC-1: Add Location-Based Demand Pricing

Recommendation Description

The City already prices parking higher during peak summer (June – September and winter (December – March) seasons, with midday (11 a.m. – 3 p.m.) pricing being higher than morning and late afternoon parking arrivals. This recommendation is to add another layer, a location-based pricing differential—for example, higher hourly pricing in the Core on streets closer to Aspen Mountain and lower hourly pricing farther away—as a further method to balance demand.

Figure 2 Aspen's Commercial Core parking can be purchased at a paystation or through a phone app.

Reasoning

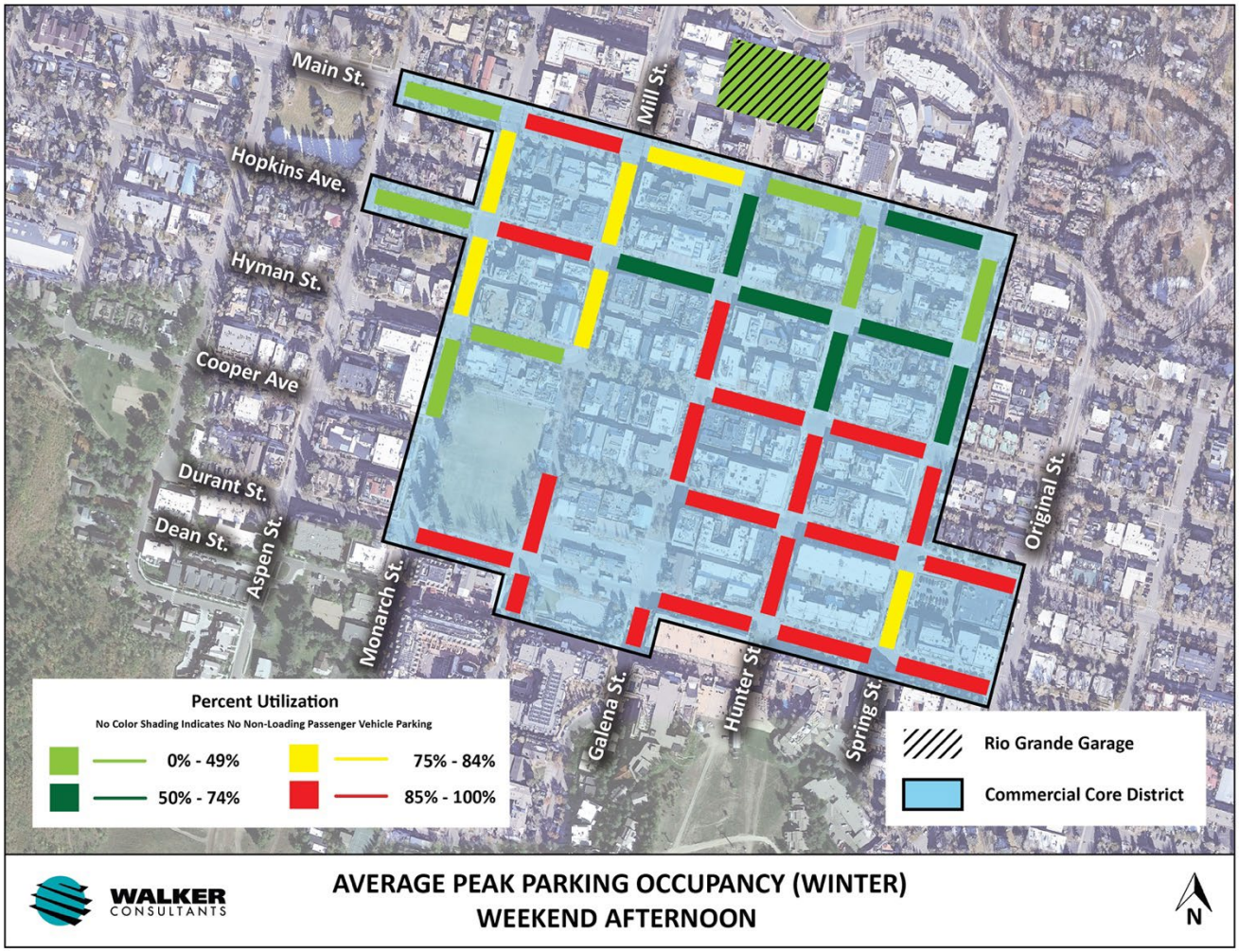
There is a parking use imbalance in the Aspen downtown core, and during both peak and off-peak seasons, the limited Commercial Core parking supply is highly utilized[1]. Location-based pricing is an additional tool that may be useful for distributing currently uneven demand.

Demand distribution issues occur frequently in the Core. Some street parking is very busy (like Galena between Durant and Hyman or Cooper between Galena and Spring), while other street parking a few blocks away (like much of Main and Hopkins) is much less utilized. The Winter and Summer peak occupancy maps developed for this study, as shown below, demonstrate this trend.

While this tactic may discourage some extraneous driving/parking trips, it will make the parking system more efficient and parking moderately easier to find in the busiest parts of the core.

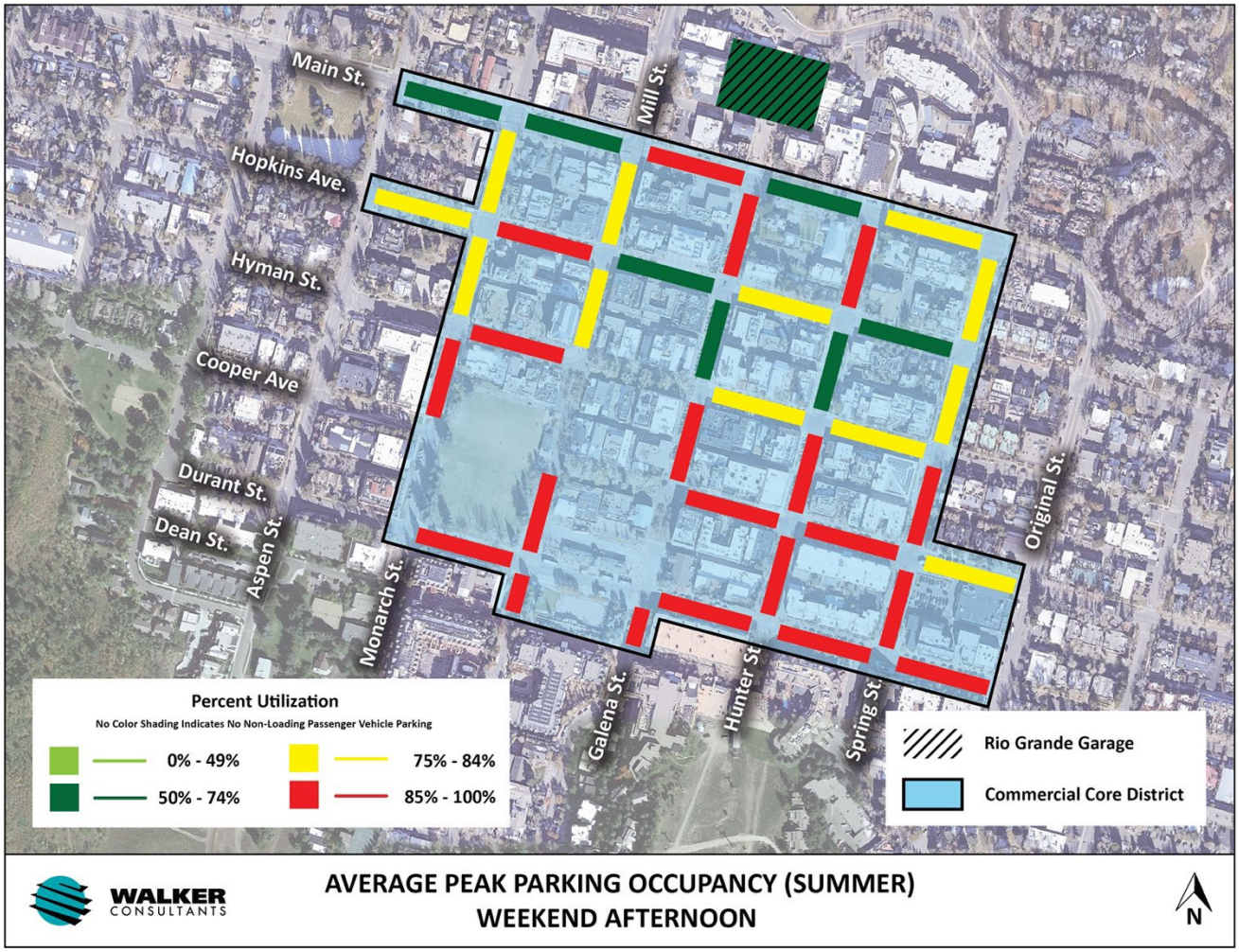
[1] The City is Aspen also evaluates the need for additional on-street spaces reserved for people with disabilities. Colorado law allows municipalities to charge people to use reserved disability spaces, with a few exemptions as outlined by the Colorado Department of Motor Vehicles - https://dmv.colorado.gov/persons-disabilities

Figure 3 Commercial Core Peak Parking Occupancy (Weekend, Winter)[2]



[2] See Appendix A: Existing Conditions Report for details about parking occupancy counts

Figure 4 Commercial Core Peak Parking Occupancy (Weekend, Summer)[3]



Potential Impact

Medium – It is likely to redistribute some parking within the Core and Residential zones and discourage some parking.

Implementation Considerations

1. Defining the boundaries of each location-based pricing zone is a vital step. The City should review all available parking occupancy data (and conduct additional and ongoing counts for monitoring) to determine high, mid, and low-demand areas.
    a. High-Demand (>86% occupancy at peak periods)
    b. Mid-Demand (65%- 85% occupancy at peak periods)
    c. Low-Demand (<64% occupancy at peak periods)
2. While these demand areas may vary block by block, the zones should be smoothed at the edges so that they are logically applied downtown, and the boundaries feel intuitive to a typical user. This plan recommends that high-demand pricing be used on all streets in the Commercial Core south, including both sides of Hyman. All areas to the north can use mid-demand pricing.

[3] See footnote 2

3. Based on an analysis provided in Appendix F: On-Street Price Sensitivity Analysis, the following rate changes are recommended to curtail parking use to a maximum of 85%-90% occupancy levels on all Core streets, thereby improving parking accessibility and reducing excessive vehicular circulation:
    a. High-Demand: Increase by $2 to $5 per hour
    b. Mid-Demand: Maintain existing rates
    c. Low-Demand: Reduce by $1 per hour
4. The City can continue to vary the baseline prices between peak and off-peak seasons.
5. Location-based demand pricing may render the midday price increase unnecessary, but the City can keep all tools in place during the initial launch period and then monitor occupancy impacts. The combination of peak and off-peak pricing, midday surge pricing, and location-based demand pricing uses overlapping pricing tools, which may be cumbersome to manage and communicate.
6. The City should monitor occupancy at regular intervals[4] throughout all seasons and can adjust the boundaries of the location-based pricing zones as needed. However, the City should adjust zones no more than once a year, as any more frequently adds unnecessary management complexity and would likely require the City to update signage, modify the payment app and pay station software, revise maps, and launch a communications effort with each change.

PC-2: Change Rio Grande Garage Pricing

Recommendation Description

The Garage charges a flat rate of $2/hour for each of the first three hours and $12 total for a full day of parking of more than three hours up to 24 hours. With the 10- and 20-quantity discounted refillable passes, the per-day price falls to $6. The price change recommendation has several options.

Hourly/Daily Rate Price Increase Options

1. Option A: Increase the basic rates by 50% to $3/hour during the first three hours and $18/day for stays beyond three hours. The City may decide on a different price increase amount.
2. Option B: Update peak season pricing to reflect the garage's positioning as a premium parking facility and address typical peak occupancy levels approaching or exceeding the 85% threshold. The recommended peak season pricing is shown in Table 3 below and reflects a 0.1 price elasticity[5]. Spring and Fall hourly rates would remain $2/hour.

Table 3 Recommended Hourly Parking Price Maximums and Occupancy Impact

Count Period	Typical Peak Occupancy	Existing Hourly Rate	New Hourly Rate Established Up To	Projected Occupancy at Maximum Price
Winter - Weekday	79%	$ 2.00	$ 4.00	69%
Winter - Weekend	73%	$ 2.00	$ 2.00	73%
Summer - Weekday	89%	$ 2.00	$ 6.00	69%
Summer - Weekday	77%	$ 2.00	$ 4.00	67%

[4] The City currently conducts a manual count of parking occupancy in the Core approximately four times yearly, once each season. This field verification provides the City a baseline of verified occupancy data that it can use to calibrate complementary technology-based occupancy data, such as license-plate recognition tracking and payment data.
[5] Occupancy would be expected to decrease by 10% for every 100% increase in price.

Garage Multi-Pack Price Increase or Elimination Options

The Garage refillable discount pass option should be adjusted to match the daily price increases. At $60 for 10 exits/days and $120 for 20 exits/days, the current pass is half the price of the daily rate for any stays beyond three hours. There are several options:

1. Eliminate the pass entirely and rely on users to purchase parking for each visit.
2. Increase the per-use pass cost to match the daily maximum times the quantity of passes purchased, essentially making it so the pass offers no discount but does offer the convenience of using the pass for quicker entries and exists without needing to pay every time.
3. Increase the price of the passes to track the general price increase in hourly parking, but still maintain a discount for all-day parking compared to paying per use.

Reasoning

High year-round use of the Garage suggests that a price increase is warranted to help distribute demand at the margin and maintain the revenue necessary for Garage operations and maintenance. In busy parking environments such as Aspen, demand is fairly price inelastic, meaning parking use is likely to decline or shift only moderately even in response to a large price increase. The redistribution effect out of the garage will be largest if the City raises garage prices but does not raise on-street hourly or daily residential zone pricing or increases those prices proportionally less than the garage increase. The new parking guidance system in the garage can help it fill closer to 100% efficiently and without undue vehicle circulation delay.

Eliminating the 10 and 20-use discounted pass option, or significantly increasing its price, is consistent with the City's goals and is a method to reduce an underpricing of parking subsidy that unnecessarily encourages driving. The City charges more for on-street parking in peak seasons and may wish to do the same for hourly parking in the garage, which currently uses the same prices year-round.

Best practice is for off-street public parking to be somewhat cheaper per hour than on-street. It is also typical to allow all-day off-street parking while having time limits on-street. The City has some margin to increase the Rio Grande Garage parking prices while remaining cheaper than Core area hourly rates. Note that a full day of Garage parking is $12 and a full day in the Residential Zone is $8. The City should be cautious of raising the Garage rate so much that it causes too many people to choose the Residential Zone instead and creates parking congestion there. The City should regularly monitor occupancy in the Garage, Core zone, and Residential zone to check for occupancy imbalances.

Potential Impact

Medium—A sizable price increase and the potential elimination or price-matching adjustment of the discount passes could notably influence people's decision to use the garage and the duration of their stay.

Implementation Considerations

4. Adjustments to Garage hourly prices and discount pass options must be made in the context of prices and parking options at alternative locations, namely on-street in the Commercial Core and on-street in the Residential zone. Grossly uneven pricing across options will lead to depressed demand in some locations and excessive demand in others.
5. The residential day pass (currently $8) is the most rivalrous alternative to the garage for daylong parking. The Garage is a premium option and location compared to Residential zone parking. Still, if garage prices greatly exceed those in the residential zone, many parkers will likely abandon the Garage in favor of Residential zone on-street parking.

PC-3: Extend Parking Payment and Enforcement Hours

Recommendation Description

Begin Monday through Saturday payment and enforcement earlier, possibly at 8 a.m. or 9 a.m. instead of 10 a.m. The new start time should be determined based on staff availability and measured occupancy earlier in the morning. Aspen may also consider adding payment and enforcement on Sundays, an increasingly busy day for downtown activity. Sunday enforcement could occur all day long in the same way as Monday through Saturday.

Reasoning

Downtown's parking is recently becoming congested earlier in the day. Many employees arrive at 6 a.m. or earlier and can currently park for free until 10 a.m. enforcement begins. With the four-hour maximum, many people can park for a full work shift and only pay for four hours. Starting enforcement earlier will help shift early arriving day-long parkers to more suitable long-term locations, such as the garage and residential zone. Nationwide in popular tourist and recreation towns, Sundays, which are not paid or enforced today in Aspen, are showing increased daylong activity downtown, and especially in the afternoon, it can be as busy as Saturdays. Aspen has not collected Sunday parking occupancy data, so it would want to conduct Sunday counts to evaluate demand before considering adding payment and enforcement.

Potential Impact

Medium—Extending enforcement can moderate parking use, likely not significantly curtailing demand but making people's parking activity more compliant and supportive of Aspen's overall downtown access and mobility goals.

Implementation Considerations

1. Additional enforcement hours will require more staff, which Aspen may be challenged to recruit. Adding Sunday enforcement could require up to two additional full time equivalent staff.
2. Businesses and other destinations in the enforcement area may object to extended enforcement, which they may view as dampening demand.
3. The City should conduct further parking occupancy and turnover (counts of how long vehicles stay parked at the curb) measurements to judge the necessity of extending enforcement into the evening, morning, and/or Sunday.

Figure 5 Enforcement in Aspen helps promote compliance and reduce disorder in the parking system

PC-4: Reform or Eliminate Parking Permits

Recommendation Description

1. **Eliminate extraneous permit options,** including the electric vehicle, neighborhood electric vehicle, fire department, doctor, mountain rescue, teacher, and service vehicle permits. These permits add to the "bloat" in the parking system, unnecessarily encourage driving and parking more than the users' needs and are often inequitably allocated. For example, the free Electric Vehicle permits do not contribute to mode shift goals and subsidize a parking option for primarily wealthier community members, as most EVs are still about 15-20% more expensive on average than gas-powered vehicles.

2. Eliminate the Carpool parking permit, as carpool parking is notoriously challenging to enforce because staff are rarely available to monitor how many people are in a vehicle for any parking location other than an access-controlled lot, which Aspen does not offer for carpool parking locations. Carpool permits are valid on one small half block near City Hall and the entire Residential Zone. Eliminating this option simplifies the parking program. People can still save money on parking by riding together and splitting the cost of regular hourly or daily parking. The City may consider re-instating the carpool permit in the future if technology supports it and there are ways to confirm people's eligibility in a multi-person carpool. Most carpool permit systems work by allowing multiple license plates[6] to share a single permit. Only one car at a time can park using the carpool permit, so this requires strong license plate recognition enforcement to ensure cars aren't doubling up. The City can determine eligibility in numerous ways. The simplest method is to allow any two or more cars registered at different home addresses to share a permit. The City could be stricter and require the applicants to send in or come to the parking office to provide proof of employment locations, proof of address, copies of driver's licenses, and other information.
3. Eliminate the Business permit and reinstate the smart loading zone system for curbside deliveries. People have perversely used the business permit for day-long parking in the Residential Zone when its intention is to allow businesses to keep a vehicle nearby for short-term quick curb access for deliveries and freight. Other options for short-term deliveries can be enhanced, while downtown employees continue to have numerous multi-hour parking options.
4. Eliminate the Lodge permit to eliminate this difficult-to-manage and much-abused permit option. The lodging permit is grossly underpriced at $3 total for five days compared to the $8/day regular rate for daylong parking in the residential zone. Lodge residents will be able to park in the general downtown core hourly on-street spaces, in the residential zone for the day-long price (which includes the first two hours free), or in other parking options made available by the lodge or a third party. This reform will require more diligent parking enforcement in the Downtown core, as lodging guests will no longer be uniquely enticed to mostly park in the residential zone because of the very low lodging permit price. Lodges and hotels may choose to purchase residential zone parking as a concierge service for their guests. Many hotels' management system software platforms support integration with Aspen's parking payment app. Lodges may choose to absorb the cost or pass it along to their guests directly.
5. Eliminate the Short-term Rental Lodging permit to reduce the bloat and complexity of this permit type, which is currently difficult to administer, has a low uptake rate by short-term rental managers, and is challenging to communicate about and enforce. Short-term rental guests will be able to park on the property if the location offers it or use the hourly or daily parking options available to visitors in the downtown core and residential zone areas.
6. Reform the Residential permit to more closely support the original intent of the program, which is to prevent parking spillover from the downtown core into the nearby residential area; provide some assurances of access to the curb for parking by those residents; and flexibly use the curb for paying non-resident parkers (as the $8/day option currently allows). The reform assumes that the paid day-long transient parking option remains available and that residential permit holders and day-long transient parkers can access the same on-street spaces. The City should establish that newly obtained permits require an annual fee to cover administrative costs and encourage people with off-street parking to use those spaces first. The City could continue allowing up to three resident permits and one guest permit per

[6] In an access-controlled parking area, such as a lot or garage with a gate or payment-on-entry booth, it is possible for the staff attendant or a camera to verify if the car has multiple passengers. Payment can still be made through a permit that the attendant or LPR system tracks, or the attendance can grant the vehicle a discount on hourly/daily parking because it is a two- or more-person carpool. It is nearly impossible to monitor how many people are in the car in on-street situations, so the only option is to enforce the vehicle license plates, not the passenger count.

address or reduce how many permits the people at each address may purchase. More strictly, the City could choose to add a fee to all new purchases and renewals starting at a future date.

7. **Digitize all permits** so that users can manage them through the online portal, and the City can link all permits to license-plate recognition enforcement systems. This will ease administration and make it simpler for permit holders to reassign, swap, and sell permits as needed. With this system, the parkers take the primary responsibility of inputting pertinent information about their permit request/application, and the City's burden is reduced to verifying the information prior to issuing the permit.
8. **Consider capping the available quantity of permits** to align with other City requirements—like Parking Maximums—, support TDM goals, and curtail driving overall. If the City offers only one permit type for low-wage workers, it can begin with no cap, then monitor the uptake of the permits and these users' impact on parking demand, only to impose a cap if this permit option excessively contributes to parking congestion.

Reasoning

Aspen has nine different types of special permits, many of which have different validation processes (some are digital and some require physical tags). This can be confusing to users and makes proper enforcement and validation difficult. Some permit types, like the Business permit and the Lodging permit, are used both for their intended purpose and as a de facto permit for commuters to Downtown, which was not an intended purpose of these options. Further, the many different permit types and the many people who have preferential access to the public right-of-way result in inefficient use of Downtown's limited inventory and inequities (some people getting options others don't have access to). These permits can detract from Aspen's transportation demand management and mode shift goals by subsidizing and perversely encouraging driving and parking among people who have other convenient options.

Potential Impact

High – These recommendations include significant changes to parking permit offerings, which, if enacted, will impact many hundreds of users. These reforms reduce or eliminate a massive source of parking subsidy currently in place because of the underpricing and profligate oversupply of these permits.

Implementation Considerations

1. The City may choose to enact all, some, or none of these recommendations, or variations thereof.
2. Permit reform is a politically challenging undertaking, due to current permit holders potentially feeling as those a long-held entitlement is being taken away.
3. If enacted, the City should set the trigger date for permit reform or elimination well into the future to allow permit holders time to adapt to the adjustment and develop new transportation and parking habits.
4. Any changes to permits will require an extensive communications strategy citywide generally and to permit holders specifically. The City may not have contact information for many holders of various permits, and so will need to deploy communications such as public signage, newspaper posting, website and email content, social media posts, and messaging partnerships through employers and lodging.

PC-5: Amend City Code to Enable Associated Parking Reforms

Recommendation Description

Several sections of the Code of Ordinances for the City of Aspen, Colorado itemize detailed parking fees, permit types, and miscellaneous fees. This creates a rigid and inflexible system in which the City Council must approve many parking management details, greatly limiting the ability of City staff to use parking management in more

nuanced and responsive ways. This will enable City staff to have more autonomy and capability to use tactics such as location-based demand pricing and parking permit reform more effectively and responsively. For example, Table 3, in action PC-2 provides a suggested maximum hourly price for peak summer and winter parking.

Reasoning

Facilitating ordinance changes to enable more responsive parking management to meet customer needs, reduce frustration among parkers in the Core, and reduce excessive circulation and associated vehicle miles traveled and emissions is a practical step to making the parking programs more responsive and straightforward to manage. These ordinance changes would focus on removing set rates and permit provisions from the Ordinance and allowing the Transportation and Parking Director to set rates within a range based on collected occupancy levels and other management objectives.

Potential Impact

Low—This policy change won't independently influence transportation activity, but it will allow the department director more authority to deploy other parking management tools more effectively.

Implementation Considerations

The City should review the following code sections and amend provisions as necessary. The list below is representative of code sections that should be reviewed but is not an exhaustive list of all potential amendments.

1. Section 2.12.060 – Parking Fees specifies exact parking price rates for hourly, daily, and many permit products. The City will need to determine what price ranges are suitable for adoption into the city code and how often the City Council will review and amend them. The City should establish several key performance indicators, such as parking occupancy, violation rates, and parking permit use, as triggers for adjusting price rates.
2. Section 24.02.120 – Waiver of parking limitations in subsection (c) enables various handicapped, service vehicles, construction vehicles, and delivery vehicles.
3. Chapter 24.16 – Residential Permit Parking Programs defines numerous residential permits and day-use options details.
4. Chapter 24.20 – Delivery Vehicles establishes regulations for delivery locations and permitted hours.
5. Chapter 26.515 Transportation and Parking Management included numerous mobility and parking policies and requirements that may need revision.

PC-6: Update Citation Fine Amounts for Various Infractions

Recommendation Description

In keeping with the community's commitment to safety and effective parking management, pursue measures like premium fines and graduated fines (higher fines for every time the rule is violated by an individual within a calendar year) for violations that impede others' ability to move freely throughout the core and make things less safe for pedestrians and cyclists (like parking in a crosswalk).

Generally, fines should be increased across the board, and graduated fines should be applied for all violation types. To demonstrate the increased impact of some violation types—like a violation resulting in a tow, or parking in a bike lane, ADA space, or crosswalk—apply premiums to them.

Table 4 depicts the recommended fine changes, and the projected impact based on the elasticity of behavior based on price increases. These changes are projected to reduce safety violations by 19%, tow violations by 28%, and violations overall by 6%.

Table 4 Recommended Fine Changes and Projected Outcomes

Fine Type	Average Fine (Current)	Average Violations (2021-2023)	New Fine	Projected Violations	% Reduction
Non-Payment	$ 50.00	16,791	$ -	16,791	
Non-Payment - Second	$ 50.00	2,687	$ 50.00	2,687	
Non-Payment- Third	$ 50.00	1,567	$ 100.00	1,254	
Non-Payment- Fourth	$ 50.00	1,343	$ 200.00	537	
Non-Payment- Total		**22,388**		**21,269**	**5%**
Overstay- Short Term	$ 49.29	4,550	$ -	4,550	
Overstay ST- Second	$ 49.29	728	$ 50.00	726	
Overstay ST- Third	$ 49.29	425	$ 100.00	337	
Overstay ST- Fourth	$ 49.29	364	$ 200.00	141	
Overstay- Total		**6,067**		**5,755**	**5%**
Overstay- Long Term	$ 56.73	382	$ 75.00	357	
Overstay LT- Second	$ 56.73	61	$ 110.00	50	
Overstay LT- Third	$ 56.73	36	$ 220.00	15	
Overstay LT- Fourth	$ 56.73	31	$ 330.00	1	
Overstay LT- Total		**509**		**423**	**17%**
Loading Zone Violation	$ 75.00	314	$ 75.00	314	
LZV- Second	$ 75.00	50	$ 110.00	46	
LZV- Third	$ 75.00	29	$ 220.00	18	
LZV- Fourth	$ 75.00	25	$ 330.00	8	
Loading Zone- Total		**419**		**386**	**8%**
Mispark (Non-Safety)	$ 74.86	982	$ -	982	
Mispark- Second	$ 74.86	157	$ 75.00	157	
Mispark- Third	$ 74.86	92	$ 110.00	83	
Mispark- Fourth	$ 74.86	79	$ 220.00	48	
Mispark- Total		**1,310**		**1,271**	**3%**
ADA	**$ 250.00**	**139**	**$ 250.00**	**139**	**0%**
Reserved/Designated Parking	$ 72.34	713	$ 75.00	708	
Reserved- Second	$ 72.34	114	$ 110.00	102	
Reserved- Third	$ 72.34	67	$ 220.00	39	
Reserved- Fourth	$ 72.34	57	$ 330.00	16	
Reserved- Total		**951**		**866**	**9%**
Other	$ 59.10	62	$ 50.00	62	

Other- Second	$ 59.10	10	$ 75.00	9	
Other- Third	$ 59.10	6	$ 150.00	4	
Other- Fourth	$ 59.10	5	$ 300.00	1	
Other- Total		**83**		**76**	**8%**
Safety Violation	$ 78.96	365	$ 100.00	345	
Safety- Second	$ 78.96	58	$ 200.00	40	
Safety- Third	$ 78.96	34	$ 400.00	6	
Safety- Fourth	$ 78.96	29	$ 800.00	-	
Safety- Total		**486**		**392**	**19%**
Fraudulence Violation	$ 100.00	7	$ 75.00	7	
Fraud- Second	$ 100.00	1	$ 110.00	1	
Fraud- Third	$ 100.00	1	$ 220.00	-	
Fraud- Fourth	$ 100.00	1	$ 330.00	-	
Fraud- Total		**9**		**8**	**13%**
Plate Violation	**$ 72.55**	**79**	**$ 72.55**	**79**	**0%**
Tow	$ 165.56	66	$ 275.00	57	
Tow- Second	$ 165.56	11	$ 550.00	6	
Tow- Third	$ 165.56	6	$ 1,100.00	-	
Tow- Fourth	$ 165.56	5	$ 2,200.00	-	
Tow- Total		**88**		**63**	**28%**
Grand Total		**32,527**		**30,726**	**6%**

Reasoning

Aspen's Downtown Core has a limited parking inventory. The community is clear in its desire to maintain this parking and is interested in ways to improve safety that do not involve widespread conversion of on-street spaces to other uses.

Overall, the enforcement goal is to reduce repeat violations that impede system efficiency and equitability, limit the impacts of parking violations on mobility freedom and safety, and reduce staff time spent on individual violations and cases. The recommended strategies are expected to support this goal by using graduated rates and targeted premiums for some violation types.

Graduated fines have a proven reductive impact on the volume of parking violations—a key benefit in Aspen, where non-compliance is frequent. These measures aim to reduce violations and improve safety and efficiency for all—not to hit a quota or increase revenue.

Potential Impact

Medium—This policy is focused on better enforcing parking violations that impact overall street user safety. Prioritizing enforcement of safety violations and setting fine amounts to match should be effective at curtailing some unsafe parking behavior.

Implementation Considerations

1. This policy may require the City to shift more enforcement personnel to safety violation monitoring and less to time limits and payment enforcement.
2. More robust safety enforcement should occur only in partnership with City Police and other law enforcement. These agencies play a complementary role in enforcing unsafe driving behavior, such as speeding and reckless driving, that Aspen's parking enforcement does not oversee.

PC-7: Improve Parking and Mobility Wayfinding

Recommendation Description

Aspen should make overall downtown wayfinding more coherent, comprehensive, and usable through improvements to various navigation tools. Methods to consider can include:

1. Simplify the formatting of parking regulatory signs and reduce the clutter of information on them. Reduce the number of signs on the street when possible. Parking control signs should meet the standards of the MUTCD sections 2B.39 through 2B.41[7] for legibility, placement, and orientation.
2. Install static signage at key entry points to downtown and at important destinations, such as ski areas, business districts, transit stops, parks, and cultural attractions.
3. Dynamic variable signage that can display a range of information, from parking availability to street closures to special information about transit service. Variable signs rely on extensive data availability, such as real-time parking occupancy, which the City does not collect. These types of signs would be a longer-term option if the City begins using sensors and technology to collect parking availability information.

Figure 6 Many of Aspen's signs are visually cluttered and difficult to read and interpret while driving.

Reasoning

A logical, ubiquitous, restrained wayfinding system can help people of all modes of travel find their destinations and end-of-trip facilities, including vehicle parking, bicycle parking, and transit stops. Properly functioning wayfinding can reduce people's need to circulate to find parking, lead them to the correct transit stop, and nudge people towards walking and biking because wayfinding promotes destinations and highlights active transportation route options people can take.

Aspen's current wayfinding systems are inconsistent and irregularly located around downtown and the residential parking zones. Improvements to wayfinding for people of all means of travel will make the city more navigable and help alleviate street congestion due to people being lost or unsure where to park or what routes to use.

A good downtown wayfinding plan is essential for guiding people through a complex urban environment. It should be clear, intuitive, and consistent, helping people navigate easily and efficiently. Wayfinding is especially

[7] https://mutcd.fhwa.dot.gov/htm/2003r1/part2/part2b3.htm

important to guide unfamiliar users, whether new residents, employees, or tourists, to important destinations such as parks and businesses and transportation options such as bicycle routes, parking locations, and bus stations. This is especially important for parking wayfinding if the City implements several parking zones with different pricing.

Figure 7 Examples of parking information signs (Sacramento, CA)

Potential Impact

Low – Quality wayfinding can generally improve people's transportation experience and, mostly by making people aware of other travel options, can encourage them to use non-drive methods for some trips.

Implementation Considerations

1. Wayfinding should serve all transportation users. Some wayfinding assets, such as on-street signage and web tools, can be useful for everyone as they guide people on foot, car, bike, or transit to popular destinations. Other wayfinding may be more customized to specific users, such as signs identifying key bicycle routes, parking location entrance signs, or transit station markings and branding.
2. Signage and markings should follow a branded wayfinding plan to ensure that physical signs and online interfaces are attractive, user-friendly, and consistent.
3. Physical signs must be designed and located to be easily visible and deployed extensively enough that people can navigate from sign to sign but not so flashy or pervasive that they detract from the aesthetic of Aspen and the City's stringent signs and branding regulations.
4. Parking information signs can vary significantly regarding their design and the content they display. At times, numerous signs are needed, such as on the left side of Figure 7, to display time limits, payment app information, nuanced parking restrictions, and courtesy information. This information is required or helpful to display to customers but can be used sparingly not to clutter the street. In other situations, just a subset of the signs can be used, such as the image at right in Figure 7, which displays the time limit. Aspen must use signs appropriately to identify different time limit and price zones, instruct people how to

pay, communicate bespoke or atypical regulations, and provide wayfinding to parking and other destinations.

5. Signs, especially for people walking and biking, should include distances to common destinations so that people know approximately how far their remaining journey will be.
6. In some cases, wayfinding and regulatory signage, such as Aspen's existing signs that identify the Residential Parking Zone and list the parking rules, can be the same.
7. It is important to provide wayfinding to electric vehicle (EV) charging locations, secure bicycle storage, and other newer types of end-of-trip facilities.

Elements of Downtown Wayfinding for All Users

Clear and Consistent Signage

- Standardized Signage: Use a consistent design scheme for all signs to create a cohesive visual experience.
- Informative Content: Ensure signs provide clear directions, distances, and landmarks.
- Multiple Languages: Consider providing information in multiple languages.

Strategic Placement of Signage

- Key Intersections: Place signs at major intersections and entrances to the downtown area.
- Points of Interest: Direct people to popular destinations like restaurants, shops, and attractions.
- Public Transportation Stops: Provide clear guidance for public transit users.
- Parking: Use signs to direct people to different parking zones, the garage, and any EV charger parking

Figure 8 Destination and parking wayfinding sign (Vancouver, WA)

Utilizing Different Signage Types

- Pedestrian Signs: Use pedestrian-friendly signs that are easy to read and understand.

- Street Signs: Ensure street signs are clearly visible and well-maintained.
- Digital Signage: Incorporate interactive digital displays to provide real-time information and updates.

Integration with Wayfinding Apps

- Compatibility: Ensure your wayfinding system is compatible with popular navigation apps.
- Real-Time Updates: Provide live information on traffic, parking availability, and events through the app.

Accessibility Features

- Braille Signage: Include Braille signage for visually impaired individuals.
- Accessible Maps: Provide maps with large print or audio descriptions.
- Accessible Parking: Ensure designated accessible parking spaces are clearly marked and easily accessible.

Figure 9 Parking availability sign (Bend, OR)

Regular Maintenance and Updates

- Inspect Signage: Regularly inspect signs for damage or deterioration and make necessary repairs.
- Update Information: Keep information on businesses, events, and public transportation up to date.

Community Involvement

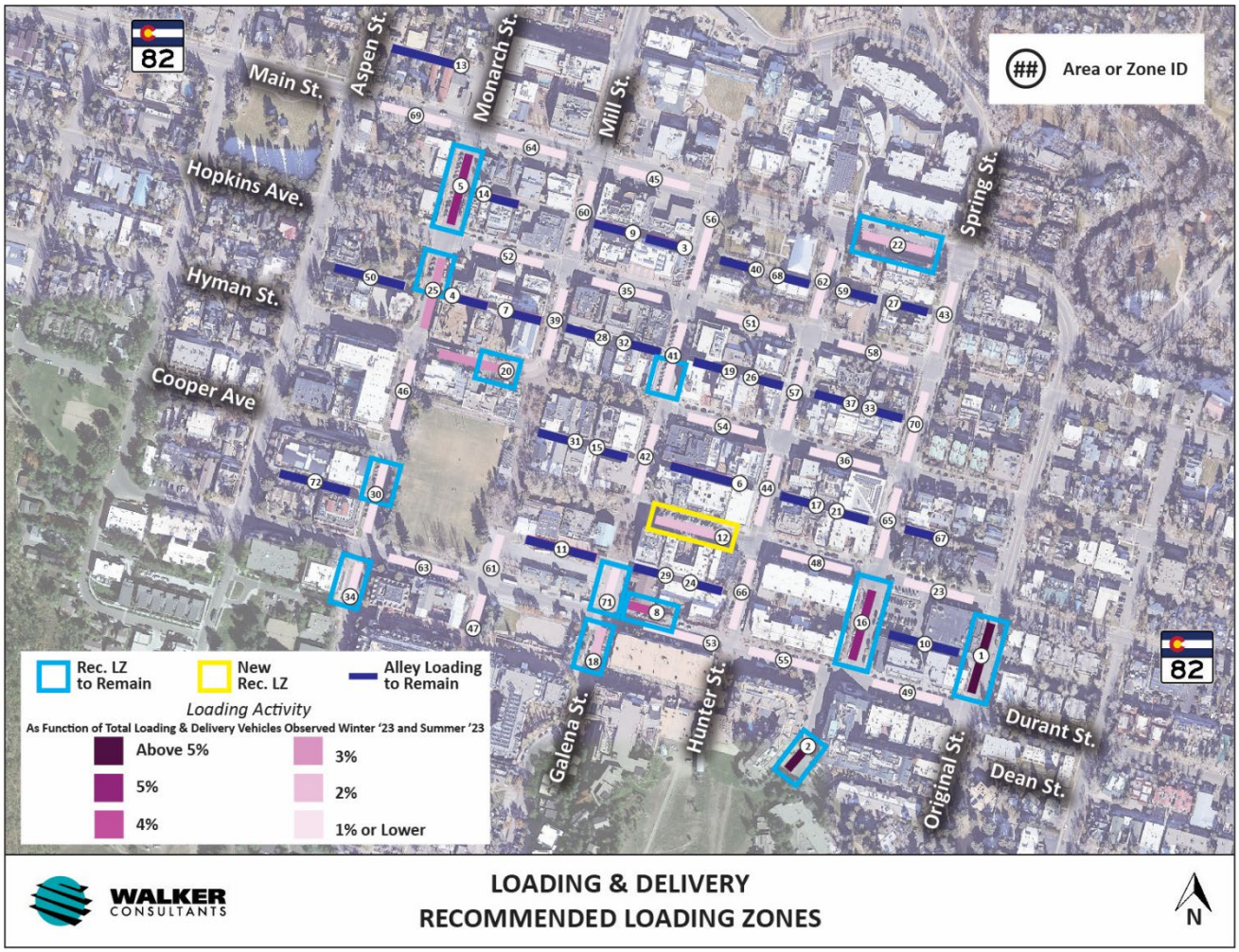
- Public Input: Involve the community in the planning and design process to ensure the wayfinding system meets their needs.
- Feedback Mechanisms: Provide a way for the public to provide feedback and suggestions for improvements.

PC-8: Revise Commercial and Passenger Loading Opportunities

Recommendation Description

1. **Redesignate loading zones in accordance with activity data.** Walker recommends re-locating existing zones based on loading activity data collected by the City in the Winter 2022/2023 and Summer 2023 peak seasons. The following figure shows the recommended on-street street segments to include designated loading zones compared to existing ones. These recommendations are based on a preliminary review of limited loading activity data and a Google StreetView scan of adjacent land uses. Walker recommends conducting outreach with businesses and conducting a more detailed survey before adding or removing loading zones.

Figure 10 Recommended Loading and Delivery Zones



2. **Consider implementing another Smart Loading Zone pilot program in the Core.** Monitor utilization of existing commercial loading zones and explore the need for additional loading zones with freight carriers and businesses.
3. **Conduct a planning study to explore smart loading zone implementation**. The study should explore charging a per-use fee for commercial delivery zones. Cities such as Pittsburgh and Omaha have active pilot studies underway that use street-mounted cameras to read vehicle license plates and can automatically charge users for the time they occupy the loading zone. A linked platform allows delivery and loading drivers to reserve a time slot at a smart loading location.
    a. Explore payment and technology options. Smart loading zones involve partnering with a technology vendor and could require considerable technology and infrastructure for implementation. Technology requirements typically include license plate readers, cameras, sensors, data platforms, automated fees and enforcement, and a loading zone reservation system available to a wide range of users through an app. Explore the potential for a phased approach as the technology and policy evolve, beginning with commercial loading zone permit pricing or metered loading zone spaces.
    b. Conduct significant outreach and education with freight operators and businesses, which is essential to the success of smart loading zone programs.

4. **Leverage locations identified in Figure 10 as initial locations for the SLZ pilot program.** The locations selected for a recommended new pilot SLZ program had the highest loading activity observed during the data collection period (at least 3 percent of total systemwide loading activity) based on data collected by City staff during the Winter 2022/2023 and Summer 2023 peak seasons[8].
5. **Consider leveraging alleys for loading activity with longer dwell times and/or larger vehicles.** The alleys are a strong option for longer dwell-time commercial loading, much of which requires larger, heavier-duty vehicles that block the limited travel infrastructure. This measure can reduce traffic congestion, reduce vehicle-vehicle, vehicle-pedestrian, and vehicle-cyclist conflict, and preserve the curb for more people-centric uses. However, some on-street loading zones may be necessary as not all businesses can have commercial loading occur in alleys, as businesses may not be located adjacent to alleys or have a back door leading to alleys.

Figure 11 A formal all-day loading zone in Aspen's downtown

Reasoning

Overall, the goal for loading, pick-up, and drop-off is to formalize and better manage increasingly in-demand options for quick, active stops for commercial and personal needs, especially in the Core. The recommended strategies are expected to support this goal by better-aligning loading zone locations with the organic concentration of loading activity and helping to prepare for the future incorporation of technology tools.

Potential Impact

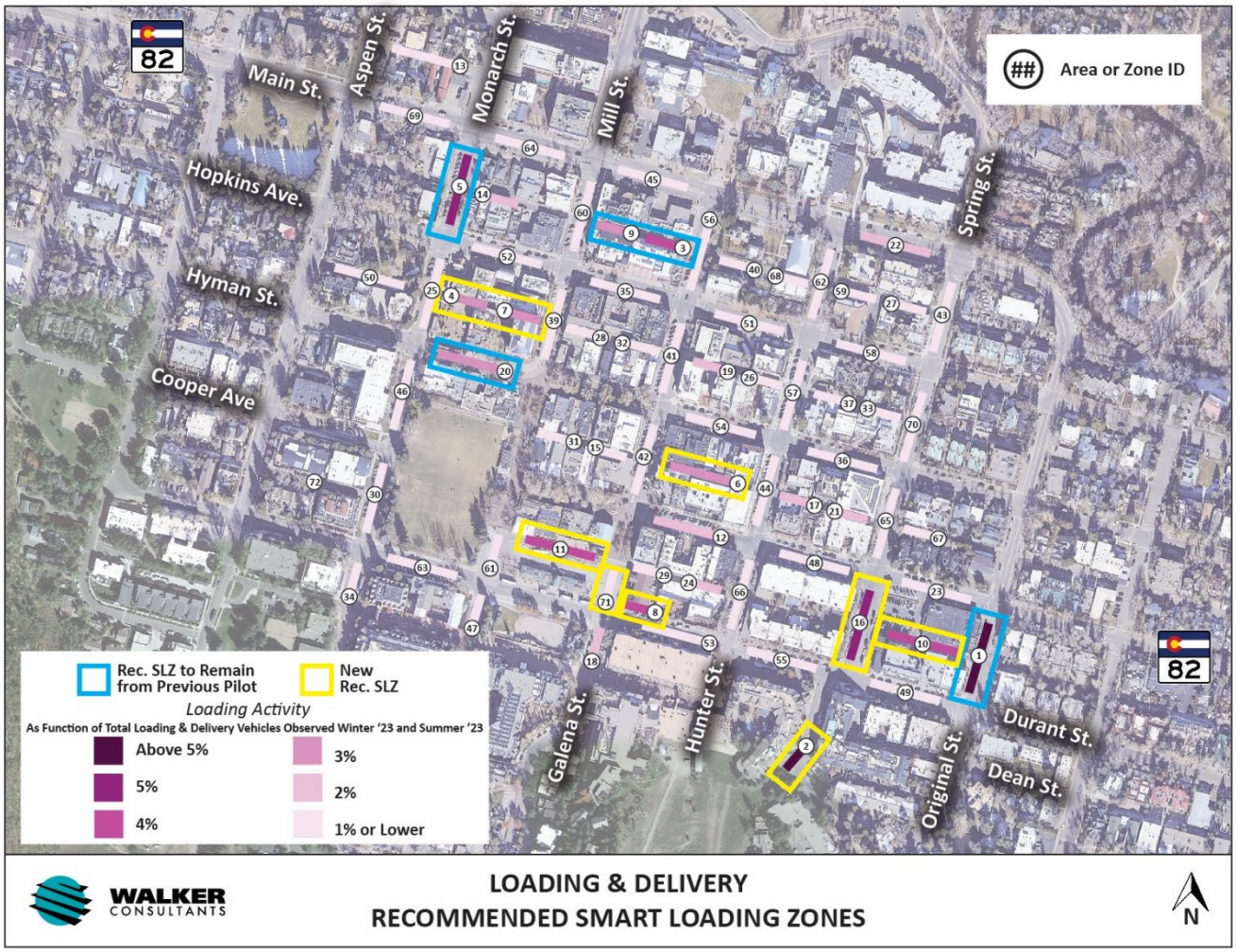
Medium – More organized, designated loading locations can ease disorder at the curb by providing dedicated space and alleviating the conflict of loading versus parking. Loading zones will also be important if the City removes the Business Permit, which had previously been used as an ad hoc method of providing low-cost business employee access to the curb.

Implementation Considerations

1. Based on the data, the City should consider designating a loading zone at the following street segment:
   - **ID 12:** This segment showed moderately high loading activity and would be suitable to add as a formal loading zone.
2. The City may wish to impose more controls on loading zone access, including requiring payment for the space's use, implementing a pre-reservation system, and restricting loading zone use to vehicles with a city-issued permit[9]. The City can also concentrate enforcement on loading zones to ensure proper space use and that people do not overstay their time limits.

[8] Location 71 was temporarily unavailable for loading during Winter 2022/23 and Summer 2023 due to a construction project but was a busy location in the initial smart loading zone pilot in 2020.
[9] San Luis Obispo, California, requires vehicles using the Commercial Loading Zones on-street during business hours to have a City-issued permit. https://www.slocity.org/government/department-directory/public-works/parking-services/delivery-services

Figure 12 Recommended Locations for the Smart Loading Zone Pilot Program Reboot



PC-9: Execute a Regular Data Collection and Analysis Process

Recommendation Details

Data Collection

Whether data collection is conducted by existing staff, contracted through a vendor, uses new technology resources, or some combination of the options, a detailed data collection plan should be developed to guide this intensive effort. A data collection plan should specify:

- Who is collecting data, and when
- What method of collection is to be used
- Where data collection will occur
- How results will be analyzed and presented
- How the data will inform decision-making and policy

Once per season, the City collects Commercial Core parking occupancy data by using a "blitz" of staff to manually tabulate vehicles. The City measures occupancy and no-parking violations during these counts. As staffing allows

the City should continue to perform these manual counts to provide as close as possible to a gold standard for typical sample occupancy each season.

The City can use the manual count data to calibrate inferred occupancy derived from looking at payment data and license plate lookups. While payment data doesn't provide a completely accurate occupancy measurement (because some people don't pay, and others stay longer or shorter than the time they paid for), it can help the City identify occupancy trends. Aspen may wish to install occupancy-monitoring technology, such as in-ground sensor pucks or cameras[10] that can tell if any given space is occupied.

Aspen may also wish to collect and analyze several other key parking metrics regularly. These may include:

The following parking data should be collected, through on-the-ground data collection efforts and through research/review of reporting tools through existing or future technology platforms.

1. Average turnover or dwell time, which is a measurement of how long vehicles occupy a parking space. It's important for busy downtowns to have adequate turnover so that some spaces are available even if overall occupancy is quite high. Turnover can be counted manually or through frequent cycles of license plate recognition.
2. Number of parking violations by type during data collection periods and annually within each area/zone. The City's parking enforcement software platform can support this, allowing Aspen to monitor how infraction behavior changes after parking policy and pricing adjustments.
3. Permit usage by type during the data collection period and annually within each zone. While Aspen may eliminate or cut back several permit types, it will be important to monitor how many people hold the remaining permits and how often they are used in the parking zones.
4. Number of tows during the data collection period and annually within each zone as another measurement of violations and enforcement activity.

Public Reporting

Publish a regular, high-level "State of Parking" report for a public audience. This report[11], written in plain language, can document data and highlight completed, in-progress, and upcoming projects.

Reasoning

Parking is an overlooked but essential part of Aspen's mobility system and a huge contributor to economic vitality, sustainability, and quality of life. Execution of this data collection plan will be essential to support continued progress on responsive parking pricing, updates on permitting management, and enforcement changes. Consistent gathering of basic information and performance indicators will allow the City to fine-tune policy and programs on a regular basis instead of relying on occasional major overhauls

Potential Impact

Low—This policy change won't influence transportation activity alone, but it will allow the City to monitor progress in parking management more effectively and shift travel choices away from driving alone.

[10] Bend, Oregon, is one such city that recently installed camera monitoring of downtown parking occupancy in on-street and parking lot locations. The data helps the City monitor parking trends and feeds into a real-time signage system on the street that helps guide drivers to available parking spaces.

[11] A relevant example reporting structure is available in the Boulder, Colorado, *Revitalizing Parking and Transportation Access in Boulder* reports, which can be viewed at: https://bouldercolorado.gov/guide/revitalizing-parking-transportation-access-boulder

Implementation Considerations

1. Initially, data collection should be focused on existing managed parking areas, including the Commercial Core and Residential parking permit areas. Where data collection expands in the future may be informed by contiguity with existing managed parking boundaries, official or recognized neighborhood boundaries, planning area boundaries, or areas of common land use and multimodal connectivity characteristics.
2. To support the efficient use of city resources, data collection should be concentrated on areas known to have parking pressures or land uses that are known to contribute to parking and transportation pressures. It is assumed that there will be areas within city limits that are not included in the initial data collection effort because they do not have managed public parking facilities.

4. Fixed-Route Public Transportation

Existing Service

The City of Aspen manages and funds eight free local bus lines, operated by the Roaring Fork Transit Authority (RFTA) and designed/managed by City of Aspen staff. All RFTA transit routes outside of Aspen are designed, managed, and funded by RFTA. Schedules adjust seasonally, based on peak or shoulder activity. Local routes service downtown, most residential neighborhoods, important services such as the school and hospital campuses and the base of Aspen Mountain and Highlands Village. Fixed route buses either terminate at or make stops at the downtown Rubey Park Transit Center, with the exception of the Galena Street Shuttle.

Figure 13 Aspen Free Shuttles Routes Map

Source: Roaring Fork Transportation Authority (RFTA), 2024

Ridership

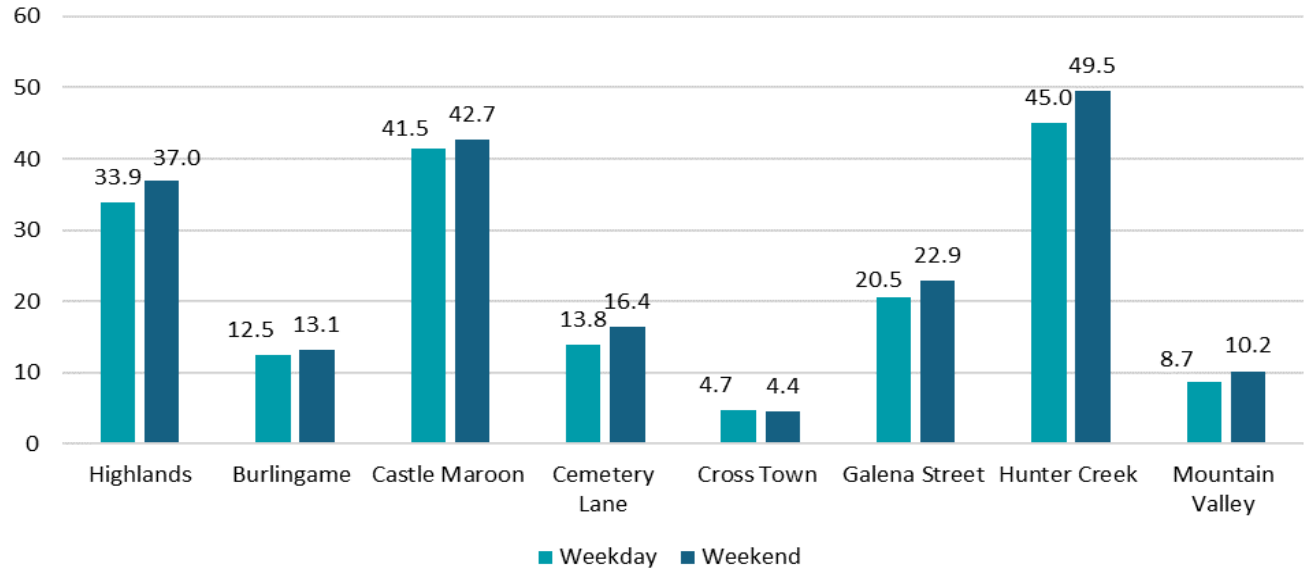
This section provides a summary of ridership by bus line and season between 2022 and 2023. Bus service operated during the following dates:

- The Winter Season was from November 20, 2022, to April 14, 2023.
- The Spring Season was from April 15, 2023, to June 9, 2023
- The Summer Season was from June 10, 2023, to September 29, 2023
- The Fall Season was from September 30, 2023, to November 17, 2023

Winter Season

Figure 14 summarizes winter season ridership by bus line on weekdays and weekends.

Figure 14 2022-2023 Winter Season Passengers per Revenue Hour by Line on Weekdays and Weekends



Data Source: Roaring Fork Transportation Authority (RFTA), 2024

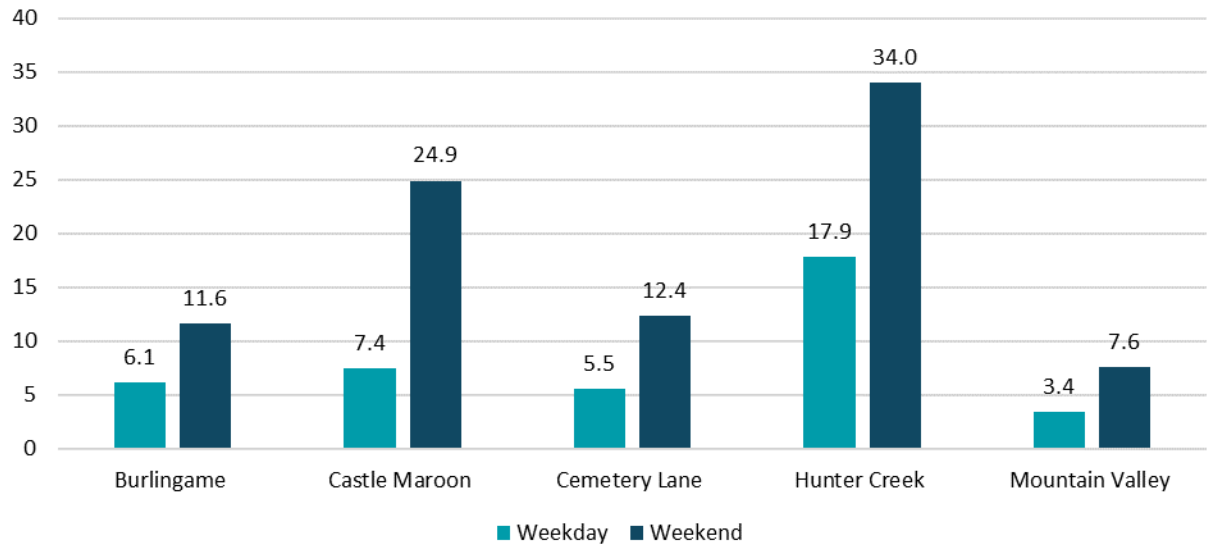
Of the eight bus lines that operated in the 2022-2023 winter season, Castle Maroon and Hunter Creek recorded the highest winter season total weekday and weekend boardings. Hunter Creek achieved the highest passengers per revenue hour (weekday: 45.0; weekend: 49.5); Cross Town had the lowest (weekday: 4.7; weekend: 4.4).

During the 2022-2023 winter season, Hunter Creek was busy throughout the day on weekdays and weekends with nine consecutive hours of high productivity (greater than 40 passengers per vehicle revenue hour). Castle Maroon and Highlands experienced surges in demand during the 2022-2023 winter season in mid-afternoon on weekdays and weekends with five consecutive hours of greater than 40 passengers per vehicle revenue hour. However, on weekday and weekend evenings and nights in the 2022-2023 winter season, Mountain Valley and Crosstown operated at low efficiency, with fewer than seven passengers per vehicle revenue hour for four and five consecutive hours, respectively.

Spring Season

Figure 15 summarizes spring season ridership by bus line on weekdays and weekends.

Figure 15 2023 Spring Season Passengers per Revenue Hour by Line on Weekdays and Weekends



Data Source: Roaring Fork Transportation Authority (RFTA), 2024

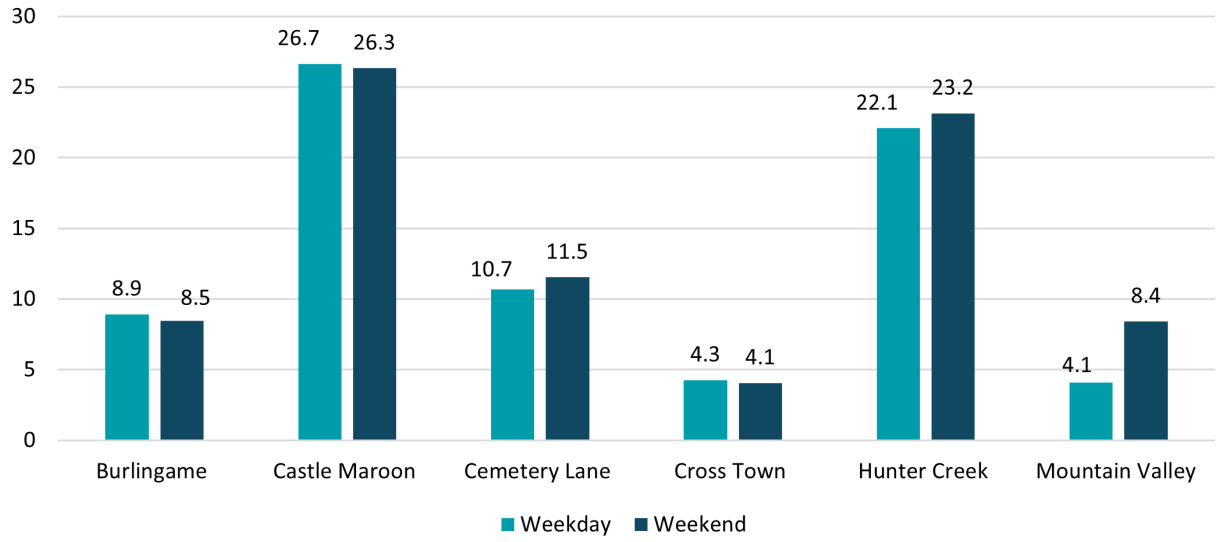
Of the five lines that operated during the 2023 spring season, Hunter Creek recorded the highest spring season total weekday and weekend boardings. Hunter Creek also achieved the highest passengers per vehicle revenue hour (weekday: 17.9; weekend: 34.0), while Mountain Valley had the lowest (weekday: 3.4; weekend: 7.6).

During the 2023 spring season, Hunter Creek was busy on weekend afternoons with five consecutive hours of high productivity (greater than 40 passengers per vehicle revenue hour). By contrast, Mountain Valley operated at low productivity in the 2023 spring season on weekdays, with fewer than five passengers per vehicle revenue hour for seven and six consecutive hours in the evening and nighttime, respectively.

Summer Season

Figure 16 summarizes summer season ridership by bus line on weekdays and weekends.

Figure 16 2023 Summer Season Passengers per Revenue Hour by Line on Weekdays and Weekends



Data Source: Roaring Fork Transportation Authority (RFTA), 2024

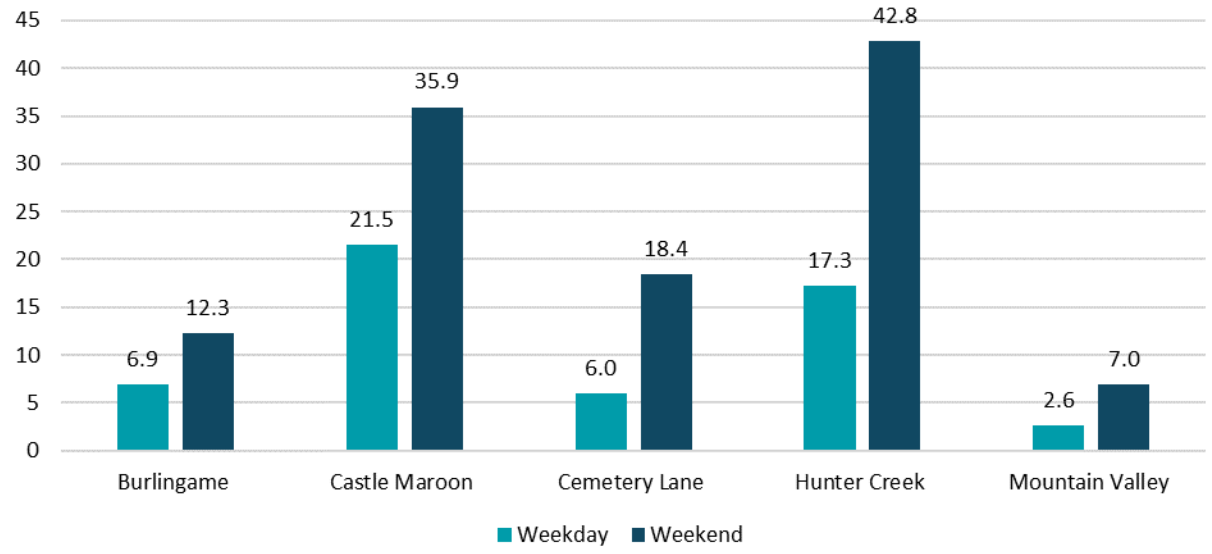
Of the six lines that operated during the 2023 summer season, Castle Maroon and Hunter Creek recorded the highest summer season total weekday and weekend boardings of all the routes. Castle Maroon achieved the highest passengers per vehicle revenue hour (weekday: 26.7; weekend: 26.3), while Cross Town had the lowest (weekday: 4.1; weekend: 8.4).

In terms of operational efficiency, during the 2023 summer season, no lines experienced more than one hour of high productivity exceeding 40 passengers per vehicle revenue hour. Moreover, Cross Town and Mountain Valley experienced low productivity on weekdays during the 2023 summer season, with fewer than five passengers per vehicle revenue hour for six and seven consecutive hours in the morning, respectively.

Fall Season

Figure 17 summarizes summer season ridership by bus line on weekdays and weekends.

Figure 17 2023 Fall Season Passengers per Revenue Hour by Line on Weekdays and Weekends



Data Source: Roaring Fork Transportation Authority (RFTA), 2024

Of the 5 lines that operated during the 2023 fall season, Castle Maroon and Hunter Creek recorded the highest fall season total weekday and weekend boardings of the active routes. Castle Maroon and Hunter Creek achieved the highest passengers per vehicle revenue hour on weekdays (21.5) and weekends (42.8), respectively, while Mountain Valley had the lowest (weekday: 2.6; weekend: 7.0).

In terms of operational efficiency, during the 2023 fall season, Hunter Creek was busy throughout the day on weekends with 11 consecutive hours of high productivity (greater than 40 passengers per vehicle revenue hour). Castle Maroon experienced surges in demand during the 2023 fall season in the middle of the day on weekends with 6 consecutive hours of greater than 40 passengers per vehicle revenue hour. However, on weekdays, Mountain Valley operated at low efficiency on weekdays in the 2022-2023 winter season, with fewer than 6 passengers per vehicle revenue hour for the entire period of operation (6:00 a.m. to 12:00 a.m.).

Recommendations

Summary of Recommendations

Table 5 provides an outline of fixed-route transit recommendations grouped into two categories: Transit Operations, Planning, and Reporting (OPR-); and Fixed-Route Service Changes (FR-).

Table 5 Summary Fixed-Route Public Transportation Recommendations

Key Code	Focus Area	Recommendation
OPR-1	Transit Operations, Planning, and Reporting	Utilize a 5-year average for annual ridership benchmarking.
OPR-2		Develop a major and minor service change framework
OPR-3		Establish and apply robust service standards
FR-1	Fixed-Route Service Changes	Change service schedules for the Cemetery Lane route.
FR-2		Combine Mountain Valley and Crosstown routes into a single line year-round.
FR-3		Reinstate the Galena Street Shuttle during the Summer.

The following sections, "Transit Operations, Planning, and Reporting," and "Fixed-Route Transit Service Changes," provide a detailed description of each of the recommendations.

Transit Operations, Planning, and Reporting Recommendations

OPR-1: Utilize a 5-Year Average for Annual Ridership Benchmarking.

Due to fluctuations in transit ridership resulting from the COVID-19 pandemic, it is recommended to calculate annual ridership by taking the average of 5 years to accurately assess ridership trends and omit outlier years with extremely high and low ridership levels. Walker recommends taking the average annual ridership from the following years to establish a baseline: 2018, 2019, 2022, 2023, 2024.

OPR-2: Develop a Major and Minor Service Change Framework

Establish a framework for service changes that distinguishes between minor and major service changes and outlines a process to facilitate decision-making for both types of changes. An example is the policy used by Transfort[12] (transit agency in Fort Collins). Because federal guidelines require transit agencies to administer a public hearing when major changes to transit service are under consideration, Transfort developed a framework that defines major service changes as those that change the route mileage, service hours, or number of stops by 25% or more, or the proposal of a new route. All other service changes are considered minor changes and have a different process for decision-making by staff. Under Transfort's policy, minor changes do not require a public hearing, but the public is provided an opportunity to provide comment during the public notice period. If there are no comments, Transfort staff implement the change. If there are comments, the agency takes comments into consideration and decides how to proceed based on the input received.

Figure 18 Transfort's Service Change Criteria (source: Transfort, Fort Collins, Colorado)

Item	Measures to Determine Major Service Changes
A	A change of 25% or more in the transit route miles*.
B	A change of 25% or more in revenue miles.
C	A change of 25% or more in a route's in service hours not including recovery.
D	A change of 25% or more of the number of stops that a route serves.
E	A new transit route is proposed.
F	Experimental or emergency service changes that meet or exceed the measures specified in items A, B, C, D and/or E above may be instituted for 180 days or less without prior notification. A public hearing must be held during that time if the experiment or emergency is to remain in effect for more than 180 days.
G	Standard seasonal variations in transit service are exempt from public hearing requirements unless the number, timing and type of service changes meet the above criteria.
H	It will not be a major service change if service is replaced without interruption at a level that would not otherwise constitute a major change.

*Transit route miles are defined as the alignment of the line trace from the route definition.

OPR-3: Develop and Apply Robust Fixed-Route Service Standards

Transit service standards (also called performance measures) are commonly used in the transit industry to guide the allocation of limited resources through a data-driven and transparent methodology. Service standards should include a description of the service change process and metrics for evaluating service. In terms of evaluating service, standards can help identify services performing well and those with opportunities for improvement. Walker recommends the adoption of service standards to provide documented guidelines for City staff and stakeholders when discussing changes to transit service in Aspen.

The following are some commonly used standards and some guidance for using these in Aspen. Unless noted, these standards are intended for scheduled fixed-route service. There are no national standards, so each service provider needs to institute their own.

Route Classification

Creating a route typology enables some routes to have specific service standards, such as frequency and hours of operation, based on the goals of a particular route type. For example, a busier route such as Hunter Creek might be classified as Frequent with higher minimums for frequency and possibly expanded service hours. Other routes, such as Highlands, Cross Town, and Galena Street, might be classified as Seasonal to codify the lack of year-round service. Other services might be simply called Local routes.

[12] Source: Transfort (2023). Fare change policy. https://ridetransfort.com/wp-content/uploads/2023/11/Final_Route_Change__Fare_Policies.pdf

Span of Service (Hours of Operation)

The span of service might vary by season and by type of route. The service hours for most routes have been stable, with some exceptions during COVID, and appear to match the main hours of activity in the City. This standard intends to reach a consensus on a minimum for each route type and season while allowing for more service if desired and resources allow.

Frequency

It is recommended that routes labeled as Frequent always maintain at least a frequency of every 15 minutes or better. Research has shown that this is the lowest frequency for most riders to use the service without referring to a schedule (also called "walk-up" service). A minimum of every 30 minutes or better is recommended for other services to make the service useful for a broad customer base. Frequency standards can vary by route type, season, and time of day. For example, a single route may have a 15-minute frequency during peak hours and a 30-minute frequency during off-peak hours.

Productivity

This standard ensures that resources are used effectively and efficiently by requiring a minimum ridership. This is typically measured in passengers per vehicle revenue hour (each vehicle in service on a route for one hour is a vehicle revenue hour). Some larger, denser areas might set a minimum goal of 10 passengers per vehicle revenue hour, but for smaller systems like Aspen's, a minimum of 8 passengers is probably appropriate. Many systems also measure the net cost per passenger as part of productivity, but with Aspen's fare-free system, this would be redundant since there are no varying fares by passenger type.

Route Spacing

This standard is intended to minimize redundancy in the fixed route network, which would cause routes to cannibalize each other's ridership and result in transit vehicles being emptier overall. A typical standard would require most of a route to be at least ½ miles from the next route so that most locations would be within ¼ miles of service. There would be exceptions for paths near transit centers, geographic barriers, or routes designed as branches with trunk service.

Fixed Route Directness

This may be simply a qualitative statement that routes should follow the straightest path wherever possible. Alternatively, for requested mid-route deviations, an analysis can be performed of the overall travel time benefits and costs to passengers, with deviations only being allowed if there is a net benefit when considering all riding and walking time. An example of the directness standard from RTD in Denver is as follows: "Deviations from a direct path from end-to-end of the route shall account for no more than one-quarter of the end-to-end travel time of the route."

Patterns/Variants on Fixed Routes

The intent is to help evaluate requests for special fixed-route service at specific times for employer shift changes, school arrivals/dismissals, etc. Creating a more complicated network can discourage ridership by making the service more difficult to understand. Simplicity should be a goal but with some allowance for special trips if ridership justifies it (while complying with Federal Transit Administration rules prohibiting public agencies from operating charter or school bus services). Similarly, if part of a route has much higher ridership and warrants more frequent service (a "short-turn"), then a threshold can be established for the ridership ratio that will justify the added complexity.

On-Time Performance

This metric measures service reliability and should include time points along each route spaced generally every ½ mile or less. A typical standard would consider the trip to be on time if it arrived at the timepoint between 2 minutes before the scheduled time and 5 minutes after the scheduled time. Exceptions are often made for the beginning of the route (no early departures) and the end of the route (earlier arrivals allowed). Also included in this standard is often a goal relating to missed trips (no more than 1% of scheduled trips, for example).

Passenger Load/Crowding

Occasional crowding can occur due to unexpected service delays or surges in demand, but this standard is intended to measure typical conditions for passenger comfort. Some standees are typically permitted, especially on shorter routes comprising the Aspen service. Peak loads of no more than 125% of seats is a typical standard, as measured by the average for each scheduled trip across all days in a schedule period or calendar month. For trips that average greater loads than permitted, either larger vehicles or more frequent service is usually the remedy. Some systems reduce the allowable passenger load to 100% of seats during less busy seasons or times of day.

Geographic Coverage

For Aspen, it may be possible to establish that all the developed areas in the entire City should be within ¼ mile (~5-minute walk) from transit service unless there are areas that have very low density or are very difficult to serve. Aspen could use formal measures of urban geographies, such as population density or official classification as a "developed area," to establish the aspirational ¼ mile proximity standard. A more practical approach would be to use existing transit ridership attainment as a primary service standard and then evaluate if any non-covered locations have sufficient density to warrant considering service expansion or adjustment into the area.

Bus Stops

Bus stop standards can include stop spacing (typically 4-7 stops per mile), amenities (for stops with more than 25 boardings per day can include shelters, benches, trash receptacles, information signs, etc.), and design. Design standards should include ADA accessibility, sidewalk, and crosswalk connectivity, safe operation for buses and pedestrians, lighting, and locations near activity centers where possible.

Customer Satisfaction

If regularly surveying customers is possible, standards should focus on longitudinal trends over time and flag any outlier issues with unusually negative (or positive) ratings. Even if offered online only and not necessarily providing a statistically valid sample, annual surveys can be useful for maintaining good service and improving.

Service Planning Process

An annual service review is a good practice. This would involve evaluating all services against the standards previously described and evaluating requests for service changes. Incorporating input from the public and stakeholders should be part of the process. Changes to service can be initiated due to requests and/or identified service deficiencies. Conversely, services performing unusually well can be strengthened and/or emulated.

Many transit agencies define a "major service change," which they use as an internal standard to trigger seeking public input before any change is implemented. Examples of major service changes may include adjustments of 25% or more to transit route miles, revenue miles, service hours, or other factors relevant to a community's transit provision.

Impacts and Benefits

The recommended frequency adjustments and combining of low-ridership routes may improve the efficiency of Aspen's local bus service by reducing investments in low-performing services or routes during off-peak hours and

allowing for increased investment in high-performing routes (e.g., Hunter Creek). Fixed-route service standards and changes that align with these standards support the city's transportation demand management (TDM) goals and related strategies, such as increases in parking fees, parking violation fees, and permit fees.

Fixed-Route Service Change Recommendations

Table 6 summarizes existing fixed-route transit services and recommends changes for the future.

Table 6 Fixed-Route Transit Recommendations

Existing Service					Future Service
Bus Line	No. of Vehicles	Span of Service - Hours		Frequency (minutes)	Recommended Changes
		Weekday	Weekend		
Winter					
Highlands	1	14	13.5	45	None
Burlingame	2	18	17.5	30	None
Castle Maroon	2	20	18	20	None
Cemetery Lane	1	20	18	30	None
Cross Town	1	15.5	15.5	30	Combine Mountain Valley and Cross Town fixed routes into a single line with 30-minute or less frequencies. Use the current Mountain Valley service hours. This change is estimated to provide minor cost savings from a simpler route plan and more bus and labor efficiency. Ridership impact: negligible or small increase.
Galena Street	2	9.5	9.5	10	None
Hunter Creek	1	20	18	20	None
Mountain Valley	1	19.5	17.5	30	See Cross Town route recommendation
Spring					
Burlingame	2	18	17.5	30	None
Castle Maroon	2	17.5	17.5	20	None
Cemetery Lane	1	17.5	17	30	Change the schedule on weekdays such that fixed-route service ends at 8:00 or 9:00 p.m., after which on-demand service is offered. This change will slightly decrease costs due to fewer service hours. Ridership impact: may decline slightly, but ridership on the substitute night on-demand service may increase.
Cross Town	None				Combine Mountain Valley and Cross Town (new Cross Town area coverage added to the Spring) fixed routes into a single line with 30-minute or less frequencies. Use the current Mountain Valley service hours. This change is estimated to provide minor cost savings from a simpler route plan and more bus and labor efficiency. Ridership impact: a small increase is expected from adding service to the Cross Town area in the Spring.

Hunter Creek	1	17	17	20	None
Mountain Valley	1	19.5	18	30	See Cross Town route recommendation
Summer					
Burlingame	2	18	17.5	30	None
Castle Maroon	2	20	18	20	None
Cemetery Lane	1	18	17.5	30	None
Cross Town	1	15.5	15.5	30	Combine Mountain Valley and Cross Town fixed routes into a single line with 30-minute or less frequencies. Use the current Mountain Valley service hours. This change is estimated to provide minor cost savings from a simpler route plan and more bus and labor efficiency. Ridership impact: negligible or small increase.
Galena Street	None				Reinstate service during the Summer. This will add operating costs, which will vary depending on how many service hours are provided. The service can use two vehicles to achieve ten-minute headways (as the Winter service currently operates). Winter service hours run for 9.5 hours; Aspen may wish to run a longer-duration service in the Summer because of longer daylight hours. Ridership impact: increase, due to adding service.
Hunter Creek	1	19.5	17.5	20	None
Mountain Valley	1	19.5	18	30	See Cross Town route recommendation
Fall					
Burlingame	2	18	17.5	30	None
Castle Maroon	2	20	18	20	None
Cemetery Lane	1	20	18	30	Change the schedule on weekdays such that fixed-route service ends at 8:00 or 9:00 p.m., after which on-demand service is offered. This change will slightly decrease costs due to fewer service hours. Ridership impact: may decline slightly, but ridership on the substitute night on-demand service may increase.
Cross Town	None				Combine Mountain Valley and Cross Town (new Cross Town area coverage added to the Fall) fixed routes into a single line with 30-minute or less frequencies. Use the current Mountain Valley service hours. This change is estimated to provide minor cost savings from a simpler route plan and more bus and labor efficiency. Ridership impact: a small increase is expected from adding service to the Cross Town area in the Fall.
Hunter Creek	1	20	18	20	None
Mountain Valley	1	19.5	17.5	30	See Cross Town route recommendation

Existing Service Information Source: City of Aspen, 2024

FR-1: Change service schedules for the Cemetery Lane route.

On weekdays in the Spring and Fall, adjust Cemetery Lane service so that fixed-route service is offered until 8 p.m. or 9 p.m., after which on-demand service is offered. This recommendation, also in the 2018 Short Range Transit Plan (STRP), would likely not save on costs since the same number of vehicles would be required. However, it could offer more flexible service (potentially, rides could be offered from any bus stop to any other bus stop) to a customer base consisting mostly of locals during this period of lowest demand. Providing on-demand service during off-peak hours would also facilitate greater integration of the fixed-route and on-demand services and help familiarize passengers with both service models operated as appropriate depending on demand.

FR-2: Combine Mountain Valley and Crosstown routes into a single line year-round.

Both routes have low ridership but provide service to areas otherwise not covered by transit. Combining the routes will allow for more efficient bus usage and fewer delays due to long layovers at Rubey Park. Service into the Crosstown area would be extended into Spring and Fall to make it a total year-round route. The dial-a-ride portions of Mountain Valley, to McSkimming Road, Eastwood Road, and Stillwater Drive, would be eliminated. These locations can be added to Downtowner's coverage area, served by taxis or ridehauling, and/or provided replacement service through other programs.

FR-3: Reinstate the Galena Street Shuttle during the Summer.

Return Galena Street Shuttle to service during the summer service season in order to provide additional service capacity and frequency along the Hunter Creek route. Initially, service can run similarly to the existing Winter schedule, with two buses operating 9.5 hours per day or more on weekdays and weekends to provide a 10-minute frequency. The City and RFTA may choose to adjust Summer service hours based on ridership and variations in peak demand periods. The City already has buses available for this service and does not need CDL-qualified drivers to operate the route.

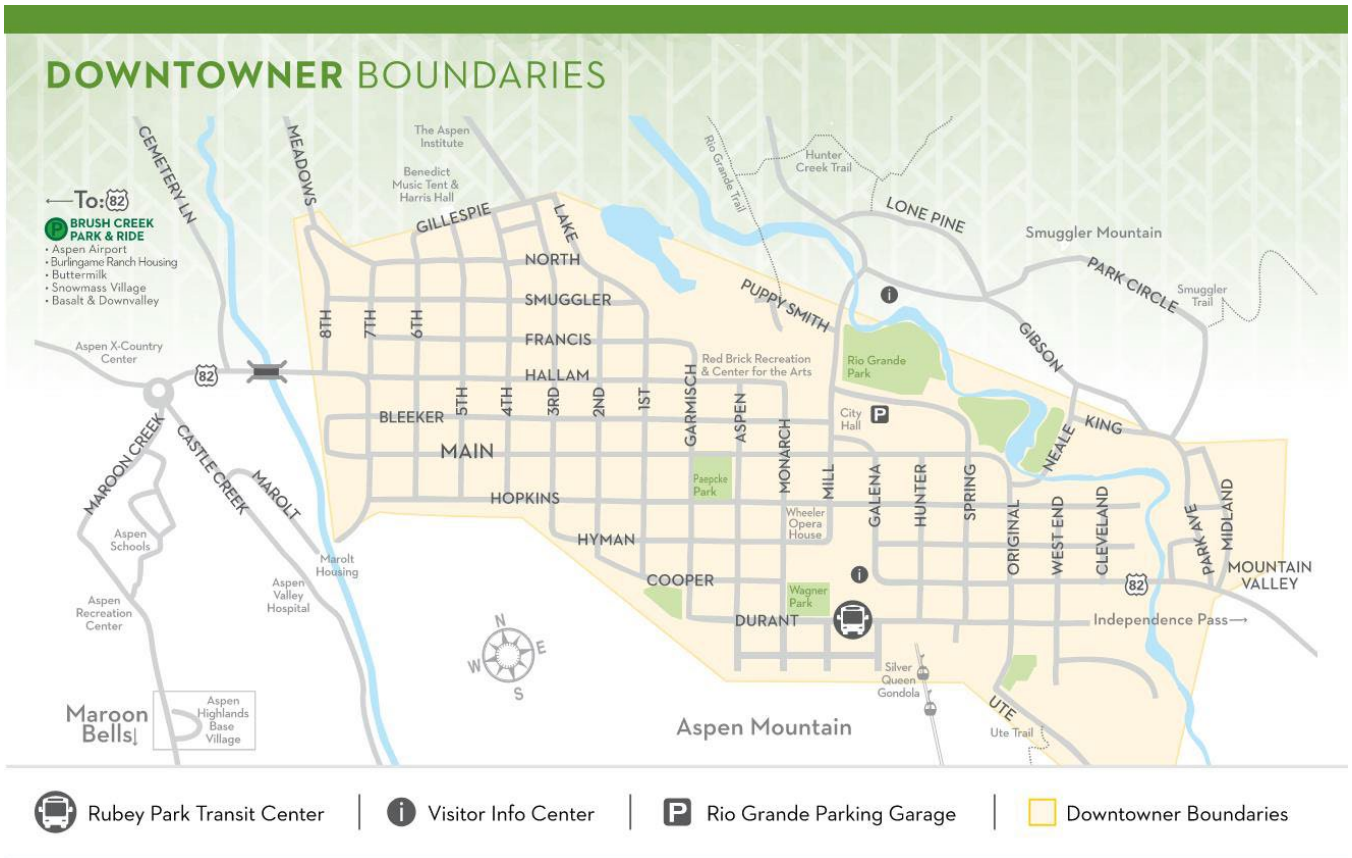
5. Microtransit / Downtowner

Current Downtowner "Door-to-Door" Operations

The Downtowner is a free, on-demand, mobile app-based service in the downtown core that provides door-to-door pick-up and drop-off service. It is operated by a private on-demand transportation service provider under contract with the City. Services run daily, with between 12 and 15 hours of daily service, depending on the season. Winter season is the highest service period.

Unlike typical microtransit, with a goal to support public transit by filling in gaps between fixed-route service and providing a first-last mile connection to transit stops, the Downtowner is a niche service. While the service is popular with constituents and has high ridership levels among locals, it is not integrated with fixed routes as a complementary "feeder," and, in fact, it may "cannibalize" some fixed-route transit ridership in the downtown core.

Figure 19 Downtowner Service Coverage Area



Source: City of Aspen, 2024

Table 7 Existing Downtowner Service 2023-2024

Season	Dates of Operation	Service Hours	Maximum Wait Time Goal
Winter	November 24 - April 11	8:00 a.m. - 11:00 p.m.	15
Spring	April 12 - June 14	11:00 a.m. - 11:00 p.m.	15
Summer	June 15 - September 5	10:00 a.m. - 11:00 p.m.	15
Fall	September 6 - November 23	11:00 a.m. - 11:00 p.m.	15

Recommendations

MTD-1: Maintain Downtowner Service

This Plan recommends maintaining Downtowner service as-is, with consideration for minor future service adjustments. Downtowner is a bespoke service operated to help meet the mobility needs of people in central areas of Aspen. It is not designed to be purely complementary of RFTA's fixed-route buses nor to fill gaps in areas that are inefficient for buses to serve, which is how microtransit is typically operated. These recommendations reflect Downtowner's unique type of service, not as formal microtransit.

Approaches to Downtowner Service Modifications

If the City has the inclination and capacity to add Downtowner service, it will decide between two objectives. These aren't mutually exclusive, but assuming that additional Downtowner service increases would be minor due to funding, staffing, and fleet limitations, the City cannot optimize both at once.

1. Increase service and vehicle availability in Downtowner's highest-use areas.
2. Concentrate additional service in areas that lack sufficient fixed route bus service.

The City may consider expanding Downtowner coverage to the following locations based on a first/last mile or gap filler model. Considerations for expansion include cost, the ability to meet service targets, and competition with private vendors.

Figure 20 Potential Downtown Coverage Expansion Areas

- Area A: Serving areas around Silverload Drive., Williams Ranch Drive., and Nicholas Lane., potentially as a door-to-hub model connecting to the Hunter Creek bus route on Park Circle.
- Area B: Serving areas around W. Lupine Drive, E. Lupine Drive, and Mountain Laurel Drive, potentially as a door-to-hub model connecting to the proposed combined Cross Town / Mountain Valley bus route on W. Lupine Drive or Highway 82.

The operations and planning recommendations described in MOT-1, 2, 3, and 4 still apply. The City would need to fine-tune the service standards listed in MOT-4 to its objectives for Downtowner service. Some details may change, but this overall approach to monitoring performance and adjusting operations remains applicable.

MTD-2: Keep Options to Implement Formal Microtransit in the Future if Needed

Overhauling Downtowner is not recommended in this Plan. The following section is a reference for the City should they decide in the future to utilize microtransit as a service complementary to fixed-route buses. If pursued, changes would include prioritizing on-demand service in geographies with low ridership that do not warrant fixed-route service. It could also involve varying a location's coverage between fixed-route and on-demand service depending on the season, time of day, and weekday or weekend.

- **Immediate-term:** No service changes except possible expansion to Mountain Valley neighborhoods; apply the measurement of service standards over one year and modify service (coverage, operations hours, vehicles in service, waiting time standards, etc.) accordingly.
- **Medium-term:** Evaluate options to curtail Downtowner service in some locations with robust fixed-route buses; concentrate Downtowner rides on low-efficiency areas to expand the City of Aspen and RFTA's overall public transportation coverage.
- **Long-term:** Provide on-demand services to areas with limited transit service in Aspen.

The table below provides recommendations for implementing microtransit service that supports existing fixed-route transit. These actions would only be taken if the City of Aspen and RFTA decide to pursue a conventional microtransit model in the future.

Table 8 On-Demand Microtransit Recommendations

Key Code	Focus Area	Recommendation
MOP-1	Microtransit Operations and Planning	Document clear service standards for microtransit and key performance indicators (KPIs) for each goal. Measure progress towards goals based on KPIs.
MOP-2		Annual survey to be conducted by the vendor to evaluate performance in alignment with goals and key performance indicators. Surveys are intended to evaluate ridership, trip routes, wait times, user satisfaction, and other factors.
MOP-3		As part of annual service evaluation, review microtransit dataset (including ridership, trip length, response times, and origins/destinations) from the microtransit operator.
MOP-4		Develop and apply robust microtransit service standards (further detail follows below in the description of MOT-4).

OD-1	On-Demand Service	Identify one or more zones for on-demand service that complement existing fixed-route transit service. A best practice is to limit microtransit service to zones that are a minimum distance of 0.75 miles away from fixed-routes. Generally, a microtransit zone should mostly cover a contiguous area that does not have fixed-route service, and microtransit vehicles can travel outside of the zone for pickups/drop-offs at a hub with fixed-route service or at a major activity center (shopping center, hospital, etc.).
OD-2		Implement “point-to-point" service. Rather than providing service at any address within a zone, point-to-point service offers pick-up and drop-off at designated places, providing hubs at which people can access microtransit.

MTD-3: Microtransit Service Standards

The following are some microtransit best practices, commonly used service standards, and some guidance for using them in Aspen.

Response Time (Microtransit)

This applies to microtransit on-demand service only and measures the time between a request for immediate pickup (not a pickup scheduled in advance) and the passenger's actual pickup. Setting a maximum response time of no more than 30 minutes is recommended.

Microtransit Zones

Design of microtransit zones should incorporate the goals and expected usage of each zone – whether passengers are expected to use microtransit for trips within the zone, or to connect with fixed-route service, or both. It is wise to set legible zone boundaries, such as main roads or geographic barriers, while noting that pickups/drop-offs might occur outside the zone for major activity centers, such as a transit center or transfer points with fixed route service. The zone size should generally be eight square miles or less to avoid vehicles being too far out of position for the next call.

Microtransit On-Time Performance

Microtransit's on-time performance is typically measured against the information provided when the ride was booked. For example, both pick-up and drop-off might be targeted within five minutes of the anticipated times published to riders. If a passenger is connecting from microtransit to fixed-route service, the standard should facilitate ensuring that the connection is made almost all the time.

Microtransit Directness

Although microtransit is designed to aggregate passengers traveling in a similar direction, each trip should have some standard for directness. A typical standard is that a passenger’s trip should take no more than twice the time needed to drive directly from the pickup point to the drop-off point.

Use of Microtransit vs. Fixed Route

Microtransit is designed for times and places where transit service will be offered, but there is very low demand. A single microtransit vehicle will not generally cost less to operate than a single fixed-route vehicle, but can

provide better service since it can operate more flexibly. Another factor to consider (if known) is whether passenger origins and destinations are generally closer to a feasible fixed-route corridor or whether the origins and destinations are more dispersed (which favors using microtransit).

Microtransit Productivity

Impacts and Benefits

Downtowner's “Door to Door” service is unique in that it operates in a dense downtown area with high-frequency transit, more as a bespoke mobility solution than a necessary public service. Few other communities worldwide provide an on-demand service so extensively. This Plan does not recommend significant changes to Downtowner's service. Accordingly, people will use Downtowner in the future much as they do today.

If in the future the City makes the major conversion from Downtowner to more conventional microtransit it will likely be contentious among residents who have become accustomed to its bespoke service model. However, the City of Aspen staff and City council can help explain the reasons for the changes in service and geographic coverage, including citywide TDM and maintaining traffic at 1993 level goals, and use metrics to inform decision-making so that the public understands and accepts these changes.

6. Transportation Demand Management

Aspen already has a significant share of work commute trips by non-drive-alone modes. The investments the City and regional partners have made in transit, walking, and bicycling options are considerable and have provided regular commuters with viable active transportation options. The parking strategies described in Section 3 aim to offer driving and parking as a viable but diminishing share of trips. The transit strategies described in Section 5 seek to enhance and modify public transportation options in several key areas to expand transit choices for people. The active transportation strategies described below fit into the "carrots" category, or incentives and investments to make walking and biking more enjoyable, safe, and accessible.

Recommendations

Summary of Recommendations

Key Code	Recommendation
TDM-1	Expand secure bicycle parking options
TDM-2	Formalize walking routes and bikeways
TDM-3	Expand carsharing by partnering with a private vendor/operator
TDM-4	Expand employer services transportation demand management (TDM) support
TDM-5	Continue support of the WE-cycle bike share program

Recommendation Details

TDM-1: Expand Secure Bicycle Parking Options

The City and its partners should increase the amount of secure bike parking across the city. The City can solicit feedback from the public to identify locations for new bike racks and partner with businesses and property owners to provide bike racks that the businesses and property owners could install for their patrons, residents, and employees.

Reasoning

Increasing the number of locations where bicyclists can secure their bikes can encourage bicycling as a form of transportation. More secure bike parking solutions can help protect higher-value e-bikes. Additionally, long-term secure parking near transit could aid travelers in making first/last-mile connections.

Potential Impact

Low—likely to remove a common barrier to using active modes.

Implementation Considerations

3. Select appropriate bike parking solutions based on the expected duration bicyclists will park their bikes following the latest best practices and guidelines[13].
4. Longer parking durations require more secure and covered solutions such as bike cages or bike lockers (e.g., ProPark[14], BikeLid[15]).
5. Explore providing e-bike charging amenities (e.g., Bikeep[16] (see Figure 20)).
1. Select bike parking locations that are visible, convenient (e.g., within 50 feet of building entrances), and easy to use (e.g., bikes stay upright and have two points of contact with the rack).
2. Where right-of-way is limited and/or destinations are clustered (e.g., downtown), consider converting existing automobile parking spaces to bike parking spaces with bike corrals and signage.
3. Continue granting through the Transportation Options Program (TOP) to support installation of bicycle parking.

TDM-2: Formalize Walking Routes and Bikeways

In areas without sidewalks and designated bikeways, people in Aspen use vehicular streets for walking and riding. More conspicuous signage would further communicate that bicycling and walking have priority on the street year-round. Additionally, traffic-calming infrastructure, such as curb extensions and mini-traffic circles, can further encourage motorists to drive at safe speeds and be comfortable for all road users.

Reasoning

Increasing dedicated infrastructure for people bicycling and walking can be a challenge in Aspen's core because of the constrained rights-of-way. Bike/pedways delineate dedicated space in existing right-of-way but, because of seasonal signage, road users may not be fully aware of the presence of the bike/pedways.

Potential Impact

Low – increases dedicated places for people to bike and walk

Implementation Considerations

1. Capital projects and walking/biking planning largely occurs through other departments and is being developed more in-depth through the *Safety Action Plan*, which Aspen is undertaking through 2025.
2. Use quick-build materials, such as plastic pylons and rubberized curbs, for traffic calming treatments.
3. Use We-cycle ridership data to identify candidate corridors for additional bike/pedways. Consider expanded granting via the Transportation Options Program (TOP) funding to third parties, such as businesses, housing, tourist destinations, and social service providers, to support their installation of bicycle parking.

TDM-3: Expand Car to Go car sharing by partnering with a private vendor/operator.

Car to Go is a car share program managed by City of Aspen staff. The program consists of 7 low- and no-emission vehicles, servicing 1,000+ trips annually for 220+ members. More vehicles and greater geographic coverage would make this program available to more people and useful to all customers.

[13] https://www.apbp.org/bicycle-parking-solutions
[14] https://cyclesafe.com/bike-parking/bike-lockers/propark-bike-locker-bank/
[15] https://bikelid.com/products/
[16] https://bikeep.com/smart-bike-parking-station/

Reasoning

City staff are limited in the ability to expand the program due to labor intensity and funding . To better manage the current system and provide opportunities to expand the number of vehicles and coverage regionally, switching to a private operator may be the best option. Carshare enables reduced car ownership and supports car- free lifestyles in Aspen. Carshare is a complement to transit, providing transit users with a local car-use option for occasional car-dependent trips around Aspen.

Potential Impact

Medium—expands opportunities to use a well-capitalized private operator to enlarge the system and more efficiently run the program

Implementation Considerations

1. The City can initiate a two- to three-year pilot program for a privately-operated carshare program, with strategic direction and oversight driven by the City, including program goals and key performance indicators (KPIs).
2. Recommended goals include reduction of vehicle miles travelled (VMT), increased usage of other transportation options, and reduced household car ownership.

TDM-4: Expand employer services transportation demand management (TDM) support through the Transportation Options Program (TOP).

Further steps the City can take include supporting employers with more services such as additional financial support towards electric cargo bikes and further discounts on intercity bus fares, bicycle parking and other TDM measures.

Reasoning

The City supports non-driving transportation choices whenever possible and helps to support active mobility and transit by investing in infrastructure and reducing the costs for the user of these modes of travel.

Potential Impact

Low/Medium—provides incentives and support for non-driving trips, including e-cargo bikes that can lessen vehicle freight and delivery impacts on the street and transit subsidies to reduce costs to the user.

Implementation Considerations

1. Administer these incentives through the Transportation Options Program to work directly with Aspen employers who employ eligible workers.
2. Target Aspen employers that make city-wide and downtown deliveries for conversion to e-cargo bikes for some or all trips.
3. Provide additional TOP funding to support employers who wish to expand bike fleets, bus pass subsidies and similar. Grow the program to include more employers and additional staff time.

TDM-5: Continue support of the WE-cycle bike share system.

Support the expansion and enhancement of the system to provide higher capacity, serve areas of Aspen without current WE-cycle amenities, and continue upgrading the fleet to the newest electric bicycles

Reasoning

The program has successfully supported first/last mile and short-distance commutes. The program has expanded regionally and is growing in ridership demand.

Potential Impact

Medium—additional geographic coverage, better bicycle availability, and more access to electric-assist bicycles can continue to help WE-cycle grow and replace some driving trips and associated parking pressure.

Implementation Considerations

4. Because the system is well built-out in Aspen, support should be in the form of station placement in underserved areas, densification of stations in the downtown core, expansion in the size of existing stations to meet demand and to improve operational efficiency, expedited replacement of standard bikes with e-bikes and other capital replacement needs, maintaining system to latest technological standards while pursuing innovation, continued participation in regional first/last mile planning efforts.

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CITY OF ASPEN

WALKER CONSULTANTS

Existing Parking & Transportation Conditions

Aspen GETS US THERE.

November 2023

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Executive Summary

The City of Aspen and its partners manage a parking and transportation system that helps residents, workers, and visitors get where they need and want to go. Beyond that objective, this system can support broader goals when employed correctly, from reducing traffic congestion, to improving air quality, to making the community healthier, happier, and more sustainable. Today, in service to these goals, the City is taking an in-depth look at how our parking and transportation options, policies and practices can better support continued excellence and innovation in mobility, community building and health, and climate resiliency, while addressing global and local changes in how we get around. This initiative is known as the Comprehensive Parking and Transportation Plan, or simply "Aspen Gets Us There." This first report encompasses an analysis of existing transportation and parking system conditions and factors that influence the system's success.

Influencing Planning and Ideation Efforts

The City and its partners have developed many substantive and impactful plans over the years that influence this work. While many plans were consulted, the recommendations and outcomes from the following four most closely guide the methodology and focus for Aspen Gets Us There.

- Aspen Area Community Plan (AACP) (2012): The Aspen Area Community Plan, placed emphasis on the use of Transportation Demand Management (TDM) and targets for limiting vehicle trips and congestion based on the federal document known as the Record of Decision. This Plan reiterated the 2000 AACP goal for maintaining Average Annual Daily Trips (AADT) across the Castle Creek Bridge, the City's primary point of access, below 1993 levels. This plan also added a new goal of maintaining peak-hour vehicle trips below 1993 levels to address regional traffic congestion.
- Bicycle and Pedestrian Master Plan (2017): This Plan evaluated and recommended community-driven improvements to Aspen's already strong bicycle and pedestrian network, like enhanced safety and connectivity, providing substantive opportunity and advisement for action steps to be advanced in this work.
- City of Aspen Short-Range Transit Plan (2018): This implementation-focused Plan included many recommendations for improving and expanding transit service, car and bike share and other TDM measures in support of user convenience and increased ridership, many of which have been completed. Some recommendations—like looking at microtransit or on-demand as an alternative option for routes suffering from inefficiency and low ridership, or better aligning parking management and pricing with TDM goals—needed to be evaluated further and will be evaluated further in this work.
- Integrated Mobility Study (2017, 2021): This Study is the combination of two bodies of work derived from the Community Forum Task Force, a 31-citizen member committee addressing transportation challenges present in the upper Roaring Fork Valley. High-level strategies identified in the first phase of work finalized in 2017, including phased BRT enhancement, ride hailing, ride sharing, HOV lane enforcement and congestion reduction measures, were analyzed in terms of their potential greenhouse gas (GHG) emissions reduction impacts in the second phase. The Aspen Gets Us There project provides an opportunity to advance and augment these ideas under the vision, support and guidance of the entire Aspen community.
-

The Transportation and Parking System: Key Successes and Challenges

The mobility opportunities, options and level of service provided to Aspen community members are of an exceptionally high caliber, especially considering Aspen's rural surroundings, weather patterns and points of access. However, Aspen staff and leadership are not satisfied with simply "good enough", or even just "great." This report includes an evaluation of the key successes and key challenges that support or detract from Aspen's path to excellence in all things transportation and parking.

Key Successes

- **Consideration of All Modes:** The system is truly comprehensive and inclusive of all modes of transportation—pedestrian and bicycle facilities, fixed-route transit including the., fare-free local bus routes, convenient connections to the RFTA regional system, microtransit and on-demand, carshare and bikeshare, and managed vehicle parking.
- **Dedicated and Aligned Staff:** The combined transportation and parking department, and partners like RFTA, are led by dedicated and highly educated staff capable of devising and advancing complex and innovative strategies. Both City staff and partner agency staff are generally aligned on overall goals and understanding of the symbiotic relationship between transportation and parking.
- **Adaptability:** Front-line staff are quick to respond and adapt to needs in all facets, from scaling up services during peak season to, on the parking side, diverting typical enforcement duties to focus on critical issues. All staff are adept at managing the intensity of the winter season, which brings high levels of tourists and general activity to the community. In terms of parking management, staff proactively communicate changes to parking systems, parking restrictions, payment methods, and enforcement periods to the general public to improve user understanding and compliance with parking regulations.
- **Culture of Service:** The Aspen mobility system is characterized by a nearly unmatchable culture of service—from extremely high-frequency headways to a prioritization of ambassadorship over enforcement in the parking system. All staff center the individual customer and their experience and are capable of dealing with the high expectations of the Aspen community.
- **Excitement About and Interest in Enabling Technology:** The Aspen community are early adopters of technology, unafraid of—and in fact excited by—being the first in line to try something novel.

Key Challenges

- **Mode Split Tracking:** TDM is a significant focus of the transportation/parking department, and has been a core impetus of this work. However, the City does not have a system to regularly track and evaluate mode split data. Especially as the City advances its goals around shifting transportation choice and behaviors, AADT across Castle Creek Bridge will not be an adequate sole measure of mode split or single-occupancy vehicle usage.
- **Data Collection Practices on the Parking Side:** The parking team in particular is bolstered by significant institutional knowledge and considerable history with parking-related agreements and concessions, held by one or two long-term employees of the team. This reliance on institutional knowledge somewhat contributes to a lack of best practice data tracking and analysis. Aspen's mature and well-established

parking system is big and strong enough to require more rigorous and systemized data collection protocols for all key performance indicators, from inventory, occupancy, and length of stay, to operating revenues and expenses by program.

- Staffing Levels: Most transportation and parking providers suffer from a lack of adequate staffing levels to do their jobs well. This difficulty results from a variety of factors depending on department and provider. Perhaps most impactful is the expensive housing market in Aspen and surrounding communities, a problem the City and partner agencies like RFTA are working to solve with workforce housing initiatives. However, some teams where staffing levels are at a critical low—like parking enforcement—suffer from a stated lack of administrative support to add staff, and a low level of interest in the work itself among qualified candidates.
- Culture of Appeasement: The "culture of appeasement" refers to the prioritization of exceptional service at an individual or organizational level over overall system wellness. This culture, which stems from an admirable focus on service, makes it difficult for Aspen's transportation and parking system to reach collective goals, from mode split and climate action to equity and financial health. As an example on the parking side, the astounding number of businesses and individuals with special parking permits make it nearly impossible to manage the system effectively, or for the system to achieve the TDM goals it's intended to. On the transit side, lower ridership on some routes (including Cemetery Lane, Galena Street, Hunter Creek, and Music School) combined with this culture make it difficult to look seriously at alternative options that would help the entire system run better.
- Physical Space: A single point of access in winter combined with Aspen's small size and limited space in the Downtown Core especially, combined with the tourism population and intensity of transportation services, can sometimes cause conflicts and reduce navigability for pedestrians and cyclists, and for transit drivers.

Conclusion and Next Steps

Aspen offers a strong and comprehensive transportation and parking system, particularly considering the external and immovable factors that make it difficult—from rural surroundings and a far-flung commuting population to inclement weather and limited points of access. Aspen's commitment to continued excellence and service is the impetus for the Aspen Gets Us There project.

This work will advance previously conducted planning work and add new analysis and engagement to develop a community-supported and transformative transportation and parking action plan. While novel and future-forward strategies will of course be a focus, this work must also seek to eliminate or at least mitigate the challenges that prevent the existing system from achieving its highest potential.

Next steps include crafting a clear vision and set of guiding principles for the Aspen Gets Us There plan alongside the entire community, and developing and vetting strategies based on that vision. The final deliverable will be an implementation plan with direct action steps to bring the future we imagine to life.

02 Introduction & Planning Context

Introduction & Planning Context

The City of Aspen's mission is "to engage with positive civil dialogue, provide the highest quality innovative and efficient municipal services, steward the natural environment, and support a healthy and sustainable community for the benefit of future generations with respect for the work of our predecessors."[1]

The City's organizational values include the following:

- Service: We serve with a spirit of excellence, humility, integrity, respect
- Partnership: Our impact is greater together
- Stewardship: Investing in a thriving future for all by balancing social, environmental, and financial responsibilities
- Innovation: Pursuing creative outcomes, grounded in Aspen's distinctive challenges and opportunities.

These organizational values are reflected in the high-quality, innovative mobility and transportation services the City offers, in partnership with public and private service providers, which also align with the City's aspirational mobility and sustainability goals.

The City of Aspen has already taken significant steps to shape mobility and sustainability policies citywide through several recent planning efforts. This includes the Aspen Area Community Plan (2012), the Bicycle and Pedestrian Master Plan (2017), the Short-Range Transit Plan (2018), and the Integrated Mobility Study (2017, 2021). This section, while not an exhaustive assessment, summarizes key elements of each of these items with a focus on goals, priorities, and commitments that influence the City's transportation system. A full accounting of plans and documents consulted for this work is provided as **Appendix B, Planning Context**.

Key Plans Consulted for This Report

Aspen Area Community Plan

The Aspen Area Community Plan (AACP), adopted in 2012, established desired outcomes for the transportation system to shape the City's future economic, social, and environmental character, including the use of Transportation Demand Management (TDM) and provided updates on the status of community-wide targets for limiting vehicle trips and congestion. Specifically, the plan provided a TDM framework to optimize the efficiency of roadway networks in the Aspen area. The Community Plan reiterated the 2000 AACP goal (originally established in the 2000 Aspen Area Community Plan) for maintaining Average Annual Daily Trips (AADT) across the Castle Creek Bridge (the City's primary access point) below 1993 levels. The plan went further to establish a congestion management goal of limiting peak-hour vehicle trips to 1993 levels.

[1] City of Aspen. 2023. Mission. City of Aspen. https://www.aspen.gov/1367/City-Vision-Mission-and-Values#:~:text=City%20of%20Aspen%20Mission%20Statement,the%20work%20of%20our%20predecessors

Bicycle and Pedestrian Master Plan

The City of Aspen gathered input on its bicycle and pedestrian networks as part of the Bicycle and Pedestrian Master Plan in 2017. Most participants described the overall bicycle experience (56%) and pedestrian experience (52%) in Aspen as "good." Nearly 70% of participants reported that they use the trail system for walking or biking "a few times per week." When asked about what types of bicycle facilities would most likely influence users to bike more often, the most popular answer was "off-street paths" (22%), followed by "buffered bike lanes" (19%) and "bicycle boulevards" (18%). When asked what types of pedestrian facilities would best influence survey respondents to walk more often, the most popular answer was "roadway crossing improvements for pedestrians" (18%), followed by "security features and good lighting" (17%) and "sidewalk network that connects where I want to go" (16%). These responses indicate that although the City provides many bicycle and pedestrian network features the community values and utilizes, additional improvements to these networks could encourage more biking and walking in the community. The desired facilities the survey respondents requested emphasized safety and connectivity.

City of Aspen Short-Range Transit Plan

The 2018 City of Aspen Short-Range Transit Plan recommended increasing frequency of transit on major routes, expanding on-demand transit services in areas with reduced transit services, and extending service schedules to improve transit convenience and ridership systemwide. In addition to these transit recommendations, this plan also recommended development of an integrated trip planning app, increasing paid parking fees, and an expansion of the City's existing TDM programs. Below is a list of implemented actions of the plan as of 2023: that

- Expanded summer transit service through September
- Expanded Transportation Options Program (TOP) grant program
- Identified car share partnerships
- Reviewed trip reduction ordinances
- Sought grants for electric transit vehicles
- Expanded Car To Go program with electric vehicle
- Created management plan for dockless bike-share program
- Sought grants for electric transit vehicles
- Improved Paepcke/Garmisch bus stops

Integrated Mobility Study

This Study is the combination of two bodies of non-public work derived from the Community Forum Task Force, a 31-citizen member committee addressing transportation challenges present in the upper Roaring Fork Valley. High-level strategies identified in the first phase of work finalized in 2017, including phased BRT enhancement, ride hailing, ride sharing, HOV lane enforcement and congestion reduction measures, were analyzed in terms of their potential greenhouse gas (GHG) emissions reduction impacts in the second phase.

Fleet Zero Emissions Roadmap

This plan is an internal document developed by the City of Aspen that outlines actions needed to transition its fleets to electric and zero emissions vehicles to achieve citywide climate goals, while sustaining day-to-day

municipal operations. The implementation will be led by the Environmental Health and Sustainability Department, with assistance from other key departments.

Purpose of this Report

The broad purposes of this report are to:

- Present a clear picture of Aspen's transportation system in its typical, existing state.
- Understand how City-maintained or funded transportation infrastructure is currently valued.
- Understand how the City's transportation programs, such as the Residential Permit Parking program and TOP function today.
- Build a foundation for creating recommendations to improve the transportation system in the future.

The report includes seven topic sections, each with a core purpose to help develop recommendations and strategies that will work within Aspen's unique framework.

- Parking/Transportation Department and TDM describes the role and functions of the City's Parking/Transportation Department and how this relates to the City's TDM goals. This overview includes a summary of existing commute mode share and AADT levels across the Castle Creek Bridge.
- Transit – Fixed-Route describes the fixed-route transit system in the Aspen area, operated by the Roaring Fork Transportation Authority (RFTA). This section summarizes the bus routes serving Aspen, current ridership levels, and findings from recent rider surveys. An assessment of existing successes and challenges and financial health is also included.
- Transit – On-Demand describes the on-demand transit system in Aspen, provided by the City's Downtowner service. This section summarizes the service catchment area, current ridership levels, and findings from recent rider surveys. An assessment of existing successes and challenges and financial health is also included.
- Active Transportation describes the City's existing bicycle and pedestrian networks. Current and planned facilities are summarized in addition to an assessment of existing successes and challenges.
- Car To Go and WE-Cycle describes the two primary shared mobility services currently serving the City. This section summarizes existing infrastructure, such as station and designated parking space locations, types of vehicles, and usage. An assessment of existing successes and challenges and financial health is also included.
- Parking describes the general inventory of City-owned parking assets and supporting programs, including parking permit programs the City has established to manage parking in commercial and neighborhood areas. This section summarizes utilization data for much of the City-maintained on- and off-street parking assets in high demand areas. Additionally, an assessment of the financial health of the City's parking assets and supporting programs is included.
- Supportive TDM Programs and Policies describes the programs, employer the City manages to encourage travel by carpool, transit, active transportation, and shared mobility in support of the City's sustainability goals. An assessment of existing successes and challenges and financial health is also included.

03 Existing Transportation Conditions

Existing Transportation Conditions

Parking/Transportation Department and TDM

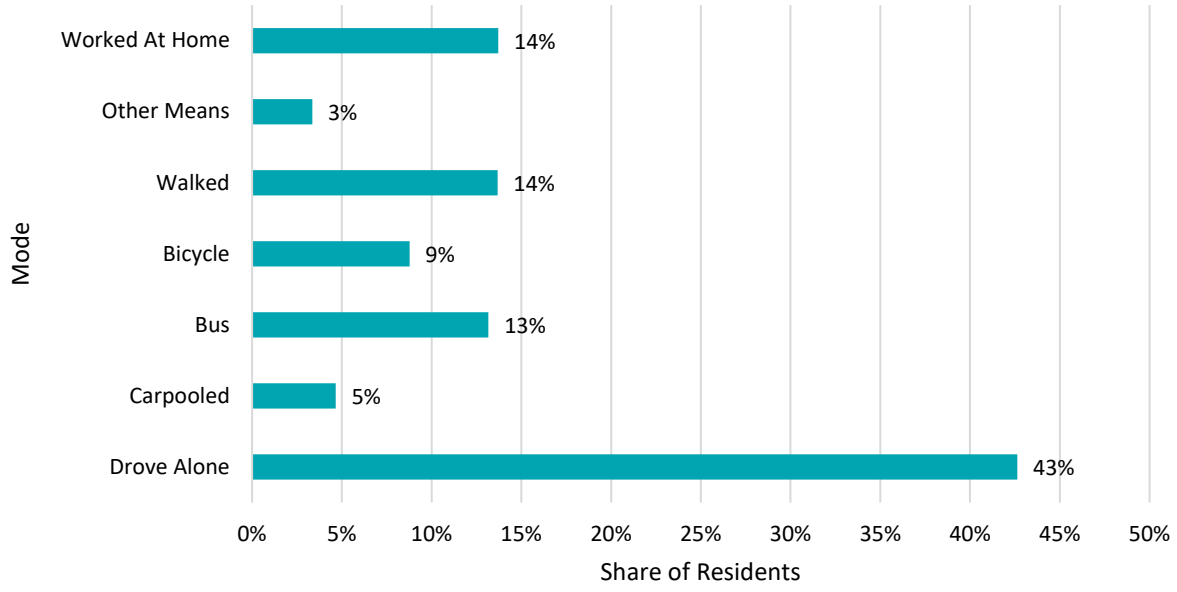
The Parking/Transportation Department of the City of Aspen manages and provides support to many aspects of the City's parking and transportation systems. Parking staff manage all City-owned on- and off-street parking assets, including the Rio Grande garage next to City Hall. Management of these parking assets includes coordination with vendors to establish Parking Access and Revenue Control Systems (PARCS), maintenance and enforcement of parking assets, and establishing policies such as rate structures for parking fees and violations. Transportation staff manage City mobility infrastructure and services including fixed route transit, on-demand micro-transit, car share operations, bike share contract and the Rubey Park Transit Center.

Many of the Parking/Transportation Department's policies support the City's mobility and sustainability goals of limiting vehicle trips and congestion within the City and specifically, maintaining 1993 AADT levels across the Castle Creek Bridge.

Commute Mode Share

Figure 1 shows the commute mode share, or the share of travel modes that Aspen residents used to get to work in 2021, based on the latest five-year estimate from the American Community Survey.

Figure 1. Commute Mode Share in Aspen

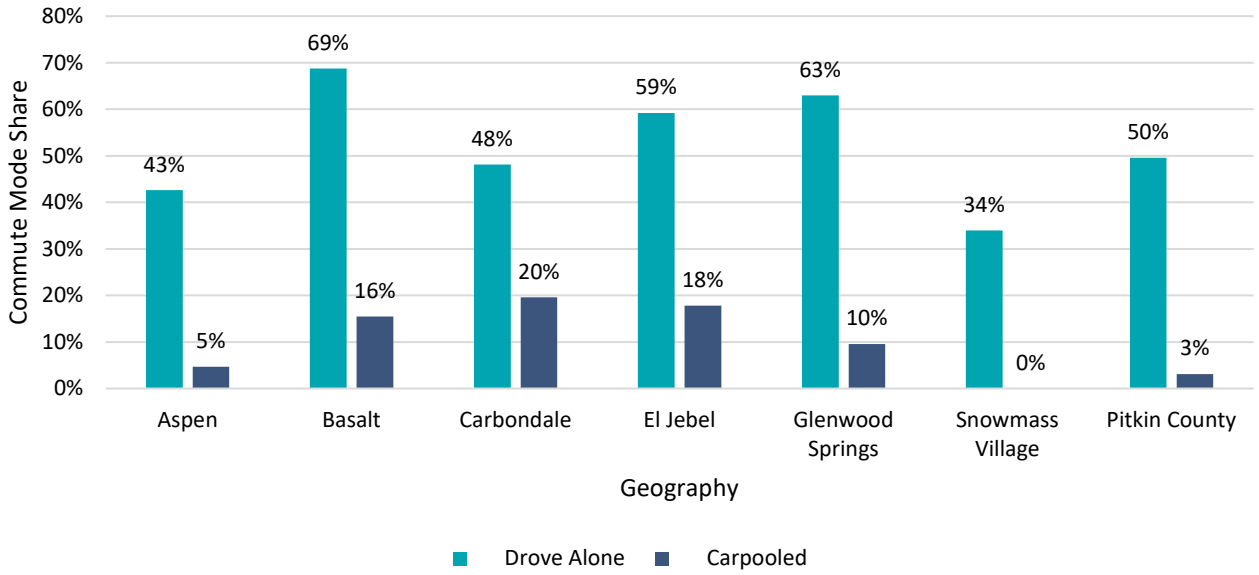


Source: American Community Survey

According to the American Community Survey, the most common mode of travel to work is driving alone (43%), followed by walking (14%), public transit (13%), biking (9%), and carpooling (5%). 14% of Aspen residents work from home.

Figure 2 and Figure 3 show how Aspen's commute mode share compares with other communities in the Roaring Fork Valley region.

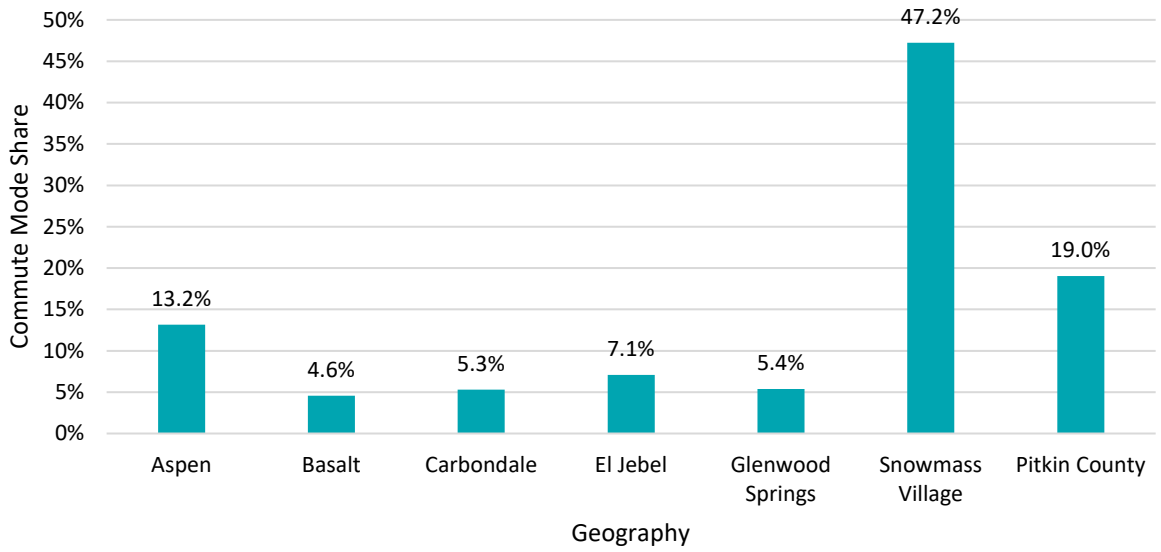
Figure 2. Drive Commute Mode Share in Aspen and Nearby Communities



Source: American Community Survey

Compared with most other communities in the Roaring Fork Valley region, Aspen has a lower share of residents who drive alone to work (43%). However, Aspen also has a significantly smaller share of residents who carpool to work (5%) than most other communities in the region.

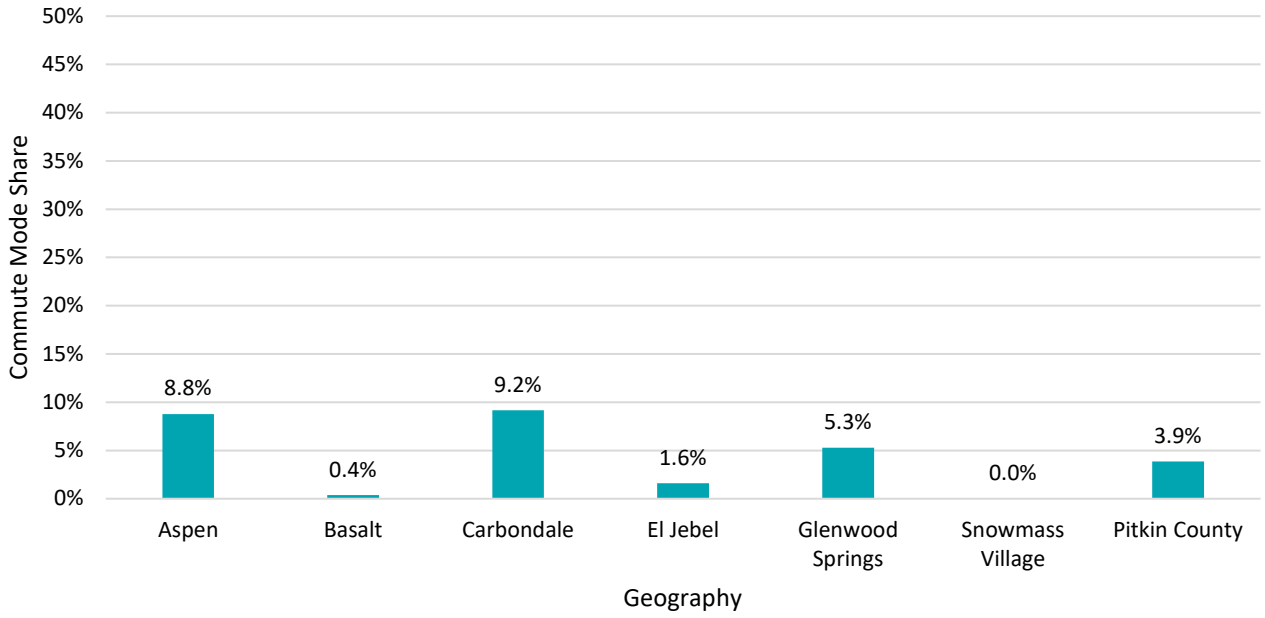
Figure 3. Bus Commute Mode Share in Aspen and Comparison Geographies



Source: American Community Survey

In Aspen, 13.2% of residents take the bus to work, which is a higher share than most other communities in the region.

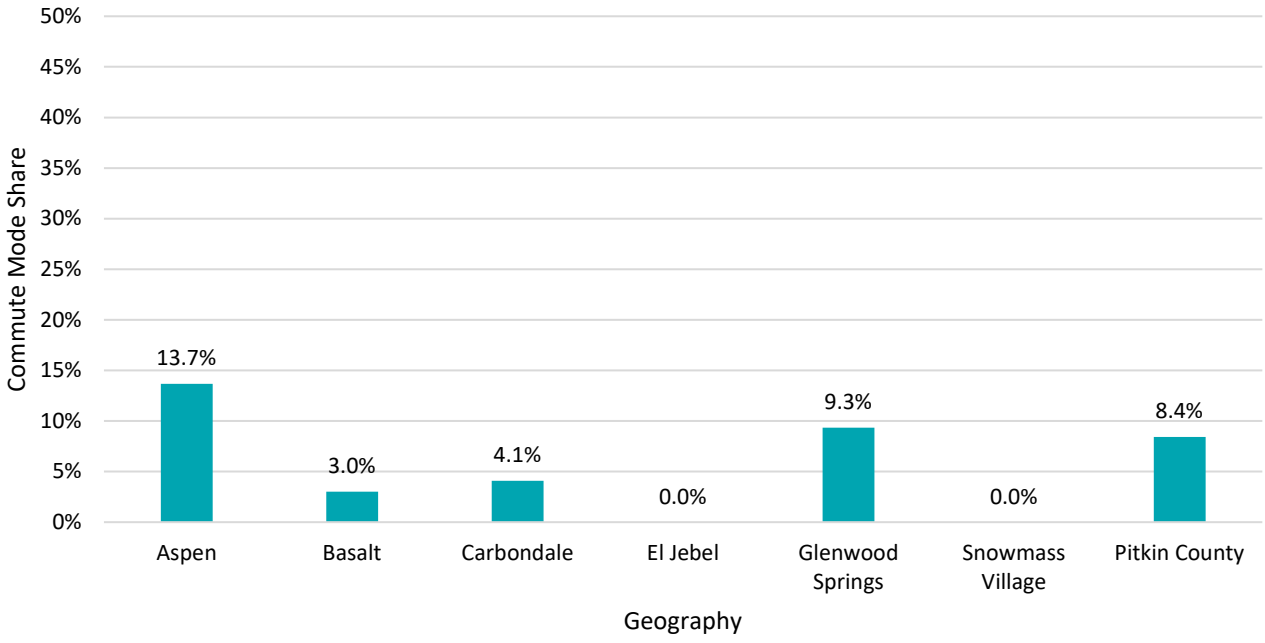
Figure 4. Bicycle Commute Mode Share in Aspen and Comparison Geographies



Source: American Community Survey

Aspen has a larger share of residents who bicycle to work (8.8%) than most other communities in the region.

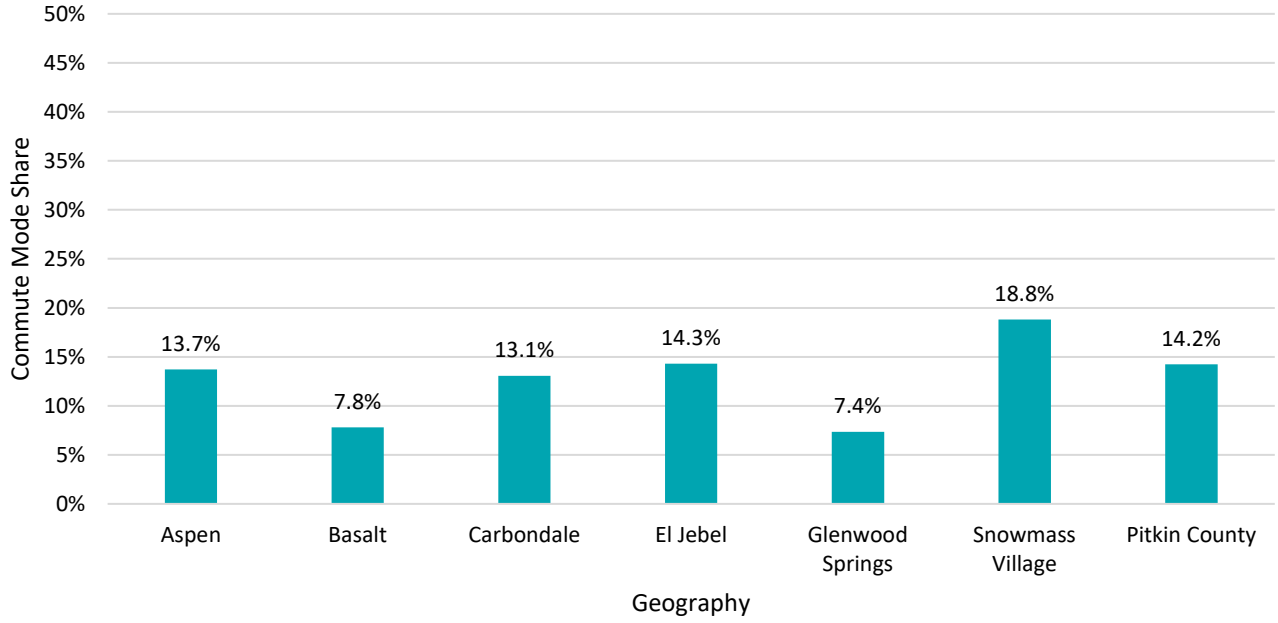
Figure 5. Pedestrian Commute Mode Share in Aspen and Comparison Geographies



Source: American Community Survey

Aspen has a larger share of residents who walk to work (13.7%) than most other communities in the region.

Figure 6. Share of Residents who Work from Home in Aspen and Comparison Geographies



Source: American Community Survey

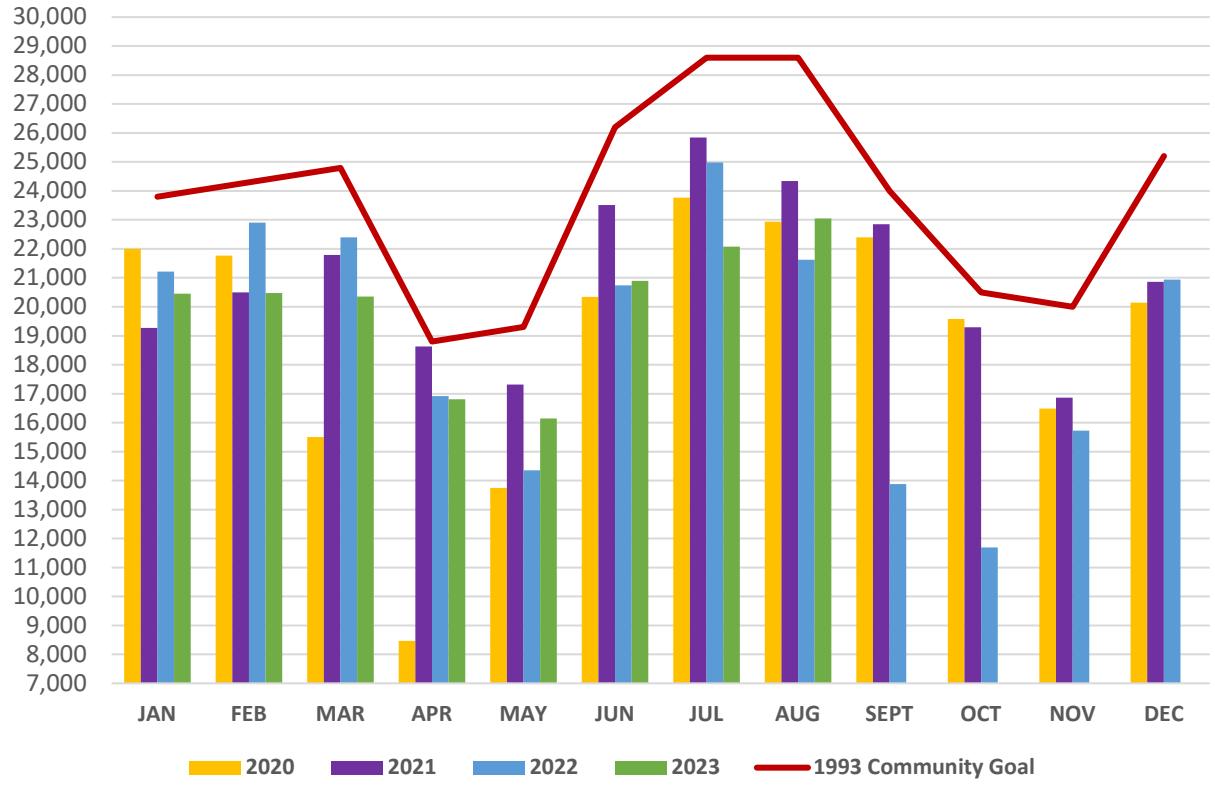
In Aspen, 13.7% of residents work from home, which is similar to many other communities in the region.

Overall, a comparison of commute mode share in the Roaring Fork Valley region shows that Aspen has lower drive alone and carpool commute mode shares than most other communities in the region, while it has higher shares of residents who ride the bus, walk to work, bike to work, and work from home when compared with the region overall.

Castle Creek Bridge AADT

The 2012 Aspen Area Community Plan established a target for maintaining Average Annual Daily Trips (AADT) below 1993 levels, measured at the Castle Creek Bridge. **Figure 7** shows AADT counts in 2020, 2021, 2022, and 2023 (through August) compared to 1993 counts (shown with a red line).

Figure 7. Monthly AADT Traffic Counts at Castle Creek Bridge (2020 – 2023)



Source: City of Aspen, 2023

Between 2020 and 2023, AADT levels have consistently been lower than 1993 levels. For all four years, the annual peak in AADT at Castle Creek Bridge was in July, and the annual low period for AADT was in May.

Transit – Fixed-Route

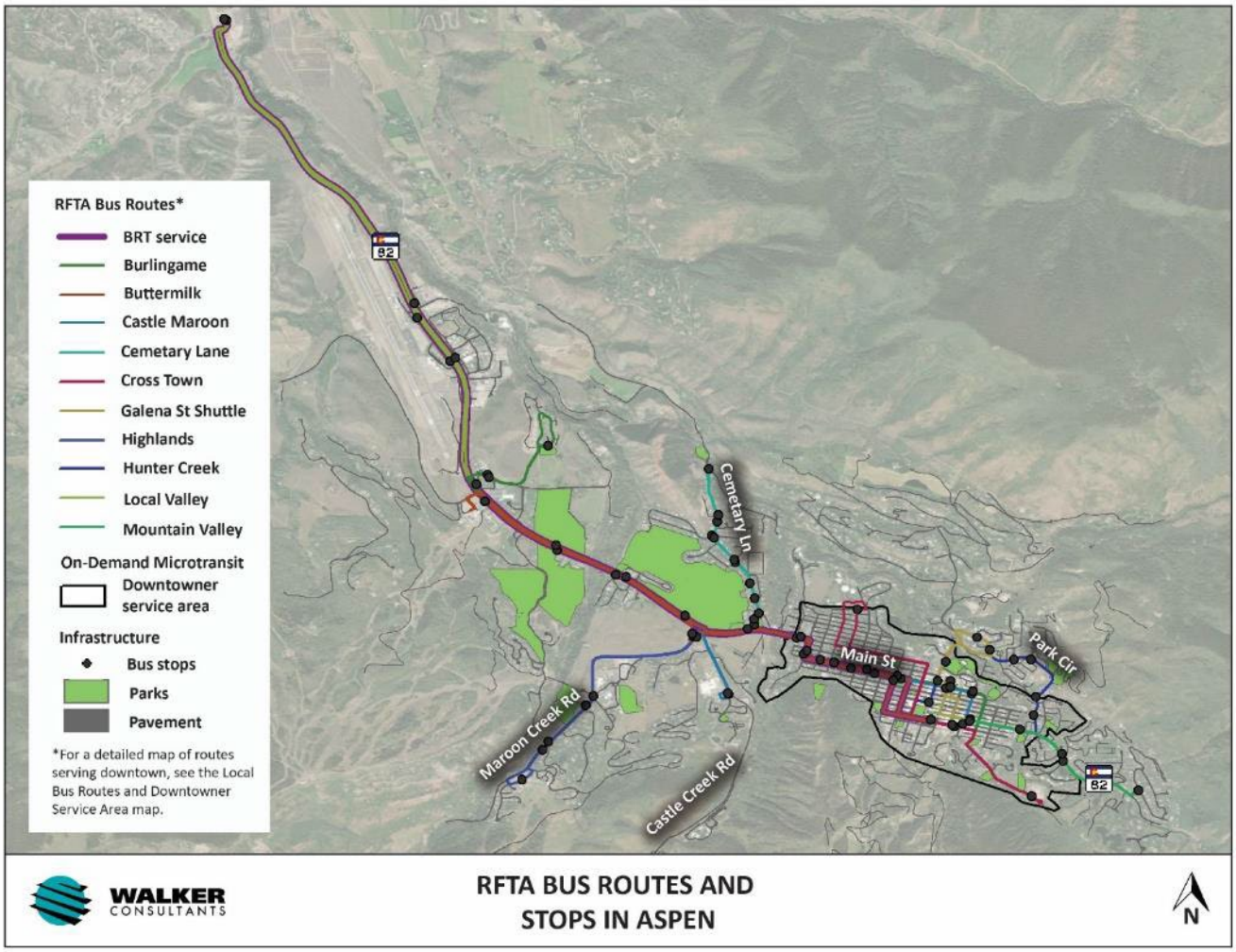
Local Bus Service

The City of Aspen, in partnership with Roaring Fork Transportation Authority, offers a robust and popular local transit system that provides residents and visitors with convenient, fare-free and frequent service. Transit headways vary by route. Headways on the Galena Street and VelociRFTA BRT routes they are as low as 10 to 15 minutes, but on other routes they range from 20 to 30 minutes. The system has long service spans, with most routes starting early in the morning and ending after midnight, and routes cover large geographic service areas[2]. The local system links with regional transit routes connecting population centers in the Roaring Fork and Colorado River Valleys.

RFTA local bus service plays a key role in support of the City's mobility and sustainability goals. **Figure 8** shows a map of the regional and local bus routes serving the City of Aspen.

[2] Roaring Fork Transportation Authority. (2023). City of Aspen free shuttles. https://www.rfta.com/routes/city-of-aspen/

Figure 8. RFTA Bus Service Map within the City of Aspen



Source: City of Aspen

Figure 9 shows the peak seasonal boardings (Winter and Summer) for each local route in 2023.

Figure 9. Local Route Boardings in Aspen 2023

Local Route	Season	
	Q1 (Winter)	Q3 (Summer)
Aspen Highlands Direct[3]	29,071	-
Burlingame	26,100	11,927
Castle Maroon	106,960	43,564
Cemetery Lane	13,513	6,443
Cross Town	4,106	1,751
Galena Street[4]	10,723	-
Hunter Creek	52,449	15,806
Mountain Valley	7,202	1,899
Music School (MAA)[5]	-	14,152

[4] Aspen Highlands is a seasonal route offered in Winter only.
[5] Galena Street is a seasonal route offered in Winter only.
[6] Music school (MAA) is a seasonal route offered in Summer only.

Source: City of Aspen

Winter is the peak season for each of the local routes, all of which have significantly higher boardings in Winter compared with any other season of the year. The local route with the highest number of boardings in Winter is Castle Maroon, with 106,960 boardings in the winter season, and the route with the lowest number of boardings is Cross Town, with 4,106 boardings in the winter season. Similarly, Winter is the peak season for the VelociRFTA route. Figure 10 shows a pre-pandemic/post-pandemic ridership comparison for the two peak seasons: Winter and Summer.

Figure 10. Bus Ridership Levels in Winter and Summer of 2019 and 2022

Route Name	2019	2022	Percent Change	2019	2022	Percent Change
	Q1 (Winter)	Q1 (Winter)		Q3 (Summer)	Q3 (Summer)	
Aspen Highlands Direct[6]	8,704	7,448	-14%	-	-	N/A
Burlingame	15,167	10,508	-31%	12,642	8,984	-29%
Cemetery Lane	11,269	5,842	-48%	7,291	5,259	-28%
Castle Maroon	56,590	39,800	-30%	44,791	27,429	-39%
Galena Street[7]	14,762	5,188	-65%	-	-	N/A
Hunter Creek	37,348	22,640	-39%	23,997	12,164	-49%
Mountain Valley	5,826	4,549	-22%	4,587	2,213	-52%
Music School (MAA)[8]	-	-	0%	18,365	8,871	-52%

[1] Aspen Highlands is a seasonal route offered in Winter only.
[2] Galena Street is a seasonal route offered in Winter only.
[3] Music school (MAA) is a seasonal route offered in Summer only.

Source: City of Aspen

Transit ridership on local bus routes was significantly affected by the COVID pandemic, as was the case for most transit services throughout the country. Recent ridership trends have also been affected by a shortage of bus drivers (as discussed further in the Successes and Challenges section).

One of RFTA's sustainability goals is for at least one-third of the overall fleet to be battery-powered electric buses. RFTA is also considering incorporating hydrogen fuel cell buses into the fleet.

RFTA Regional Service

RFTA offers 20 bus routes in 3 counties and 9 communities (including Aspen, Snowmass Village, Pitkin County, Basalt, a portion of Eagle County, Carbondale, Glenwood Springs and New Castle, Colorado). RFTA also provides commuter bus service in the Roaring Fork Valley and ski shuttle service to Aspen ski resorts, Maroon Bells, and other seasonal services.[9]

[9] Roaring Fork Transportation Authority. (2014). About RFTA. Roaring Fork Transportation Authority. https://www.rfta.com/about-rfta-2/#:~:text=The%20Roaring%20Fork%20Transportation%20Authority%20has%20been%20in%20operation%20since,the%20newest%20member%20New%20Castle.

In 2023, RFTA had approximately 400 employees and is forecasted to transport 5 million riders with a fleet of 120 vehicles in the calendar year. RFTA had a $155 million budget in 2023 and is funded by sales and property taxes, service contracts, grants, and fares. In addition to local bus service, RFTA provides commuter and paratransit services and coordinates with the City's bikeshare and on-demand transit programs.

RFTA is distinguished for operating the first rural bus rapid transit (BRT) service in the United States, established in 2013. The BRT route, called VelociRFTA, provides service between Aspen and Glenwood Springs with 10 to 15-minute headways during peak service hours.[10] The BRT route covers 40 miles along the Highway 82 corridor between Glenwood Springs and Aspen. This route includes amenities such as branded bus stop shelters, real-time bus tracking display boards, high-frequency service, bus lanes along congested corridors, and coach seating for longer trips. **Figure 11** shows the peak seasonal boardings (Winter and Summer) for VelociRFTA in 2023.

Figure 11. Regional VelociRFTA Route Boardings in 2023

Regional Route	Season	
	Q1 (Winter)	Q3 (Summer)
VelociRFTA	390,109	258,244

Bus Fare and Payment Options

To maximize the benefits of fixed-route transit service, the City of Aspen subsidizes local bus services, resulting in fare-free transit for all bus routes within the City limits. As part of this funding, the City makes annual service requests to RFTA to maintain high quality bus service and geographic coverage.

RFTA offers mobile ticketing and on-demand bus tracking using the Transit App. Fares are free within the same zone, and $2.00 for the first zone change, and $1.00 for each additional zone. Seniors aged 65 years or older and children who are 5 years of age or younger ride for free. Youth between the ages of 6 and 18 receive a discounted fare of $1.00 per ride outside of the free zone. **Figure 12** provides a regional bus fare chart by origin and destination for easy calculation of trip cost.

[10] Roaring Fork Transportation Authority. (2014). VelociRFTA. Roaring Fork Transportation Authority. https://www.rfta.com/routes/velocirfta-brt/

Figure 12. RFTA Regional Bus Fare Chart

RFTA FARE CHART FOR THE ROARING FORK VALLEY LOCAL, VELOCIRFTA BRT & GRAND HOGBACK

ZONE	Rifle	Silt	New Castle	Glenwood Springs	Carbondale	El Jebel/Blue Lake	Basalt/Willits	Old Snowmass	Aspen Village	Woody Creek	Brush Creek Park & Ride	Snowmass Village	Aspen
Rifle	FREE	2.00	3.00	4.00	5.00	6.00	6.00	6.00	7.00	8.00	8.00	8.00	8.00
Silt	2.00	FREE	2.00	3.00	4.00	5.00	5.00	5.00	6.00	7.00	7.00	7.00	7.00
New Castle	3.00	2.00	FREE	2.00	3.00	4.00	4.00	4.00	5.00	6.00	6.00	6.00	6.00
Glenwood Springs	4.00	3.00	2.00	FREE	2.00	3.00	3.00	3.00	4.00	5.00	5.00	5.00	5.00
Carbondale	5.00	4.00	3.00	2.00	FREE	2.00	2.00	2.00	3.00	4.00	4.00	4.00	4.00
El Jebel/Blue Lake	6.00	5.00	4.00	3.00	2.00	FREE	FREE	FREE	2.00	3.00	3.00	3.00	3.00
Basalt/Willits	6.00	5.00	4.00	3.00	2.00	FREE	FREE	FREE	2.00	3.00	3.00	3.00	3.00
Old Snowmass	6.00	5.00	4.00	3.00	2.00	FREE	FREE	FREE	2.00	3.00	3.00	3.00	3.00
Aspen Village	7.00	6.00	5.00	4.00	3.00	2.00	2.00	2.00	FREE	2.00	2.00	2.00	2.00
Woody Creek	8.00	7.00	6.00	5.00	4.00	3.00	3.00	3.00	2.00	FREE	FREE	FREE	FREE
Brush Creek Park & Ride	8.00	7.00	6.00	5.00	4.00	3.00	3.00	3.00	2.00	FREE	FREE	FREE	FREE
Snowmass Village	8.00	7.00	6.00	5.00	4.00	3.00	3.00	3.00	2.00	FREE	FREE	FREE	FREE
Aspen	8.00	7.00	6.00	5.00	4.00	3.00	3.00	3.00	2.00	FREE	FREE	FREE	FREE

Fare: FREE service within each zone, first zone change add $2.00, then $1.00 each additional zone.
Seniors (65 and over) and children ages 5 and under ride for FREE.
Youth ages 6-18 ride all regional routes for only $1.00 when leaving the free zone.

Source: Roaring Fork Transit Authority

Use Cases

According to RFTA's ridership survey conducted in March 2022, RFTA's ridership within the Aspen/Snowmass zone is diverse, including both higher-and lower-income groups, residents, and commuters. According to responses, 24% of survey participants earned a household income over $150,000 and 18% of participants earned an income below $25,000. In addition, 23% of participants identified as Hispanic or Latino in the Aspen/Snowmass zone. The largest user groups in the Aspen/Snowmass zone were residents and skiers, each of which represented 39% of survey participants, followed by employees, which made up 28% of participants. The diversity of riders indicates that RFTA's service in the Aspen/Snowmass zone caters to various user groups, with strong ridership in Winter during ski season.[11]

When asked why they choose to ride the bus, over half of participants (55%) indicated that they want to take advantage of bus lanes which avoid traffic congestion. The second most common reason for riding the bus is to reduce the impact of travel on the environment (52% of participants). Other common reasons for riding are the convenience of not having to drive (49% of participants), the ability to save money on gas (40% of participants),

[11] Warner, Marc. (May 12, 2022). Highlights of the March 2022 passenger surveys. Warner Transportation Consulting and RFTA. https://www.rfta.com/wp-content/uploads/2022/06/rfta-survey-2022-board-presentation-w-rg3.pdf

lack of a car or driver's license (47% of participants) and having an employer-subsidized transit pass (22% of participants).[12]

Successes and Challenges

RFTA provides a high level of transit service given the small town and mostly rural character of its service area. The City of Aspen contributes significantly to this success by providing consistent funding support, enabling fare-free service within City limits. Additionally, although the Aspen area experiences harsh weather conditions in the winter months, RFTA has successfully maintained service at these times with only minimal disruptions.

A significant challenge for RFTA stems from the general lack of affordable housing in the region. RFTA has recently experienced challenges recruiting and retaining enough bus drivers to maintain desired transit service levels. To help alleviate this issue, RFTA has increased salaries and expanded workforce housing complexes reserved exclusively for RFTA employees. Recruiting new employees with families remains a critical challenge, as most of the workforce housing is suited to individuals.

In the future, RFTA hopes to advance its communication with riders—including tourists, which are a key user group—by leveraging new tech platforms and expanding use of the ones already used. Additionally, RFTA and City staff responsible for transit programming within the City boundaries are interested in evaluating demographic and user behavior shifts that affect existing routes, and look at more efficient ways to serve these routes in support of the entire system. Employing microtransit and integrating first- and last-mile connection options with fixed-route transit service are seen as key initiatives.

Financial Health

This section reviews RFTA's fare recovery ratio, operating costs, and a comparison to peer agencies to better understand its financial performance and ability to add service, grow ridership, and address unmet needs.

Fare Recovery Analysis

The system's fare recovery in year 2022 was 9.7% across the board. As a way of comparison, the State of California, through its Transportation Development Act funding system, requires urban transit systems to recover at least 20% of costs at the farebox, and rural transit systems to recover at least 10% of costs. Therefore, RFTA's fare recovery is generally aligned with the rural transit system benchmark. **Figure 13** shows a summary of the system's fare recovery over the last five full years.

[12] Warner, Marc. (May 12, 2022). Highlights of the March 2022 passenger surveys. Warner Transportation Consulting and RFTA. https://www.rfta.com/wp-content/uploads/2022/06/rfta-survey-2022-board-presentation-w-rg3.pdf

Figure 13. RFTA Fare Recovery, 2018-2022

Year	Fare Revenues	Operating Expenses	Fare Recovery
2018	$5,117,635	$32,342,251	15.80%
2019	$5,242,070	$34,825,962	15.10%
2020	$2,907,306	$37,471,304	7.80%
2021	$4,099,845	$41,892,857	9.80%
2022	$4,498,273	$46,190,159	9.70%

Source: National Transit Database

As shown in the above table, fare recovery was cut almost in half due to loss of ridership during the COVID pandemic and bus driver wage increases to address housing affordability challenges. However, fare recovery has since increased from its 7.8% low point in 2020.

Systemwide Operating Costs

Figure 14 calculates the fully allocated operating cost of each additional hour of service with the current (2022) operating costs.

Figure 14. RFTA Operating Cost per Vehicle Hour, 2022

Cost Metric	Cost per Vehicle Hour – Fixed-Route	Cost per Vehicle Hour – Paratransit	Total Operating Cost per Vehicle Hour
Annual Operating Cost	$45,074,017	$1,116,142	**$46,190,159**
Annual Vehicle Hours	238,333	7,758	**246,091**
Average Cost	$189.12	$143.87	**$187.70**

Source: National Transit Database

The fully allocated operating cost of providing each additional hour of service, on the fixed-route system, with the existing fleet and operating costs amounts to an average of $189.12 per vehicle hour. It is typical for approximately 25% of transit operating costs to be fixed (rather than variable), therefore, the marginal cost for each vehicle hour is approximately $140.

However, any new investment in the fixed-route service, such as increasing hours of service, needs to consider additional service hours of complementary ADA paratransit service. RFTA financials show that the cost of providing paratransit service amounts to 2.4% of the total operating costs, and $143.87 per vehicle hour. On a marginal cost basis, this would amount to approximately $110 per vehicle hour.

Therefore, for each $1,000,000 investment per year in additional service, RFTA would be able to provide approximately:

- 3% increase in vehicle service hours, which would amount to
- 6,970 additional fixed-route vehicle service hours per year, and
- 220 additional ADA paratransit vehicle service hours per year

Transit – On-Demand

The Downtowner on-demand transit service plays a key role in support of the City's mobility and sustainability goals. To maximize the benefits of on-demand transit service, the City of Aspen provides comprehensive funding to Downtowner which enables fare-free on-demand transit service for all rides within the service area.

Fleet

Downtowner operates a fleet of mostly hybrid or internal combustion engine (ICE) vehicles, but also currently operates two all-electric Chevrolet Bolts and one Ford E-Transit van.

Downtowner is an on-demand transit service provider that also operates in Basalt and is preparing to launch in Carbondale to complement RFTA bus services in the Roaring Fork Valley. In addition, the operator provides similar services at resorts including Deer Valley Resort, Big Cedar Lodge, Vail Resorts and mountain communities, including County of Placer, California and Summit County, Colorado

On-Demand Service

Downtowner operates in the downtown Aspen area from according to the following schedule, which varies by day of the year. **Figure 15** depicts Downtowner's hours of operation.

Figure 15. Downtowner Hours of Operation

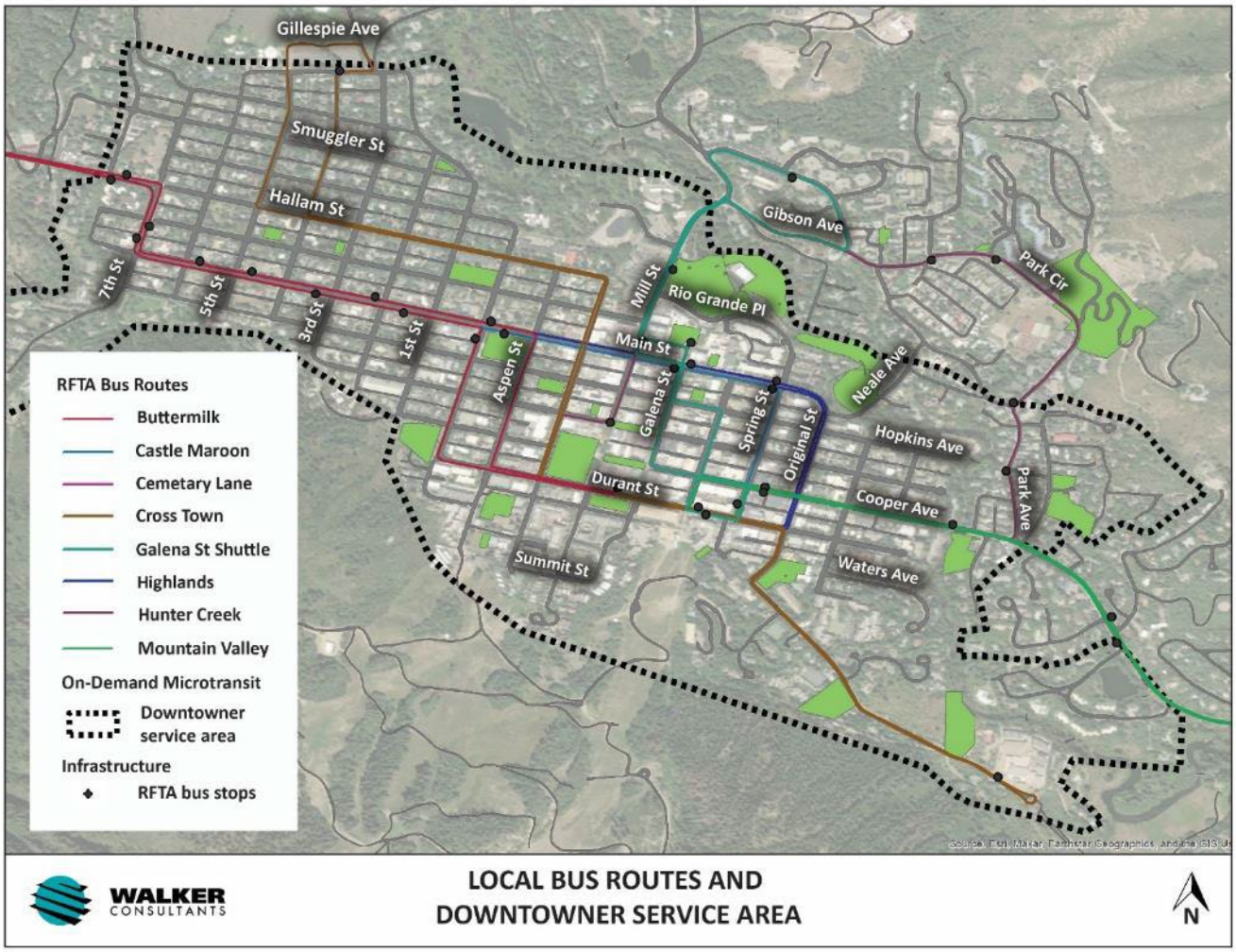
Day of the Year	Hours of Operation
November 24 - April 11	8:00 am to 11:00 pm
April 12 - June 14	11:00 am to 11:00 pm
June 15 - September 5	10:00 am to 11:00 pm
September 6 - November 23	11:00 am to 11:00 pm

Vehicles include heaters and ski racks. Rides can be requested using the Downtowner mobile app.[13]

Downtowner provides service within the downtown area shown in **Figure 16**.

[13] City of Aspen. (2023). Downtowner. City of Aspen. https://www.aspen.gov/207/Downtowner

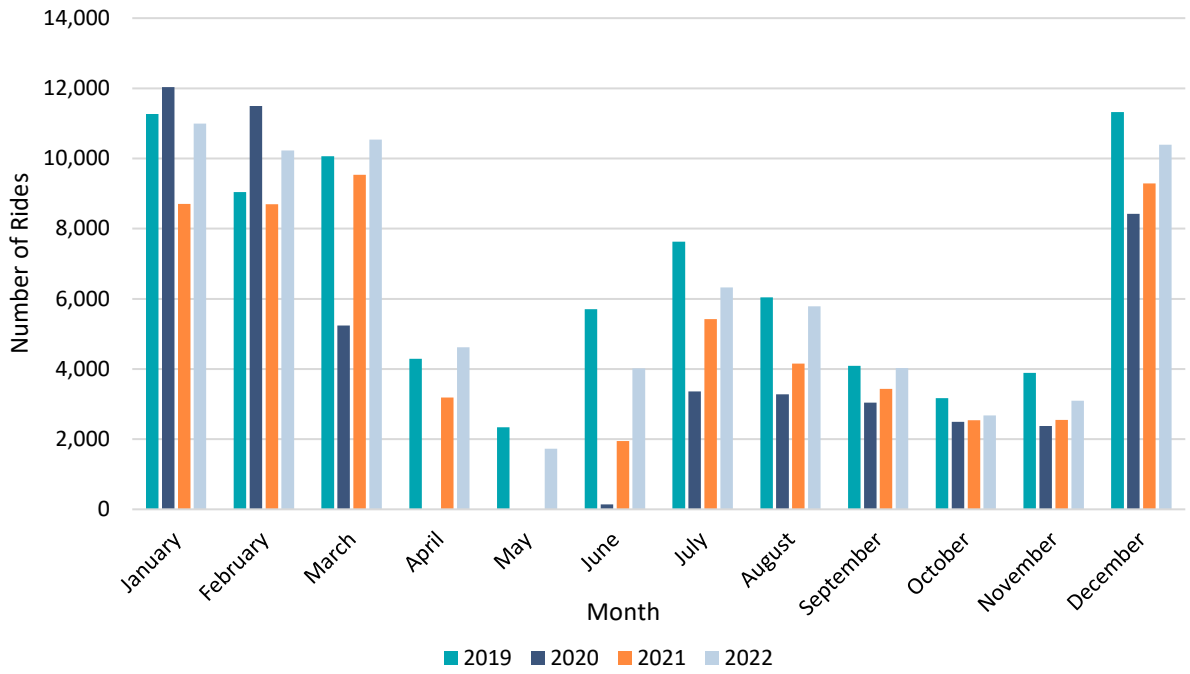
Figure 16. Local Bus Routes and Downtowner Service Area



Source: City of Aspen

Figure 17 shows ridership by month for the Downtowner service between 2019 and 2022.

Figure 17. Downtowner Monthly Rides, 2019 to 2022



Source: City of Aspen

Between 2019 and 2022, Downtowner ridership peaked in Winter and had the lowest ridership during Spring and Fall. In 2019, ridership was at its highest during the last 4 years, with a total of 78,851 rides. After a 2-year decrease in ridership in 2020 and 2021 resulting from the COVID-19 pandemic (annual ridership of 51,876 and 59,469, respectively), Downtowner has experienced a recovery of ridership in 2022 (annual ridership of 74,422), nearing 2019 levels.

Successes and Challenges

Downtowner compliments both RFTA fixed-route transit service and the WE-Cycle bikeshare program to provide an integrated mobility solution for trips within downtown Aspen and the surrounding area. The service is extremely popular and, according to lead Downtowner staff, Downtowner does not experience the same challenges in hiring as do other transportation providers. In Downtowner staff's view, this lends itself to relative ease in scalability, which is a goal of theirs. Based on community feedback, it is likely this service replaces some trips that would otherwise be made by walking or biking due to the convenience of the service and the very small size of the catchment area.

One of the challenges with Downtowner service, based on rider feedback, is that there are long wait times during peak commute hours. Other challenges include competition with private sector businesses, and the prevalence of single-occupancy point-to-point on-demand trips, which can add vehicles to the roadway and increase congestion—of particular concern in the tight and constricted Core. Downtowner also shares limited and curated data with the City of Aspen related to system operation and performance.

Financial Health

The Downtowner service is offered to users free of charge. Therefore, the service is entirely funded through the City of Aspen transportation budget. The City's current annual budget allocates $636,220 to fund the service. In 2022, the most recent full year of data, 74,422 people utilized the Downtowner service. Using the current annual budget, the total operating cost per passenger trip is $8.55.

Services similar to Downtowner around the country typically cost around $10-15 per trip[14]. Although, if the service coverage is significantly larger than ridership demand, the cost per trip can quickly rise, as was recently the case for the Metro Micro service in Los Angeles County which operated at $43 per trip[15]. The Downtowner service is able to be more efficient due to a relatively small catchment area and a high concentration of activities within downtown Aspen.

Active Transportation

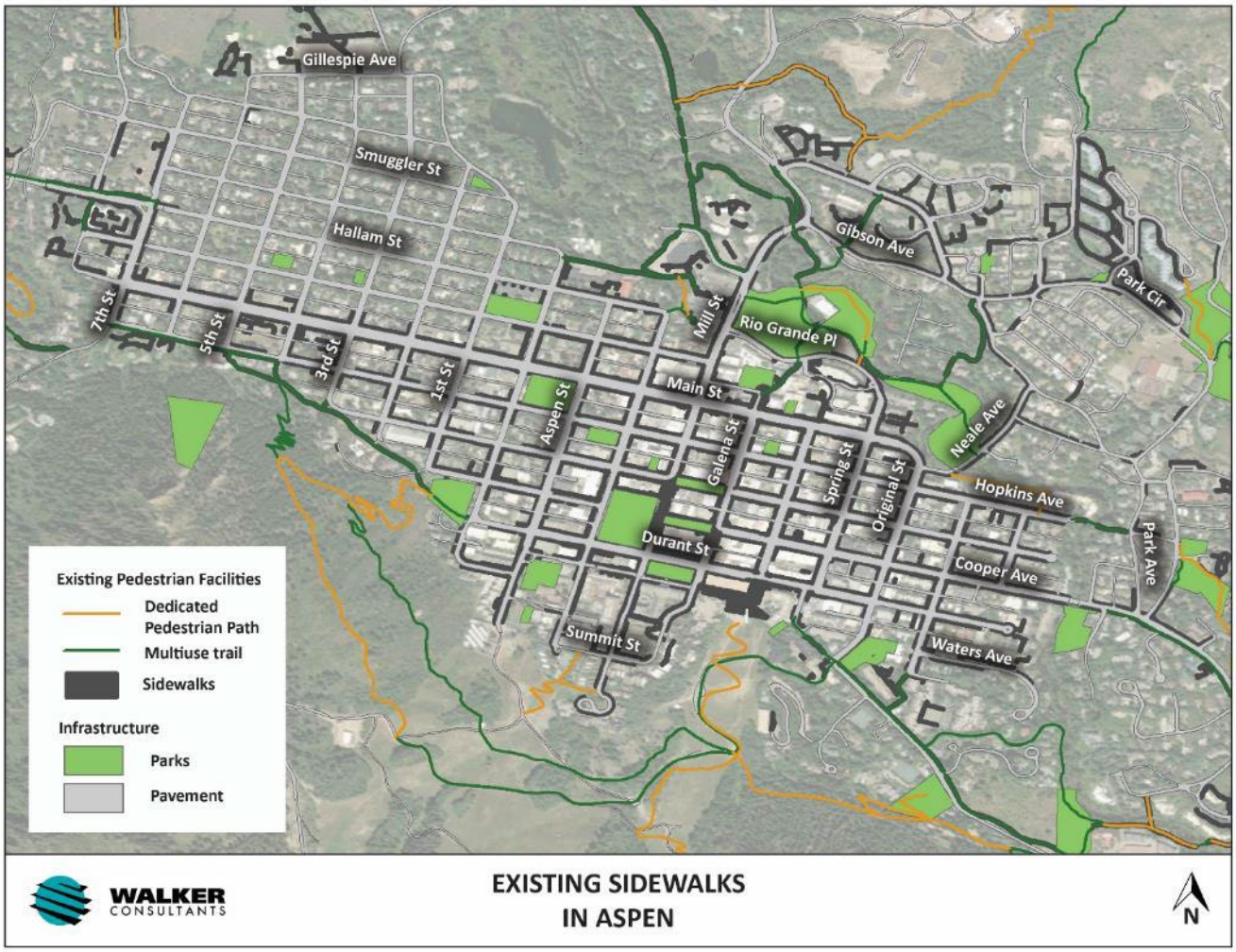
The City encourages its residents, visitors, and employees to walk and bike given the significant sustainability and public health benefits of these travel modes.

Infrastructure

The City provides a mix of bicycle and pedestrian facilities, including: multiuse paved trails, sidewalks, crosswalks, bike lanes, bike boulevards, and designated bike routes. **Figure 18** show existing pedestrian facilities and sidewalks in Aspen.

[14] https://www.governing.com/transportation/microtransit-has-broad-appeal-despite-clear-drawbacks
[15] https://www.latimes.com/california/story/2023-09-14/the-1-ride-that-costs-metro-43-is-this-pilot-van-program-worth-the-costs

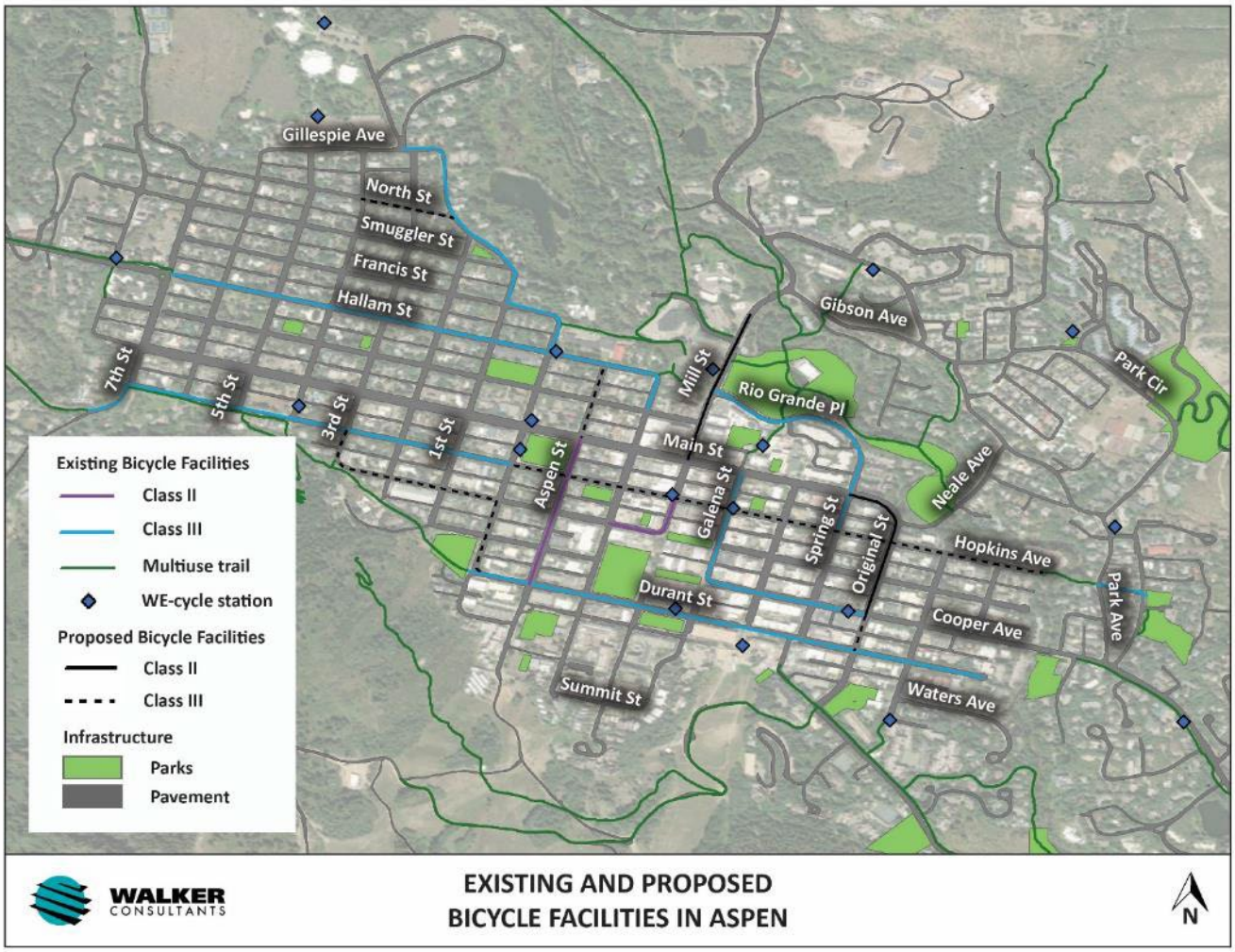
Figure 18. Existing Pedestrian Facilities in Aspen



Source: City of Aspen

Figure 19 shows existing and proposed bicycle facilities in Aspen.

Figure 19. Existing & Proposed Bicycle Facilities in Aspen



Source: City of Aspen

Use Cases

The City of Aspen gathered input on its bicycle and pedestrian networks as part of the Bicycle and Pedestrian Master Plan in 2017. Most survey participants described the overall bicycle experience (56%) and pedestrian experience (52%) in Aspen as "good." Nearly 70% of participants reported that they use the trail system for walking or biking "a few times per week." When asked about what types of bicycle facilities would most likely influence users to bike more often, the most popular answer choice was "off-street paths" (22% of participants), followed by buffered bike lanes (19% of participants) and Bicycle Boulevard (18% of participants).

When asked about what types of pedestrian facilities would most likely influence users to walk more often, the most popular answer choice was "roadway crossing improvements for pedestrians" (18% of participants), followed by "security features and good lighting" (17% of participants) and "sidewalk network that connects

where I want to go" (16% of participants). These responses indicate that Aspen community members prefer grade separated bicycle and pedestrian facilities.

Successes and Challenges

The City of Aspen provides a high level of quality bicycle and pedestrian facilities for its residents, visitors, and employees to enjoy. The Rio Grande trail system, for example, provides a continuous paved trail connecting Aspen with down valley communities such as El Jebel. Within the grid network of roadways in downtown Aspen and the surrounding neighborhoods, sidewalks are included on most blocks and a ped-bikeway (a low-speed street designated to give bicyclists and pedestrians priority) system is provided to give people biking safer options to travel across the City.

One particular challenge when walking or biking in Aspen is nighttime visibility. Although the City does provide streetlights in most areas, many of these streetlights offer only soft, ambient light, which makes it difficult for drivers to see people walking and biking.

Car To Go and WE-Cycle

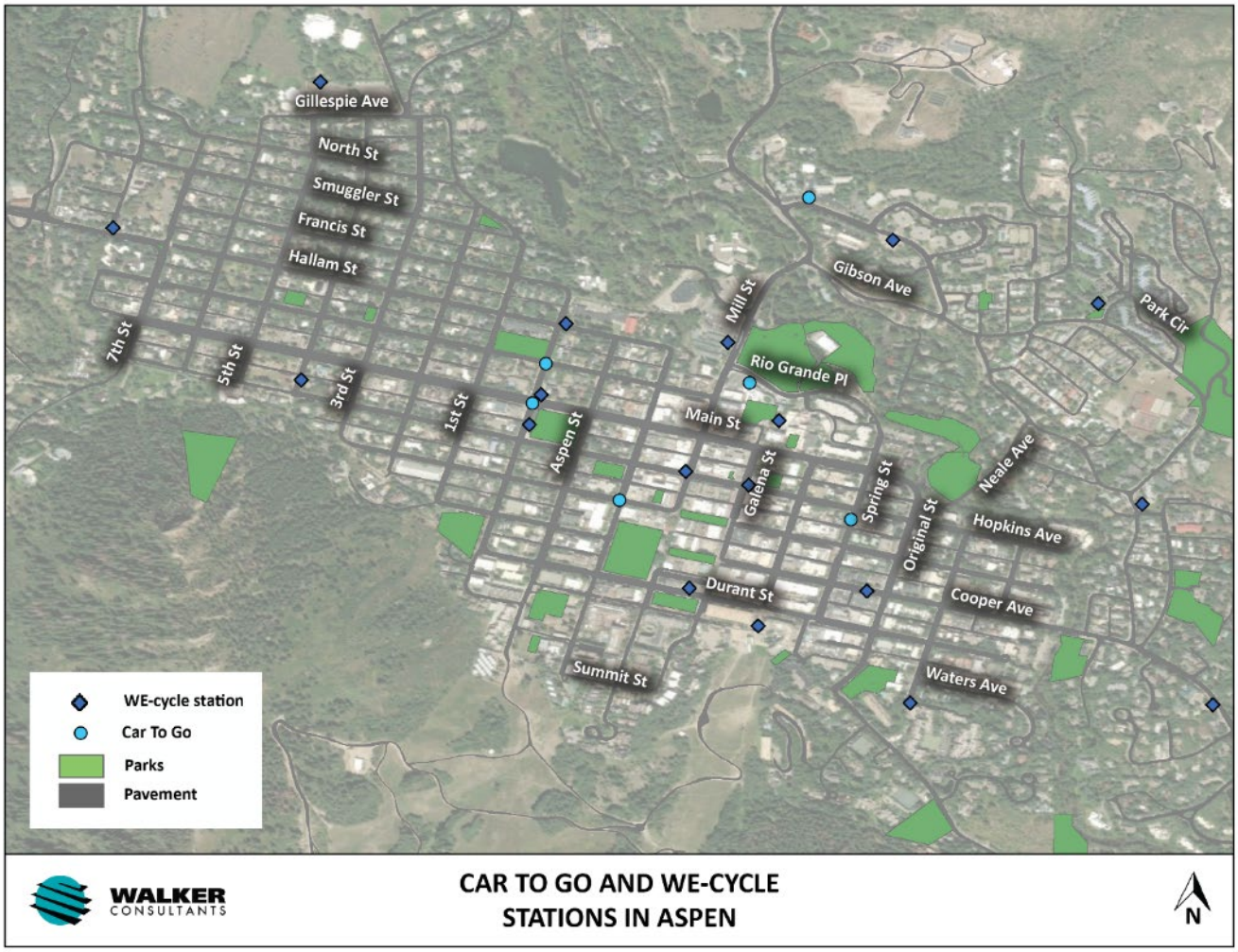
The City of Aspen provides two primary shared mobility services: Car To Go and WE-cycle. Car To Go is a carshare program operated by the City of Aspen. The program manages a fleet of 7 hybrid and electric vehicles that drivers can rent for short-term use. The Car to Go program had 260 members in 2023.

WE-Cycle is a docked bikeshare system serving nearly 3,000 riders per month in peak season, with the first 30 minutes being offered free for every ride. WE-cycle is a non-profit organization and its operations are funded by RFTA, jurisdictions, and private sponsors. WE-cycle's presence in Aspen is contracted through a Memorandum of Understanding with RFTA and operated/managed by WE-cycle. Originally launched in Aspen in 2012, WE-cycle now offers bicycles in Snowmass Village, Basalt, Willits, El Jebel, and Carbondale.

Infrastructure

Figure 20 shows the location of Car To Go and WE-Cycle stations in Aspen.

Figure 20. Car To Go and WE-Cycle Stations

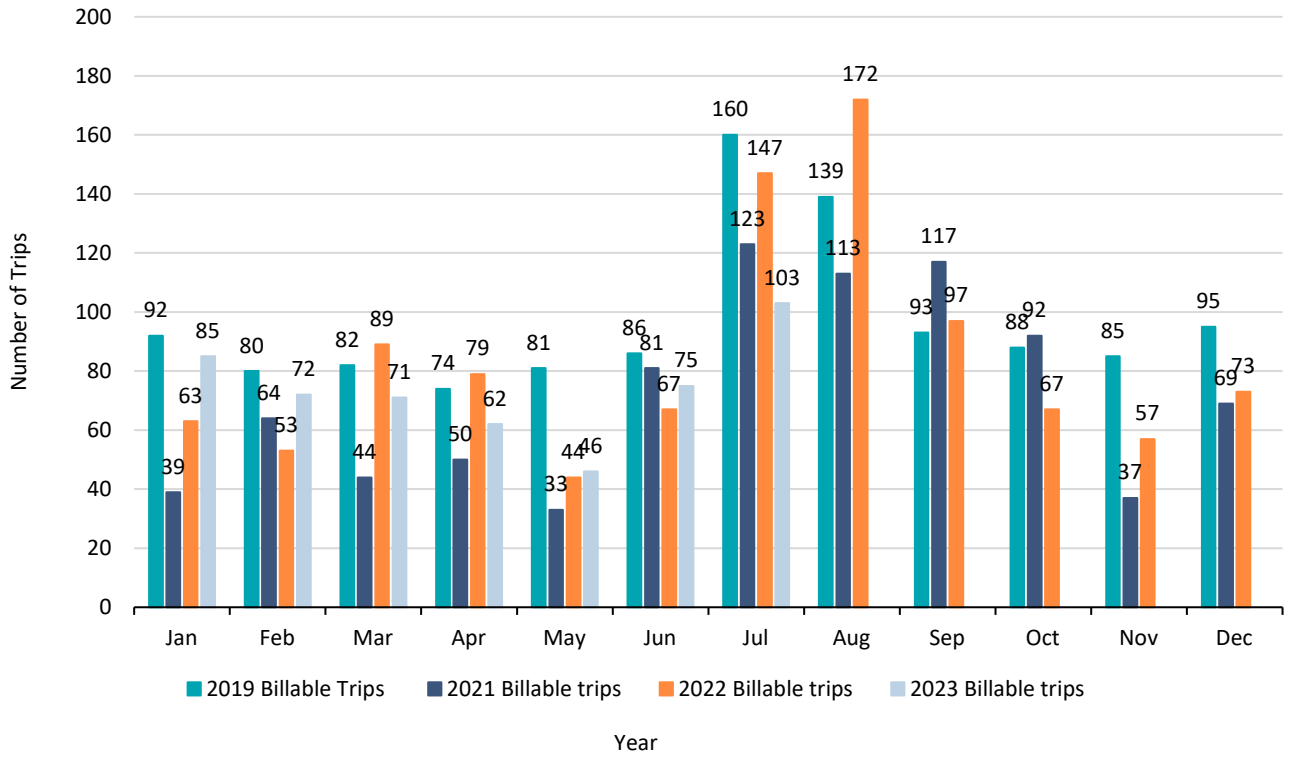


Source: City of Aspen; WE-cycle

Use and Ridership

Figure 21 shows annual Car To Go trips between 2019 and 2023.

Figure 21. Car To Go Monthly Trips, 2019-2023

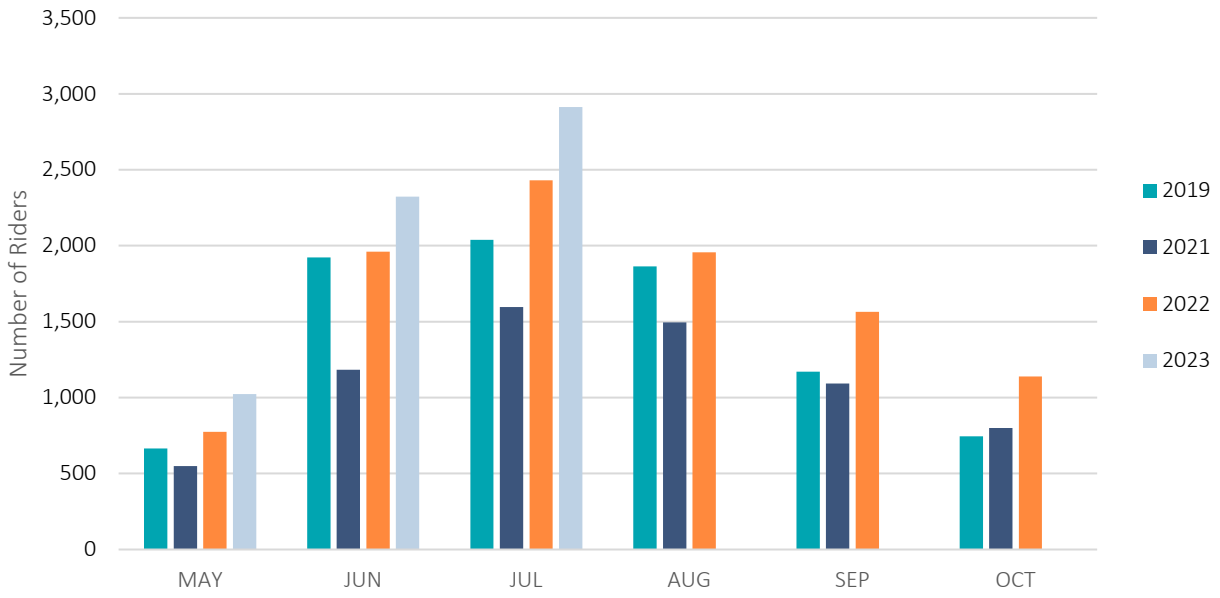


Source: City of Aspen

Between 2019 and 2023, Car To Go trips peaked in Summer. Winter trips reached their highest level during the last 4 years in 2019 during the months of December, January, and February, along with the summer months of June and July. After a two-year decrease in Car To Go trips in 2020 and 2021 resulting from the COVID-19 pandemic, Car To Go trips experienced a partial recovery of ridership in 2022 year-round and 2023 during winter months.

Figure 22 shows monthly WE-Cycle ridership in 2019 compared with 2021 through 2023.

Figure 22. WE-Cycle Monthly Riders, 2019 and 2021 to 2023



Year	Month					
	May	June	July	August	September	October
2019	666	1,922	2,038	1,864	1,170	746
2021	550	1,184	1,597	1,495	1,093	800
2022	774	1,961	2,431	1,956	1,565	1,139
2023	1,024	2,324	2,914			

Source: City of Aspen

Between 2021 and 2023, WE-Cycle ridership peaked in the month of July. After a decrease in WE-Cycle ridership in 2021 resulting from the COVID-19 pandemic, WE-Cycle experienced a strong recovery and growth in ridership in 2022 and 2023, surpassing even 2019 ridership during the months of May, June, and July (data for remainder of the 2023 season not yet available).

WE-Cycle Use Cases

Results from WE-Cycle's 2019 End of Season Survey show that almost two-thirds of riders commute to Aspen (66%) and 40% of riders live in Aspen (40%). Riders also come from Carbondale, Basalt, El Jebel, Glenwood Springs, Snowmass Village, or visit from out of the Roaring Fork Valley area. In 2019, there was higher representation of female (52%) survey participants than male (47%). The overwhelming majority of respondents (84%) were between the ages of 35 and 64.[16]

[16] RFTA. (2021). Roaring Fork Valley Regional Bikeshare Plan. RFTA. https://www.rfta.com/wp-content/uploads/2022/06/roaring-fork-valley-regional-bikeshare-pl.pdf

Over half of survey participants (54%) ride WE-Cycle at least once a week and nearly one third (30%) ride a few times a month. While some riders use WE-Cycle as a door-to-door mode of mobility, the majority of riders use WE-Cycle as a first- or last-mile service to connect to transit.[17]

Over three-quarters (77%) of survey participants indicated that they use WE-Cycle to connect with transit services. In 2019, 50% of trips made using WE-Cycle started or ended at one of RFTA's VelociRFTA (BRT) stations. In addition, approximately 20% of participants indicated that they ride RFTA more often because of the availability of WE-Cycle (21%).[18]

Successes and Challenges

Car To Go and WE-Cycle offer Aspen residents, employees, and tourists convenient first-last mile solutions that support transit ridership and active transportation. Key successes for WE-Cycle include expansion of the program to Carbondale with 17 stations located in strategic locations identified by the community, deployment of solar-powered e-bike charging stations (first of its kind in the national bikeshare industry), and steady growth in ridership systemwide, especially among e-bikes. In addition, to make WE-Cycle accessible to unbanked riders, an access pass is available so that riders can use service without a credit card.

Challenges for WE-Cycle include the ability to hire skilled staff due to lack of affordable housing in the region. Additionally, limited storage space for bikes during the off-season, a 6-month operation period due to snow removal in the Winter, and the lack of public understanding of the scale of operations (Aspen, Snowmass, Mid-Valley, and Carbondale) in the region pose challenges for expanding the program.

Car To Go provides a viable and convenient alternative to renting or owning a vehicle and storing it, especially for infrequent residents of Aspen who stay for only a few weeks out of the year. Key success of the program are sustainability (all vehicles are hybrid or EVs) and technology that is currently being piloted to automate entry of trip mileage into software, the popularity of the program among users, and the strong customer service and attention to detail. Challenges are the large amount of staff time and resources required to manage fleets (equivalent to one part-time staff) in-house, limited marketing of the program, and the need for additional grant funding to make the program more financially sustainable. Again, while Car To Go is a popular program, running the program in-house makes it very difficult, if not impossible, to scale, especially when carshare does not yield as substantial of an impact on personal vehicle usage than do other investments.

Financial Health

To become a member of the Car To Go program, users must pay a one-time $25 application fee and a $10 per month lock box key fee. **Figure 23** shows the standard usage rates for the program.

[17] RFTA. (2021). Roaring Fork Valley Regional Bikeshare Plan. RFTA. https://www.rfta.com/wp-content/uploads/2022/06/roaring-fork-valley-regional-bikeshare-pl.pdf
[18] RFTA. (2021). Roaring Fork Valley Regional Bikeshare Plan. RFTA. https://www.rfta.com/wp-content/uploads/2022/06/roaring-fork-valley-regional-bikeshare-pl.pdf

Figure 23. Car To Go Standard Usage Rates

Type of Vehicle	Usage Rate	
	Hourly	Per Mile
Electric	$5.50	$0.25
Standard	$5.50	$0.60
SUV or Truck	$5.50	$0.65

Source: City of Aspen

Figure 24 shows projected annual revenue from the program based on current (2023) data provided by the City.

Figure 24. Car To Go Projected Annual Revenue

Type of Vehicle	Average Hours per Day	Average Distance per Day	Estimated Annual Revenue
Electric	1	1.81	$2,173
Standard	3	16.12	$9,553
SUV or Truck	10	45.46	$30,860
Total	**14**	**63.4**	**$42,586**

Source: City of Aspen

The City's current annual budget allocates $141,890 to fund the program. Therefore, the user fee recovery ratio is approximately 30%.

The WE-Cycle program is offered to users free of charge for rides up to 30 minutes. The service is primarily funded by RFTA, local jurisdictions, the Elected Officials Transportation Committee (EOTC), and system sponsorship. Based on WE-Cycle's 2022 Annual Report, annual operating costs for the WE-Cycle program are approximately $1.53 million, with the City of Aspen contributing approximately $160,000 to the program. With 54 stations and approximately 500 docks, the annual operating cost per station is approximately $28,300 and the annual operating cost per dock is approximately $3,000. We may want to review the MOU with RFTA here which is a large cost offset and is fairly new.

04 Existing Parking Conditions

Existing Parking Conditions

Sound parking management is an essential tool for supporting the City's mobility and sustainability goals. When done effectively, parking management can reduce vehicle trips and encourage use of other transportation options, since every vehicle trip must start and end in a parking space. The City actively manages its parking through paid parking, permit programs, a variety of TDM programs, and proactive enforcement.

Mission, Purpose, & Role in Supporting TDM

According to the City of Aspen, the Parking Department's mission is "to provide safe, efficient and convenient parking options to residents, commuters and visitors." The Parking Department is responsible for managing and enforcing on-street parking, educating the public on parking options, and providing prompt customer service. The purpose of Aspen's parking management system is to strategically reduce traffic congestion, improve air quality, and preserve Aspen's small-town character. Revenues from on-street and off-street paid parking are strategically re-invested into free local transit services to support these city-wide transportation goals.[19]

Operations and Management

About the Parking Department

Organization

The Parking Operations Manager oversees operations and administration and supervises parking enforcement officers. There are 5 full-time staff that are responsible for day-to-day parking enforcement, one staff member responsible for managing reserved parking, and one staff member dedicated to administration.

Jurisdiction

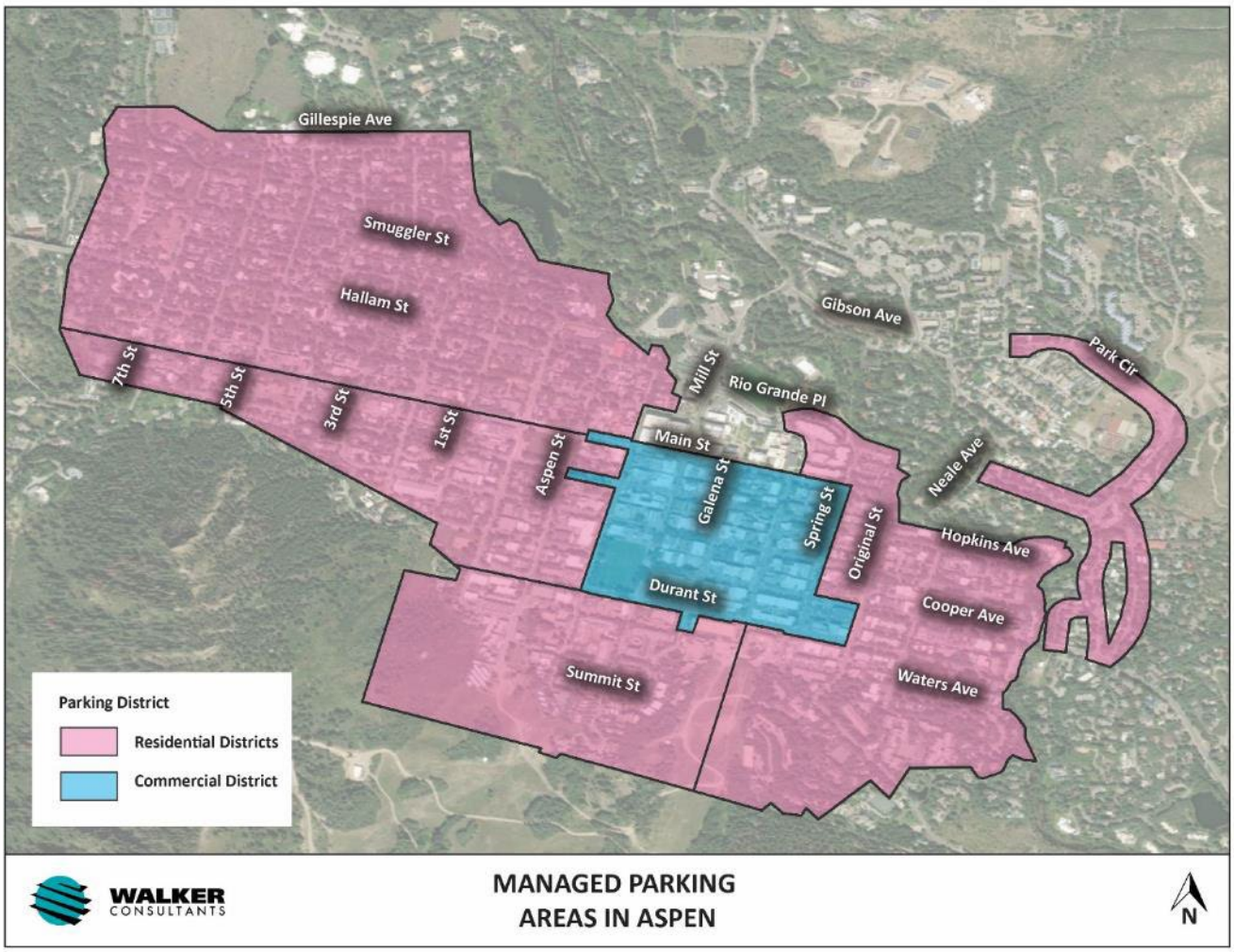
The Parking Department's jurisdiction consists of two primary areas: the commercial core and the residential districts immediately surrounding the commercial core.

In 1995, the City of Aspen implemented paid parking to increase parking availability in the downtown. Concurrently, the City established residential parking districts to protect adjacent neighborhoods from increased parking demand and doubled the frequency of local bus services. After a three-month pilot program, City Council referred the paid parking plan to voters for approval. 75% of voters supported the paid parking program, which has continued to this day.[20]

[19] City of Aspen (2023). Parking. Parking Department. https://www.aspen.gov/314/Parking
[20] U.S. Department of Transportation, Federal Highway Administration (FHWA). Contemporary approaches to parking pricing: A primer. FHWA. https://ops.fhwa.dot.gov/publications/fhwahop12026/sec_7.htm

Figure 25 shows the boundaries of managed parking areas in Aspen, including commercial and residential districts.

Figure 25. Managed Parking Areas in Aspen



Source: City of Aspen

Enforcement

Enforcement Hours

Enforcement hours are shown in Figure 26.

Figure 26. Parking Enforcement Hours

Parking District	Enforcement	Enforcement Days	Enforcement Hours
Residential Districts	Proactive, but lower priority	Monday - Friday	10 AM - 6 PM
Commercial Core	Proactive	Monday - Saturday	10 AM - 6 PM

Source: City of Aspen

Reserved Parking

Aspen has a reserved parking program which charges elevated daily rates for special events, construction sites, moving companies, tree trimming, and other services. For special events, parking spaces are reserved up to 6 weeks in advance. Fees for reserved parking are listed in **Figure 27**.

Figure 27. Daily Fees for Reserved Parking

Use	Daily Fee Per Space
Construction	$40- residential area/ $100- Downtown core
Non-construction	$20

Source: City of Aspen

Permit Parking

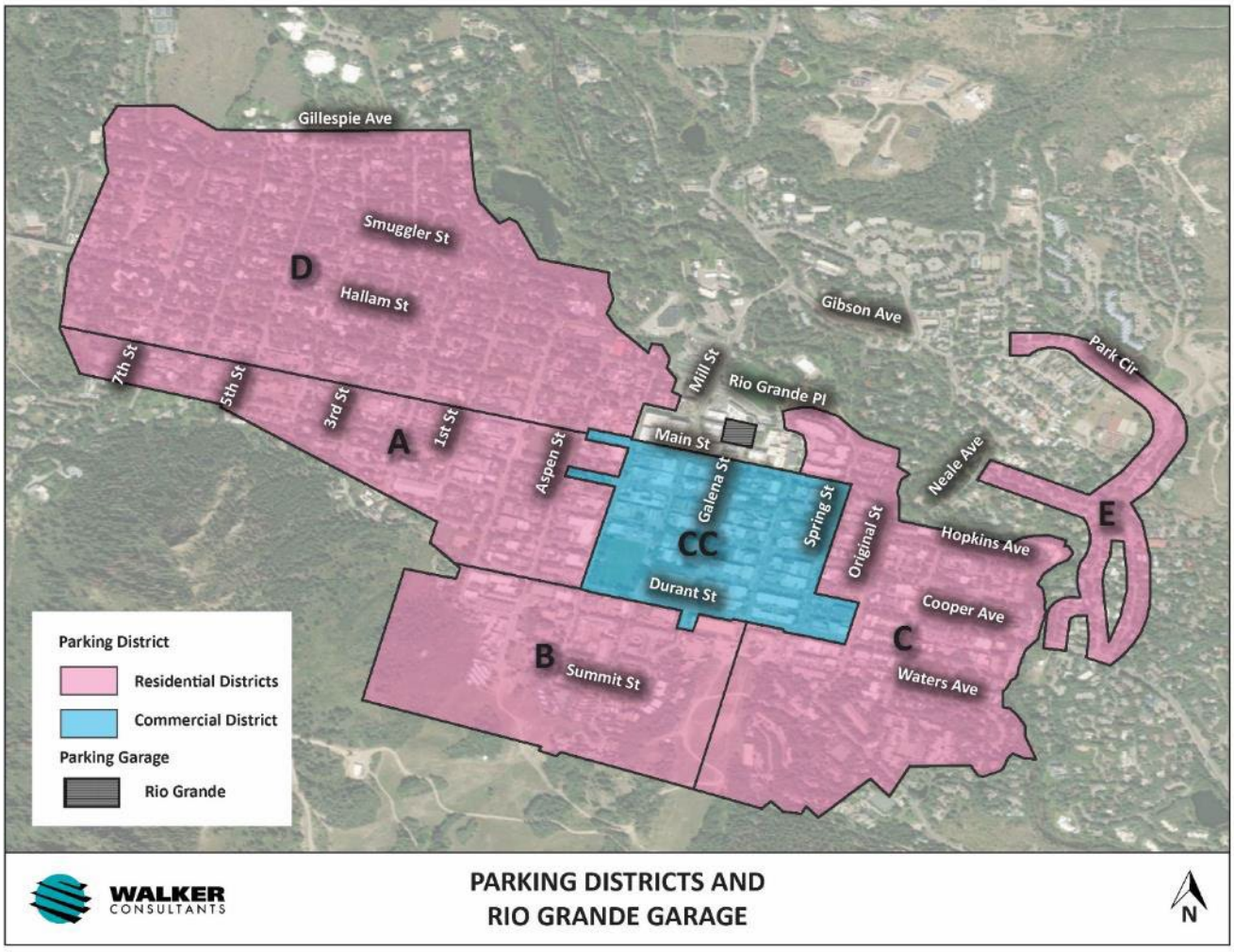
Long-Term/Lease Parking

Those frequently traveling to downtown Aspen can bulk purchase parking for discounted rates at the Rio Grande garage, an underground parking facility located near Galena Plaza at N Mill Street and Rio Grande Place.

Residential Parking Permit

The residential parking permit (RPP) program was established to protect residential neighborhoods adjacent to the commercial core from high parking demand after the implementation of paid parking. There are 3,000 parking spaces available to residents, as well as businesses and lodge guests in residential districts. Residential parking districts are enforced Monday through Friday from 10:00 am to 6:00 pm. **Figure 28** shows the boundaries of residential districts, shaded in pink, where permits are enforced.

Figure 28. Parking Districts in Aspen



Source: City of Aspen

Parking time limits and restrictions are enforced in residential districts. All residential parking spaces have a 72-hour limit, meaning that residents need to move their vehicle every few days to avoid towing of parked vehicles. In addition, parking is prohibited in fire zones, snow removal zones, and no parking zones, between the hours of 3:00 am and 7:00 am in Downtown and some residential streets.[21]

[21] City of Aspen. (2023). Parking in Residential Area. Parking Department. https://aspen.gov/328/Parking-in-Residential-Area

Other Permit Types

Figure 29 describes special permits that are allowed for specific user groups in the commercial and residential districts.

Figure 29. Special Permits in Aspen[22]

Permit Name	Description
Business Permit	Business permits were established to provide a means to load and unload at their business within the downtown commercial district.
Electric Vehicle Permit	Electric vehicle permits were established to promote the use of electric and hybrid vehicles. Currently, all-electric vehicles may park for free in residential districts.
Doctor Permit	Doctor permits were established to provide Aspen Valley Hospital with parking permits for on-call staff to be used in any legal parking space.
Aspen Fire District Permit	Aspen Fire District permits were established, according to Ordinance Sec 24.04.120 in the municipal code, to provide volunteer and fire first responders with free parking in any legal parking space as "Active Fire Personnel."
Lodge Guest Permit	Lodge guest permits were established for guest parking in residential zones after the City first introduced paid parking. According to Ordinance Section 24.16.070 in the municipal code, indicates the permit is to be utilized for guests only for the stay or a maximum of 7 days from the issue date.
Mountain Rescue Permit	The mountain rescue permit was established so that members of mountain rescue who are on-call personnel can park for free in any legal spot.
Neighborhood Electric Vehicle Permit	Neighborhood Electric Vehicle (NEV) permits were established to promote small in-town vehicles that do not utilize gas. The NEVs have free access to parking in any legal parking space.
Residential Parking Permit	Each household can obtain 4 permits (3 permits and 1 additional guest permit upon request). A resident is required to present a motor vehicle registration or an operator's license and proof of residency with the application.
Service Vehicle Permit	Service vehicle permits were established to provide parking at a reduced rate for plumbers, electricians, or other service providers. They may utilize the virtual Pay by Phone business account to manage their fleet vehicles.

Source: City of Aspen

[22] City of Aspen. (August 2022). Appendix A: Parking special permit descriptions. City of Aspen Parking Special Permit Review, August 22,2022.

Lodge Permit Use

As mentioned previously, Aspen provides lodge permits to lodges on an unlimited basis at a subsidized rate of $3.00 for up to a 7-day period (compared with the day use parking fee of $8 for resident visitors). Because permits are purchased by the lodge management in large quantities, the issuance of the permit is issued through the discretion of hotel staff. Tracking and enforcement of the permit to assure compliance of guests can be challenging and time consuming..[23] **Figure 30** shows the number of lodge permits issued to select lodges in 2022.

Figure 30. Lodge Permits Issued for Select Aspen Hotels/Lodges in 2022

Lodge	Number of Keys	2022 Projected Number of Permits Requested by Lodge[24]	Percentage of Total	Cost	Average Number of Annual Permits Per Room
Lodge A	126	1,117	28%	$3,352	8.9
Lodge B	53	1,009	25%	$3,026	19.0
Lodge C	88	897	22%	$2,690	10.2
Lodge D	500	299	7%	$896	0.6
Lodge E	140	277	7%	$832	2.0
Lodge F	17	138	3%	$414	8.1
Lodge G	59	115	3%	$345	1.9
Lodge H	24	112	3%	$336	4.7
Lodge I	13	25	1%	$76	1.9
Lodge J	71	11	0%	$34	0.2
Total	**1,091**	**4,000**	**100%**	**$12,000**	-
Weighted Average Number of Permits per Key in 2022	**3.7**				
Median Number of Permits per Key in 2022	**3.3**				

[25] The number of permits used by each lodge was projected by applying the share of lodge permits used by each lodge in 2015 to the total number of lodge permits used in 2022.

Source: City of Aspen

In 2022, the median number of lodge permits issued per key or separate unit on an annual basis was 3.3, however, the range of lodge permits issued per key was large (ranging between 0.2 permits per key and 19 permits per key). In a recent memorandum, parking department staff recommended changes to the lodge permit program to address the high parking demand for lodge permits, described in the section on Changes to Special Parking Permits Under Consideration.

[23] Aspen Daily News. (November 1, 2022). Aspen Council to review special parking permits for lodges and businesses. Aspen Dailly News, Staff Report. https://www.aspendailynews.com/news/aspen-council-to-review-special-parking-permits-for-lodges-businesses/article_ab6aa156-5990-11ed-85a7-dbd1f29028e0.html

Parking Pricing

Public Parking

Parking is enforced on a schedule that varies by season. During the peak seasons of June to September and December to March, parking is enforced from Monday through Saturday, with a 4-hour maximum time period. During the off-peak seasons of April to May and October to November, parking is enforced from Monday through Friday, with a 4-hour maximum time period.

On-street parking in the downtown core is priced differently depending on the season due to high levels of summer tourism. During the off-season (April to May and October to November), hourly prices range from $2.00 to 4.00 per hour on Monday-Friday depending on the time of day. During the peak-season (months of June-September and December-March) hourly prices range from $4.00 to $6.00 per hour on Monday-Saturday. The higher price during peak seasons helps to manage parking demand during the busiest times of year and busiest times of day, while generating more parking revenue during these higher-value periods. To encourage carpooling and parking outside of the city limits, Aspen offers free parking options for carpool vehicles (which require a permit at no cost) or parking at the Brush Creek Park and Ride with free transportation to Aspen.

Figure 31 shows the peak season and off-season parking rates.

Figure 31. Seasonal Parking Rates in Aspen[25]

Off-Season Rates (April-May, October-November, Monday-Friday)		Peak-Season Rates (June-September, December-March, Monday-Saturday)	
Time of Day	Hourly Rate	Time of Day	Hourly Rate
10:00 am-10:59 am	$2.00/hr	10:00 am-10:59 am	$4.00/hr
11:00 am-2:59 pm	$4.00/hr	11:00 am-2:59 pm	$6.00/hr
3:00 pm-5:59 pm	$2.00/hr	3:00 pm-5:59 pm	$4.00/hr

Source: City of Aspen

Parking is free in the commercial core between the hours of 6:00 pm and 3:00 am and between 7:00 am and 10:00 am daily.

On-street parking in residential districts is free for the first two hours (no re-parking permitted), and thereafter is charged at a daily rate of $8.00 per day. Parking is free in the residential districts between the hours of 6:00 pm and 10:00 am daily.

There are three parking payment options in the commercial core and the residential districts: 1) Text2Park, a web-based payment option that pairs a license plate with credit card information, 2) Pay stations, or 3) the PayByPhone app.

For off-street public parking, the Rio Grande Parking Plaza charges graduated hourly rates for the first three hours that increases by two dollars for each hour parked ($2.00 for first hour, $4.00 for 2 hours, and $6.00 for 3 hours) with a flat-rate daily fee of $12.00 charged after 3 hours. There is a 24-hour maximum time limit for parking in the garage. Parking is free in the garage between the hours of 5:00 pm and 5:00 am daily.

[25] City of Aspen. (2023). Downtown parking. Parking Department. https://aspen.gov/1400/Parking-Options

Long-Term/Lease Permit

Aspen offers long-term parkers a parking pass which is flexible and convenient for employees that do not park in the facility on a daily basis. The monthly pass offers unlimited parking at a cost of $250 per month, while the discount pass is a flexible option that can be purchased for 10 exits ($60.00) or 20 exits ($120.00) at a time. Once purchased, the card can be reloaded at two Pay Stations located at the garage.[26]

Figure 32. Rio Grande Parking Pass Options

Rio Grande Parking Pass Options		
Type of Pass	Cost	Access
Monthly Pass	$250/month	Unlimited access from start to end date
Discount Pass	$60 for 10 exits or $120 for 20 exits	Up to 24 hours per entry/exit

Source: City of Aspen

Residential Parking Permit

According to Section 24.16.050 of the Aspen Municipal Code, households located in residential districts are provided four parking permits at no charge (3 residential vehicle permits and 1 guest vehicle permit). Permits are renewed on an annual basis using an online application on the City's website. Businesses or non-profit organizations located within residential districts are eligible to receive 1 residential permit. Guests of lodges located within residential districts may also purchase a temporary residential parking permit for up to 7 days, as described in the next section, Other Permit Types.

Other Permit Types

Figure 33 outlines the fees for special parking permits in Aspen.

[26] City of Aspen. (2023). Public parking garage. Parking Department. https://www.aspen.gov/333/Public-Parking-Garage

Figure 33. Fees for Special Parking Permits in Aspen[27]

Permit Name	Fee
Business Permit	$125 per year
Electric Vehicle Permit	Free
Doctor Permit	~~$~~100 per year
Aspen Fire District Permit	Free
Lodge Guest Permit	$3.00 per week
Mountain Rescue Permit	Free
Neighborhood Electric Vehicle Permit	Free
Residential Parking Permit	Free for first 4 permits
Service Vehicle Permit	Half of the price of current parking rate.

Source: City of Aspen

Loading/Delivery

The City provides designated curb loading zones and alleys within the commercial core. Additionally, local businesses can apply for a residential permit to make deliveries within the RPP zones. According to Section 24.20.030 of the Aspen Municipal Code, delivery vehicles are restricted to deliveries between the hours of 9:00 pm and 5:00 am.

Parking Rules and Regulations

Citations and Fines

The power to enforce parking-related regulations is vested in the Aspen Municipal Code. Currently, this authority is delegated to the City of Aspen Parking Department. In 2022, for the first time in 20 years, the City of Aspen increased the fees for parking-related code violations through the judicial process to increase the availability of parking.

Parking fines for overtime in a timed zone and for failure to pay a parking meter increased from $30 to $50, illegal parking increased from $50 to $75; and abuse of ADA parking spaces increased from $100 to $250. In addition, the fines for the 4-hour limit with multiple citations increased to $100 for the second violation and $200 for the third violation, with the fourth violation resulting in a court summons.[28] Figure 34 shows the current fee structure for parking-related code violations.

[27] City of Aspen. (August 2022). Memorandum on parking special permits. City of Aspen Parking Special Permit Review, August 22,2022.
[28] Sackariason, Carolyn. (July 27, 2022). Aspen Times. Aspen to increase parking fines for the first time in 20 years. https://www.aspentimes.com/news/aspen-to-increase-parking-fines/

Figure 34. Fee Schedule for Parking-Related Code Violations

Violation Type	Base Amount
Exceeding Time Restriction in Residential Districts	$50.00
Exceeding Time Restriction in Commercial Core District	$50.00
Obstructing Driveway or Alleyway	$75.00
Obstructing Traffic or Maintenance	$75.00
Fire Hydrant or Fire Station Driveway Within 15 Feet	$75.00
Crosswalk Within 15 Feet (or 30 Feet for Midblock Crosswalk)	$75.00
Overtime Parking or Failure to Pay[29]	$50.00
Parking in Specified Prohibited Places[30]	$75.00
Falsely Obtaining Parking Permits	$100.00
Impoundment of Motor Vehicles (local)	$160.00
Impoundment of Motor Vehicles (distant)	$200.00
ADA Parking Violation	$250.00
Boot Fee	$75.00
Fraudulent Use of Parking Resources	$100.00
Parking in Loading Zone	$50.00
Parking During Snow Removal	$50.00
Unattended Motor Vehicle	$75.00

Specified prohibited locations for parking include:

(a) On a sidewalk
(b) Within an intersection
(c) On a crosswalk
(d) Between a safety zone and the adjacent curb or within 30 feet of points on the curb immediately opposite the ends of a safety zone
(e) Alongside or opposite any street excavation or obstruction when stopping, standing, or parking would obstruct traffic
(f) On the roadway side of any vehicle stopped or parked at the edge of curb of a street
(g) Upon any bridge or other elevated structure upon a highway or within a highway tunnel
(h) On any railroad tracks
(i) On any controlled access highway
(j) In the area between roadways of a divided highway, including crossovers
(k) At any other place where official signs prohibit stopping
(l) In alleyways, truck loading zones, and passenger loading zones except during the necessary and expeditious loading and unloading of merchandise or freight

Source: City of Aspen

Technology

The City of Aspen uses several software tools to gather parking data, manage payment, and enforce the parking code throughout its parking system.

For data collection, Aspen uses Smarking, a software tool for parking analytics that is integrated with PARCS. This tool enables real-time monitoring of paid parking occupancy 24/7 in both the Rio Grande Garage and on-street parking areas.

[29] Second offense - $100, third offense - $200.00, fourth offense - summons
[30] See information below table

For payment, Aspen uses Text2Pay and PaybyPhone mobile app for payment of short-term, public on-street parking. In 2020, the City updated pay stations with Pay-by-Plate technology for hourly on-street parking to assist with enforcement by providing real-time tracking of payment status by license plate.

Aspen uses T2 Flex software for digital payment and management of residential parking permits, including residential, business, and lodge guest permits. Residents can purchase virtual parking permits using an account linked to their license plate from a smartphone, tablet, or computer via T2 FlexPort, making it easier for users and for parking enforcement.

For enforcement, Aspen uses Genentec license plate recognition (LPR) technology integrated with T2 Flex, which enables officers to perform permit and payment lookups, receive LPR detected violations, and issue citations.

Special Parking Permit Changes Under Consideration

In 2022, Parking staff wrote a memorandum addressed to the City Mayor and Council with recommended reforms to the current parking permit structure and fees. On November 1, 2022, City Council discussed these recommended reforms, which could result in a change to the City's parking code. They recommended an overhaul of the current structure for many special permits, as described below:

- Business Parking Permits—Remove business permits (which currently cost $125/year and occupy 300-400 spaces in residential zones) and have businesses instead use increasingly popular loading zones, with the option for businesses to use paid parking.
- Doctor Parking Permits – Increase the cost of doctor permits from $120.
- Fire Department Permits – Limit the fire department parking to the red curb designation area for emergency vehicles.
- Lodge Parking Permits – Remove lodge permits and have lodge guests use the residential payment system ($8 fee per day).
- Residential Parking Permits – Consider charging an annual fee for residential permits (currently each resident can obtain up to 4 permits, three resident permits and one visitor permit, for free).
- Parking Garage Permits – Increase the daily discount parking passes from $6 per day/exit to $8 per day/exit.
- Business Garage Permits – Increase the business discount parking pass from $150 per month to $180 per month.
- Monthly Parking Passes – Remove the monthly parking pass, which can increase the garage occupancy count, making it appear full, even though the spaces are not occupied.[31]

The memorandum recommended maintaining the existing EV, Neighborhood EV, Mountain Rescue, Service Vehicles, and ADA parking permits with no changes since these permits are estimated to have minimal impacts on parking demand and congestion.

[31] City of Aspen. (August 2022). Memorandum on parking special permits. City of Aspen Parking Special Permit Review, August 22,2022.

Financial Health and Sustainability

System Revenue and Expenses

Figure 35 shows total revenue, expenses, and resulting cost recovery of Aspen's parking system between 2019 and 2022.

Figure 35. Parking Revenues, Expenses, Profit, and Cost Recovery Systemwide, 2019-2022

Financial Metric	2019	2020	2021	2022
Annual Revenue—Parking Program in Total	5,253,022	3,755,517	5,198,187	5,594,237
Annual Expenses—Parking Program in Total	1,965,358	1,917,492	2,074,219	1,958,300
Difference (Revenue – Expenses)	**3,287,664**	**1,838,025**	**3,123,968**	**3,635,937**
Cost Recovery	**267%**	**204%**	**251%**	**286%**

Source: City of Aspen

Overall, the parking department's revenue is high, with an expense recovery rate averaging 252% between 2019 and 2022. Since 2019, revenues from on-street parking in the commercial core have decreased by 8% and revenues from business and lodging permits in the residential districts have decreased by 19%, which was more than compensated by the increase in other revenue sources by 70%.

Parking Infrastructure

Systemwide

In downtown Aspen, there are a total of 1,102 public parking spaces, excluding time limited and loading spaces. Out of that, 782 spaces are on-street parking in the Commercial Core and 320 are off-street spaces in the Rio Grande Garage.

Figure 36 and Figure 37 below show systemwide public parking demand and occupancy percentages, respectively. The peak period is highlighted in yellow.

Figure 36. Systemwide Public Parking Inventory and Average Peak Demand (Number of Spaces)

Parking Type	Supply	Average Peak Demand			
		Winter Season		Summer Season	
		Weekday	Weekend	Weekday	Weekend
On-Street (Excluding Time Limited and Loading)	782	588	595	606	645
Rio Grande Garage	320	214	154	254	200
Total	**1,102**	**802**	**749**	**860**	**845**

Source: City of Aspen

Figure 37. Systemwide Public Parking Inventory and Average Peak Demand (Occupancy Percentage)

Parking Type	Average Peak Percent Occupancy			
	Winter Season		Summer Season	
	Weekday	Weekend	Weekday	Weekend
On-Street (Excluding Time Limited and Loading)	75%	76%	77%	82%
Rio Grande Garage	67%	48%	79%	63%
Total	**73%**	**68%**	**78%**	**77%**

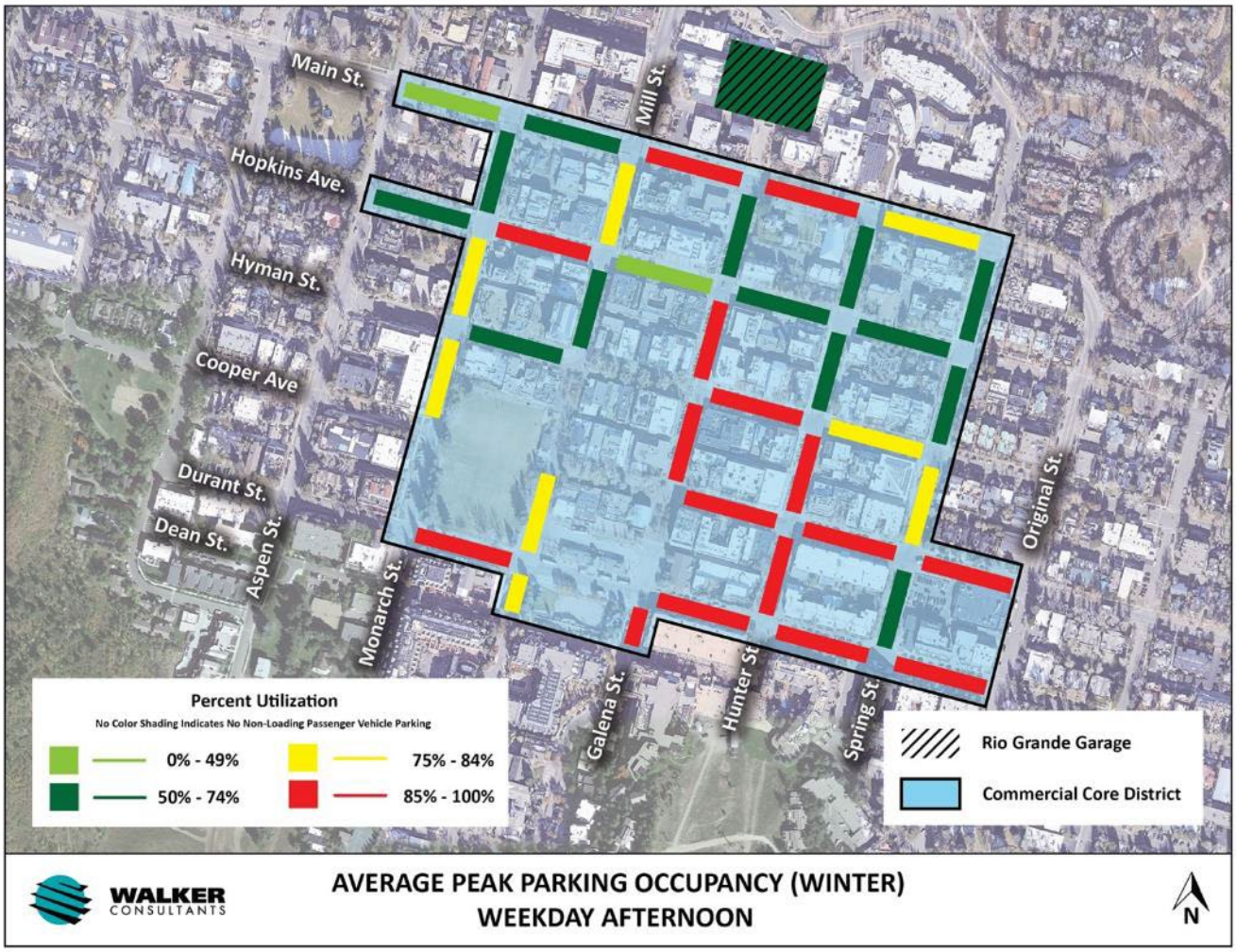
Source: City of Aspen

Overall, average parking demand peaks during summer weekdays at 860 spaces, or 78%, though it remains nearly the same during summer weekends.

Relative to weekdays, on-street parking is more occupied and the garage parking is less occupied during both winters and summers.

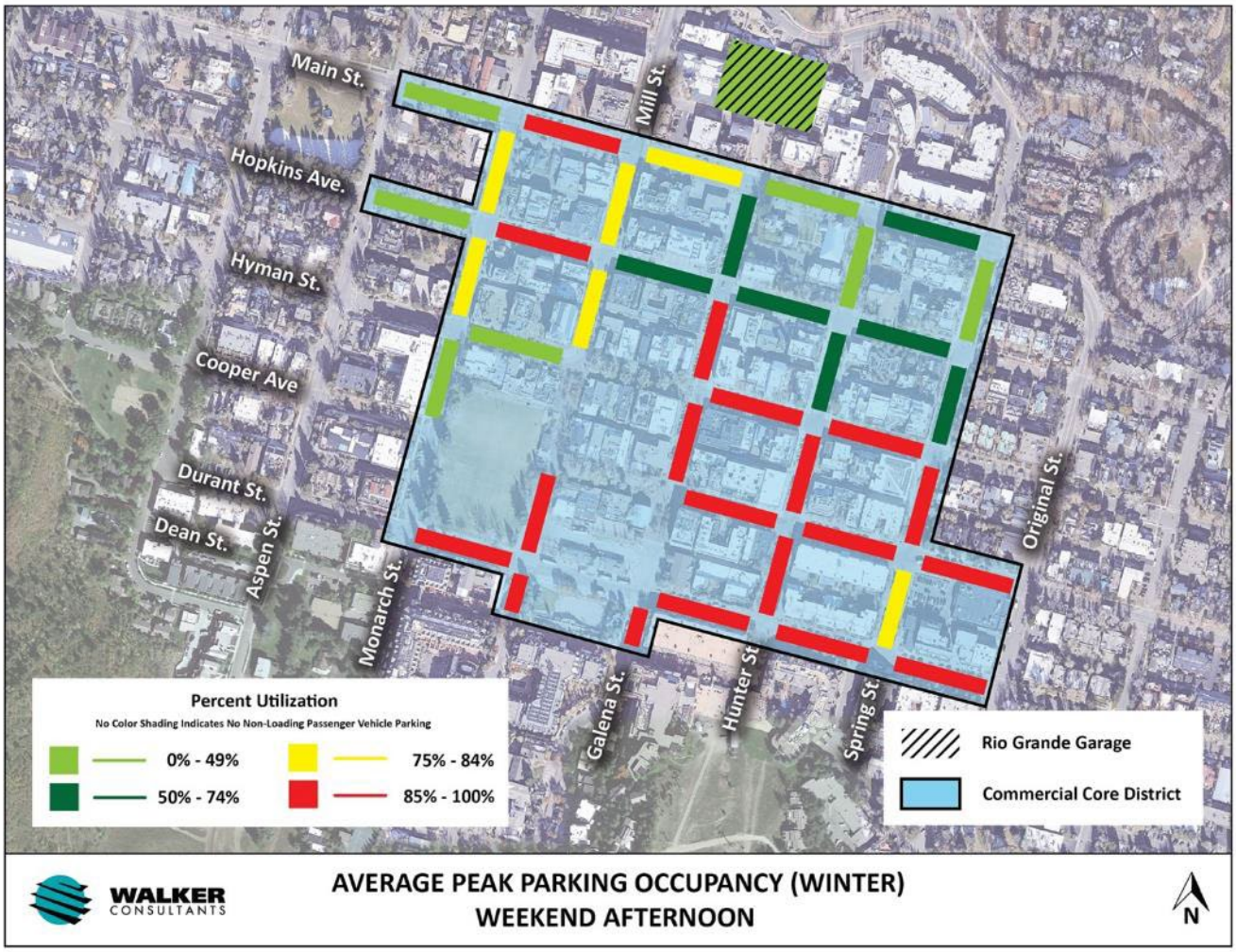
Figures 38-41 below are occupancy heat maps that show occupancy percentage by block/street segment within the Commercial Core and for the garage.

Figure 38. Systemwide Peak Parking Occupancy Heat Map (Winter Weekday)



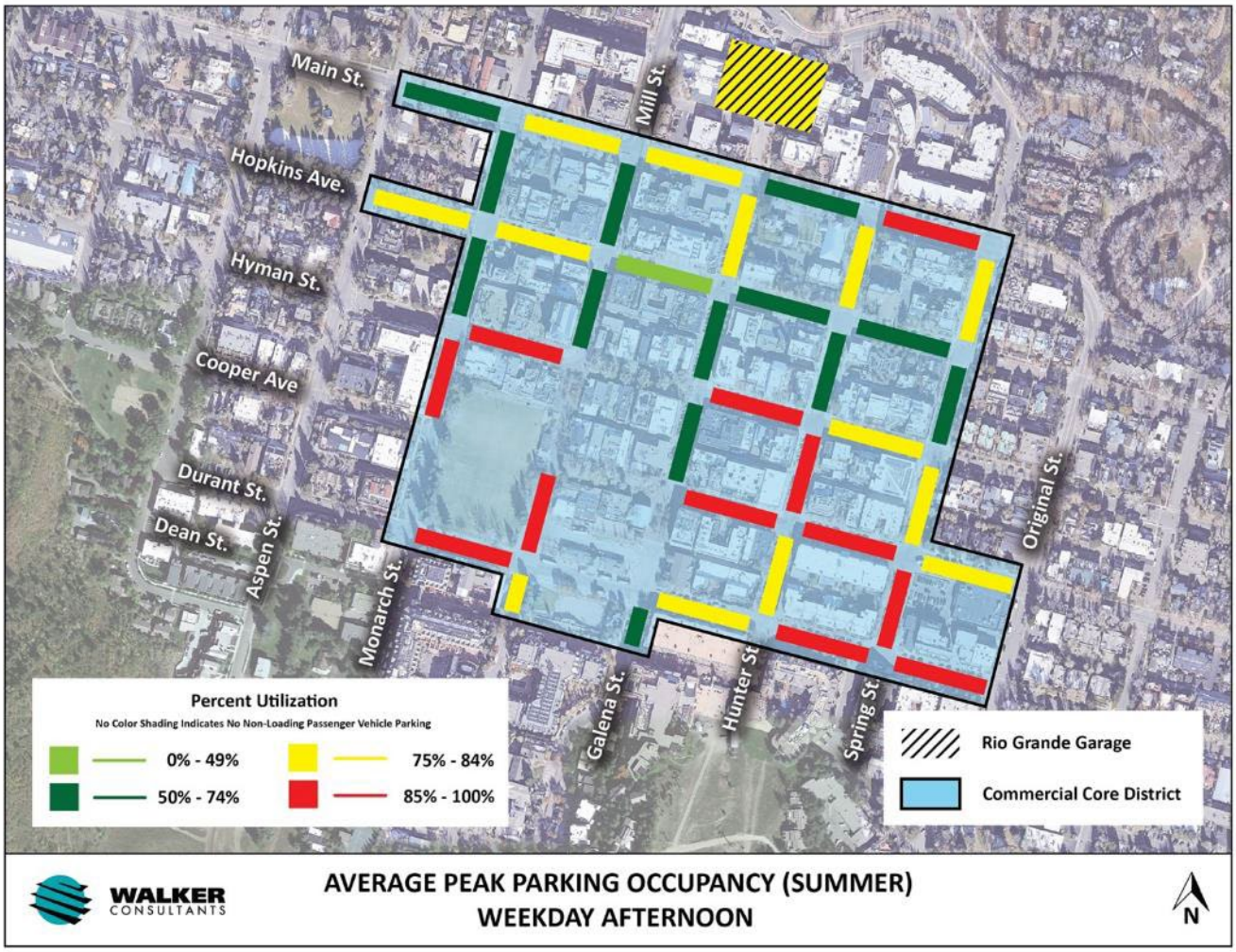
Source: City of Aspen

Figure 39. Systemwide Peak Parking Occupancy Heat Map (Winter Weekend)



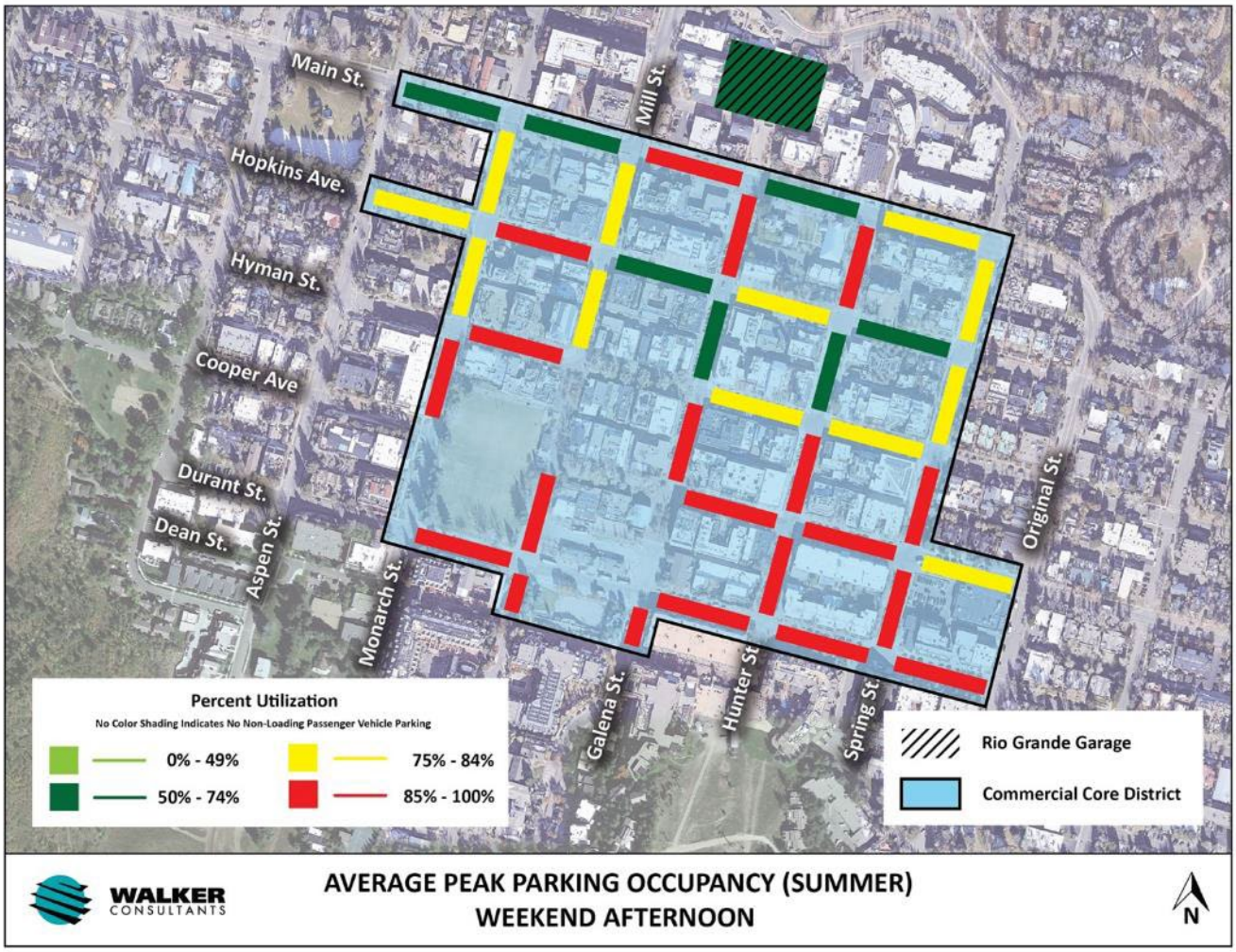
Source: City of Aspen

Figure 40. Systemwide Peak Parking Occupancy Heat Map (Summer Weekday)



Source: City of Aspen

Figure 41. Systemwide Peak Parking Occupancy Heat Map (Summer Weekend)



Source: City of Aspen

On-Street Parking

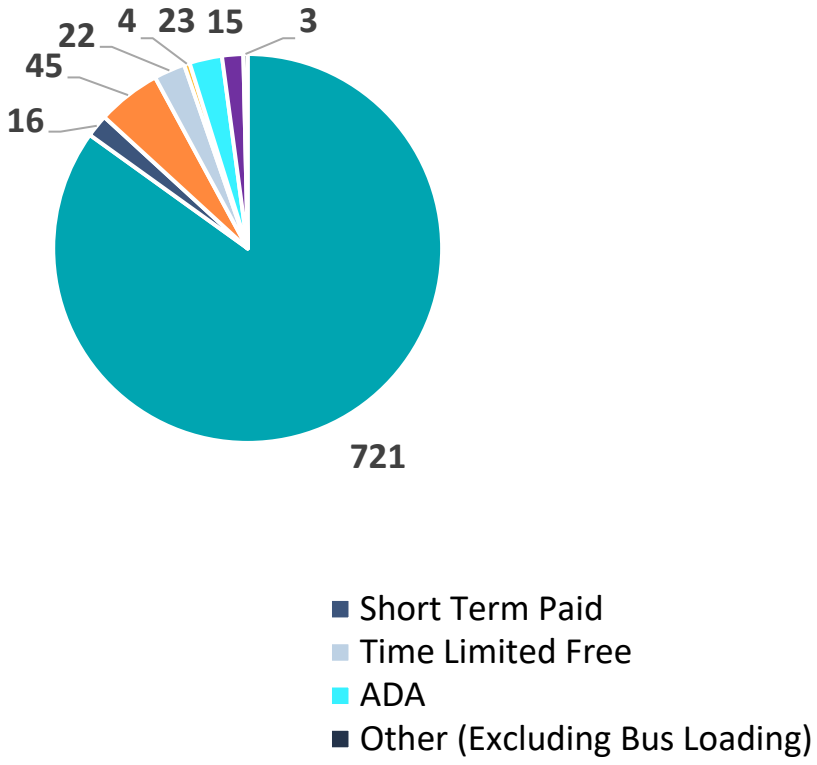
Commercial Core Inventory

Within the Commercial Core, which is the area roughly bounded by Main Street to the north, Spring Street to the east, Durant Avenue to the south, and Monarch Street to the west, with some areas extending towards Original Street to the east, Dean Street to the south, and Aspen Street to the west, there are a total of 849 on-street spaces for passenger vehicles, not including on-street frontage dedicated for RFTA bus loading only.

Excluding loading, 15-minute, and time-limited free spaces, there are a total of 782 on-street spaces within the Core.

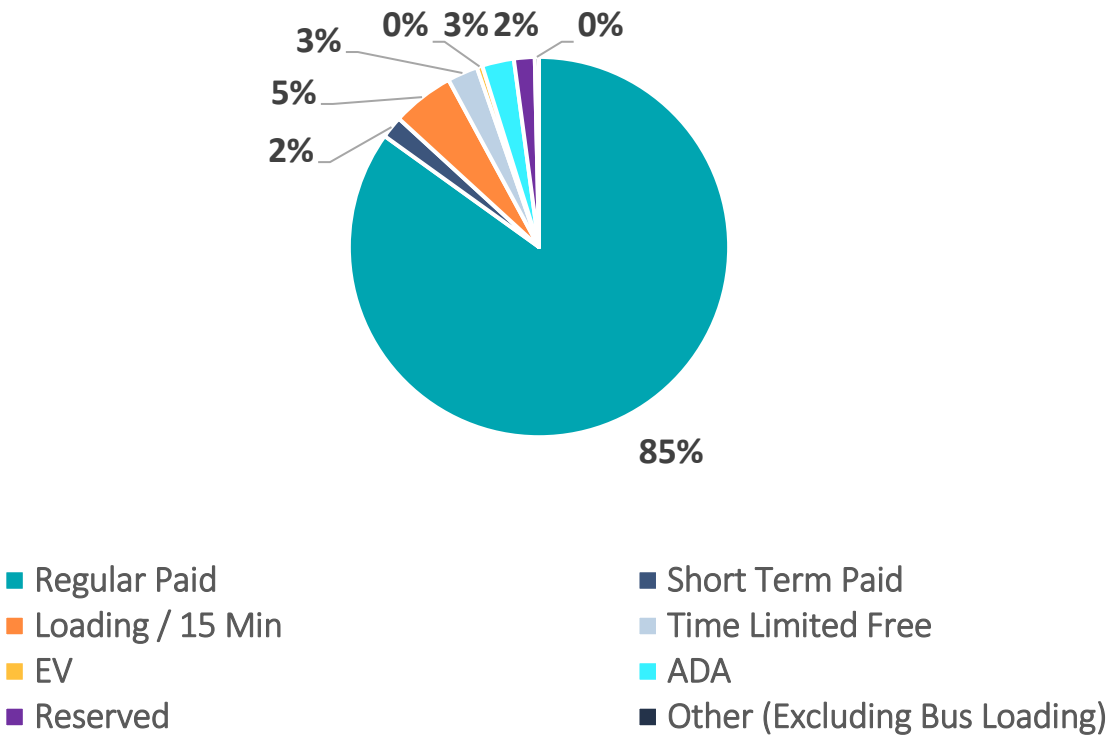
Figure 42 and **Figure 43** below show the on-street parking supply within the defined Commercial Core by parking type or restriction.

Figure 42. On-Street Parking Inventory in the Commercial Core by Type / Restriction (Number of Spaces)



Source: City of Aspen

Figure 43. On-Street Parking Inventory in the Commercial Core by Type / Restriction (By Percent)



Source: City of Aspen

Commercial Core Occupancy

To determine on-street parking occupancy patterns within the Commercial Core, Walker analyzed a data set from the City of Aspen that detailed on-street parking occupancy by block during the peak Winter 2022/2023 season as well as the peak Summer 2023 season. Specifically, data was available between the last week of December 2022 and the third week of March 2023, as well as between the third week of June 2023 and the third week of August 2023. Data was collected during typical peak times, during the late morning or early afternoon.

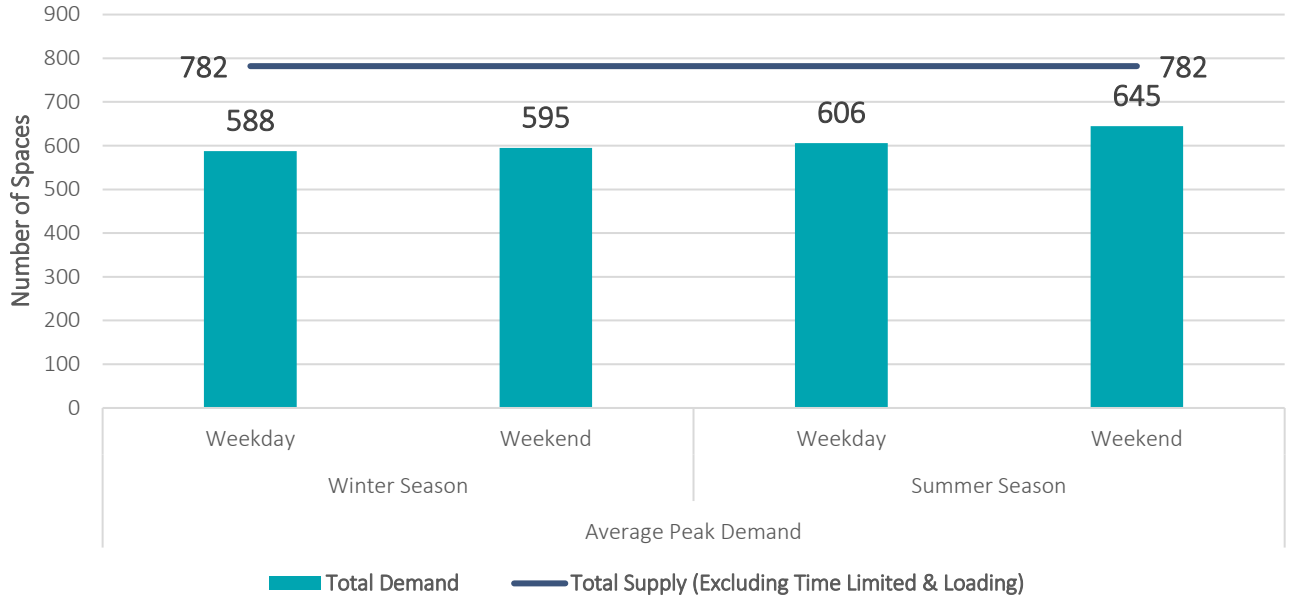
Note that data was collected on different days, depending on the street segment. For instance, the first two days of data for the 100 S. block of Mill Street were 12/30/22 and 1/5/23, while the first two days of data for the 500 block of Cooper Avenue were 12/27/22 and 1/3/23. Every block had a differing number of samples, though more data was collected during the Winter than the Summer, and more weekdays than Saturdays were collected.

The number of winter weekday data points available ranged from 2 to 9 and from 1 to 3 for Saturdays. For the Summer, the number of data points ranged from 2 to 7 for weekdays and from 0 to 6 for Saturdays. For blocks where no Saturday summer data was available, Friday data was substituted.

Due to the varying days and number of samples, Walker first sorted the data by season and by day of week, and then averaged data points together to determine an "average observed peak" by block or street segment. Therefore, the analysis should be considered to represent an "average typical peak" for the on-street parking system.

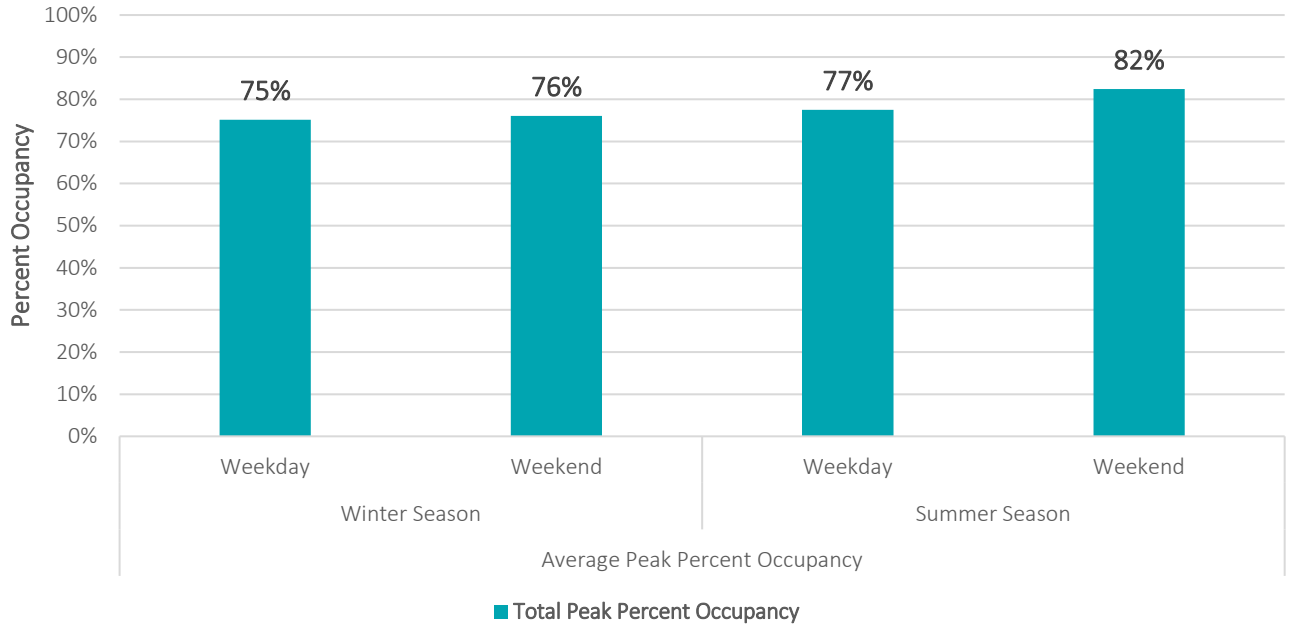
Figure 44 and Figure 45 below show total observed average peak on-street demand and occupancy percentage by day of week and season, relative to the total on-street supply, excluding time limited and loading parking.

Figure 44. Average Peak On-Street Parking Demand in Commercial Core by Season and Day of Week



Source: City of Aspen

Figure 45. Average Peak On-Street Percent Occupancy in Commercial Core by Season and Day of Week



Source: City of Aspen

Core-wide, average peak on-street parking occupancy percentage ranged from 75% during the winter weekday to 82% during the summer Saturday.

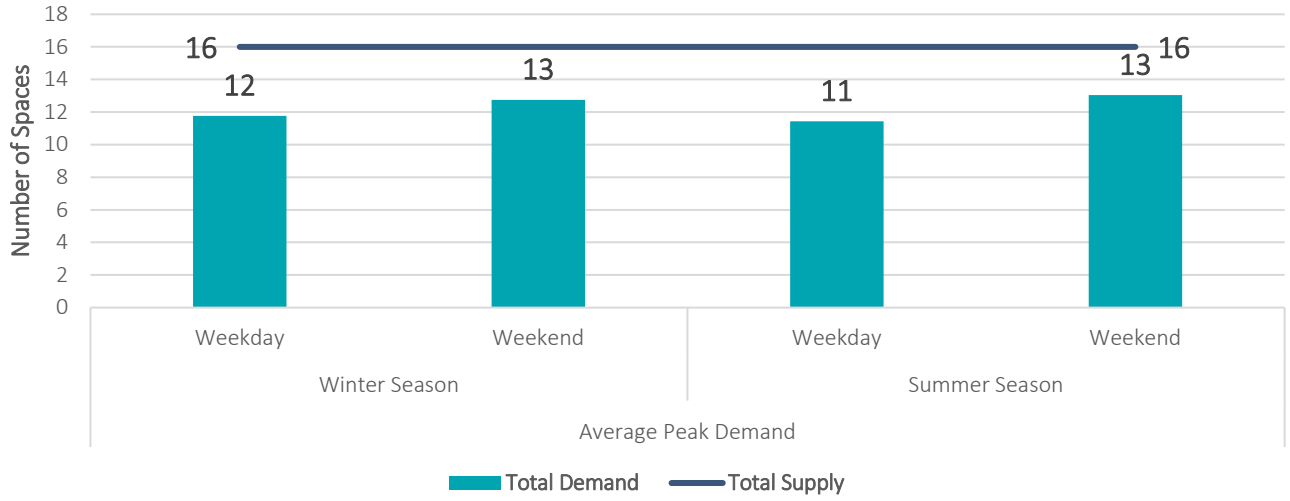
A more detailed breakdown of systemwide average peak on-street parking demand and percent occupancy sorted by block or street segment can be found in the **Appendix.**

Short-Term Paid Occupancy

Aspen's Commercial Core features a total of 16 "short-term" meter spaces that provide individually metered parking spaces that are strictly limited to 30 minutes, intended for those needing to run quick errands or accomplish other business. The current rate is $1 per session, with a maximum of one allowed session per day.

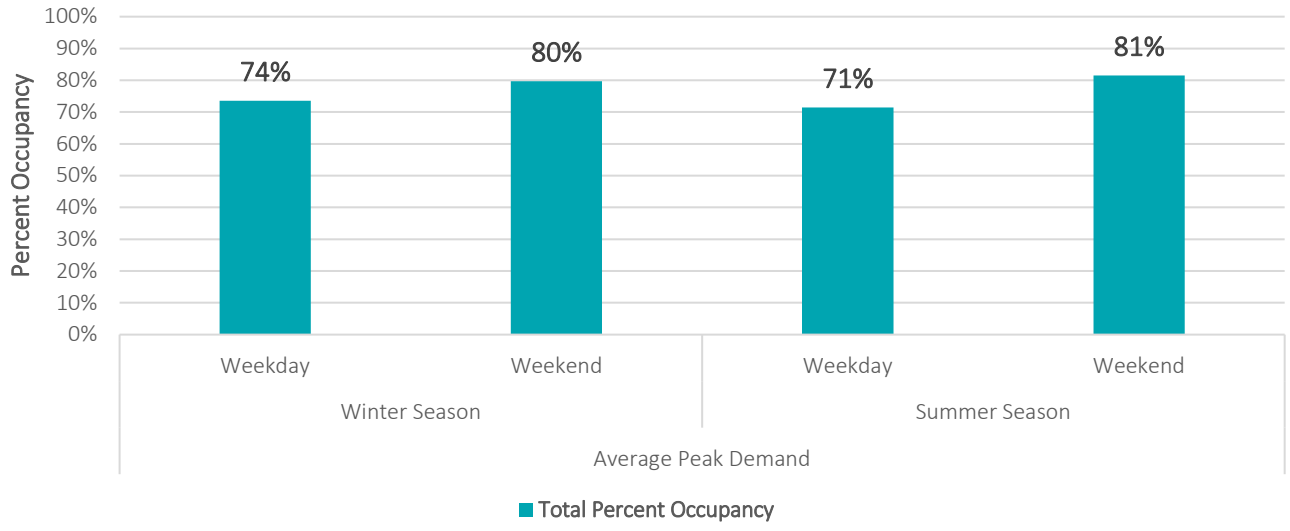
Figure 46 and Figure 47 below show total observed average peak on-street demand and percent occupancy by day of week and season for short-term metered parking only.

Figure 46. Average Short-Term Metered Parking Demand by Season and Day of Week



Source: City of Aspen

Figure 47. Average Short-Term Metered Percent Occupancy by Season and Day of Week



Source: City of Aspen

Overall, average peak occupancy percentage for short-term metered parking ranged from 74% to 81%, indicating that such spaces continue to be well utilized within the greater context of metered on-street parking.

A more detailed breakdown of average peak on-street short-term metered parking demand and occupancy percentage sorted by block or street segment can be found in the **Appendix.**

Off-Street Parking

Rio Grande Garage Inventory & Occupancy

Aspen has one public off-street parking facility with parking that is available for public use: the 320-space Rio Grande Parking Garage. The garage is located between Mill and Hunter Streets just north of Main and accessed from Rio Grande Place. The garage serves both hourly/day parkers as well as longer-term parkers and monthly parkers and allows overnight parking.

Walker reviewed occupancy data provided by the City of Aspen for the garage to determine 85th percentile daily peak parking occupancy levels for the garage across the same time periods for which on-street parking demand was analyzed and quantified.

Figure 48 below shows 85th percentile daily peak parking demand within the Rio Grande Garage by user group and sorted by season and day of week. Note that effective supply is shown for reference.

ABOUT EFFECTIVE PARKING SUPPLY

For the off-street parking, Walker typically considers the effective supply as well as the actual supply for an analysis of the actual parking adequacy in each facility.

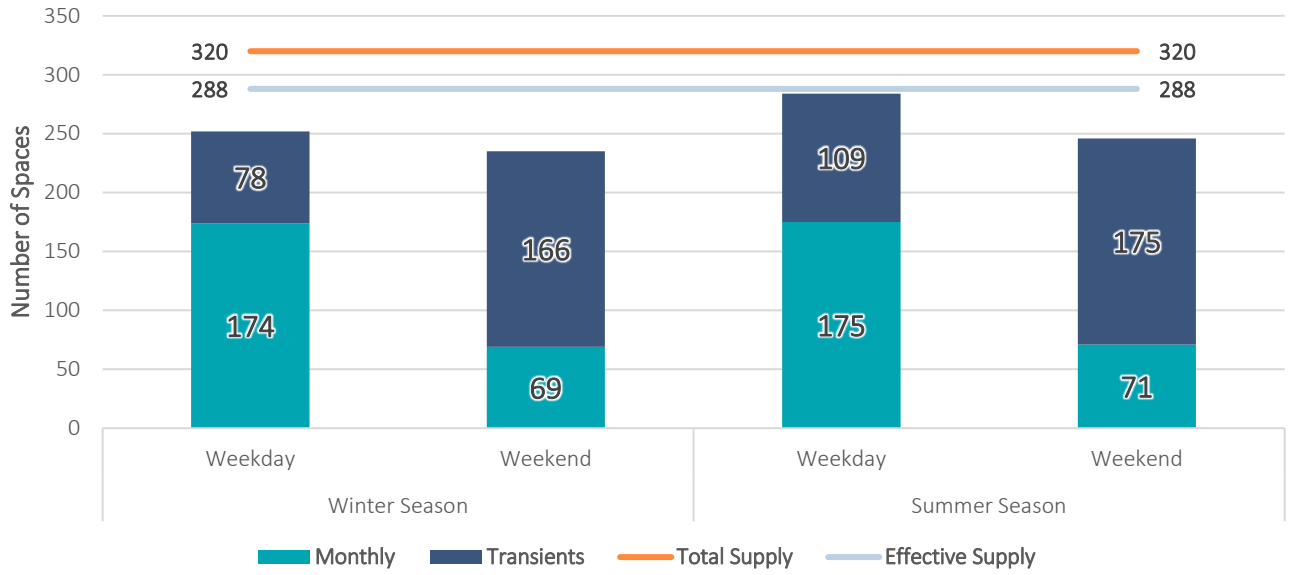
The effective parking supply is determined by applying an effective supply factor to the physical parking supply for each user group in the parking system inventory. It is a generally accepted principle in parking supply/demand analyses that a supply of parking operates at optimum efficiency when occupancy is no more than 85% to 95% of the total supply. The unused spaces provide a "cushion" to allow for the dynamics of vehicles moving in and out of parking stalls and to reduce the time required to search for the last few available spaces. This cushion also allows for daily, weekly, and seasonal variations/vacancies created by restricting facilities to certain users, mis-parked vehicles (such as vehicles straddling a striped delineation and therefore occupying more than one space), and minor construction.

When occupancy exceeds optimum levels, there may be delays and frustration in finding available parking, patrons may be forced to use an undesirable space, such as one at a greater or uncomfortable walking distance. The parking supply may be perceived as inadequate, even though vacant spaces are still available somewhere in the system.

As a result, the effective parking supply is used for analysis of the adequacy of the parking system rather than the total supply. This cushion typically varies between 5% and 15% of the total parking capacity, depending on the type of parking area/facility. For reserved spaces, residential or commercial, a 0% cushion is used, as all spaces are assigned.

For the Rio Grande Garage, an average effective supply factor of 10% was applied, a balance between the greater expected parking efficiencies generated by monthly and habitual parkers and the relative inefficiencies generated by short-term and non-habitual parkers.

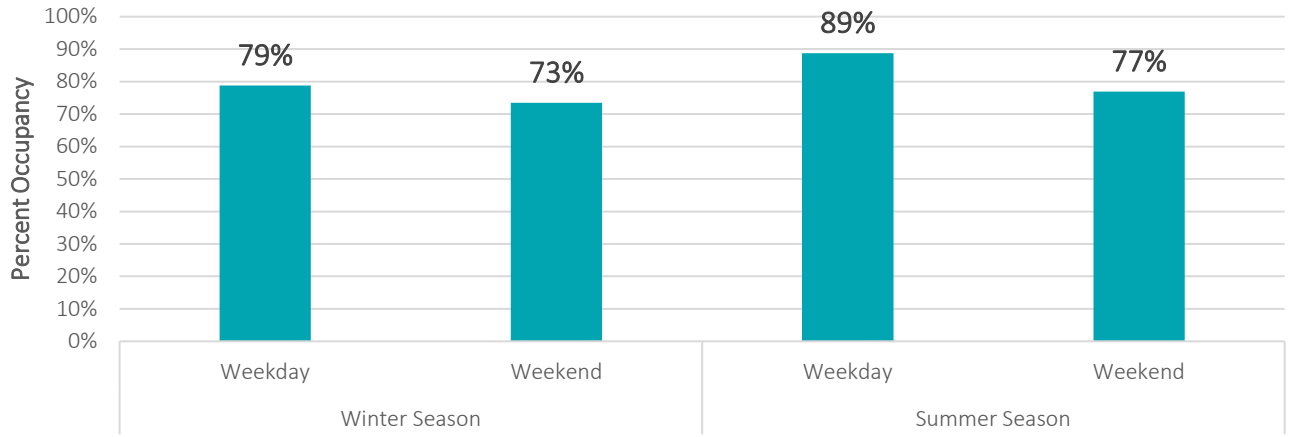
Figure 48. 85th Percentile Peak Off-Street Demand by Parker Group Sorted by Season and Day of Week



Source: City of Aspen

Figure 49 below shows 85th percentile daily peak parking percent occupancy within the Rio Grande Garage sorted by season and day of week.

Figure 49. 85th Percentile Peak Off-Street Percent Occupancy Sorted by Season and Day of Week



Source: City of Aspen

In all, 85th percentile daily peak demand ranged from 73% during a weekend in the Winter to 89% during a weekday in the Summer. Overall, the garage is busier during the peak summer months than winter months.

Rio Grande Parking Adequacy

Figure 50 below shows parking adequacy in the Rio Grande Garage by season and day of week as a function of the 85th percentile daily peak occupancy observed. Parking adequacy is the overall surplus or deficit of available parking as a function of 85th percentile daily peak demand and the effective parking supply.

Figure 50. Rio Grande Garage Parking Adequacy by Day of Week and Season

User Group	Total Supply	Total Effective Supply (10% Cushion)	85th Percentile Daily Peak Percent Occupancy			
			Winter Season		Summer Season	
			Weekday	Weekend	Weekday	Weekend
Total Demand	320	288	252	235	284	246
Parking Adequacy			36	53	4	42

Source: City of Aspen

After considering an effective supply cushion, Walker projects that there is currently an effective parking surplus during 85th percentile daily peak times of between 4 spaces on summer weekdays to 53 spaces on winter weekends. As a function of the 85th percentile busiest day, that means that the garage is nearing effective capacity during summer weekdays.

Rio Grande Parkers by User Group

Figure 51. Average Overall Share of Garage Parkers by User Group Sorted by Day of Week and Season

User Group	Winter Season		Summer Season	
	Weekday	Weekend	Weekday	Weekend
Monthly	70%	40%	62%	31%
Transients	30%	60%	38%	69%

Source: City of Aspen

On average, while monthly parkers outnumber transient parkers by about 2 to 1 during weekdays, the distribution is less pronounced during the summer than the winter. On weekends, transient parkers represent the majority, ranging from 60% to 69%, on average, of all garage parkers.

Rio Grande Length of Stay

The City of Aspen furnished to Walker computer-generated reports that detail the total number of tickets, by transaction, sorted by the length of stay associated with each transaction for the Winter 2022/2023 and Summer 2023 peak seasons. Walker was able to analyze this data to determine average lengths of stay by day of week and season.

In all, over 25,000 individual tickets/transactions were analyzed.

Figure 52 below shows Rio Grande Garage lengths of stay sorted by day of week and season.

Figure 52. Rio Grande Garage Average Length of Stay by Day of Week and Season

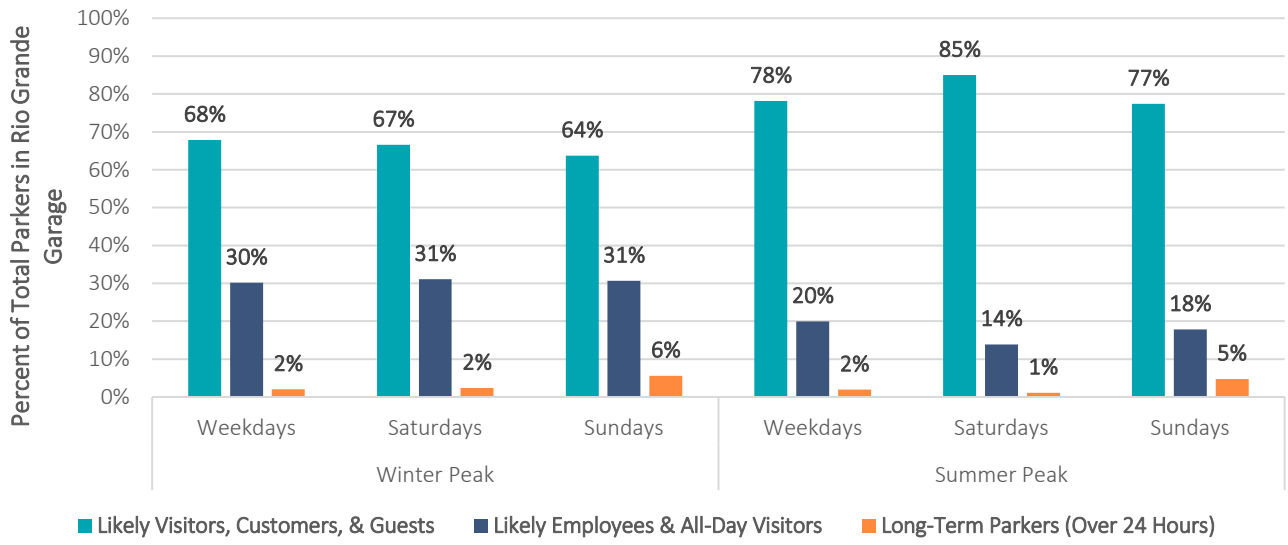
Season	Day(s) of Week	Length of Stay							
		Less Than 2 Hours	2 - 4 Hours	5 - 6 Hours	7 - 12 Hours	13 - 24 Hours	1 - 2 Days	3 - 7 Days	More Than a Week
Winter Peak	Weekdays	20%	37%	11%	26%	4%	0.9%	0.9%	0.2%
	Saturdays	12%	36%	19%	26%	5%	1.4%	0.9%	0.1%
	Sundays	15%	38%	11%	23%	7%	3.3%	2.3%	0.0%
Summer Peak	Weekdays	17%	49%	12%	17%	3%	1.0%	0.9%	0.0%
	Saturdays	14%	58%	13%	12%	2%	0.8%	0.3%	0.0%
	Sundays	14%	54%	10%	15%	3%	2.7%	2.1%	0.0%

Source: City of Aspen

In all instances, parkers parked for between 2 and 4 hours represented the largest single category of parkers from a length of stay perspective, followed by parkers parked for between 7 and 12 hours. Short-term parkers of 2 hours of fewer represented between 12% and 20% of all Rio Grande Garage parkers.

From the above, Walker further aggregated data to obtain an approximate idea of the relative ratios of short-term (likely non-employee) parkers versus longer-term day parkers (likely employees) versus long-term parkers (one day or longer). This distribution is shown in **Figure 53.** Parkers parked for 6 hours or fewer were determined to be likely guests, customers, and visitors while parkers parked for more than 7 hours but fewer than a day were considered to be day parkers or likely employees.

Figure 53. Rio Grande Garage Distribution of Parkers by Parker Type or Group



Source: City of Aspen

Under the time period classifications described above, short-term parkers who are not likely employees (visitors, guests, et cetera) represented between 64% and 68% of parkers in the winter but between 77% and 85% of parkers in the summer. Longer-term day parkers and likely employees represented between 30% and 31% of parkers in the winter but between 14% and 20% during the summer. Notably, parkers for longer than a day represented between 2 and 6% of all parkers, with Sundays seeing the greatest number of such parkers.

Figure 54 below shows the total number of long-term parkers versus very long-term parkers observed during the peak Winter 2022/2023 and Summer 2023 seasons respectively.

Figure 54. Long-Term Parkers and Very-Long-Term Parkers

Season	Day(s) of Week	Long-Term Parkers (1 Day - 1 Week)	Very Long-Term Parkers (Over 1 Week)
Winter Peak	Weekdays	130	15
	Saturdays	40	1
	Sundays	64	0
Summer Peak	Weekdays	190	1
	Saturdays	27	0
	Sundays	68	0

Source: City of Aspen

On average, the number of parkers parked for a day or more, by season, ranged from 27 to 130, and the number of parkers parked over a week ranged from 0 to 15, with winter weekdays representing the majority of parkers in both categories.

Loading & Delivery

In addition to data relating to parking occupancy and length of stay, The City of Aspen also provided some detailed data relating to loading and delivery activity throughout the Commercial Core during the Winter 2022/2023 and Summer 2023 peak seasons.

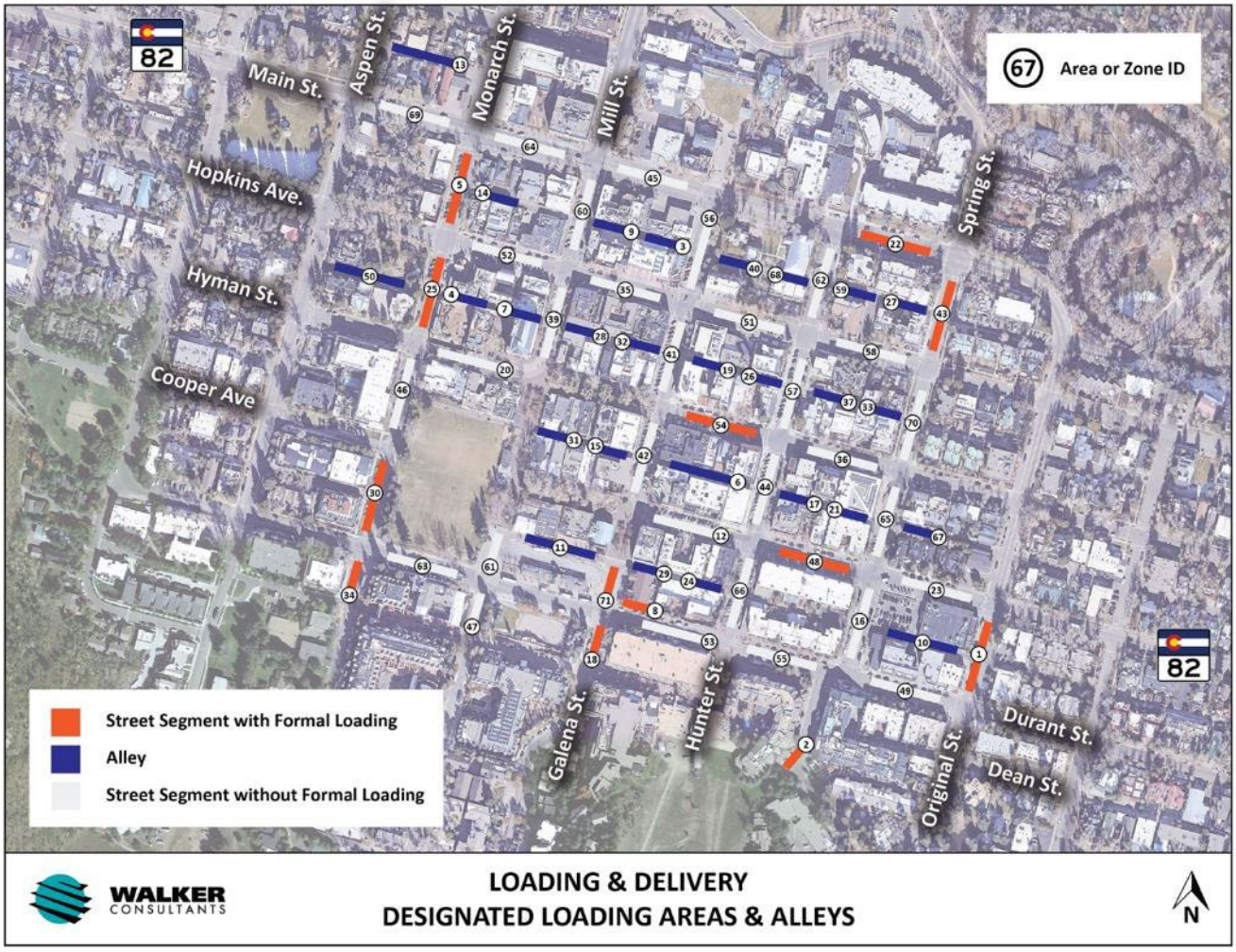
Between the winter months of December 2022 and March 2023, and between the summer months of June and August 2023, data on loading and delivery activity was collected hourly, between the hours of 8 AM and noon, across the Commercial Core. In addition to formal loading zones, loading activity was also looked at within alleys as well as within non-loading on-street spaces.

In all, across the entire system and across all study days and hours, a total of 2,929 vehicles engaging in loading or delivery activities were observed.

Location of Loading Areas

Figure 55 below is a map of the location of formally designated loading areas or zones, along with other areas or zones that were studied or observed for loading activity. Each area or zone is shown with an ID number assigned by Walker for purposes of identification and analysis.

Figure 55. Loading Activity Heat Map



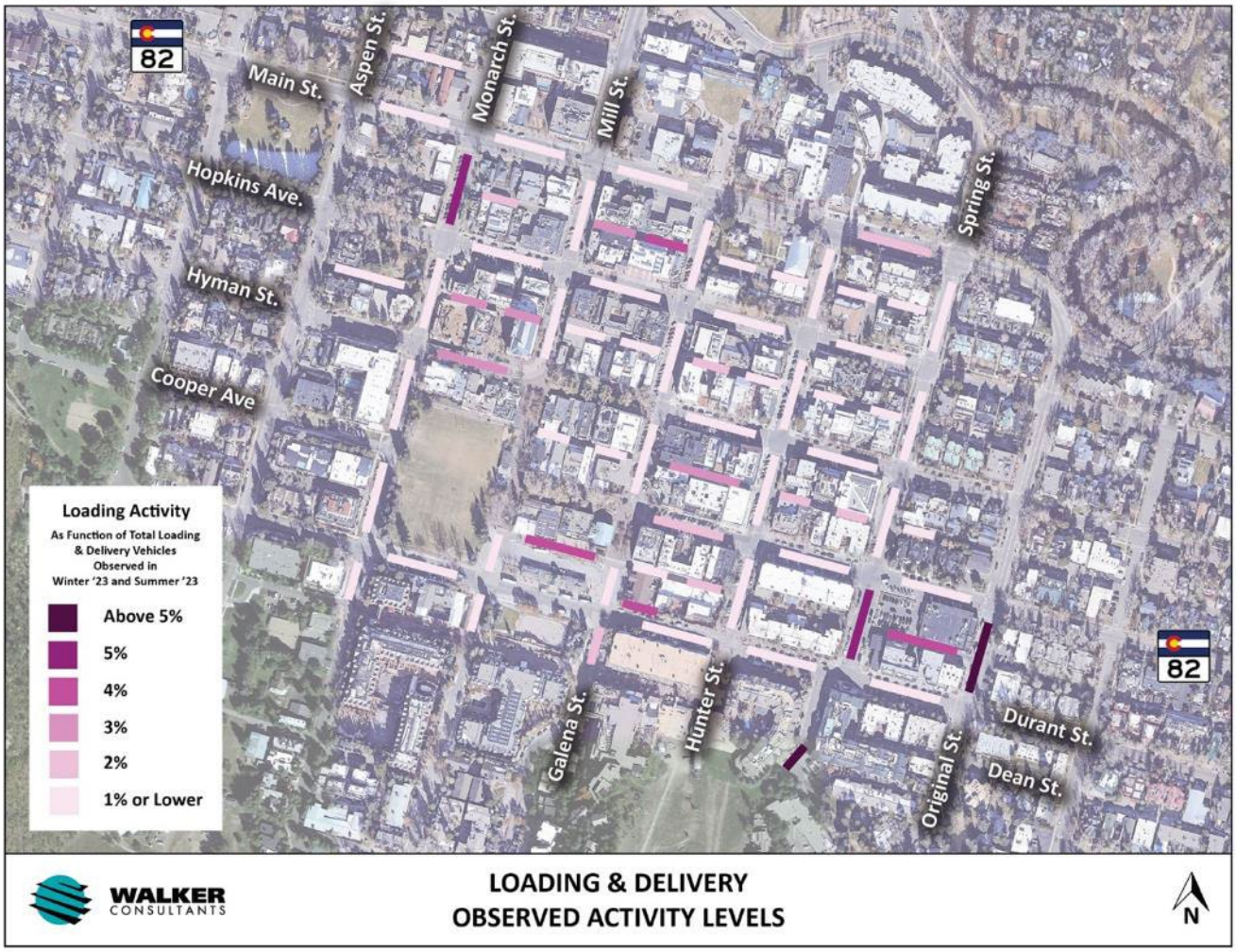
Source: City of Aspen

In all, there are 13 blocks, street segments, or areas that feature formal, designated loading spaces or zones, excluding alleyways.

Loading Zones by Activity Level

Figure 56 below is a heat map that shows loading activity sorted by percentage share of all observed loading activity by block / street segment or area.

Figure 56. Loading Activity Heat Map by Percent



Source: City of Aspen

Figure 57 below shows the 15 most active loading areas observed across the system during all observation times and days.

Figure 57. Top 15 Most Active Loading Zones / Areas

Rank #	Area or Zone ID	Area or Zone Description	Total Observed Vehicles	Percent of Systemwide Total Loading Activity
1	1	400 Original LZ	247	8%
2	2	Ute LZ	182	6%
3	16	400 Spring LZ	145	5%
4	5	100 Monarch LZ	133	5%
5	8	Belly Up LZ	120	4%
6	3	Local's Alley	116	4%
7	11	Eve's Way Alley	114	4%
8	10	City Market Alley	113	4%
9	4	Crystal Palace Alley	102	3%
10	6	Prada Alley	98	3%
11	7	Wheeler Alley	98	3%
12	20	300 Hyman LZ	97	3%
13	9	Michola Alley	92	3%
14	25	200 Monarch LZ	87	3%
15	13	WFC Alley	76	3%

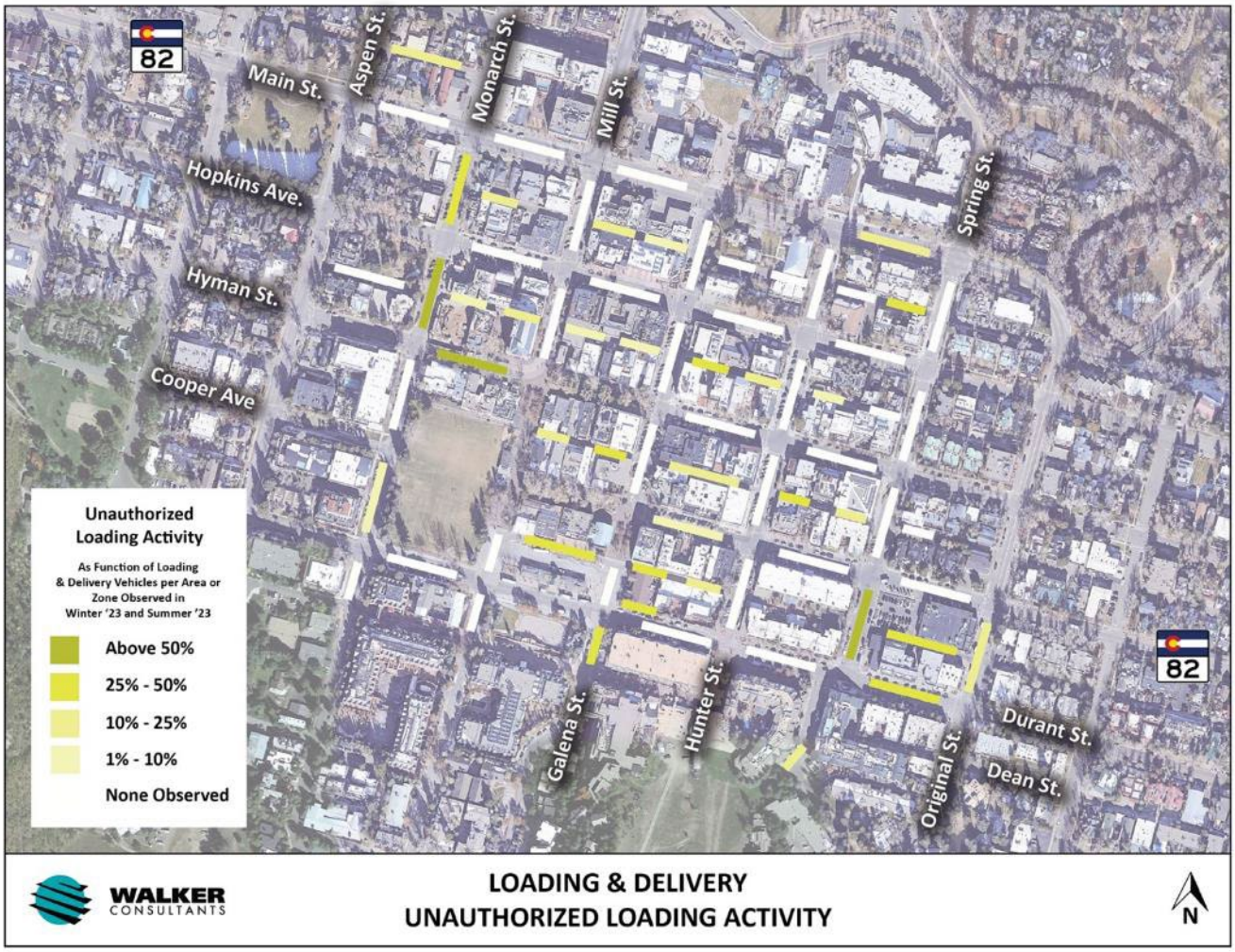
Source: City of Aspen

Loading Zones by Percent of Activity Unauthorized

Figure 58 below is a heat map that shows loading activity sorted by the percentage share of all observed loading activity by block / street segment or area that was deemed to be unauthorized.

For purposes of this analysis, unauthorized loading was an improper use of a loading space, such as a non-commercial vehicle parking in the loading space.

Figure 58. Unauthorized Loading Activity Heat Map by Percent



Source: City of Aspen

Figure 59 below shows the 15 loading areas with the most unauthorized loading activity observed across the system during all observation times and days.

Figure 59. Top 15 Loading Zones / Areas with the Most Unauthorized Loading Activity by Percent

Rank #	Area or Zone ID	Area or Zone Description	Percent of Activity Unauthorized
1	16	400 Spring	63%
2	25	200 Monarch	62%
3	20	300 Hyman	56%
4	38	G n G Alley	38%
5	29	Belly Up Alley	36%
6	18	500 Galena	34%
7	5	100 Monarch	33%
8	11	Eve's Way	32%
9	8	Belly Up LZ	31%
10	10	City Market Alley	30%
11	15	Rossi Alley	27%
12	24	Big Wrap Alley	24%
13	31	Cos bar / Aspen Sports Alley	24%
14		Ped. Alley	23%
15	21	Museum Alley	22%

Source: City of Aspen

Illegal Loading Activity

Figure 60 below is a heat map that shows loading zones by the number of vehicles engaging in illegal loading activity that were observed across the time period studied.

For purpose of this analysis, illegal loading was when a vehicle is obstructing traffic, parking in an ADA space without an ADA license plate or placard, or otherwise violating the municipal code.

Figure 60. Illegal Loading Activity Heat Map

Source: City of Aspen

Figure 61. Top 15 Loading Zones / Areas with the Most Illegal Loading Activity

Rank #	Area or Zone ID	Area or Zone Description	Number of Vehicles Engaged in Illegal Loading Activity
1	36	600 Hyman	13
2	35	400 Hopkins	10
3	12	500 Cooper LZ	10
4	18	500 Galena LZ	9
5	39	200 Mill	6
6	16	400 Spring LZ	6
7	23	700 Cooper	6
8	8	Belly Up LZ	6
9	20	300 Hyman LZ	5
10	47	500 Mill	5
11	41	200 Galena	3
12	61	400 Mill	3
13	55	600 Durant	3
14	22	600 Main	3

Source: City of Aspen

Residential Parking Permit Areas

RPP-Inventory

There are about 3,000 parking spaces in across all of Aspen's residential parking permit zones.[32]

Successes and Challenges

The City of Aspen's parking program is successful at providing variety of parking options to its residents, visitors, and employees/commuters. These parking options generate revenue to fund high-quality, local transit services, another key success that supports high walk and bike mode share among Aspen residents. Paid parking and free local bus service in Aspen are two effective TDM strategies that encourage people to walk, bike, carpool, and ride the bus.

Staffing levels are a key issue for the parking team, both from a workload management perspective and a hiring perspective. The enforcement team unanimously cited regular diversions from their regular enforcement routes due to several factors, including:

- The level of workload required for dedicated management of reserved and permit parking. Due to the changing nature of reserved parking demand, managing reserved parking requires a significant amount of time and staff resources. Further, the extremely high volume of bespoke permit arrangements also makes uniformity and predictability in enforcement extremely difficult.
- Urgent issues that pull staff away from standard enforcement duties, like enforcing at the Brush Creek Intercept Lot or Buttermilk Parking Lot, ARC and other lots or complaints out-side of normal enforcement area. or dealing with individual vehicles or customers.

[32] https://www.aspendailynews.com/news/changes-to-aspen-parking-systems-not-meant-to-offset-decline-in-revenue/article_6caf04a4-bf61-11eb-871b-3f2b6ac973e4.html

- The extreme disruption of dealing with vehicles that need a tow or dealing with scofflaws where a tow is required, as there is only one available towing company operating in the Valley. This can result in a staff member not able to conduct typical enforcement for an entire day.

The parking team also indicates that there is a conflict between the staffing levels they functionally need to operate well and the staffing apportioned by City administration. Even when hiring new staff is supported, it's difficult—the housing market is expensive, and the duties of an enforcement officer in Aspen are not particularly attractive for many candidates. Many in the parking team said that even though the Aspen community generally understands the need for and benefit of enforcement, parking enforcement officers are often not treated with respect, and conflict is frequent.

In part because of these staffing levels and in part because of current departmental priorities, the team also does not have clear regimentation around data collection and analysis related to usage or financials, as would be expected in a department of this size and scope.

05 Supportive TDM Programs & Policies

Supportive TDM Programs & Policies

Usage and Benefits

Aspen administers TDM programs and policies that align with the citywide transportation and climate goals. These programs are listed in **Figure 62**:

Figure 62. City of Aspen Parking and Transportation Facilities and Programs

Program	Description
Free local transit service	Eight fare-free local routes, operated by the Roaring Fork Transit Authority (RFTA) and designed/managed by Aspen staff. All Roaring Fork Valley transit routes outside the City are designed, managed, and funded by RFTA.
Downtowner	Free, on-demand, mobile app-based service supplementing transit service in core areas
Paid Parking	Paid parking on-street and in the Rio Grande garage, with seasonal, time-of-day, and length-of- stay differences in price, to support effective demand distribution and efficiency and fund TDM. The City owns, operates, and manages the Rio Grande parking structure, as well as all on-street parking within City boundaries.
Rubey Park Transit Center	Renovated in 2015, the Transit Center serves 4 million+ annually and features solar panels and a green roof.
Car to Go program	Operates 9 low- and no-emission vehicles, servicing 1,000+ trips annually for 220+ members. Enables reduced car ownership and supports car- free lifestyles in Aspen.
Bikeshare program	Pedal and electric bike share program serving nearly 3,000 riders per month in peak season, with the first 30 minutes being offered free for every ride.
Carpool incentives	Incentives for carpooling, including enforced HOV lanes, free carpool parking with daily permits, and help with finding someone to carpool with.
Employer/School Transportation Options Program (TOP)	Free services offered to local employers and schools to support TDM. Services include mini-grants, subsidized bus passes, emergency ride home services, customized transportation options information, and more.

Marketing campaigns	Marketing to residents, commuters and visitors to share information and build excitement around transportation options. Events include Bike to School Day, Bike to Work Days (2), Bus Rider/Driver Appreciation Days, carpool outreach activities, and focused outreach during special events.
Transportation Impact Analyses	Assesses impacts and options to reduce single- occupancy vehicle trips with developer-funded programs and infrastructure.

Impact

Although no specific metrics have been measured as part of the TDM programs, some examples of the impact of the programs include the establishment of environmental goals at major employers, such as Ski Company which has 3,000 employees, and the promotion of transportation options for employees at Jerome Hotel. Benefits of riding the bus to work include reduced travel time during peak commute hours and less pressure on employers' limited parking facilities.

Cost and Funding Sources

The TOP program, funded by the City's Transportation Fund, has a maximum annual budget of $60,000.

Successes and Challenges

TDM programs are successful in that they raise awareness about existing transportation options and encouraging residents, employees, and visitors to use of these programs. The primary challenge is limited funding to market the program. There is opportunity to expand the program with additional funding approved by City Council if the City can demonstrate that the TDM programs provide a traffic reduction benefit.

06 Conclusion

Conclusion

Aspen is a regional leader in economic development and has established strong parking management systems and high-quality transit services to support this growth. With a projection of significant population growth, tourism, and development of both residential and commercial uses, the Aspen Parking and Transportation departments will have important considerations and decisions to make so as to maintain an effective parking system and accommodate more users in the area as development continues without detracting from the City's scenic resources and small-town feel.

Priorities for continued success in parking and transportation systems in Aspen include expanded local transit services and expanded Downtowner service area, increased funding and marketing of TDM programs, such as Car To Go and Transportation Options programs, to support the City's congestion reduction goal; improved management of loading zones to reduce congestion and emissions associated with commercial vehicles; and improved tracking and enforcement of lodge parking permits to manage tourism-related parking demand. These priorities and others will need to be addressed in the future to manage parking demand, encourage reduced single occupancy vehicle trips, help reduce emissions associated with driving, and maintain a healthy and enjoyable quality of life for residents, employees, and visitors to Aspen.

Aspen Gets Us There provides an opportunity to advance these priorities, vet and augment new ideas embodied by existing plans like the Bicycle and Pedestrian Master Plans, Short Range Transit Plan, and Integrated Mobility Study, and address critical challenges and inconsistencies in the transportation and parking system.

07 Appendices

1: Parking Inventory & Occupancy

Figure A1. Detailed On-Street Average Peak Demand

Street	Block Number	Street Segment	Parking Restriction								Total	Total (Excluding Loading / 15 Minute & Time Limited)
			Regular Paid	Short Term Paid	Loading / 15 Min	Time Limited Free	EV	ADA	Reserved	Other (Excluding Bus Loading)		
Spring St.	100	Main to Hopkins	15	0	0	0	0	0	0	0	15	15
	200	Hopkins to Hyman	13	2	0	0	2	0	0	0	17	17
	300	Hyman to Cooper	16	0	0	0	0	3	0	0	19	19
	400	Cooper to Durant	11	2	3	0	0	0	0	0	16	13
Hunter St.	100	Main to Hopkins	18	0	0	0	0	2	0	0	20	20
	200	Hopkins to Hyman	22	2	0	0	0	0	0	0	24	24
	300	Hyman to Cooper	23	0	0	0	0	0	0	0	23	23
	400	Cooper to Durant	22	2	0	0	0	0	0	0	24	24
Galena St.	100	Main to Hopkins	17	0	0	0	0	1	0	0	18	18
	200	Hopkins to Hyman	15	0	4	0	0	0	0	0	19	15
	300	Hyman to Cooper	21	0	0	0	0	1	0	0	22	22
	400	Cooper to Durant	0	0	3	0	0	0	0	0	3	0
	500	Durant to Dean	4	0	1	0	2	1	0	0	8	7
Mill St.	100	Main to Hopkins	16	2	0	0	0	1	0	0	19	19
	200	Hopkins to Hyman	16	0	0	0	0	0	1	0	17	17
	400	Cooper to Durant	0	0	0	0	0	2	1	0	3	3
	500	Durant to Dean	4	0	0	0	0	0	0	0	4	4
Monarch St.	100	Main to Hopkins	22	2	4	0	0	0	0	0	28	24
	200	Hopkins to Hyman	24	0	2	0	0	0	0	0	26	24
	300	Hyman to Cooper	9	0	0	0	0	0	0	0	9	9
	400	Cooper to Durant	0	0	1	0	0	0	0	0	1	0
Main St.	200	Aspen to Monarch	24	0	0	0	0	0	0	0	24	24
	300	Monarch to Mill	18	0	7	0	0	0	0	0	25	18
	400	Mill to Galena	10	0	2	0	0	0	0	0	12	10
	500	Galena to Hunter	7	0	0	2	0	2	0	0	11	9
	600	Hunter to Spring	15	0	3	0	0	0	0	0	18	15
Hopkins Ave.	200	Aspen to Monarch	22	0	0	0	0	0	0	0	22	22
	300	Monarch to Mill	30	0	0	0	0	1	0	0	31	31
	400	Mill to Galena	17	0	0	0	0	0	13	0	30	30
	500	Galena to Hunter	35	0	0	0	0	0	0	0	35	35
	600	Hunter to Spring	34	0	0	0	0	0	0	0	34	34
Hyman Ave.	300	Monarch to Mill	15	0	3	0	0	3	0	1	22	19
	500	Galena to Hunter	33	0	0	0	0	1	0	0	34	34
	600	Hunter to Spring	27	0	0	0	0	2	0	0	29	29
Cooper Ave.	500	Galena to Hunter	28	0	1	0	0	1	0	0	30	29
	600	Hunter to Spring	26	2	3	0	0	1	0	0	32	29
	700	Spring to Original	9	0	0	20	0	0	0	0	29	9
Durant Ave.	300	Monarch to Mill	22	0	2	0	0	0	0	0	24	22
	400	Mill to Galena	0	0	0	0	0	0	0	0	0	0
	500	Galena to Hunter	24	2	2	0	0	1	0	0	29	27
	600	Hunter to Spring	9	0	0	0	0	0	0	2	11	11
	700	Spring to Original	28	0	4	0	0	0	0	0	32	28
Total			**721**	**16**	**45**	**22**	**4**	**23**	**15**	**3**	**849**	**782**

Figure A2. Detailed On-Street Average Peak Demand

Street	Block Number	Street Segment	Average Peak Demand			
			Winter Season		Summer Season	
			Weekday	Weekend	Weekday	Weekend
Spring St.	100	Main to Hopkins	10	6	12	13
	200	Hopkins to Hyman	11	12	12	13
	300	Hyman to Cooper	14	17	16	17
	400	Cooper to Durant	9	10	12	11
Hunter St.	100	Main to Hopkins	14	6	16	18
	200	Hopkins to Hyman	13	17	16	16
	300	Hyman to Cooper	21	22	22	22
	400	Cooper to Durant	21	23	20	23
Galena St.	100	Main to Hopkins	13	13	14	15
	200	Hopkins to Hyman	14	15	11	8
	300	Hyman to Cooper	20	20	16	19
	400	Cooper to Durant	0	0	0	0
	500	Durant to Dean	6	6	5	7
Mill St.	100	Main to Hopkins	15	15	14	15
	200	Hopkins to Hyman	12	13	12	13
	400	Cooper to Durant	2	3	3	3
	500	Durant to Dean	3	5	3	4
Monarch St.	100	Main to Hopkins	17	18	16	19
	200	Hopkins to Hyman	18	19	17	20
	300	Hyman to Cooper	7	0	8	9
	400	Cooper to Durant	0	0	0	0
Main St.	200	Aspen to Monarch	11	8	14	16
	300	Monarch to Mill	13	17	14	12
	400	Mill to Galena	9	8	8	10
	500	Galena to Hunter	9	3	6	6
	600	Hunter to Spring	12	8	15	13
Hopkins Ave.	200	Aspen to Monarch	13	11	18	17
	300	Monarch to Mill	26	28	25	27
	400	Mill to Galena	13	17	14	17
	500	Galena to Hunter	23	23	26	27
	600	Hunter to Spring	19	22	19	24
Hyman Ave.	300	Monarch to Mill	9	9	17	16
	500	Galena to Hunter	31	29	30	29
	600	Hunter to Spring	23	27	25	23
Cooper Ave.	500	Galena to Hunter	25	31	26	28
	600	Hunter to Spring	25	28	26	28
	700	Spring to Original	8	9	8	8
Durant Ave.	300	Monarch to Mill	20	20	19	20
	400	Mill to Galena	0	0	0	0
	500	Galena to Hunter	25	25	21	24
	600	Hunter to Spring	11	10	9	10
	700	Spring to Original	25	28	24	27
Total			**588**	**595**	**606**	**645**

Figure A3. Detailed On-Street Average Peak Percent Occupancy

Street	Block Number	Street Segment	Average Peak Percent Occupancy			
			Winter Season		Summer Season	
			Weekday	Weekend	Weekday	Weekend
Spring St.	100	Main to Hopkins	67%	40%	77%	84%
	200	Hopkins to Hyman	64%	73%	71%	76%
	300	Hyman to Cooper	74%	89%	83%	89%
	400	Cooper to Durant	69%	77%	95%	85%
Hunter St.	100	Main to Hopkins	68%	30%	78%	89%
	200	Hopkins to Hyman	56%	69%	68%	67%
	300	Hyman to Cooper	89%	96%	96%	97%
	400	Cooper to Durant	89%	94%	84%	94%
Galena St.	100	Main to Hopkins	69%	69%	75%	85%
	200	Hopkins to Hyman	91%	97%	72%	53%
	300	Hyman to Cooper	92%	91%	73%	88%
	400	Cooper to Durant				
	500	Durant to Dean	88%	90%	71%	106%
Mill St.	100	Main to Hopkins	77%	76%	72%	79%
	200	Hopkins to Hyman	73%	76%	71%	76%
	400	Cooper to Durant	78%	111%	100%	106%
	500	Durant to Dean	83%	117%	75%	104%
Monarch St.	100	Main to Hopkins	70%	75%	65%	77%
	200	Hopkins to Hyman	75%	79%	72%	83%
	300	Hyman to Cooper	75%	0%	93%	98%
	400	Cooper to Durant				
Main St.	200	Aspen to Monarch	47%	33%	58%	68%
	300	Monarch to Mill	72%	92%	76%	68%
	400	Mill to Galena	93%	75%	83%	96%
	500	Galena to Hunter	94%	28%	62%	63%
	600	Hunter to Spring	80%	50%	98%	83%
Hopkins Ave.	200	Aspen to Monarch	61%	48%	82%	77%
	300	Monarch to Mill	85%	90%	82%	85%
	400	Mill to Galena	43%	55%	46%	57%
	500	Galena to Hunter	65%	64%	74%	77%
	600	Hunter to Spring	55%	63%	57%	72%
Hyman Ave.	300	Monarch to Mill	50%	47%	90%	86%
	500	Galena to Hunter	90%	85%	88%	84%
	600	Hunter to Spring	78%	93%	84%	80%
Cooper Ave.	500	Galena to Hunter	87%	107%	89%	97%
	600	Hunter to Spring	85%	95%	91%	95%
	700	Spring to Original	88%	100%	83%	83%
Durant Ave.	300	Monarch to Mill	89%	91%	86%	89%
	400	Mill to Galena				
	500	Galena to Hunter	91%	94%	76%	87%
	600	Hunter to Spring	95%	88%	85%	91%
	700	Spring to Original	89%	100%	86%	96%
Total			**75%**	**76%**	**77%**	**82%**

Figure A4. Detailed On-Street Short-Term Parking Average Peak Demand & Percent Occupancy

Street	Block Number	Street Segment	Supply	Average Peak Demand				Average Peak Percent Occupancy			
				Winter Season		Summer Season		Winter Season		Summer Season	
				Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
Spring St.	200	Hopkins to Hyman	2	1	1	1	2	50%	67%	40%	100%
	400	Cooper to Durant	2	2	2	2	2	92%	88%	100%	100%
Hunter St.	200	Hopkins to Hyman	2	1	2	1	1	50%	100%	56%	67%
	400	Cooper to Durant	2	2	2	2	2	83%	100%	88%	100%
Mill St.	100	Main to Hopkins	2	2	1	1	1	78%	50%	63%	50%
Monarch St.	100	Main to Hopkins	2	1	1	1	2	69%	50%	50%	75%
Cooper Ave.	600	Hunter to Spring	2	2	2	2	2	83%	100%	100%	100%
Durant Ave.	500	Galena to Hunter	2	2	2	2	1	83%	83%	75%	60%
		Total	**16**	**12**	**13**	**11**	**13**	**74%**	**80%**	**71%**	**81%**

2: Summary of Planning Documents

Figure A5 below summarizes the planning documents that were reviewed in the process of researching existing transportation conditions.

Figure A5. Summary of Referenced Planning Documents

Plan Title	Date Completed	Areas or Topics of Focus	Key Strategies	Critical, Influential, or Informative?	Relationship to Transportation Plan
RFTA Destination 2040	Ongoing	Long range planning document that outlines RFTA's goals for the region in the next 20 years. The agency's goals are grouped into three categories: improvements for the environment, reducing congestion/improving mobility, and sustainability.	Replace fleet with a mix of CNG, electric, and diesel buses; increased evening frequency of regional bus services; funding for improvements to pedestrian crossings at TOD stations.	Critical	Strategies support TDM goals by improving the quality and safety of transit facilities.
RFTA Regional TOD Assessment	2022	Defines TOD and describes existing conditions of stations and the feasibility of development surrounding these stations to promote compact urban development near transit and job centers.	Prioritize pedestrian and bicycle access, park and rides, downtown shuttles, and compact development centered around transit.	Critical	Feasibility study that guides future development around transit stations.
RFTA First and Last Mile Mobility Study	2022	Describes existing first and last mile mobility programs, recent investments, community feedback, and future programs	Expand bikeshare program, targeted communications for marginalized groups, an e-bike voucher program, secure bicycle parking at transit stations, and improved pedestrian and bicycle infrastructure	Influential	Recommends mobility strategies to increase transit ridership and access for marginalized groups
Aspen Affordable Housing Strategic Plan	2022	Describes existing housing policies programs, goals, and actions achieve 500 affordable housing units within the next 5 years.	Replace expiring deed-restrictions, complete housing projects underway, promote partnerships, Affordable Housing Program Enhancements, secure funding, and incentivize downsizing	Influential	Housing development near employment centers and regional destinations may promote higher rates of walking, biking, and transit use in the future.
Integrated Mobility Study, Phase 2	2021	Analysis of travel patterns in Roaring Fork Valley and associated VMT and GHG emissions, with recommended strategies to reduce GHG emissions.	HOV enforcement on Highway 82, increase paid parking in downtown Aspen, enhance BRT services, launch ride sharing app for commuters, expand Downtowner service, construct new Park and Ride in Carbondale area, and	Influential	Provides a GHG analysis to inform decision-making that will influence the sustainability of transportation systems and the City's ability to

			implement dynamic roadway pricing.		achieve its climate goals.
Aspen Climate Action Plan	2020	Citywide GHG emissions inventory, emission targets, and GHG reduction strategies across all sectors (land use, energy, transportation, solid waste, food/agriculture, water and natural resources).	Increase building energy efficiency, increase renewable energy use, promote compact development patterns, increase walking/biking/transit mode share, reduce emissions from aviation and logistics industries, and reduce solid waste diversion.	Influential	Reports current and past emissions from the transportation sector and identifies strategies for reducing current and future emissions.
Pedestrian and Bicycle Safety Team Policy	2018	Provides a standard framework for evaluating and prioritizing traffic safety issues across municipal departments.	Prioritize safety and access of pedestrians, followed by bicyclists, transit riders, and roadway users.	Influential	Provides guidance for prioritization of pedestrian and bicycle infrastructure improvement.
Short Range Transit Plan	2018	Describes existing conditions of transportation options, survey responses about commute multimodal networks, transportation options best practices, and recommendations for reducing SOV trips.	Recommendations from survey responses included expansion of on-demand services, expansion of the Transportation Options Program, development of a citywide trip-reduction ordinance, and implementation of demand-based parking pricing downtown.	Informative	Provides insight into user experience, mobility trends, and best practices for improvement of transportation demand management (TDM).
Phase 1 Bicycle and Pedestrian Master Plan	2017	A detailed analysis of existing conditions and community feedback regarding pedestrian and bicycle conditions and safety concerns, with recommended infrastructure improvements.	New multi-use trails, bicycle lanes, and shared roads to provide connectivity of pedestrian and bicycle networks	Critical	Provides community and data driven recommendations for infrastructure improvements.
Upper Valley Mobility Report	2017	A compilation of research findings and recommended mobility strategies specific to the Roaring Fork Valley that support multimodal networks and reduced vehicle dependency.	Recommendations include ride sharing, congestion reduction measures, HOV lane enhancement, ride hailing, and phased BRT enhancement.	Influential	Provides strategic recommendations for enhancing efficiency and convenience of mobility networks.
RFTA Travel Patterns Study	2014	Survey responses about commute mode share, mode share for all trips, employee travel patterns and incentives along with demographic projections of employment and population growth.	Recommendations from survey responses included increased frequency of transit and additional routes to Rifle and Battlement Mesa	Informative	Illustrates transportation trends to inform future transit services and pedestrian, and bicycle infrastructure improvements.

Planning Document Review

Aspen's Mission and Values

The City of Aspen's mission is "to engage with positive civil dialogue, provide the highest quality innovative and efficient municipal services, steward the natural environment, and support a healthy and sustainable community for the benefit of future generations with respect for the work of our predecessors."[33]

The City's organizational values include the following:

- "Service: We serve with a spirit of excellence, humility, integrity, respect
- Partnership: Our impact is greater together
- Stewardship: Investing in a thriving future for all by balancing social, environmental, and financial responsibilities
- Innovation: Pursuing creative outcomes, grounded in Aspen's distinctive challenges and opportunities."

These organizational values are reflected in the high-quality, innovative mobility and transportation services the City offers, in partnership with public and private service providers, which are in alignment with the City's aspirational mobility and climate goals.

For example, the 2012 Aspen Area Community Plan established desired transportation policy outcomes that shape the City's future economic, social, and environmental progress, including the use of Transportation Demand Management (TDM) and use of targets for limiting vehicle trips and congestion. Specifically, the plan provided a framework for the use of TDM measures to optimize efficiency of roadway networks in the Aspen area. In addition, the Community Plan established a target for reduction of Average Annual Daily Trips (AADT) to 1993 levels at the Castle Creek Bridge and a goal to reduce peak-hour vehicle trips below 1993 levels.

Following is a summary of regional and local transportation existing conditions, commute patterns, transportation services, mobility and TDM programs, and community feedback to provide context on the Aspen area's complex transportation and mobility systems.

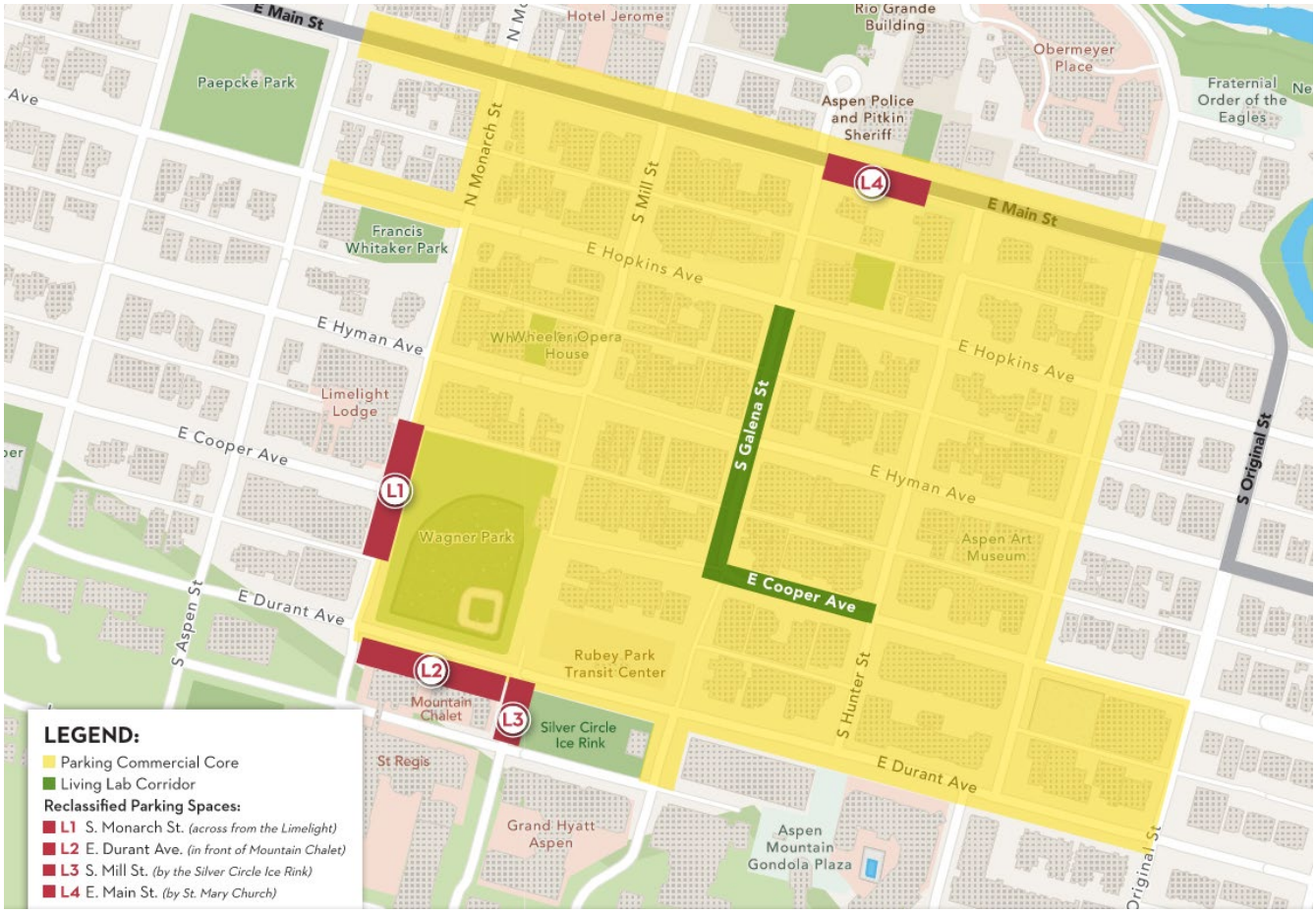
Parking in Aspen

Downtown Parking Zone

Figure A6 shows a map of the on-street parking enforcement area in Downtown Aspen (yellow shaded area).

Figure A6. On-Street Parking Enforcement Area—Downtown

[33] City of Aspen. 2023. Mission. City of Aspen. https://www.aspen.gov/1367/City-Vision-Mission-and-Values#:~:text=City%20of%20Aspen%20Mission%20Statement,the%20work%20of%20our%20predecessors



Source: City of Aspen, 2023

On-Street Parking Prices

In Aspen, parking is priced differently depending on the season due to high levels of summer tourism. During the off-season (months of April-May and October-November), hourly prices range from $2.00 to 4.00 per hour on Monday-Friday depending on the time of day. During the peak-season (months of June-September and December-March) hourly prices range from $4.00 to $6.00 per hour on Monday-Saturday.[34] The higher price during peak season helps to manage parking demand during the busiest time of year and busiest time of day, while generating more parking revenue during these higher-value periods.

Figure A7 shows the peak-season and off-season parking rates.

[34] City of Aspen. (2023). Parking Options. City of Aspen. https://aspen.gov/1400/Parking-Options

Figure A7. Peak Season and Off-Season Parking Rates

Off-Season Rates (April-May, October-November, Monday-Friday)		Peak-Season Rates (June-September, December-March, Monday-Saturday)	
Time of Day	Hourly Rate	Time of Day	Hourly Rate
10:00 am-10:59 am	$2.00/hr	10:00 am-10:59 am	$4.00/hr
11:00 am-2:59 pm	$4.00/hr	11:00 am-2:59 pm	$6.00/hr
3:00 pm-5:59 pm	$2.00/hr	3:00 pm-5:59 pm	$4.00/hr

Source: City of Aspen, 2023

Parking Payment Options

There are three ways to pay for parking in Aspen, as well as two free parking options:

1) Use Text2Park by texting ASPEN1 to 25023 for the Downtown Zone and Text ASPEN2 to 25023 for Residential Zones.
2) Download the PaybyPhone App and enter a location: Downtown Zone (2400) or Residential Zones (2401). Choose duration time and confirm payment.
3) Via Pay Station using license plate number.
4) Free options:
   - park for free at the Brush Creek Park and Ride (served by a free bus to and from downtown)
   - carpool and redeem a free carpool permit.

Off-Street Parking Prices and Permits

The City of Aspen has a variety of off-street parking pricing options that help manage parking demand, serve different user groups, and increase parking revenues. The Rio Grande Parking Plaza charges graduated hourly rates for the first three hours that increases by two dollars for each hour parked ($2.00 for first hour, $4.00 for two hours, and $6.00 for three hours), daily parking rates of $12.00, and a parking pass which is flexible and convenient for employees that do not park on a regular basis. The pass can be purchased for 5, 10, or 20 exits or days at a time, and can be reloaded at two Pay Stations located at the garage.[35]

PARKING PERMIT CHANGES UNDER CONSIDERATION

In 2022, Parking Programs Manager Debbi Zell, Project Manager PJ Murray, Deputy City Engineer/Director of Parking Pete Rice, and Parking Operations Manager Blake Fitch wrote a memorandum addressed to the City Mayor and Council with recommended reforms to the current parking permit structure and fees. On November 1, 2022, City Council discussed these recommended reforms, which could result in a change to the City's parking code. The recommended an overhaul of the current structure for many special permits, as described below:

- Business Parking Permits – Remove business permits (which currently cost $125/year and occupy 300-400 spaces in residential zones) and have businesses instead use increasingly popular loading zones, with the option for businesses to use paid parking at a discounted rate.
- Doctor Parking Permits – Increase the cost of doctor permits from $120.

[35] City of Aspen. (2023). Parking Options. City of Aspen. https://aspen.gov/1400/Parking-Options

- Fire Department Permits – Limit the fire department parking to the red curb designation area.
- Lodge Parking Permits – Remove lodge permits and have lodge guests use the residential payment system ($8 fee per day).
- Residential Parking Permits – Consider charging an annual fee for residential permits (currently each resident can obtain up to 4 permits, three resident permits and one visitor permit, for free).
- Parking Garage Permits – Increase the daily discount parking passes from $6 per day/exit to $8 per day/exit.
- Business Garage Permits – Increase the business discount parking pass from $150 per month to $180 per month.
- Monthly Parking Pass – Remove the monthly parking pass, which can increase the garage occupancy count, making it appear full, even though the spaces are not occupied.

The memorandum recommended maintaining the existing EV, Neighborhood EV, Mountain Rescue, Service Vehicles, and ADA parking permits with no changes since these permits are estimated to have minimal impacts on parking demand and congestion.

Parking Recommendations

Based on community feedback gathered for the 2018 Short Range Transit Plan, parking recommendations include expanding parking zones, increasing downtown parking fees, and offering amenities and services at intercept parking lots, such as the Brush Creek lot.

Parking Requirements

In 2017, the City of Aspen updated its parking code to impose a maximum on parking for new infill developments and provide more flexibility in meeting parking requirements, including opportunities for reduction of required parking spaces and cash in lieu fees for commercial development.

For infill development, the minimum is 1 parking space per bedroom for single family homes and duplexes and 1 parking space per multi-family home. The maximum parking for infill development is 1.25 parking spaces per bedroom and 1.25 parking spaces for single family homes and duplexes and 1 parking space per multi-family home.

When any calculation of Parking Requirements results in a fractional number of parking spaces, that fraction may be rounded up, paid through a fractional cash-in-lieu payment, or satisfied through a mobility commitment credit.[36]

[36] City of Aspen. Municipal Code, Parking Requirements. City of Aspen. https://library.municode.com/co/aspen/codes/municipal_code?nodeId=TIT26LAUSRE_PT500SURE_CH26.515TRPAMA_S26.515.040PARE

Table 26.515-1 *Parking* Impact Requirement Calculations			
Use	Aspen Infill Area		All Other Areas *Parking Requirement (in units)*
	Parking Requirement (in units)	*Parking* Maximum (in units)	
Commercial[1]	1 unit / 1,000 sf Net Leasable Space	1.25 units / 1,000 sf NLA	3 units per 1,000 sf NLA [2]
Residential - Single-Family and Duplex[4]	Lesser of 1 unit per bedroom or 2 units per Dwelling Unit	Greater of 1.25 units per bedroom or 2.5 units per dwelling unit	Lesser of 1 unit per bedroom or 2 per unit
Residential - Accessory Dwelling Units and Carriage Houses[3] [4]	1 unit per unit	1.25 units per unit	1 unit per unit [3]
Residential - Multi-Family (as a single use)	1 unit per Dwelling Unit	1.25 units per dwelling unit	Lesser of 1 unit per bedroom or two units per Dwelling Unit
Residential - Multi-Family within a mixed-use building	1 unit per Dwelling Unit	1.25 units per dwelling unit	1 per Dwelling Unit [2]
Hotel/Lodge	0.5 units per Key	0.7 units per Key	0.7 units per Key [2]
All Other Uses (civic, cultural, public uses, essential public facilities, child care centers, etc.)	Established by Special Review according to the review criteria of Section 26.515.080.	N/A	Established by Special Review according to the review criteria of Section 26.515.080.

Source: Aspen Municipal Code

Key to Table 26.515-1:

- [1] = Up to one hundred percent (100%) of *Parking* Requirement, may be provided through cash-in-lieu.
- [2] = A reduction in *Parking* Requirement may be approved, pursuant to Chapter 26.430, Special review and according to the review criteria of Section 26.515.080
- [3] = A reduction in *Parking* Requirements may be approved, pursuant to Chapter 26.520, Accessory dwelling units and carriage houses.
- [4] = All Single Family and Duplex dwelling units, as well as ADUs and Carriage Houses shall provide their *Parking* Requirement as off-street, on-site *parking* spaces.
- SF = Square feet
- NLA = Net leasable square feet of commercial space

Pedestrian and Bicycle Mobility

Pedestrian and Bicycle Safety Plan

The City of Aspen developed a policy to ensure that municipal operations have a consistent policy framework to guide decision making across departments. The Aspen Pedestrian and Bicycle Safety Team (PABST) Policy established the following policies:

1. "Through traffic should be encouraged to use higher classification roadways instead of local streets.
2. Pedestrian, bicycle, and transit access and use should be encouraged and enhanced whenever possible.
3. Transit service access, safety and scheduling should not be adversely affected.
4. Priorities for addressing program goals are:
   a. first, facilitation of pedestrian access and safety;
   b. second, facilitation of bicycle access and safety;
   c. third, facilitation of transit access;
   d. fourth facilitation of motorist safety;
   e. Fifth, after the first four priorities are met, accommodating parking, construction and other demands."[37]

According to the PABST Policy (2018), the City of Aspen prioritizes traffic safety issues in the following order promote the following conditions: Ease of walking and biking; ease of access to mass transit; proximity to neighborhood destinations such as schools, parks, and recreation facilities; and safe speeds of vehicles on local streets.

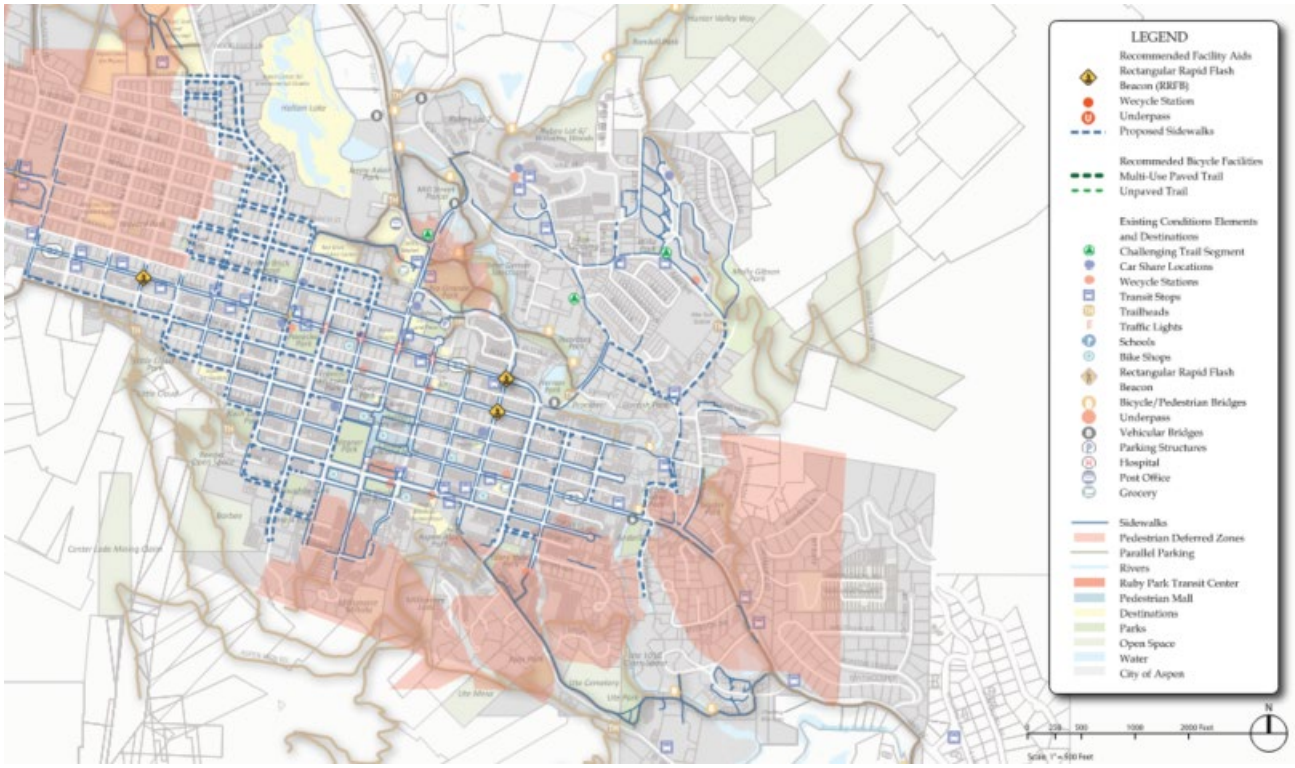
Existing Pedestrian and Bicycle Networks

There are a few notable multiuse trails in the Roaring Fork Valley, including the Rio Grande Trail connecting Glenwood Springs and Aspen, the Owl Creek Trail connecting Aspen and Snowmass, Crystal Valley Trail that parallels Highway 133 in Carbondale, and the ABC Trail that parallels Highway 82 from Aspen to Buttermilk Ski Resort. The existing trail network provides some connectivity between communities and activity centers, but falls short of a complete network, which requires additional facilities and crossing improvements to ensure safety and increase trail use.

Figure A8 shows a map of existing sidewalks in Aspen.

[37] City of Aspen. (2018). Pedestrian and Bicycle Safety Team (PABST) Policy. City of Aspen. https://www.aspen.gov/DocumentCenter/View/3023/2018-PABST-Policy

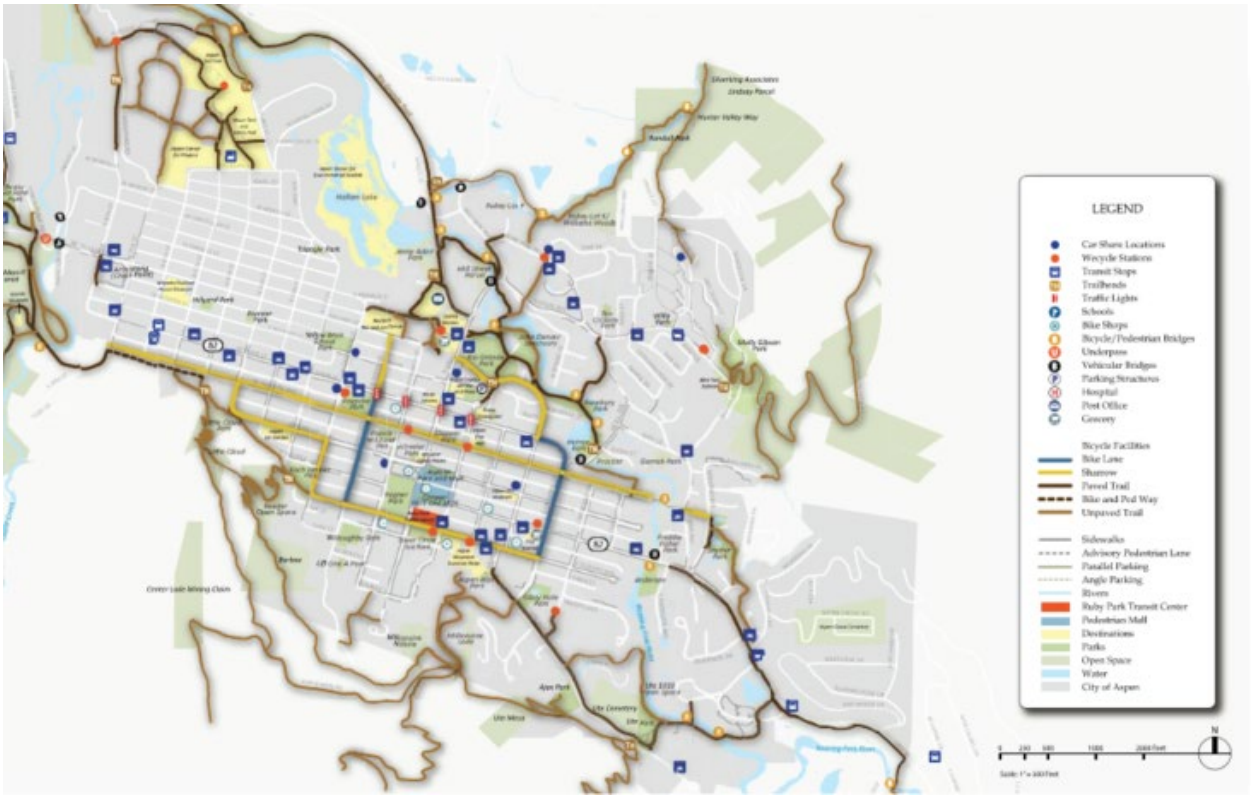
Figure A8. Existing Sidewalks



Source: Phase 1 of Bicycle and Pedestrian Master Plan, 2017

Figure A9 shows a map of existing bicycle facilities in Aspen.

Figure A9. Existing Bicycle Facilities



Source: Phase 1 of Bicycle and Pedestrian Master Plan, 2017

The majority of bicycle lane miles in Aspen are paved and unpaved trails outside of the downtown core, which are intended for recreational use. The city has two existing bicycle lanes (shown in blue) in the downtown core on Aspen Street and Original Street, which are parallel to one another and lacking connectivity. The remaining bicycle facilities are roads with sharrows (shown in yellow), which indicate that the road is to be shared by vehicles and bicycles.

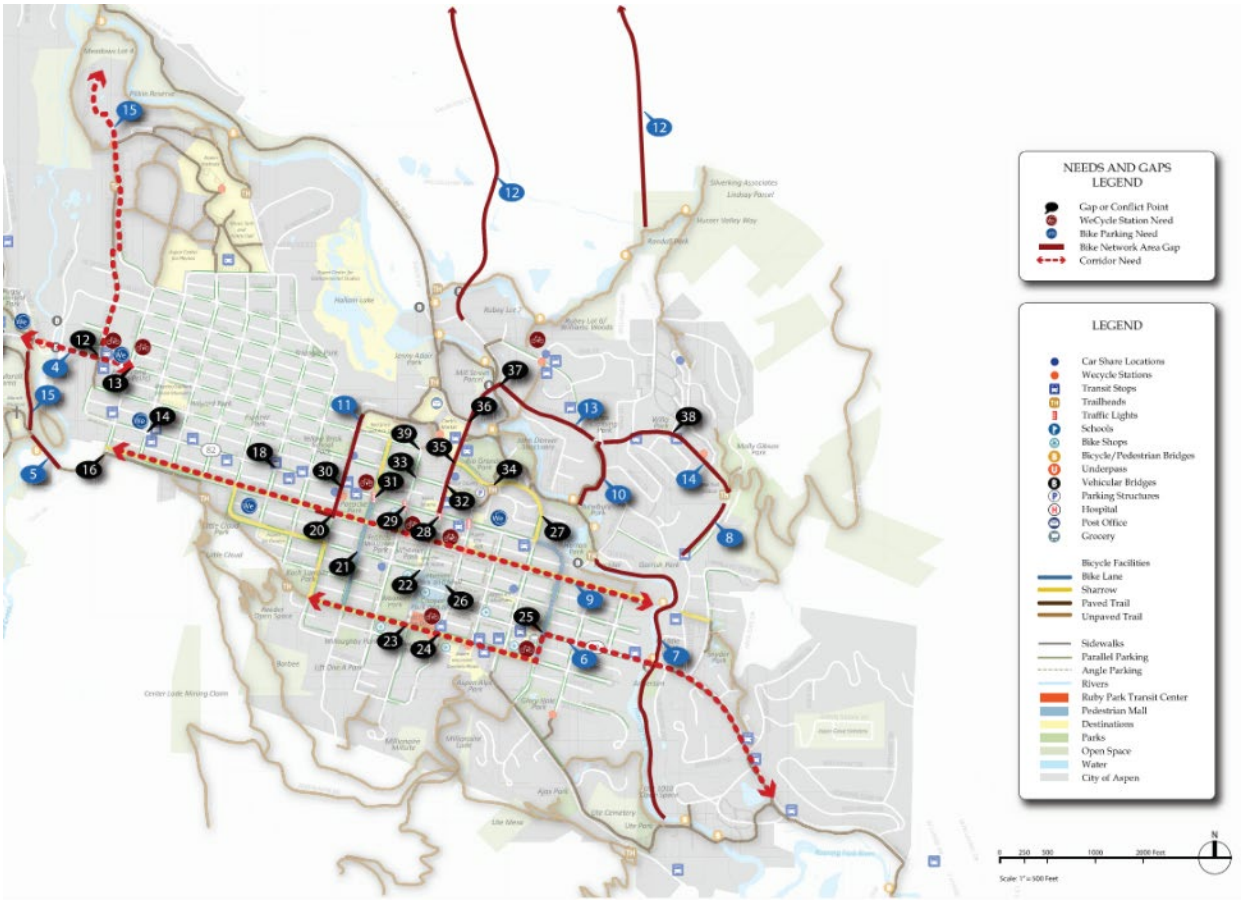
Bicycle and Pedestrian Master Plan

The City of Aspen gathered input on bicycle and pedestrian networks as part of the Bicycle and Pedestrian Master Plan in 2017. The majority of survey participants described the overall bicycle experience (56%) and pedestrian experience (52%) in Aspen as “good.” Nearly 70% of participants report that they use the trail system for walking or biking “a few times per week.” When asked about what types of bicycle facilities would most likely influence users to bike more often, the most popular answer choice was “off-street paths” (22% of participants), followed by buffered bike lanes (19% of participants) and Bicycle Boulevard (18% of participants). When asked about what types of pedestrian facilities would most likely influence users to walk more often, the most popular answer choice was “roadway crossing improvements for pedestrians” (18% of participants), followed by “security features and good lighting” (17% of participants) and “sidewalk network that connects where I want to go” (16% of participants). These responses indicate that Aspen community members prefer grade separated bicycle and pedestrian facilities.

Community members most frequently mentioned the following corridors where bicycle improvements are needed: Hopkins, Castle Creek Bridge, Highway 82, Crossing, and Main St. Community members most frequently mentioned the following corridors where bicycle improvements are needed: Hopkins, 8th Street, Highway 82 and 8th, and Main St. Safety improvements to these corridors may encourage more community members to bike and walk.

Another engagement activity was a mapping activity in which community members labeled a map of the City of Aspen with pedestrian and bicycle gaps or conflict points, shown in **Figure A10**.

Figure A10. Pedestrian and Bicycle Gaps and Conflict Points

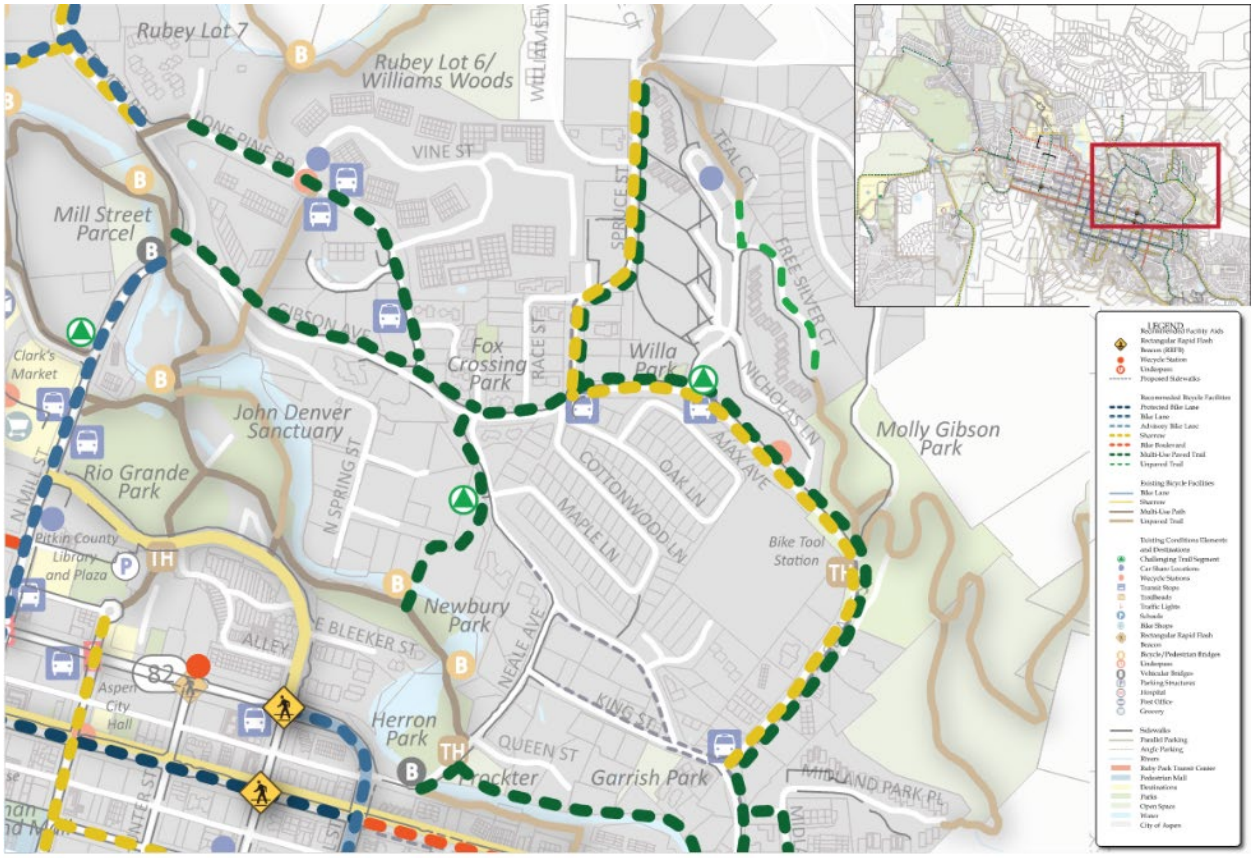


Source: Phase 1 of Bicycle and Pedestrian Master Plan, 2017

Based on the results of the mapping activity, a common observation in the downtown is lack of safe intersections (comments number 28-38 are related to unsafe intersections or crossings) for pedestrians and bicycle network gaps. In addition, the map indicated the need for more We-Cycle stations that are evenly distributed in the downtown area.

Based on data analysis and community feedback, the planning team developed three detailed maps of recommended improvements.

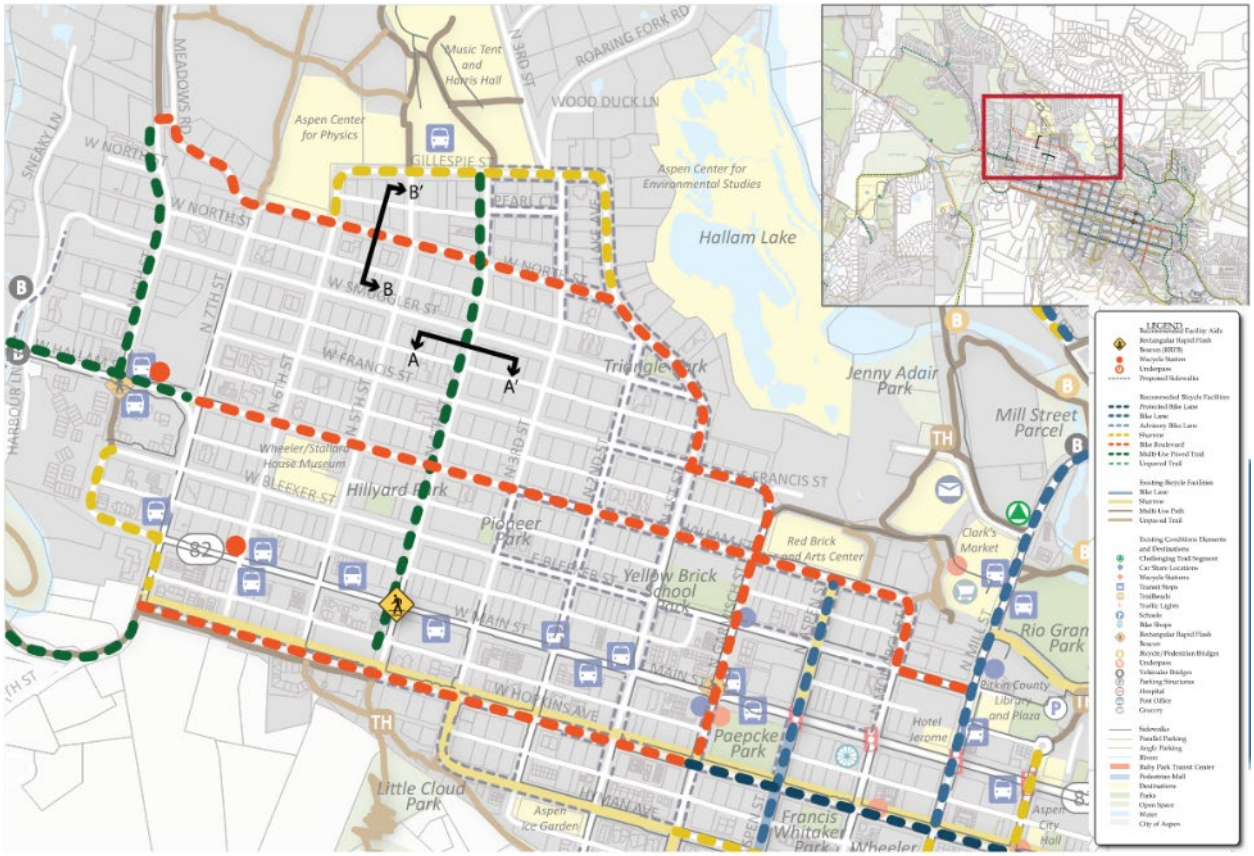
Figure A11. Recommended New Pedestrian and Bicycle Improvements



Source: Phase 1 of Bicycle and Pedestrian Master Plan, 2017

In the northeast portion of downtown, the plan recommends a new bicycle lane along Mill Street (shown in blue) and a new multi-purpose trail (shown in green) along Lone Pine Road, Gibson Avenue, Spruce Street, and along the Roaring Fork River.

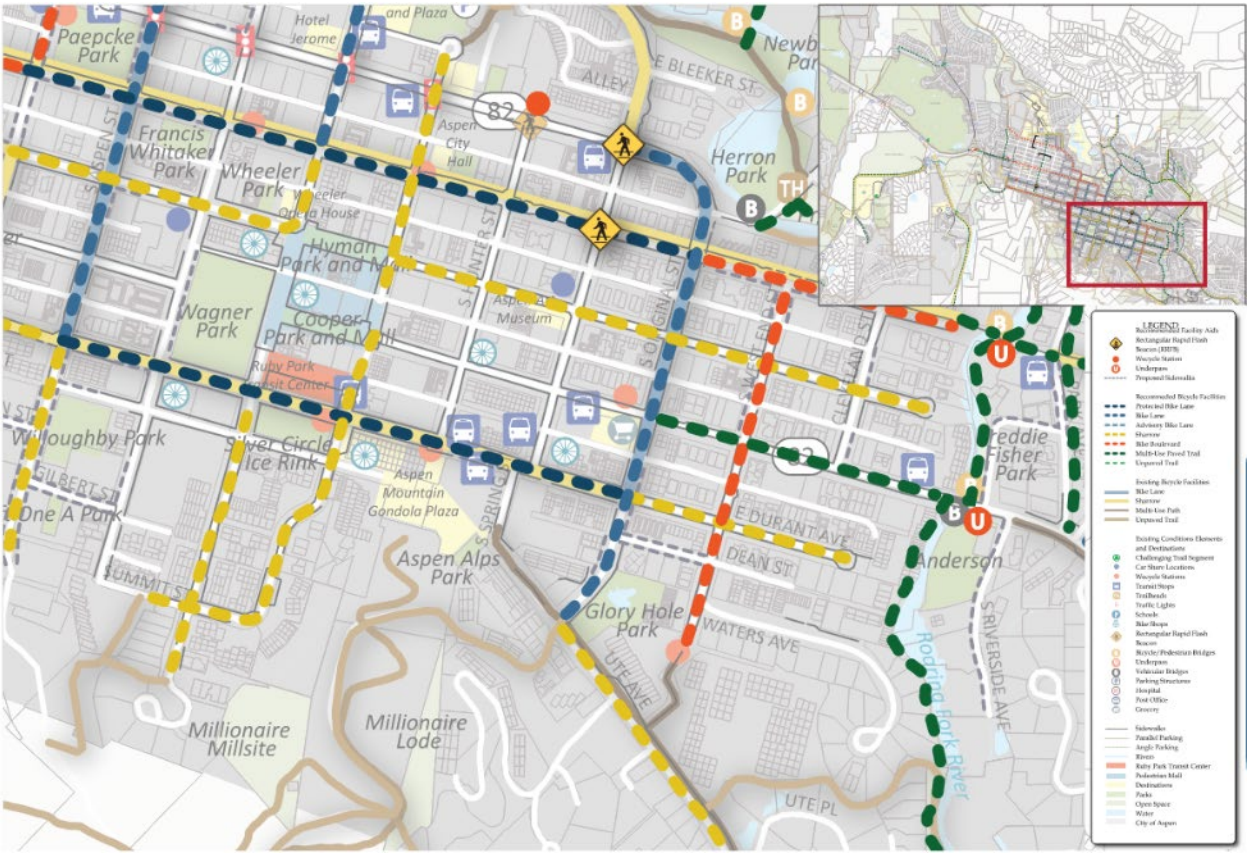
Figure A12. Recommended New Pedestrian and Bicycle Improvements



Source: Phase 1 of Bicycle and Pedestrian Master Plan, 2017

In the northwest portion of downtown, the plan recommends a new multi-use trail (shown in green) along 8th street and 4th street, and a bicycle boulevard (shown in red) along North Street, Hallam Street, and Hopkins Avenue.

Figure A13. Recommended New Pedestrian and Bicycle Improvements



Source: Phase 1 of Bicycle and Pedestrian Master Plan, 2017

In the southeast portion of downtown, the plan recommends a new multi-use trail (shown in green) along the Roaring Fork River and Park Ave, a new bicycle boulevard (shown in red) along West End, and sharrows along roads intended to be shared by vehicles and bicycles (shown in yellow).

Regional Bikeshare System

RFTA's Regional Bikeshare Plan (2021) summarizes the existing conditions and describes opportunities and challenges associated with planned improvements to the WE-cycle regional bikeshare program, a non-profit founded in 2010 to provide a community bikeshare service to the region. Through a partnership with PBSC Urban Solutions, WE-cycle launched the bikeshare system in Aspen in 2013 with 13 stations and 100 bikes, which was the first of its kind operating outside of a metropolitan area in North America.

Following the Roaring Fork Valley's legacy as a center of innovation in transportation, the program was built at the grassroots level through community leadership and an organizational structure that established strong ties with the local community to oversee and manage the program. The program has successfully grown through partnerships with RFTA, local agencies, the private sector, and the local community to become a system with 284 bikes and 55 stations systemwide in 2022 (including Aspen, Snowmass Village, and the Mid-Valley) and has piloted several innovations that have become industry standards. Recently the community demonstrated its

support for the program by approving further investments amounting to $1.271 million for capital infrastructure and $583,495 annually for operations as part of the Destination 2040 bond measure.

BICYCLE FLEET AND INTEGRATION WITH TRANSIT

WE-cycle uses a modular, solar-powered, dock-based system with mostly three-speed, pedal-powered bikes and 52 e-bikes (Class 1 pedal-assist, with no throttles). WE-cycle first integrated six e-bikes into its fleet in 2020 and increased that to 26 e-bikes for the 2021 season. E-bikes are seen as an asset to the WE-cycle fleet due to the mountainous terrain and long distances between RFTA stations in the region, and they will continue to be a priority for the program as it expands infrastructure.

WE-cycle initially began as a first-last mile service to improve access to transit. To make it convenient for riders to use the bikeshare program, WE-cycle stations are located at bus stops and BRT stations. In addition, to improve the user experience, WE-cycle is integrated into the Transit app so that users can plan transit and bikeshare trips using one app. As a result, according to trip data, 74% of RFTA passengers use the Transit app to reserve a We-bicycle and 65% of RFTA passengers use the Transit app for both We-bicycle and transit trip planning.[38] Other ways to reserve a WE-bike is to use the website or the dock kiosk.

In addition, to incentivize higher ridership among transit riders, in 2018 WE-cycle updated its pricing structure to provide free rides during the first 30-minutes. To encourage longer rides, WE-cycle also partnered with local bike shops to offer bike rentals for recreational trips.

The integration of WE-Cycle with transit services has been successful, resulting a high share of trips that begin or end at a BRT station (50%) according to survey response and trip data. In addition, according to the RFTA 2019 annual report, 66% of riders feel that having access to regional transportation options in one mobile app is “very important.”

TRIP DATA

Figure A14 shows the WE-cycle system fleet and ridership statistics between 2013 and 2021.

[38] RFTA. (2021). Roaring Fork Valley Regional Bikeshare Plan. RFTA. https://www.rfta.com/wp-content/uploads/2022/06/roaring-fork-valley-regional-bikeshare-pl.pdf

Figure A14. Recommended New Pedestrian and Bicycle Improvements

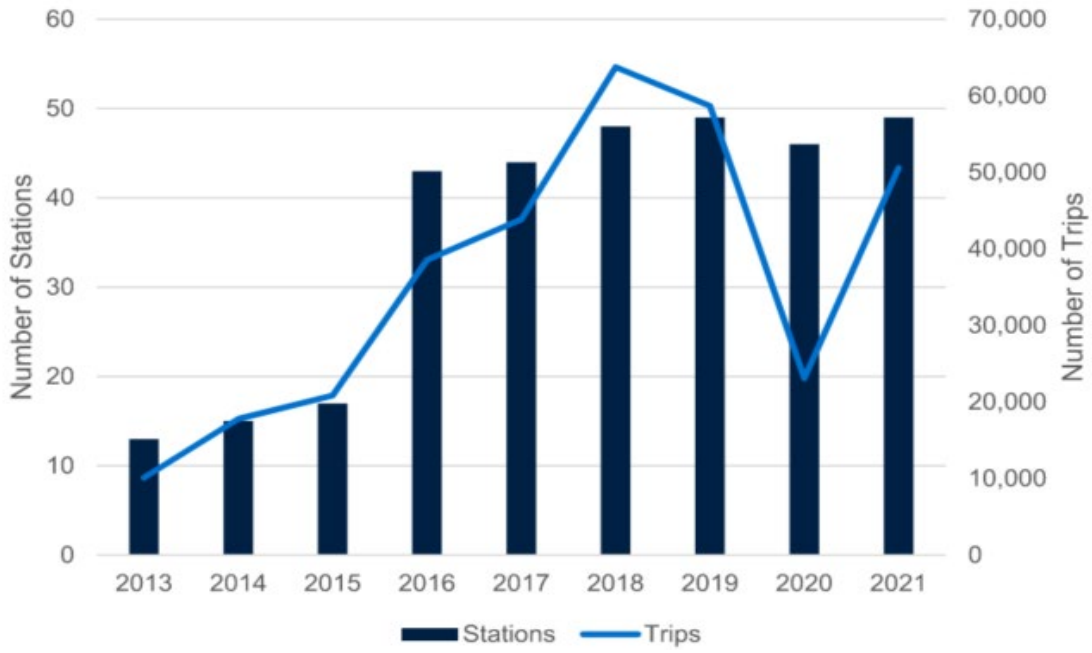
	2013	2014	2015	2016*	2017	2018**	2019	2020***	2021
Stations	13	15	17	43	44	48	49	46	49
Regular Bikes	100	100	100	190	190	210	209	224	228
E-Bikes	0	0	0	0	0	0	0	6	25
Operating Days	151	183	183	183	183	183	174	146	178
Rides	10,123	17,808	20,871	6,310	43,878	63,741	58,707	23,105	50,573
Average rides per day	67	97	114	211	240	348	337	158	284
Unique riders	1,807	2,271	2,626	3,152	3,227	6,043	6,247	3,998	5,826

*WE-cycle launches in Basalt
**WE-cycle launches fare-free service for 30-minute rides, underwritten by local jurisdictions
***WE-cycle launches in Snowmass Village; COVID-19 pandemic begins

Source: Roaring Fork Regional Bikeshare Plan, 2021

WE-Cycle operates only 6 months out of the year, and nevertheless has experienced rapid growth in recent years, with the exception of a drop in 2020 due to the COVID-19 pandemic. Figure A15 shows the number of stations and trips between 2013 and 2021.

Figure A15. WE-Cycle Stations and Trips, 2013—2021



Source: Roaring Fork Regional Bikeshare Plan, 2021

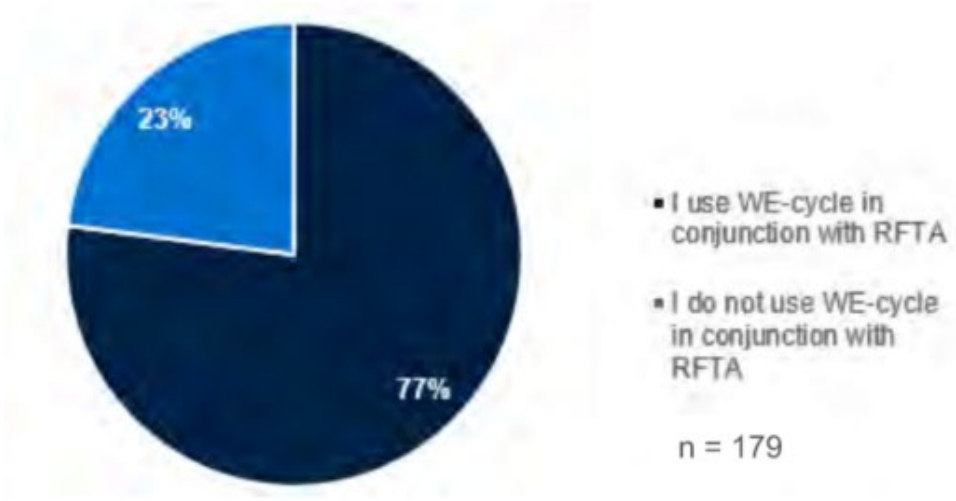
In 2019, the number of WE-cycle trips averaged 337 trips per day and a total of 6,247 unique riders. In 2020, e-bike began, but its ridership was low due to the pandemic. 2021 ridership suggests that bike share is gradually returning to pre-pandemic levels, with e-bikes gaining popularity. In 2021, the number of e-bike trips was 3.5 times as much as pedal bicycles.

Data analysis of trip patterns is used to make operational decisions based on where existing rides begin and end, where there are gaps in bikeshare service, how riders interact with transit, and the demographics of users. Data from WE-cycle's 2019 End of Season Survey shows that almost two-thirds of riders commute to Aspen (66%) and 40% of riders live in Aspen (40%). Riders also come from Carbondale, Basalt, El Jebel, Glenwood Springs, Snowmass Village, or visit from out of the Roaring Fork area. In 2019, there was higher representation of female (52%) survey participants than male (47%). The overwhelming majority of respondents (84%) were between the ages of 35 and 64.[39]

Over half of survey participants (54%) ride WE-cycle at least once a week and nearly one third (30%) ride a few times a month. While some riders use WE-cycle as a door-to-door mode of mobility, the majority of riders number use WE-cycle as a first- or last-mile service to connect to transit.[40]

Figure A16 shows the share of survey participants who use WE-Cycle to get to a bus stop or station.

Figure A16. Survey Participants Who Use WE-Cycle



Source: Roaring Fork Regional Bikeshare Plan, 2021

As shown in Figure A16, over three-quarters (77%) of survey participants indicated that they use WE-cycle to connect with transit services. WE-cycle trip data. In 2019, 50% of trips made using WE-cycle started or ended at

[39] RFTA. (2021). Roaring Fork Valley Regional Bikeshare Plan. RFTA. https://www.rfta.com/wp-content/uploads/2022/06/roaring-fork-valley-regional-bikeshare-pl.pdf
[40] [40] RFTA. (2021). Roaring Fork Valley Regional Bikeshare Plan. RFTA. https://www.rfta.com/wp-content/uploads/2022/06/roaring-fork-valley-regional-bikeshare-pl.pdf

one of RFTA's VelociRFTA (BRT) stations. In addition, approximately 20% of participants indicated that they ride RFTA more often because of the availability of WE-cycle (21%).[41]

OPERATIONS, BUDGET, AND GOVERNANCE

Public partners involved in the WE-Cycle bikeshare program include RFTA, The City of Aspen, the Town of Basalt, Eagle County, and the Elected Officials Transportation Committee (EOTC). EOTC funds are the result of a 2018 voter passed initiative called the Destination 2040 bond measure, which provides $583,495 in operating funds for new bikeshare service in Carbondale and Glenwood Springs (increasing 3% per year) and expansion of existing bikeshare service. In 2021, 62% of WE-cycle annual revenues came from public sector partners; 26% of revenues came from scholarships, donations, and private sector support; 9% came from other funds (mostly the PPP grant); and the remaining funds (3%) came from rider fees.

Challenges include the ability to recruit and retain highly skilled staff who are familiar with bikeshare program operations, the limited six month operations period each year, and limited funding to provide livable wages in Aspen. Currently, the program is operating at maximum scale given limited staff and funding, and will need to increase both staffing and revenue in order to expand to other communities, such as Carbondale, Glenwood Springs, and New Castle.

The Roaring Fork Regional Bikeshare Plan recommends that RFTA, local jurisdictions, and WE-cycle enter into a public-private non-profit partnership to expand services and secure a long-term future of bikeshare in the region. In this partnership, RFTA would serve as the principal financial supporter (providing 80% of funding for capital investments and 100% of funding for operations with regard to Destination 2040 expansion) and would provide regional coordination of bikeshare services, local jurisdictions would approve local permits, provide financial support, and coordinate for planning services, and WE-cycle would serve as the operator of bikeshare service and technology.

COMMUNITY FEEDBACK

According to WE-Cycle survey, 46% of participants had used bikeshare while 89% of participants had heard of the program. When asked which other communities could benefit from WE-Cycle services (which currently do not have access to them), the most common responses were Carbondale, Glenwood Springs, and New Castle. When asked which communities could benefit from expansion of existing WE-Cycle services, the most common responses, in descending order, were Aspen, Willits/El Jebel, Basalt, and Snowmass Village.

When asked what specific locations where bikeshare service should be added, participants indicated that they would use bikeshare to get to the following locations:

- The airport
- Aspen (ABC, Burlingame, and Buttermilk)
- El Jebel (connecting residential neighborhoods and transit stations)
- City Market Grocery store, library, and Main Street in downtown Carbondale
- Glenwood Springs (connecting residential neighborhoods, downtown, and 27th Street BRT station)

[41] [41] RFTA. (2021). Roaring Fork Valley Regional Bikeshare Plan. RFTA. https://www.rfta.com/wp-content/uploads/2022/06/roaring-fork-valley-regional-bikeshare-pl.pdf

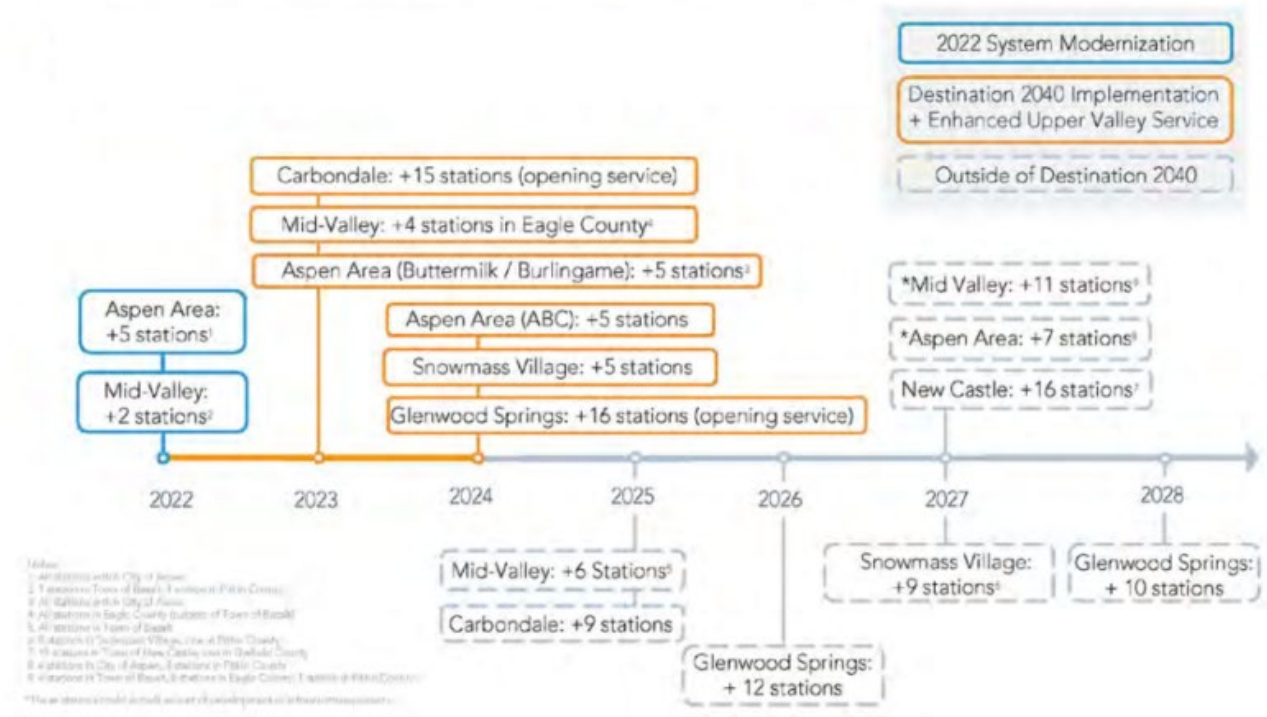
- Newcastle (connecting residential neighborhoods to downtown and transit stops)

Two common themes from community engagement were that 1) Safe and comfortable bicycle infrastructure is needed to increase ridership and 2) WE-cycle stations are needed near residential neighborhoods, which are often low density and present a barrier to ridership.

FUTURE EXPANSION

The planed expansion of WE-cycle services across various communities in the Roaring Fork Valley is outlined in Figure A17, including a timeline of implementation.

Figure A17. Planned Expansion of WE-Cycle Services



Source: Roaring Fork Regional Bikeshare Plan, 2021

Transportation Existing Conditions

Demographics

People of color make up a significant percentage of the population in many communities in the Roaring Fork Valley. The largest non-white ethnic group in the region is Hispanic/Latino. **Figure A18** shows the share of non-white and Hispanic/Latino Populations in Roaring Fork Valley communities.

Figure A18. Share of Non-White and Hispanic/Latino Populations in the Roaring Fork Valley

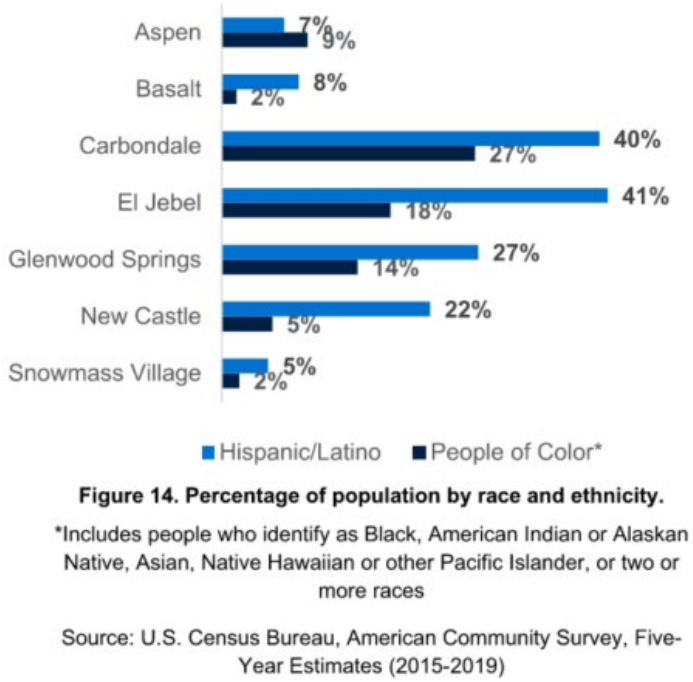


Figure 14. Percentage of population by race and ethnicity.

*Includes people who identify as Black, American Indian or Alaskan Native, Asian, Native Hawaiian or other Pacific Islander, or two or more races

Source: U.S. Census Bureau, American Community Survey, Five-Year Estimates (2015-2019)

Source: Roaring Fork Regional Bikeshare Plan, 2021

Hispanics/Latinos make up 40% of the population of Carbondale, 41% of El Jebel, 27% of Glenwood Springs, 22% of Newcastle, 8% of Basalt, and 7% of Aspen. People of color, including Hispanics/Latinos, are more likely to be lower income and underserved by transportation facilities and services. Improvements in transportation facilities and services should prioritized these communities due to their high share of underserved populations.

Commute Patterns

The Roaring Fork Transportation Authority (RFTA)'s 2014 Regional Travel Patterns Study analyzed community feedback gathered from three surveys: a summer survey and an employer/employee survey administered in spring. The summer survey targeted resident feedback. The study received response from 1,352 employees, 110 employers, and 327 residents.

The survey revealed several notable trends among commute patterns:

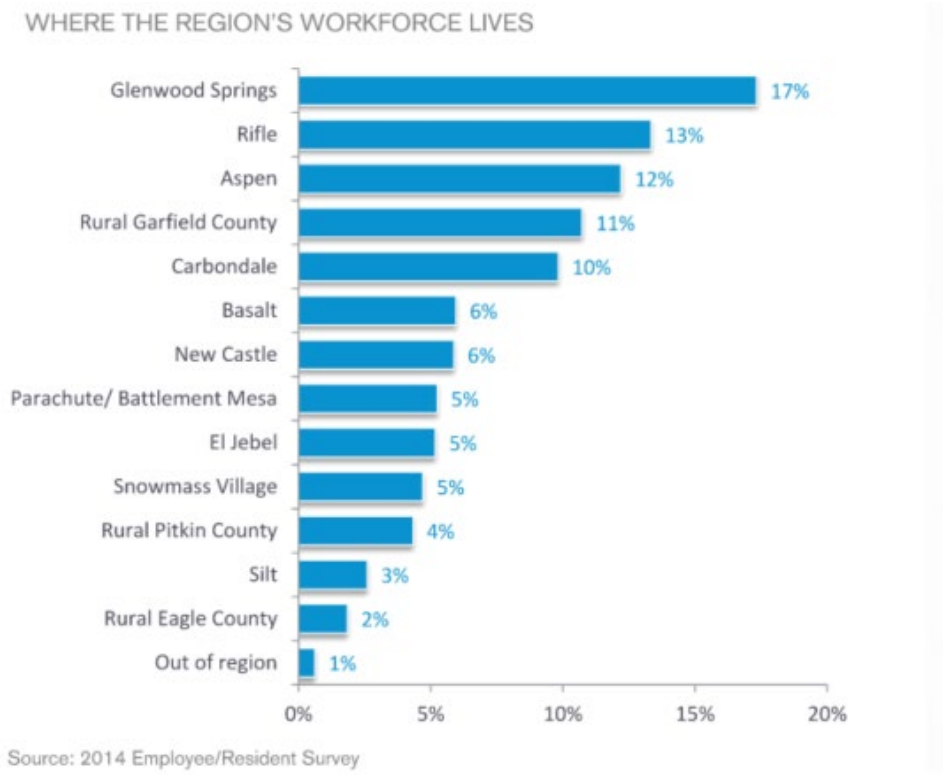
1. **Long commutes continue to be an integral part of the region.**
   About 62% of participants report that they commute to a different town or city than they live.
2. **The dominant commute flow is up-valley to the primary job centers in Rifle, Glenwood Springs or Aspen.**
   These job centers account for 75% of region's jobs.
3. **Rifle, Glenwood Springs and Aspen have the highest percentage of residents working in their community**,
   These job centers also have the highest percentage of commuters walking and biking to work.
4. **More winter workers are commuting by bus than in 2004, especially in the Roaring Fork Valley where winter bus mode share is 35%.**

Commute mode share increased from 12% to 19% and fewer are driving to work, down from 80% to 74%.

5. The survey revealed a 10% seasonal commute mode shift from driving to walking/biking in summer relative to winter.
6. There has been a rapid increase in the share of employees who telecommute 3 or more days a week since 2004 (from 1% to 7%).[42]
7. The largest non-white racial and ethnic group in the region is Hispanic/Latino, which makes up 23% of the region's population.

In 2014, about 75% of employee participants indicated that they work in Aspen, Glenwood Springs or Rifle, compared with 60% in 2004. The employee survey demonstrates the commute flows based on place of residence and place of employment. The most common commute flow is up valley to the major employment centers (Rifle, Glenwood Springs, and Aspen). Figure A19 shows where the region's employees live across different communities as a share of all employees in the region.[43]

Figure A19: Place of Residence for Regional Workforce



Source: RFTA Travel Patterns Study, 2014

[42] Roaring Fork Transportation Authority. (2014). Travel Patterns Study. Roaring Fork Transportation Authority. https://www.rfta.com/wp-content/uploads/2015/12/2014-RFTA-Travel-Patterns-Report_2015-09-09.pdf
[43] Roaring Fork Transportation Authority. (2014). Travel Patterns Study. Roaring Fork Transportation Authority. https://www.rfta.com/wp-content/uploads/2015/12/2014-RFTA-Travel-Patterns-Report_2015-09-09.pdf

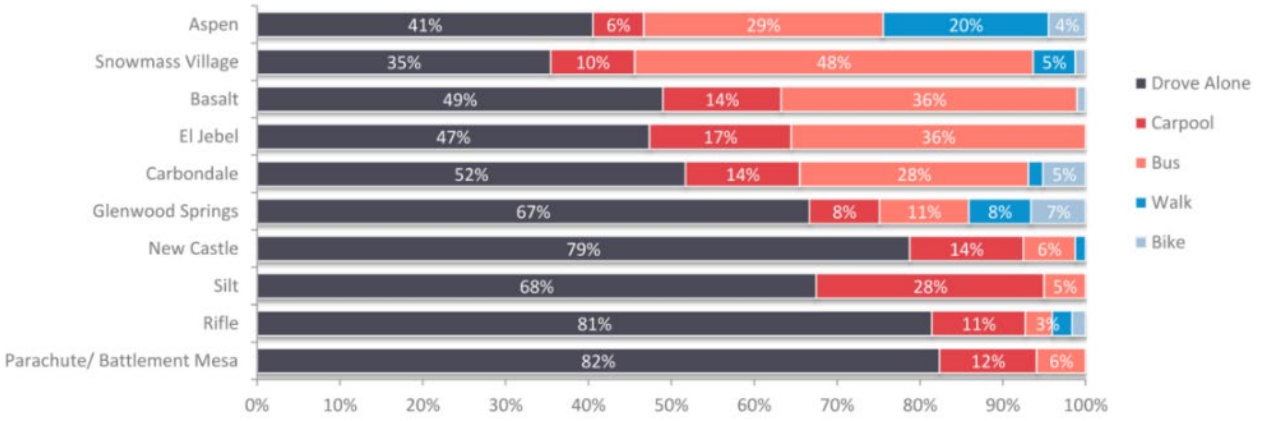
According to survey responses, the highest share of survey participants lived in Glenwood Springs (17%), followed by Rifle (13%) and Aspen (12%). Because a high share of regional jobs is located in Aspen, the residents of Aspen are more likely to work locally. In 2014, 86% of residents both lived and worked in the city limits.

RESIDENT COMMUTE PATTERNS

According to survey responses, Aspen residents have the shortest average travel distance to work in the region (5 miles with an average commute time of 14 minutes).

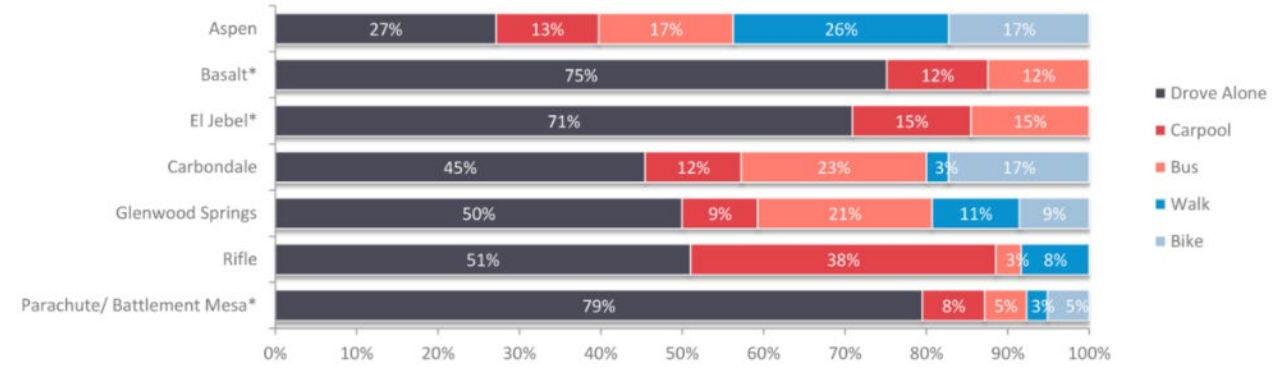
Figures A20 and A21 show commute mode share in the winter and in the summer.

Figure A20. Commute Mode Share by Home Location in Winter



Source: RFTA Travel Patterns Report, 2014

Figure A21. Commute Mode Share by Home Location in Summer



Source: RFTA Travel Patterns Study, 2014

According to RFTA survey responses, Aspen residents had the highest walk commute mode share in the region year-round, Glenwood Springs residents had the highest bike commute mode share in the region year-round, and

Silt residents had the highest carpool commute mode share in the region in the winter (28%), while Rifle residents had the highest carpool commute mode share in the summer (38%).[44]

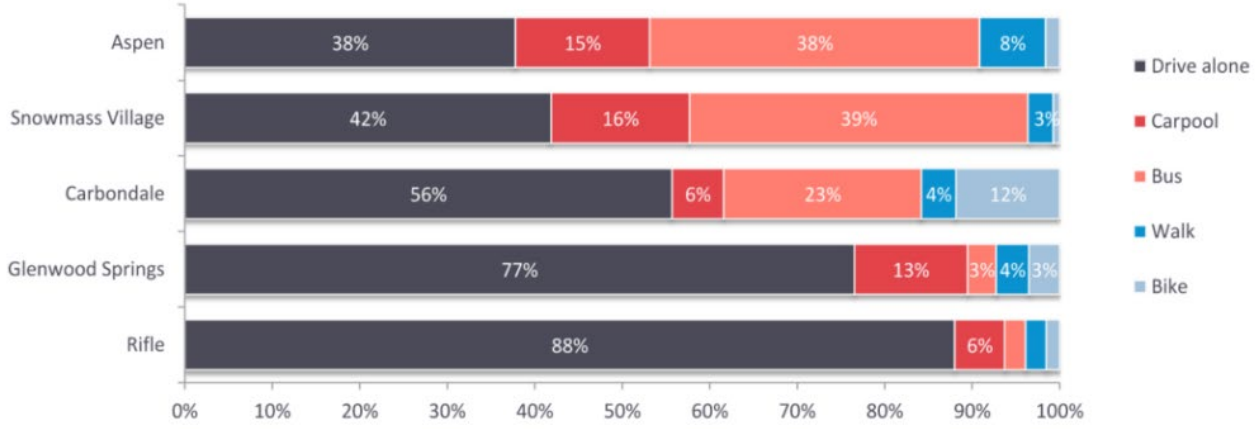
In Aspen, during the winter, 41% of employees drive alone, 29% take the bus, 20% walk, 6% carpool, and 4% bike to work. During the summer, 27% of employees drive alone and 17% take the bus, while there is an increase in all other commute mode shares. Bike commute mode share increases to 17% and carpool mode share increases to 13% during the summer in Aspen.[45]

WORKER COMMUTE PATTERNS

Aspen employees have the longest average travel distance (20 miles with an average commute time of 33 minutes) in the region due to the fact that many employees live outside of the city limits.

Figures A22 and A23 show commute mode share in the winter and in the summer.

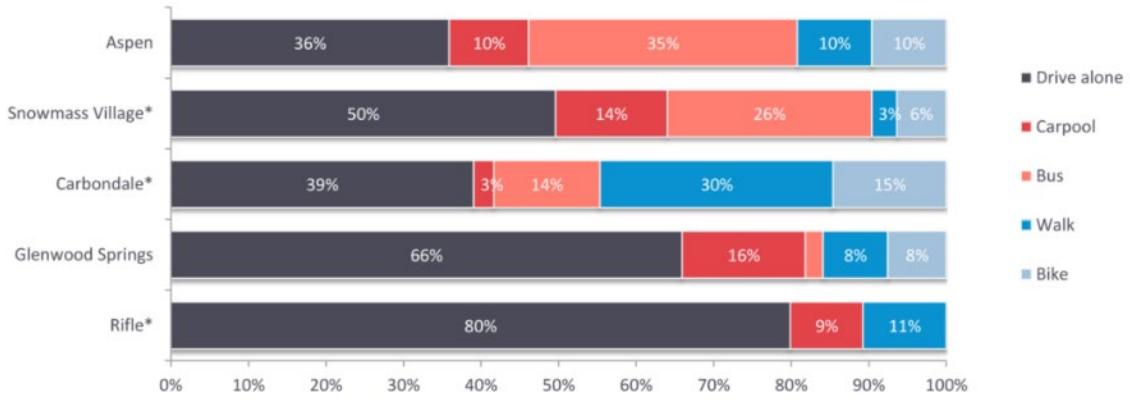
Figure A22. Commute Mode Share by Work Location in Winter



Source: RFTA Travel Patterns Report, 2014

[44] Roaring Fork Transportation Authority. (2014). Travel Patterns Study. Roaring Fork Transportation Authority. https://www.rfta.com/wp-content/uploads/2015/12/2014-RFTA-Travel-Patterns-Report_2015-09-09.pdf
[45] Roaring Fork Transportation Authority. (2014). Travel Patterns Study. Roaring Fork Transportation Authority. https://www.rfta.com/wp-content/uploads/2015/12/2014-RFTA-Travel-Patterns-Report_2015-09-09.pdf

Figure A23. Commute Mode Share by Work Location in Summer



Source: RFTA Travel Patterns Study, 2014

Throughout the region, drive alone commute share has decreased since 2004, while bus commute mode share has increased since 2004. Employees with an employer-subsidized bus pass were 5 times more likely to ride the bus to work than employees without this employee benefit.[46]

Commuters who worked up-valley (going north toward Aspen) were more likely to ride the bus to work and less likely to drive alone than commuters who worked down-valley (going south towards Parachute). Carbondale had the highest share of its workforce who used active travel modes both in the summer (45%) and in the winter (16%). The bus commute mode share for employees is higher in the winter than the summer in all of the region's job centers, in many cases accompanied by a higher walk and bike commute mode share in the summer.[47]

Mode Share

Figure A24 shows the mode share for all trips by season.

[46] Roaring Fork Transportation Authority. (2014). Travel Patterns Study. Roaring Fork Transportation Authority. https://www.rfta.com/wp-content/uploads/2015/12/2014-RFTA-Travel-Patterns-Report_2015-09-09.pdf
[47] Roaring Fork Transportation Authority. (2014). Travel Patterns Study. Roaring Fork Transportation Authority. https://www.rfta.com/wp-content/uploads/2015/12/2014-RFTA-Travel-Patterns-Report_2015-09-09.pdf

Figure A24: Regional Mode Share for All Trips by Season

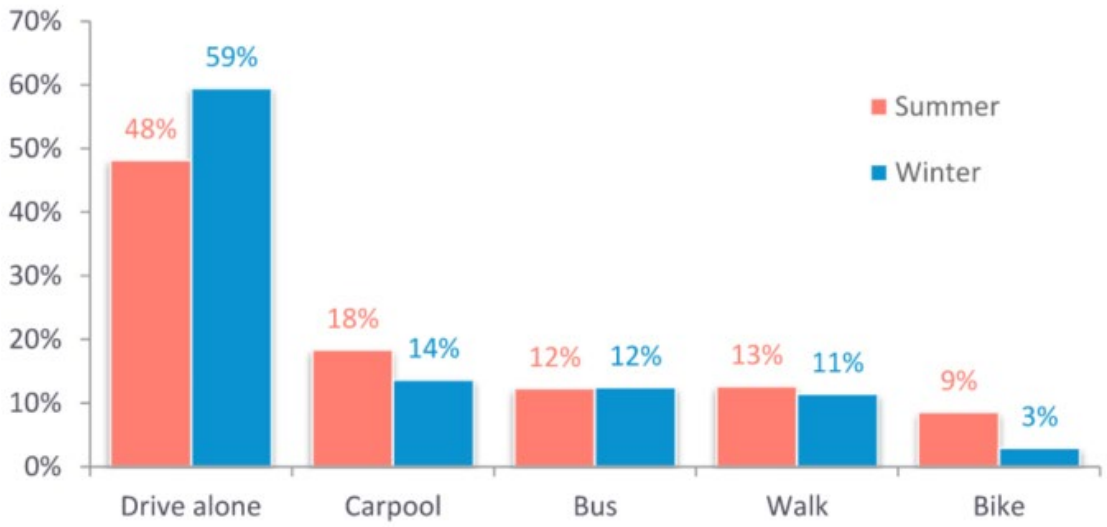
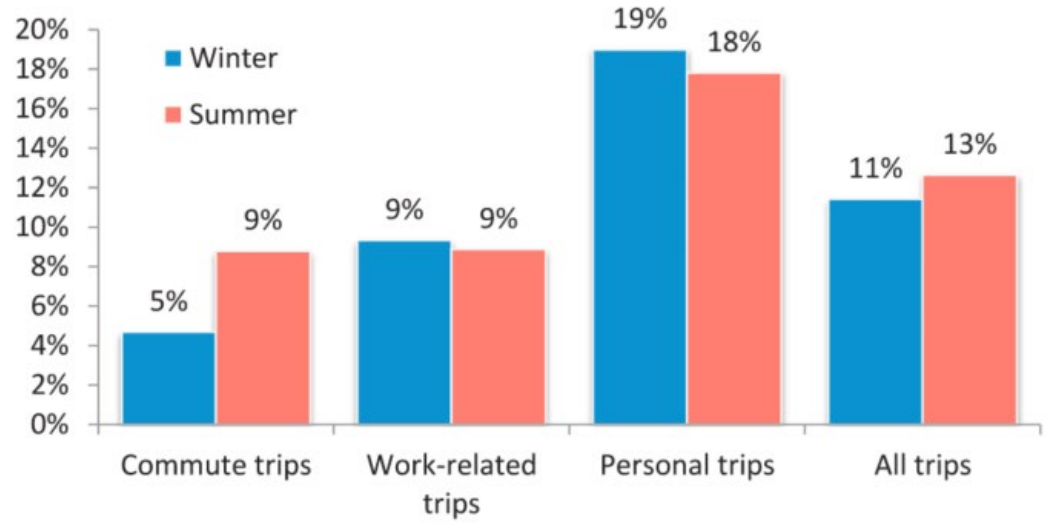


Figure A25 shows the walk share for all trips by trip type and season.

Figure A25: Regional Walk Mode Share for All Trips in Winter and Summer



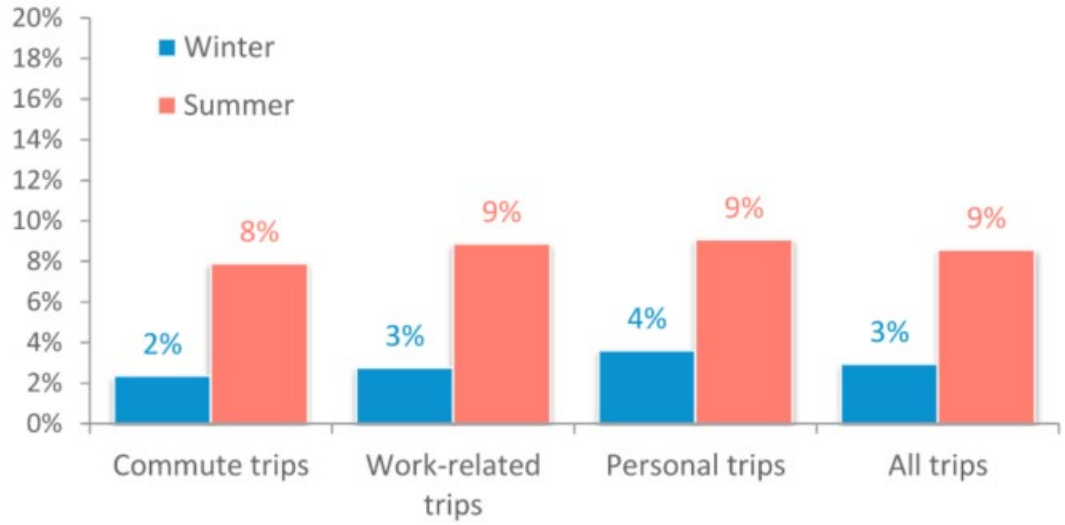
Source: RFTA Travel Patterns Study, 2014

Walk mode share in the region varies little by season for all trips except for work trips; for these trips, walk mode share decrease significantly in the winter.

Bike mode share has increased since 2004 due to expanded bicycle paths and trails in the region. In 2014, 58% of participants agreed that bicycling is convenient and 56% agreed that it is safe in their community, compared with 48% and 50% of 2004 responses, respectively.[48]

Figure A26 shows the bike mode share for all trips by trip type and season.

Figure A26: Regional Bike Mode Share for All Trips in Winter and Summer



Source: RFTA Travel Patterns Study, 2014

Bike mode share in the region is about three times higher in the summer than in the winter for all trips.

Commuting Survey

Survey responses gathered for the RFTA Travel Patterns Report represented employers from a wide variety of industries, of which 31% were professional services industries. 46% of employers were small businesses, with 10 employees or fewer.

COMMUTE MODE SHARE AND INCENTIVES

According to American Community Survey, most residents in the area drive alone to work (43%), 14% walk to work, 14% work from home, 13% take public transit to work, 9% bicycle to work, and 5% of residents carpool to work. The remainder of residents use other means to get to work.

According to survey responses gathered for the Regional Travel Patterns Study, the share of employees that commute to work by bus increased by 33%, from 10% in 2004 to 15% in 2014. The number of employers that support and encourage telecommuting doubled from 15% in 2004 to 30% in 2014. While the share of employers

[48] Roaring Fork Transportation Authority. (2014). Regional Travel Patterns Study. Roaring Fork Transportation Authority. https://www.rfta.com/wp-content/uploads/2015/12/2014-RFTA-Travel-Patterns-Report_2015-09-09.pdf

that offer incentives for not driving alone to work (29%) has remained the same since 2004, employers are offering more options than before. 21% of employers are subsidizing bus passes compared with 19% in 2004.

Figure A27. Non-SOV Commuting Incentives

Non-driving commute incentives	2004	2014
None	71%	71%
RFTA Bus Pass	19%	21%
Other	6%	11%
Bike fleet		9%
Transportation coordinator	2%	7%
Bike share memberships		6%
Company vehicle for employee errands	11%	5%
Car pooling program	5%	5%
Van pooling program	3%	4%
Cash incentives	2%	3%
Preferential parking for carpools		3%
Car share memberships		3%

Source: RFTA Travel Patterns Study, 2014

EMPLOYEE PARKING

According to survey responses, 92% of employees have free parking at work, compared with 81% in 2004.

RECOMMENDATIONS

Employers recommended two improvements to transit that can better serve the needs of commuters:

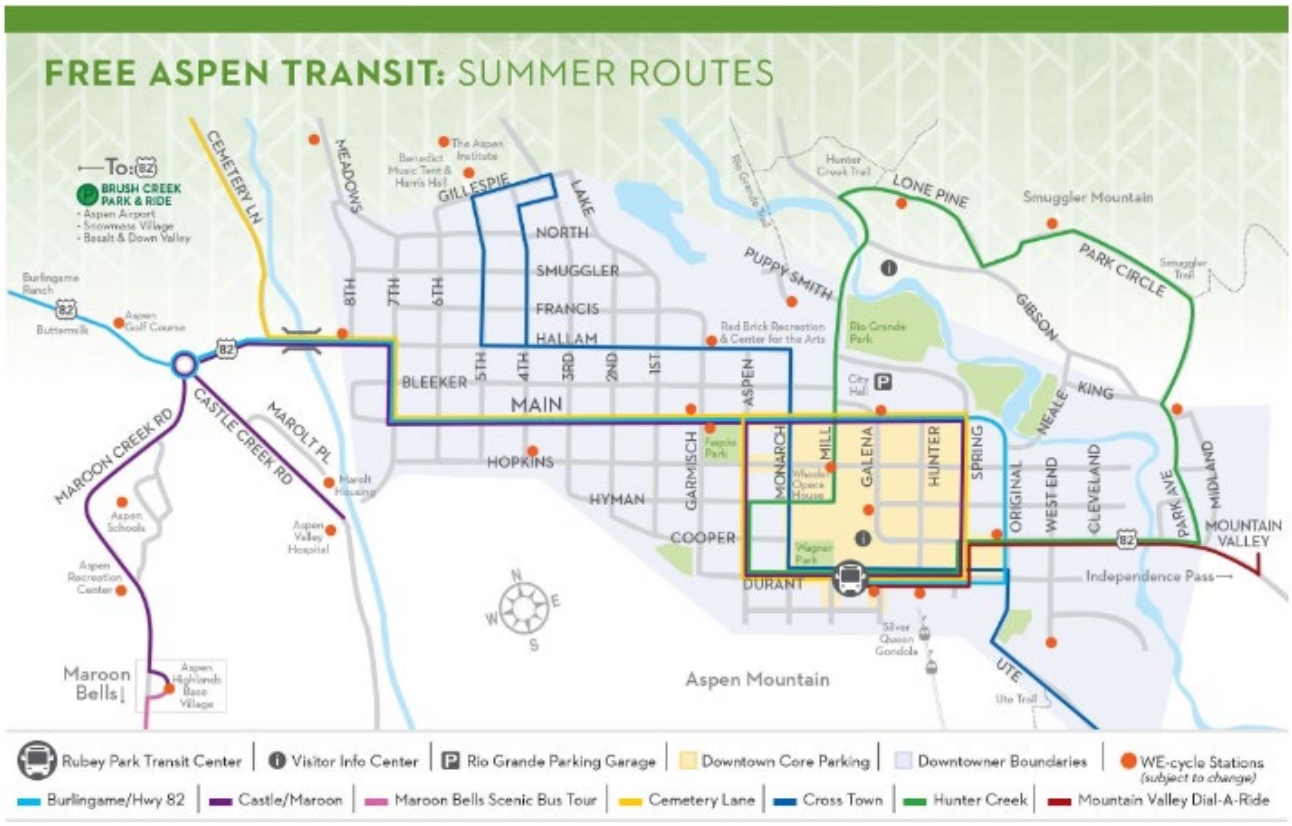
- Improve service to Rifle
- Reduce the price of bus passes

Existing TDM Programs

Transportation Demand Management (TDM) includes strategies and policies to reduce single occupancy vehicle trips. The City of Aspen has multiple TDM programs, listed below:

1. Transportation Options Program for Employers to promote commuting by public transit, including grant opportunities, an emergency ride home program, networking opportunities, marketing and trip planning resources. Program is subsidized by the City of Aspen and there is no cost to participate.
2. Transit, Bicycle, and Carpool Marketing Campaigns to raise awareness about transportation options and incentivize higher participation among residents, employees, and visitors. The campaign includes a bi-annual Drive Less campaign and Bike to Work Day.
3. Carpool Incentives to reduce SOV trips include HOV lanes for vehicles with 2 or more adult passengers, free parking with a permit in designated carpool spaces in Aspen and in residential parking zones.
4. Free Summer Shuttles

Figure A28. Summer Shuttle Route



3. E-Bike Share Program through We-Cycle, the region's e-bike vendor, to support non-vehicle modes of travel by providing first-last mile connections to destinations citywide. The e-bike program expanded in 2023 to a total of 31 stations and 172 e-bikes in Aspen. We-Cycle service is also available in neighboring jurisdictions west and east of Aspen for seamless connectivity between Aspen and nearby destinations (Burlingame Ranch, Cemetery Lane, East Aspen/Beaumont, and Ute Ave).

4. Car To Go Car Share Program that provides trucks, SUVs, and passenger cars (both electric and combustion engine vehicles) for shared use through a subscription program. Users pay for vehicle use on an hourly basis, with a maximum of 24 hours, and a per-mile basis.

5. Aspen Airport Taxi Service provides affordable transportation to and from the Aspen/Pitkin County Airport, serving all lodging and private homes in the Aspen and Snowmass areas.

TDM RECOMMENDATIONS

Based on community feedback gathered for the 2018 Short Range Transit Plan, the high priority strategies among participants related to TDM are as follows:

- Expand the Transportation Options Program.
- Develop a citywide trip-reduction ordinance.
- Expand the Emergency Ride Home program.
- Implement demand-based parking pricing downtown.

- Collaborate with schools to reduce school SOV trips through Safe Routes to Schools and other programs.

Public Transit

The City of Aspen has a robust and well used public transit system, with ridership approaching 1.5 million passengers per year. Aspen's transit system provides residents and visitors with convenient and frequent service, with transit headways as low as 10 minutes on some routes for most of the day. The system has long service spans, with most routes starting early in the morning and ending after midnight, and routes cover large geographic service areas.

The system links with the Roaring Fork Transportation Authority (RFTA) long distance routes connecting population centers in the Roaring Fork and Colorado River Valleys. Growth in transit ridership in recent years can be attributed to the introduction of bus rapid transit in 2013, the shifting of Aspen's workforce towards Glenwood Springs and other communities westward, and the City's investment in workforce housing and transportation demand management. The City has expanded routes where needed to meet this increased demand.

ROARING FORK TRANSPORTATION AUTHORITY (RFTA)

RFTA, the transportation authority serving the Roaring Fork region, offers 20 bus routes in 3 counties and 9 communities (including Aspen, Snowmass Village, Pitkin County, Basalt, a portion of Eagle County, Carbondale, Glenwood Springs and New Castle, Colorado). RFTA also provides commuter bus service in the Roaring Fork Valley and ski shuttle service to Aspen ski resorts, the Maroon Bells Shuttles, and other seasonal services.[49] In addition to bus service, RFTA provides commuter and paratransit services and supports bikeshare and microtransit services.

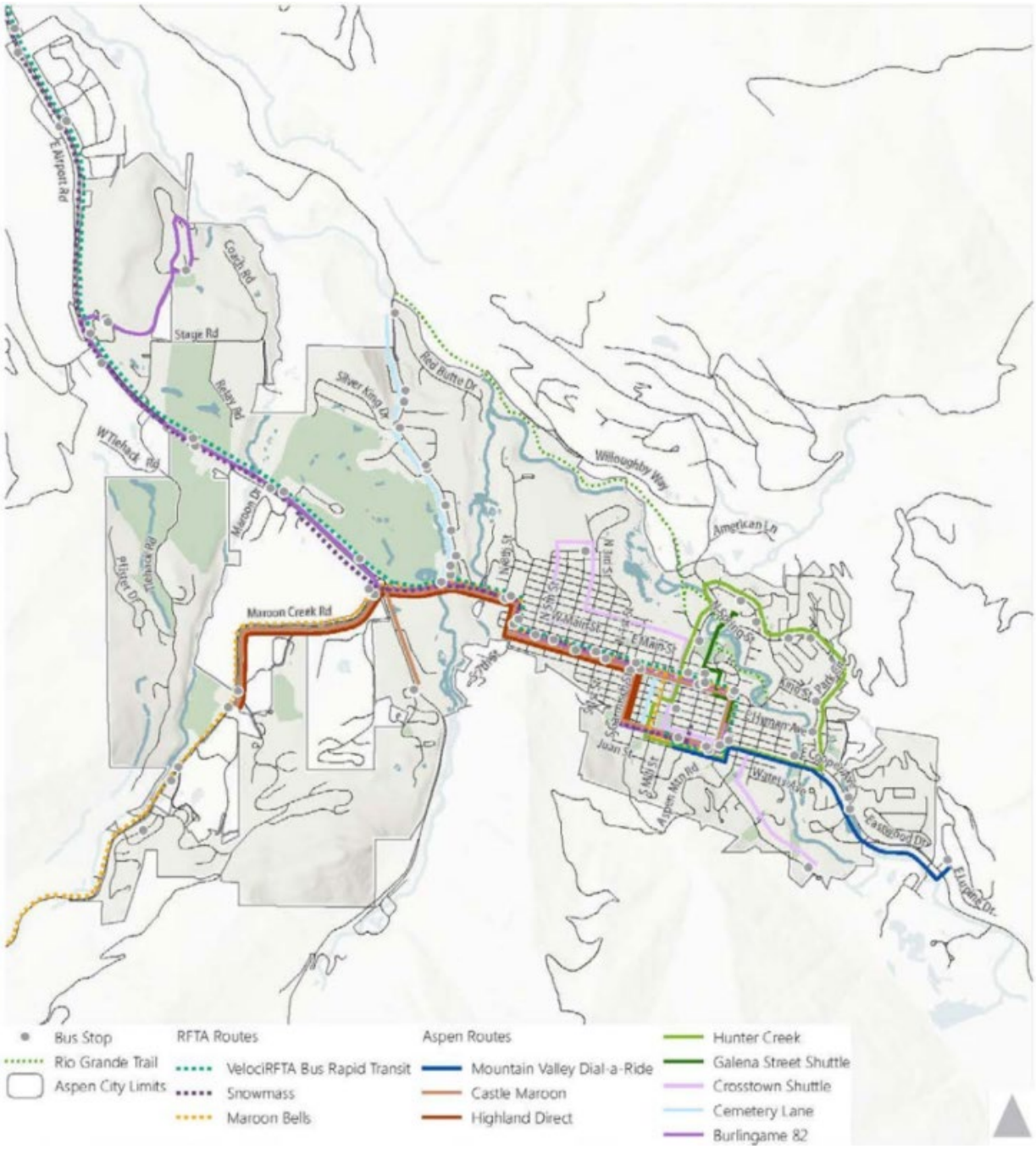
In 2023, RFTA had approximately 400 employees and is forecasted to transport 5 million riders with a fleet of 120 vehicles in the calendar year. RFTA had a $155 million budget in 2023 and is funded by sales and property taxes, service contracts, grants, and fares.

RFTA is distinguished for operating the first rural bus rapid transit (BRT) service in the United States, established in 2013. One of the bus routes, called VelociRFTA, is a BRT service between Aspen and Glenwood Springs with 12-minute headways during peak service hours.[50] The BRT route covers 40-miles paralleling Highway 82 between Glenwood Springs and Aspen and includes nine stations.

Figure A29 shows a map of the regional and local bus routes serving the City of Aspen.

[49] Roaring Fork Transportation Authority. (2014). About RFTA. Roaring Fork Transportation Authority. https://www.rfta.com/about-rfta-2/#:~:text=The%20Roaring%20Fork%20Transportation%20Authority%20has%20been%20in%20operation%20since,the%20newest%20member%20New%20Castle.
[50] Roaring Fork Transportation Authority. (2014). VelociRFTA. Roaring Fork Transportation Authority. https://www.rfta.com/routes/velocirfta-brt/

Figure A29: RFTA and City of Aspen Bus Routes



Source: City of Aspen Short Range Transit Plan, 2018

RFTA offers mobile ticketing and on-demand bus tracking using the Transit App. Fares are free within the same zone, and $2.00 for the first zone change, and $1.00 for each additional zone. **Figure A30** provides a fare chart by origin and destination for easy calculation of trip cost.

Figure A30: RFTA Fare Chart

RFTA FARE CHART FOR THE ROARING FORK VALLEY LOCAL, VELOCIRFTA BRT & GRAND HOGBACK

ZONE	Rifle	Silt	New Castle	Glenwood Springs	Carbondale	El Jebel/Blue Lake	Basalt/Willits	Old Snowmass	Aspen Village	Woody Creek	Brush Creek Park & Ride	Snowmass Village	Aspen
Rifle	FREE	2.00	3.00	4.00	5.00	6.00	6.00	6.00	7.00	8.00	8.00	8.00	8.00
Silt	2.00	FREE	2.00	3.00	4.00	5.00	5.00	5.00	6.00	7.00	7.00	7.00	7.00
New Castle	3.00	2.00	FREE	2.00	3.00	4.00	4.00	4.00	5.00	6.00	6.00	6.00	6.00
Glenwood Springs	4.00	3.00	2.00	FREE	2.00	3.00	3.00	3.00	4.00	5.00	5.00	5.00	5.00
Carbondale	5.00	4.00	3.00	2.00	FREE	2.00	2.00	2.00	3.00	4.00	4.00	4.00	4.00
El Jebel/Blue Lake	6.00	5.00	4.00	3.00	2.00	FREE	FREE	FREE	2.00	3.00	3.00	3.00	3.00
Basalt/Willits	6.00	5.00	4.00	3.00	2.00	FREE	FREE	FREE	2.00	3.00	3.00	3.00	3.00
Old Snowmass	6.00	5.00	4.00	3.00	2.00	FREE	FREE	FREE	2.00	3.00	3.00	3.00	3.00
Aspen Village	7.00	6.00	5.00	4.00	3.00	2.00	2.00	2.00	FREE	2.00	2.00	2.00	2.00
Woody Creek	8.00	7.00	6.00	5.00	4.00	3.00	3.00	3.00	2.00	FREE	FREE	FREE	FREE
Brush Creek Park & Ride	8.00	7.00	6.00	5.00	4.00	3.00	3.00	3.00	2.00	FREE	FREE	FREE	FREE
Snowmass Village	8.00	7.00	6.00	5.00	4.00	3.00	3.00	3.00	2.00	FREE	FREE	FREE	FREE
Aspen	8.00	7.00	6.00	5.00	4.00	3.00	3.00	3.00	2.00	FREE	FREE	FREE	FREE

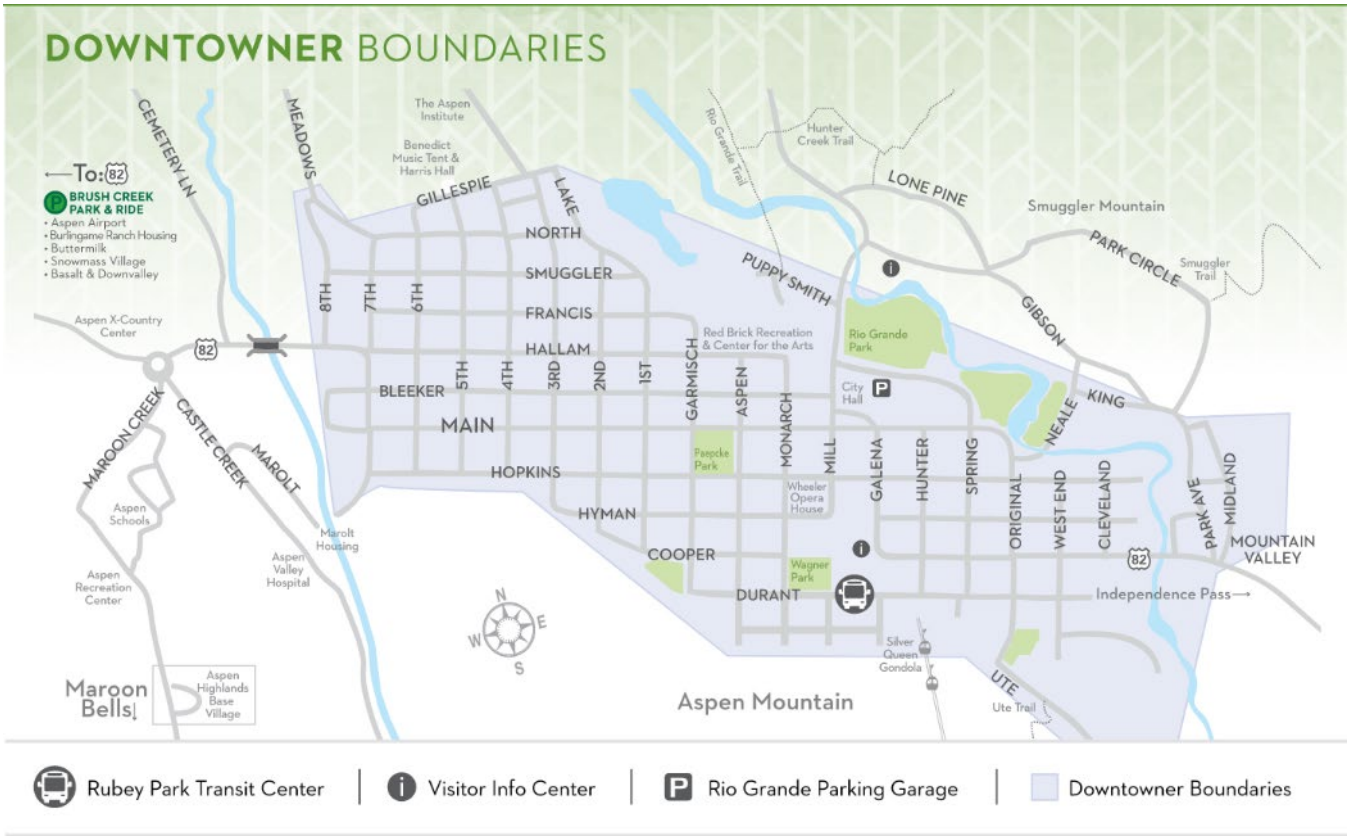
Fare: FREE service within each zone, first zone change add $2.00, then $1.00 each additional zone.
Seniors (65 and over) and children ages 5 and under ride for FREE.
Youth ages 6-18 ride all regional routes for only $1.00 when leaving the free zone.

Source: RFTA, 2023

ON-DEMAND MICROTRANSIT

The City of Aspen offers a free door-to-door, on-demand ride service called the Downtowner. It operates in the downtown area from 10:00 am to 11:00 pm. Vehicles are electric and include heaters and ski racks. Rides can be requested using the Downtowner mobile app.

Figure A31. Downtowner Service Area



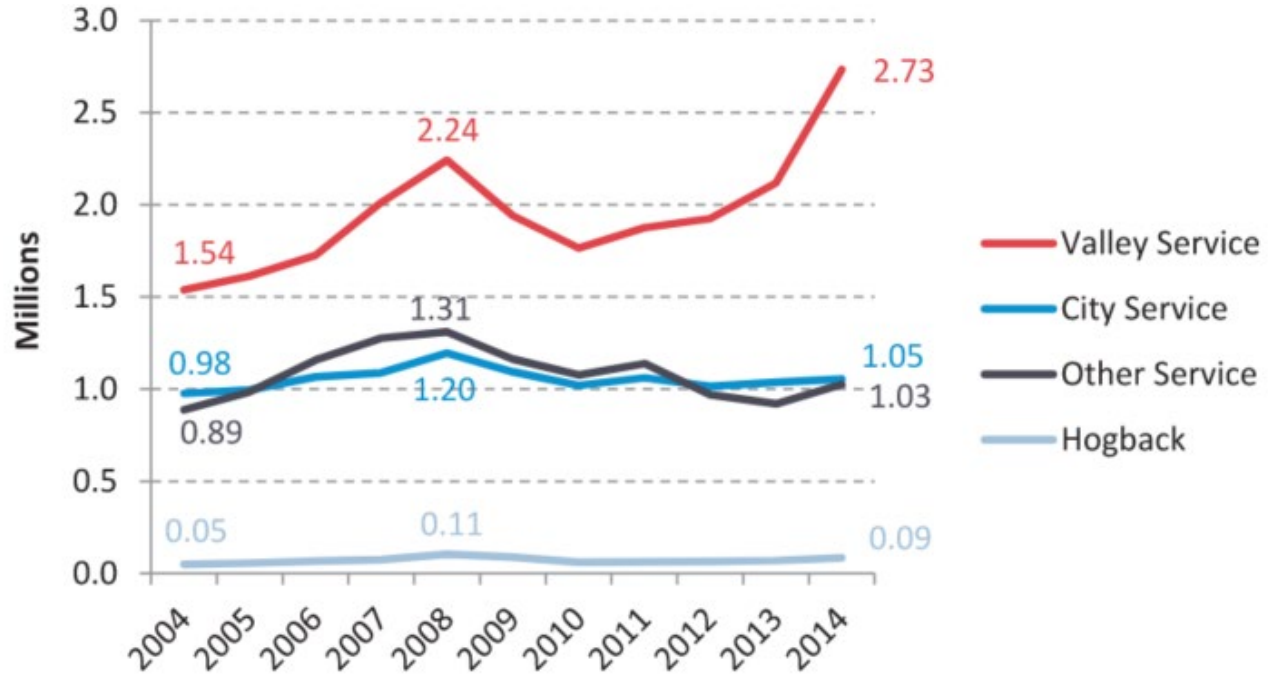
Source: City of Aspen, 2023

To maximize the potential of microtransit, the 2018 Short Range Transit Plan recommends forming partnerships with additional on-demand transit services and promoting use of the Downtowner as a first and last mile solution.

TRANSIT RIDERSHIP

According to community feedback gathered for the 2018 Short Range Transit Plan, over 60% of survey respondents ride the BRT route and over 40% ride local or express routes. Other commonly used routes among survey participants were Castle Maroon and Hunter Creek. The majority of participants walk to the bus stop, followed by participants who drive. The fastest growing service area in terms of ridership since 2004 has been the Valley Service area between Glenwood Springs and Aspen. Figure A31 shows the growth in annual bus ridership in the region since 2004.

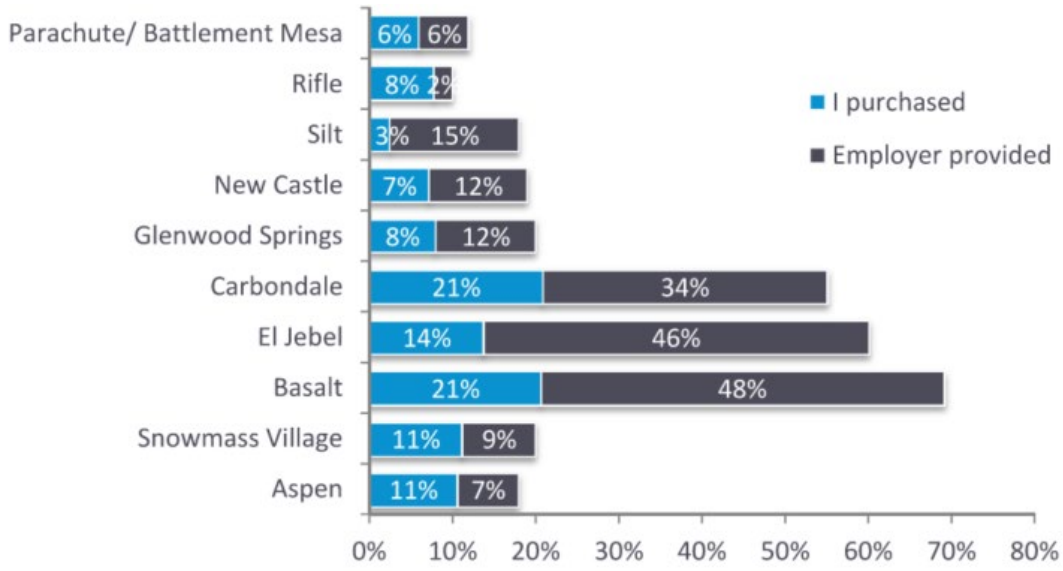
Figure A32. Annual Ridership Growth by Service (in Millions)



Source: RFTA Travel Patterns Report, 2014

The rate of employer-subsidized bus pass use has increased from 53% to 63% since 2004, contributing to an increase in bus ridership. As shown in **Figure A33**, residents of Carbondale, El Jebel, and Basalt have the highest shares of employer-subsidized bus pass use, ranging from 34% to 48%.

Figure A33. Annual Ridership by Service Area (in Millions)



Source: RFTA Travel Patterns Report, 2014

The average reported distance to an RFTA bus stop is 1.7 miles. In 2014, 83% of Aspen survey participants reported that they live walking distance (five blocks) from a bus stop, which contributes to the high bus ridership of Aspen residents.

When asked about ways to increase bus ridership, the highest percentage of participants (25%) recommended increasing frequency of service. Other popular recommendations were to reduce fares, add new bus routes (specifically a route connecting Parachute to Battlement Mesa), and add more stops along existing routes.[51]

RECOMMENDED TRANSIT IMPROVEMENTS

The 2018 Short Range Transit Plan recommended increasing frequency of transit on major routes, expanding on-demand transit services in areas with reduced transit services, and extending summer schedules to the end of September to improve transit convenience and ridership systemwide. The plan also includes the following route-specific recommendations:

• "Operate Castle/Maroon route frequency at 10-minute service from 7 AM to 7 PM, reducing hours of Aspen-Highlands Direct service (summer and winter)

• Operate Hunter Creek route at 10-minute frequency over a 12-hour service day (summer and winter)

• Combine Crosstown and Mountain Valley Dial-a-Ride routes and supplement area outside modified service area with on-demand service."[52]

MOBILITY PROGRAMS AND SERVICES

Existing mobility programs and services operated by RFTA include local bus services, VelociRFTA BRT service, Hogback Route bus service (between Rifle and Glenwood Springs), and transit mobile ticketing. Local bus services and the BRT service are described in the section titled Roaring Fork Transportation Authority. The Hogback Route connects the communities of Glenwood Springs, New Castle, Silt, and Rifle. The route has six stops and integrates into RFTA's regional fares (see Figure X). Service is daily from 5:15 am to 9:00 pm.

The RFTA mobile ticketing app was launched when RFTA partnered with Masabi in 2021 to streamline payment systems. The benefits of this new feature include greater flexibility and convenience for payment of multiple mobility services, including the We-Cycle bike share program.

In recent years, RFTA has taken the also following actions to address growing commute demand and improve mobility in the region:

- Created a first and last mile fund to invest in transit access and mobility improvements (2021)
- Provided financial support for the growing regional bikeshare program (2022)
- Advocated for several projects on the Destination 2040 ballot measure (2022), including:
    - "Pedestrian crossings at Buttermilk
    - Real-time traveler information

[51] Roaring Fork Transportation Authority. (2014). Travel Patterns Study. Roaring Fork Transportation Authority. https://www.rfta.com/wp-content/uploads/2015/12/2014-RFTA-Travel-Patterns-Report_2015-09-09.pdf
[52] City of Aspen. (2018). Short Range Transit Plan. City of Aspen. https://www.aspen.gov/DocumentCenter/View/2215

- A new transit station at Glenwood Springs
- New pedestrian crossings at Glenwood Springs
- Transit service improvements
- Bikeshare expansion."[53]

According to the First and Last Mile Mobility Study (2022), RFTA-service area recommendations include secure bike parking facilities, an E-bike incentive program, and engagement and materials for Spanish speakers. Other community supported mobility improvements that RFTA will continue to partner with other agencies to improve include microtransit (both fixed route and dynamic), carpooling, and pick-up and drop-off sites for ridesharing/ridehailing.

The Future of Mobility in Aspen

The Community Forum Mobility Report

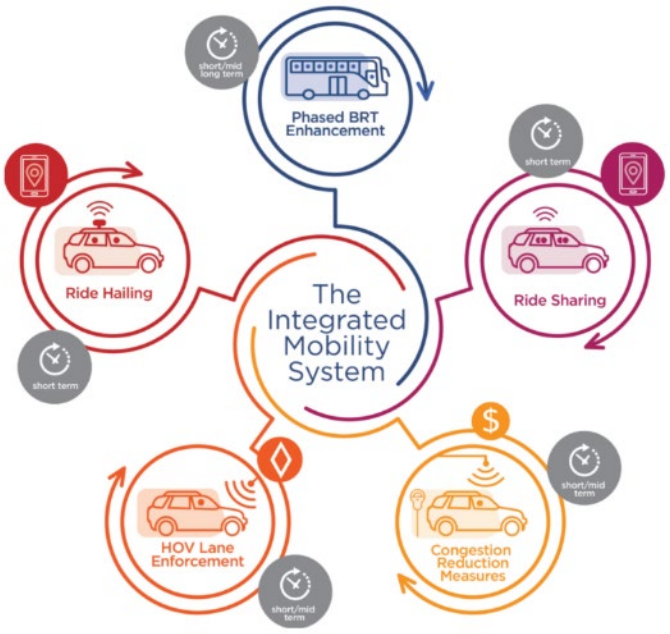
The Community Forum Mobility Report is a summary of visioning, research, and considerations regarding the future of integrated mobility in the Roaring Fork region. The report was developed by a task force of community members between July 2016 and August 2017. The report proposed a variety of mobility options that operate together to support shared goals of reduced traffic congestion and greater flexibility and mobility choice, including ride sharing, congestion reduction measures, HOV lane enhancement, ride hailing, and phased BRT enhancement.

The integrated mobility system proposed in the report addresses induced traffic through a combination of carrots and sticks, with complementary measures for the near, mid, and long term.

Figure A34 illustrates the components of an integrated mobility system, as envisioned by the community members who developed the report.

[53] RFTA. (2022). First and Last Mile Study. RFTA. https://www.rfta.com/wp-content/uploads/2022/07/rfta-flmm-and-bike-share_v6.pdf

Figure A34: The Integrated Mobility System Illustration (from the IMS)



Source: Community Forum Mobility Report, 2017

Following is a description of each mobility strategy and potential benefits and challenges of each:

1. Ridesharing
   Ridesharing is an app-based ride sharing system could serve as both a first and last mile service and a Valley Trunk Line Service, moving riders between origins and destinations in the Aspen/Snowmass area. Unlike a ridehailing service, a ridesharing service would identify and reserve seats in passenger vehicles already planned.
   - Benefits of ridesharing systems are their potential to build a sense of community, the lack of infrastructure investment, and appeal to people who are unwilling to ride buses.
   - Challenges include driver screening, limited demand/impact, and marketing/outreach.
2. HOV Lane Enforcement
   HOV lane enforcement is a TDM measure designed to increase carpooling and reduce traffic congestion, decreasing travel time for all users. HOV lanes are in operation on Highway 82, the Basalt/Buttermilk four-lane highway, however, enforcement reduced in recent years, and tickets are not issue for violations. HOV enforcement would strengthen this TDM measure and optimize the benefits for highway users.
   - Benefits of HOV lane enforcement include reduced traffic (by over 2,500 vehicles), more efficient transit operations, incentives for carpooling, and technology could reduce enforcement costs.
   - Challenges included staff time and resources for enforcement, the difficulty of gaining judicial support, and the need to extend the HOV lanes to Aspen to maximize effectiveness.
3. Ride Hailing Services
   Ride Hailing is an app-based on-demand ride system with paid drivers, such as Uber, Lyft, taxis, and the Aspen Downtowner that may serve as a first and last mile service. A ride could be integrated with RFTA's mobile app for digital ticketing to bundle the cost into a single purchase.

- Benefits of ride hailing services are convenience, lack of infrastructure investment, employment opportunities, and wide brand recognition and trust.
- Challenges include limited cell services and limited Uber and Lyft service in the area.

4. Phased BRT Enhancements
   BRT could be enhanced through phased consolidation of existing BRT, express bus, local, and skier-shuttles at 10, 20, and 30-minute headways using electric or compressed natural gas (CNG) buses.
   - Benefits of BRT consolidation include reduced bus congestion, reduction of up to 100 trips, and reduced operation costs and labor, allowing investment in cleaner fuel fleets.
   - Challenges include requiring transfers from the Brush Creek BRT station, and higher capital and operations costs of electric buses (including charging and auxiliary heating in winter).
5. Dynamic Road Pricing
   Dynamic Road Pricing is an effective congestion management tool that charges drivers a fee to drive on a road using an electronic toll. This tool would be best suited for Highway 82 lanes towards Aspen and in downtown Aspen.
   - Benefits of dynamic road pricing include reduced time spent in traffic for toll lane users, generation of revenue for transit improvements, and improved roadway experience for tourists or visitors.
   - Challenges including building public support, compliance with state and federal regulations, potential for traffic diversion on other roads, and implementation/political will.
6. Parking Strategies
   Parking strategies are measures that efficiently manage parking resources and support multi-modal networks, such as dynamic pricing of parking spaces and facilities, valet services, reduction of parking requirements in new developments, and employer parking requirements.
   - Benefits of parking strategies are low implementation cost, increased parking availability, incentive for mode shifts, and generation of revenue for transit improvements or pedestrian/bicycle infrastructure.
   - Challenges include the need for dynamic pricing to control demand distribution issues, the need to provide mobility alternatives to address equity concerns, and the potential for community pushback due to perception of parking as a right.

Other ideas for enhancing transportation choice in the Roaring Fork Valley include:

- Expanding direct transit links from ski areas between Snowmass Village and Aspen, linking Snowmass, Buttermilk, Highlands, and Aspen during peak periods to reduce vehicle trips.
- Creating a designated airport transit shuttle to increase transit ridership to the airport (currently only 3%)
- Develop an intermountain gondola connection between Aspen and Snowmass Village, with potential links between Buttermilk, Highlands, and Snowmass.

VMT and GHG Emissions Projections (IMS Report)

The Integrated Mobility (IMS) Report Phase 2, conducted by Fehr & Peers, is a quantitative analysis of VMT trends and GHG emissions from passenger vehicles in Aspen and Snowmass Village. The report also contains performance metrics for evaluation, travel impacts of automated vehicles and COVID-19, and equity implications of implementation. It was a follow-up to the Phase 1, in which five VMT reduction strategies were identified and modeled, shown in Figure A35.

Figure A35: High Level Strategies and Projected Impacts

Ranking	Strategy	Long Term Effectiveness GHG emission reduction
1	***Congestion Reduction Measures***	17,600 metric tons/year
2	***Ride Sharing***	3,800 metric tons/year
3	***Phased BRT Enhancements***	800 metric tons/year
4	***HOV Lane Enforcement***	No VMT/GHG emission benefit as a stand-alone strategy.
5	***Ride Hailing***	No VMT/GHG emission benefit as a stand-alone strategy.

Source: Integrated Mobility Report Phase 2, June 2021

The Phase 2 report analyzed four different types of travelers in the Upper Valley (commuters, local visitors, non-local visitors, and residents).

Figure A36. Daily Vehicle Trips by User Group (Summer)

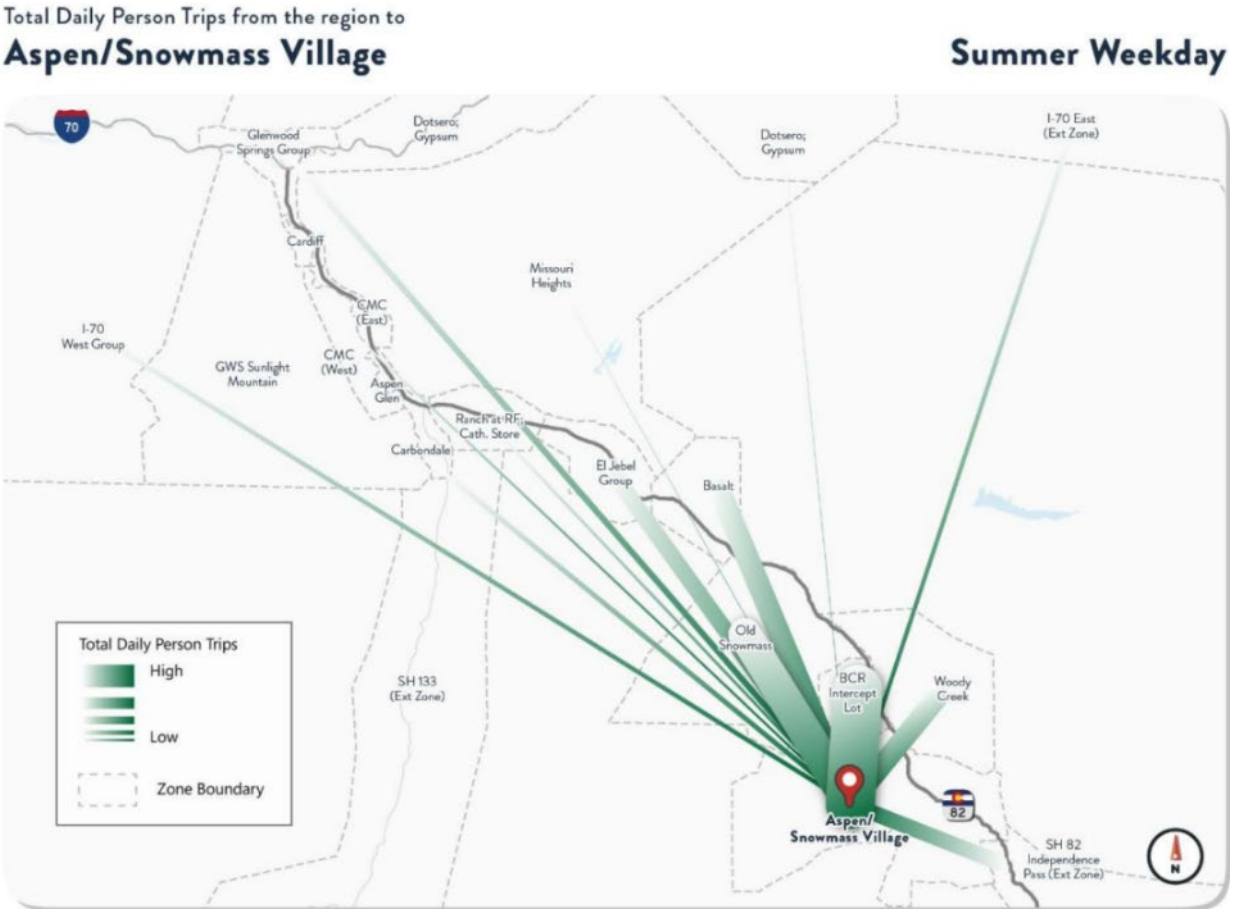
Daily Vehicle Trips - Average Peak Season	Snowmass Village (Across Brush Creek Road)	Aspen (Across Castle Creek Bridge)
Residents - Commute Out	80	590
Residents - Personal	420	1,660
Workers - Commute In	2,380	6,160
Local Visitors	1,480	2,460
Non-Local Visitors	3,870	10,070
Total	**8,230**	**20,940**

Source: Integrated Mobility Report Phase 2, June 2021

In both Snowmass Village and Aspen, the largest share of trips is generated by non-local visitors (more than 50% of all trips in summer and almost the same share in winter), followed by workers commuting into the community. Residents and local visitors, by comparison, generate the smallest share of trips into Aspen and Snowmass Village.

The report included an analysis of trip data from AirSage by traveler type. Trips represented include all modes of travel. Figures A37—A40 are graphic visualizations of trip volume by traveler type on a daily basis in summer.

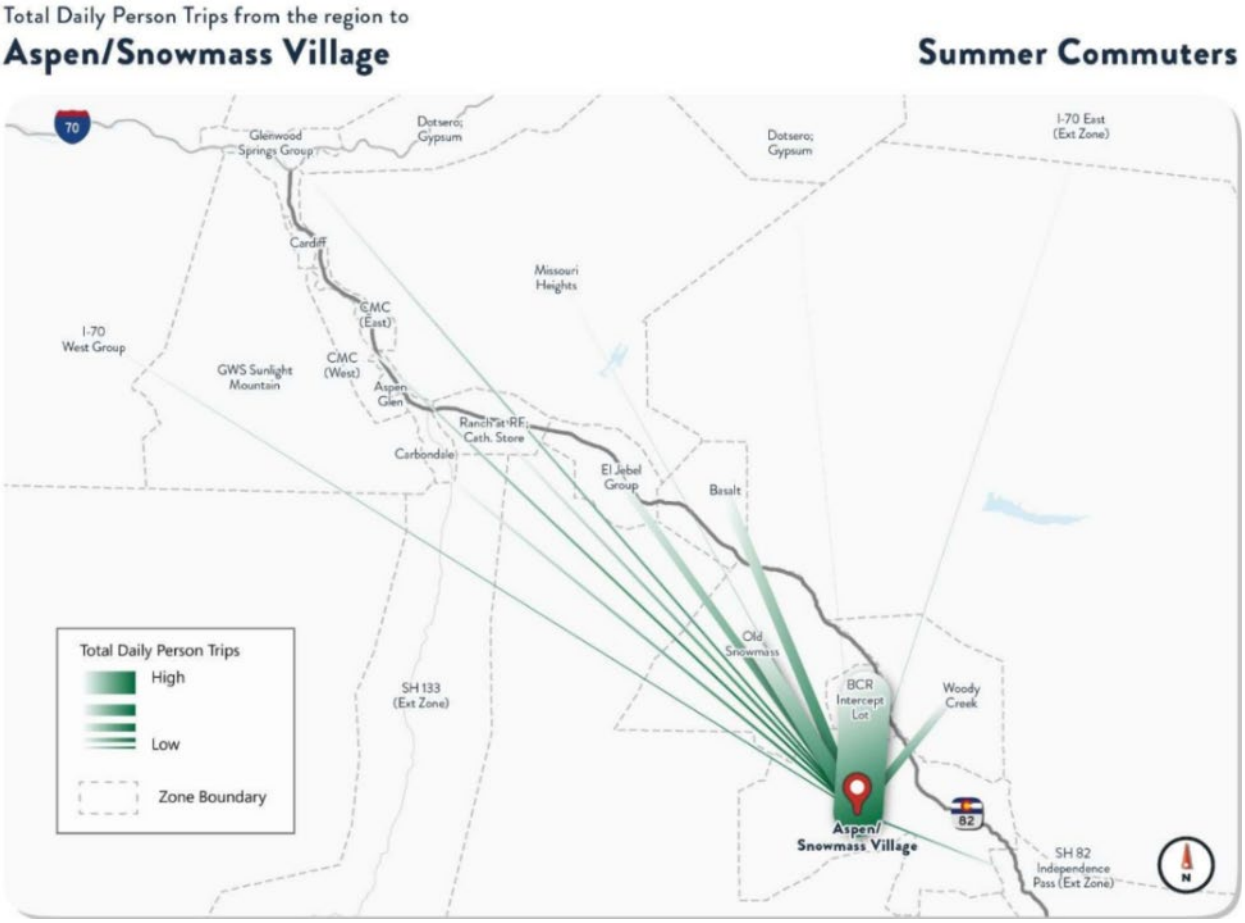
Figure A37. Total Daily Trips to Aspen/Snowmass Village by Visitors in Summer



Source: Integrated Mobility Report Phase 2, June 2021

According to AirSage data, the predominant trip flows of visitors into Aspen originate from the Brush Creek Park and Ride, Old Snowmass, and Woody Creek.

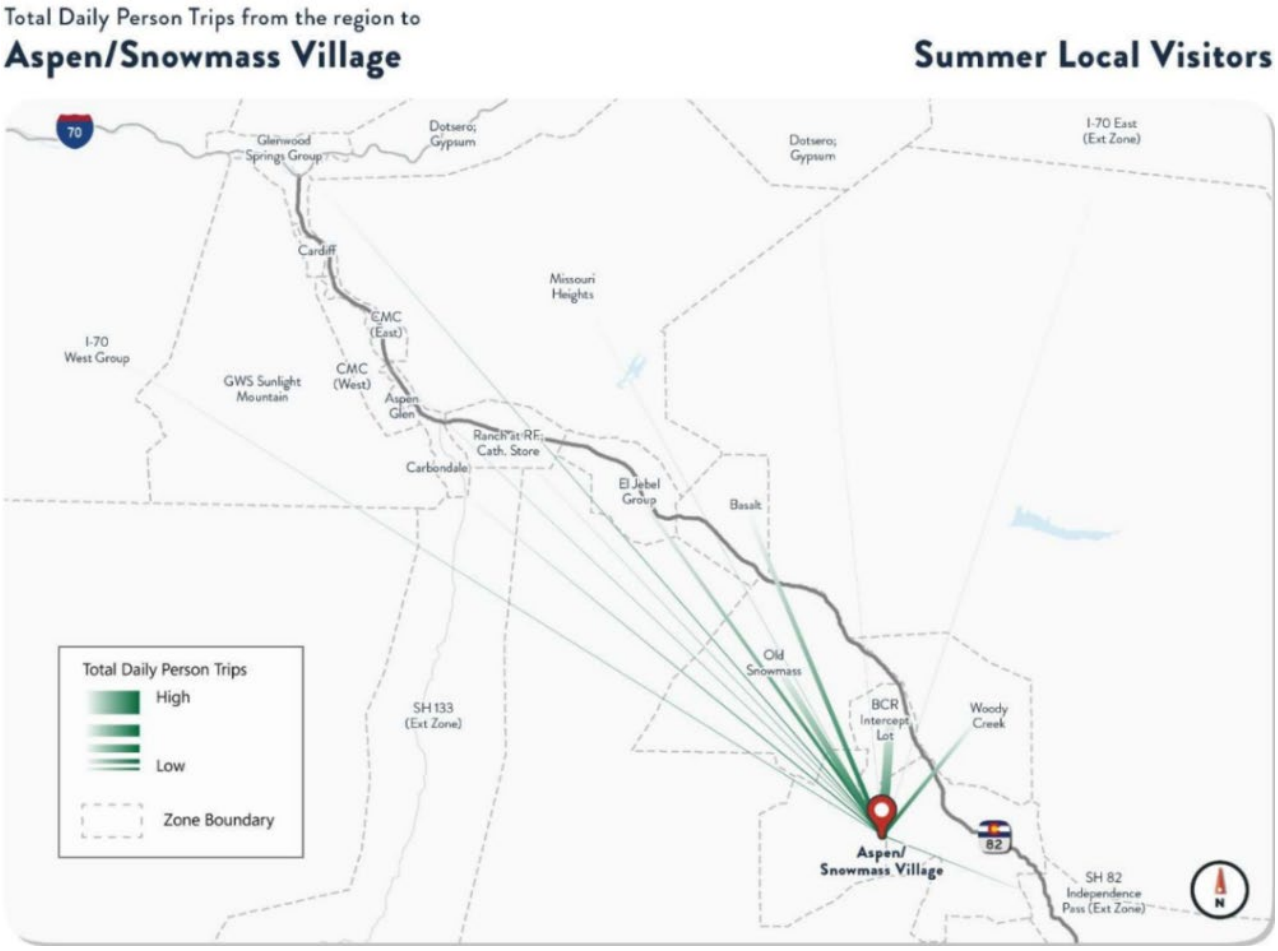
Figure A38. Total Daily Trips to Aspen/Snowmass Village by Commuters in Summer



Source: Integrated Mobility Report Phase 2, June 2021

According to AirSage data, commuter trips are concentrated from the Brush Creek Park and Ride to Aspen and Snowmass Village. This is consistent with other data that indicate a high number of transit and carpool trips originate at this park and ride.

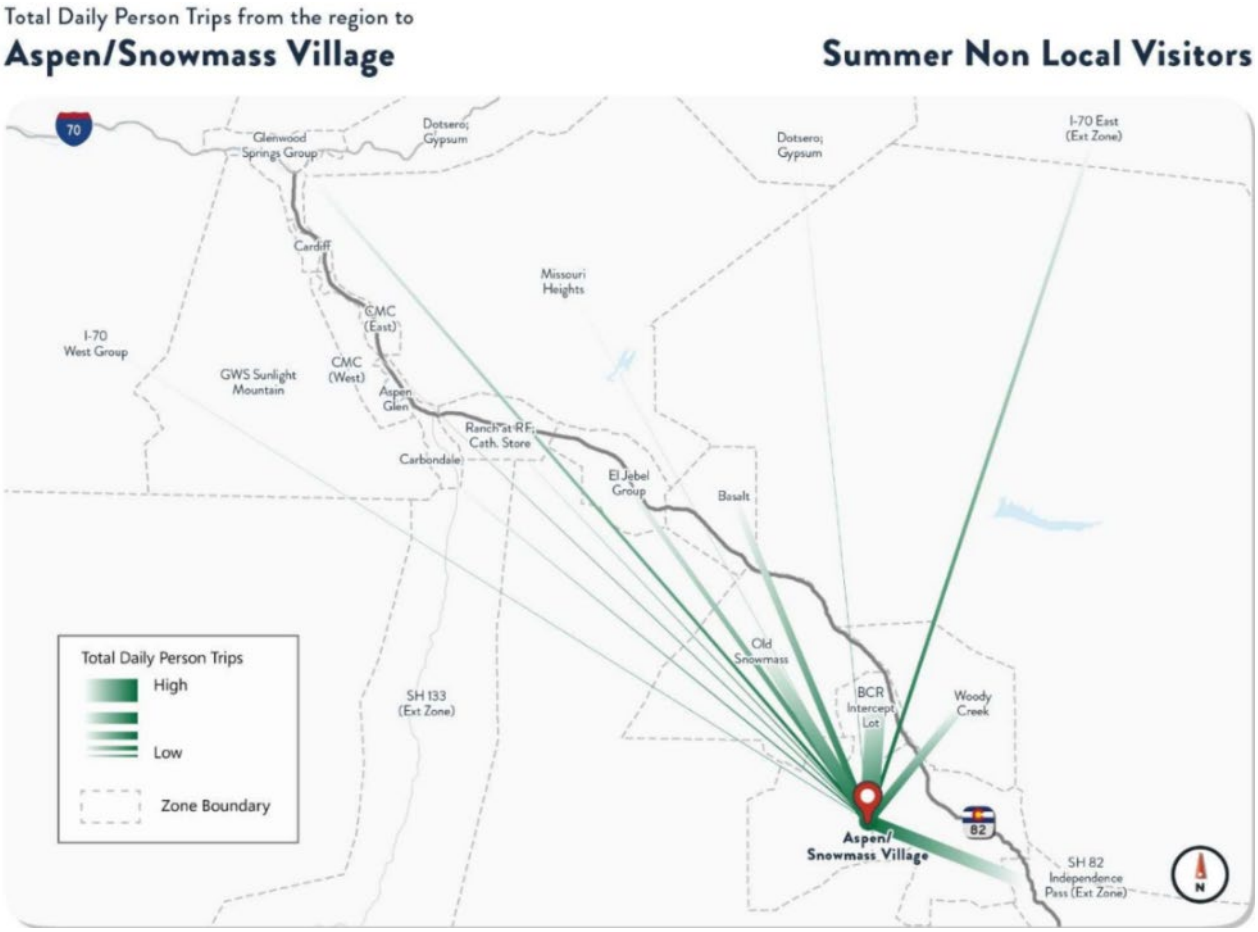
Figure A39. Total Daily Trips to Aspen/Snowmass Village by Local Visitors in Summer



Source: Integrated Mobility Report Phase 2, June 2021

According to AirSage data, local visitor trips are much more evenly distributed than commuter trips and make up a smaller share of all trips. Most trips flow in the up valley direction, with destinations of Aspen and Snowmass Village.

Figure A40. Total Daily Trips to Aspen/Snowmass Village by Non-Local Visitors in Summer



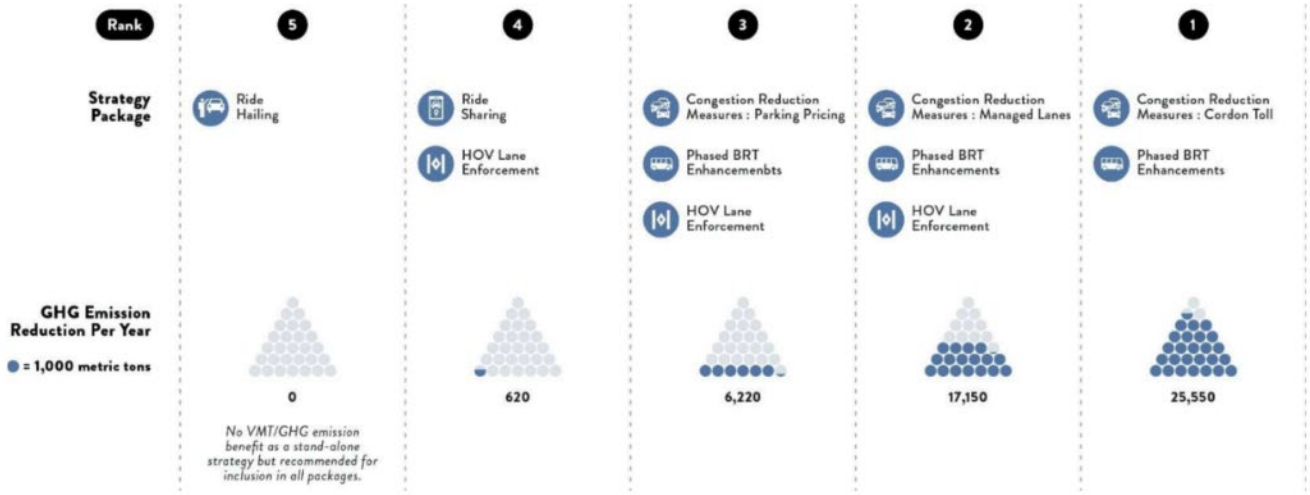
Source: Integrated Mobility Report Phase 2, June 2021

According to AirSage data, non-local visitors travel predominantly from Independence Pass and the Brush Creek Park and Ride with more distribution from other down valley communities.

The report evaluated 5 strategy packages: 1) Cordon Toll on SH 82 + Phased BRT Enhancements, 2) Managed Lanes on SH 82 + Phased BRT Enhancements + HOV Lane Enforcement, 3) Parking Pricing + Phased BRT Enhancements + HOV Lane Enforcement, 4) Ride Sharing + HOV Lane Enforcement, and 5) Ride Hailing. Packages 1, 2, and 3 would not be combined due to their similar nature, but packages 4 and 5 can be combined with any of the other packages. BRT enhancements are supportive to any strategy that makes driving more expensive, by providing an alternative that is more cost effective and by reducing highway congestion.

Figure A41 shows the potential GHG emissions reductions associated with each of the strategy packages based on the results of modeling the five alternatives using the Aspen 2017 VMT model. Packages 1 and 2 are the most effective at reducing GHG emissions and are recommended as long-term strategies for congestion and VMT reduction in the Roaring Fork Valley, with the potential to reduce emissions by 25,550,000 and 17,150,000 metric tons per year, respectively.

Figure A41. GHG Emissions Reduction Potential By Strategy Package per IMS



Source: Integrated Mobility Report Phase 2, June 2021

The report recommended an implementation framework to achieve the City's climate and VMT goals, shown in **Figure A42.**

Figure A42. Implementation Framework from IMS

Time Frame	Strategy
Short Term (0-5 years)	HOV lane enforcement on Highway 82
	Increase parking prices and expand hours of pricing in downtown Aspen
	Begin speed and reliability improvements along the BRT route
	Implement pilot ride-sharing app for commuters
Mid Term (3-10 years)	Implement ride hailing service in Aspen/Snowmass area
	Expand Aspen downtowner's service and fleet
	Construct new Park & Ride in the Carbondale/El Jebel/Basalt area and begin a new peak period BRT service to Snowmass
Long Term (11+ years)	Implement dynamic road pricing on Highway 82

Source: Integrated Mobility Report Phase 2, June 2021

The report included an equity impact analysis and recommended mitigations to address the impact of congestion pricing strategies on transportation choice for low-income drivers. Due to the high price of housing in Aspen, many employees live outside of the city and commute in for work. The report points to studies of partial highway tolls, such as HOV lanes, in Dallas, Texas and Seattle, Washington in which one or more travel lanes are available for drivers to use without paying. However, the examples were implemented on highways with more than two travel lanes, which are more feasible given the greater amount of space for unpaid highway lanes. For example, according to the Texas Department of Transportation, inventory of managed lanes with no fee component is 64% of managed lanes and the inventory of toll lanes is 36% of managed lanes. In Aspen, the section of Highway 82

from Aspen to its eastern terminus it has only two travel lanes in each direction, which would result in a ratio of 50% of vehicle travel space that is managed with a toll and may exacerbate congestion. The report also pointed to an example of cordon pricing in Edinburgh using a progressive fee that is more equitable.

The study recommends HOV lanes because they provide low-income drivers with a free option and provide a fast track for bus travel to incentivize public transit. Alternatively, if a cordon pricing scheme was considered for Aspen, it could exclude certain users, such as employees and commercial vehicles. To address equity concerns with regard to congestion pricing, the report recommends reinvesting revenues from toll lanes or cordon pricing into improved transit service so that it is a more convenient and viable option for low-income riders.

Vehicle Traffic Patterns

Between 2004 and 2014, VMT per capita in the region decreased by 13%. CDOT monitors monthly highway VMT using three permanent traffic count stations (I-70 at Silt, SH-82 at Glenwood Springs, and SH-82 at Snowmass). In 2014, peak traffic volumes at all three count locations were lower than they were in 2008. However, since 2004 highway traffic has been growing faster during the summer and in the up-valley direction. Traffic has decreased down-valley I-70 west of Glenwood Springs since 2004.[54]

Based on community feedback gathered for the 2018 Short Range Transit Plan, high priority vehicle travel recommendations include the following policies and programs that encourage non-SOV trips:

- Grow the CAR TO GO program.
- Car share: Explore partnerships with national car share operators.
- Autonomous vehicles: Adopt new city policies to maximize benefits of autonomous vehicles.
- Explore public-private partnerships with carpool ride-matching app developers.
- Create an electronic permitting process for carpoolers.[55]

Planned Transportation Improvements

RFTA's Destination 2040 plan outlines the transit agency's goals for the region in the next 20 years. The agency's goals are grouped into three categories: improvements for the environment, reducing congestion/improving mobility, and sustainability. In terms of environmental improvements, RFTA plans to replace its 88-bus fleet with a roughly equal proportion of CNG, diesel, and electric buses. In terms of congestion and mobility improvements, RFTA plans to increase evening frequency of service from every hour to every 30 minutes after 8:15 pm. In terms of sustainability, RFTA plans to financially support the construction (by covering 50% of the project costs) of a grade-separated pedestrian crossing at Highway 82 and 27th Street in Glenwood Springs, the location of the Glenwood Springs station.

According to the Comprehensive Valley Transportation Plan (2020), which provides a framework for use of transportation funds generated by Pitkin County transit sales and use taxes, upper valley priorities for transit improvements are:

[54] Roaring Fork Transportation Authority. (2014). Travel Patterns Study. Roaring Fork Transportation Authority. https://www.rfta.com/wp-content/uploads/2015/12/2014-RFTA-Travel-Patterns-Report_2015-09-09.pdf
[55] City of Aspen. (2018). Short Range Transit Plan. City of Aspen. https://www.aspen.gov/DocumentCenter/View/2215

- "Bike and Pedestrian Connections to Transit Stops and Brush Creek Park and Ride.
- Airport / AABC Multi-Modal Transit Hub and Transit Circulation Enhancements.
- Multi-Modal Solution to Entrance to Aspen.
- Snowmass Village to Brush Creek Park and Ride Service Commensurate with Highway 82 Corridor Transit Service.
- Electrification of Transit System."[56]

In addition, the Comprehensive Valley Transportation Plan recommended improvements to the SH 82 corridor, including HOV enforcement between Basalt and the Aspen/Pitkin County airport, a dedicated bus lane between the airport and Aspen, added transit service on Brush Creek Road to the Park & Ride and Maroon Creek Road to Highlands.

Regional Transit Oriented Development

Transit Oriented Development is compact, mixed-use urban development that is located within walking distance of a transit facility. The 2015 Regional Transit Oriented Development Assessment report describes existing conditions at five station areas (Glenwood Springs/27th Ave, Carbondale, El Jebel, Basalt, and Snowmass Mall), summarizes stakeholder feedback, analyzes feasibility of future TOD at the five sites, and develops conceptual plans for the Carbondale station, including land use and multimodal access. The five station areas are described below:

1. **Glenwood Springs/27th Ave:** A BRT station with a park-and-ride that accommodates 60 vehicles on the corner of Highway 82 and 27th Street in the southern portion of Glenwood Springs. Pedestrian and bicycle access is provided via the Rio Grande Trail. Pedestrians/bicyclists must cross the highway to access the station using a signaled crosswalk.
   Compared to other stations, the market readiness for development near the Glenwood Springs station is low due to the lack of easily developable adjacent land and competition from other commercial centers in Glenwood Springs.
2. **Carbondale:** A BRT station that is located at the southwest corner of Highway 133 and Village Road, not directly on Highway 82, with a bus circulator that provides service between the station and downtown Carbondale. Pedestrian and bicycle access is provided via the Rio Grande Trail, as well as many sidewalks along major roadways, and planned future bicycle facilities. Pedestrians/bicyclists must cross Highway 133, to access the station using a traffic signal. An upgraded crossing with grade separation is planned, but not yet funded. The Carbondale station area is at a high level of market readiness compared to other stations, given the property owners' interest in future development. Moreover, Carbondale has developed a strong local tourism base, a vibrant arts community, and a diversified and growing manufacturing sector. The Carbondale Economic Development and Community Sustainability Plan projected a need for over 500,000 square feet of commercial uses by 2023, and community feedback

[56] Pitkin County. (2020). Comprehensive Valley Transportation Plan. Pitkin County. https://www.pitkincounty.com/DocumentCenter/View/26132/Comprehensive-Valley-Transportation-Plan-July-2020

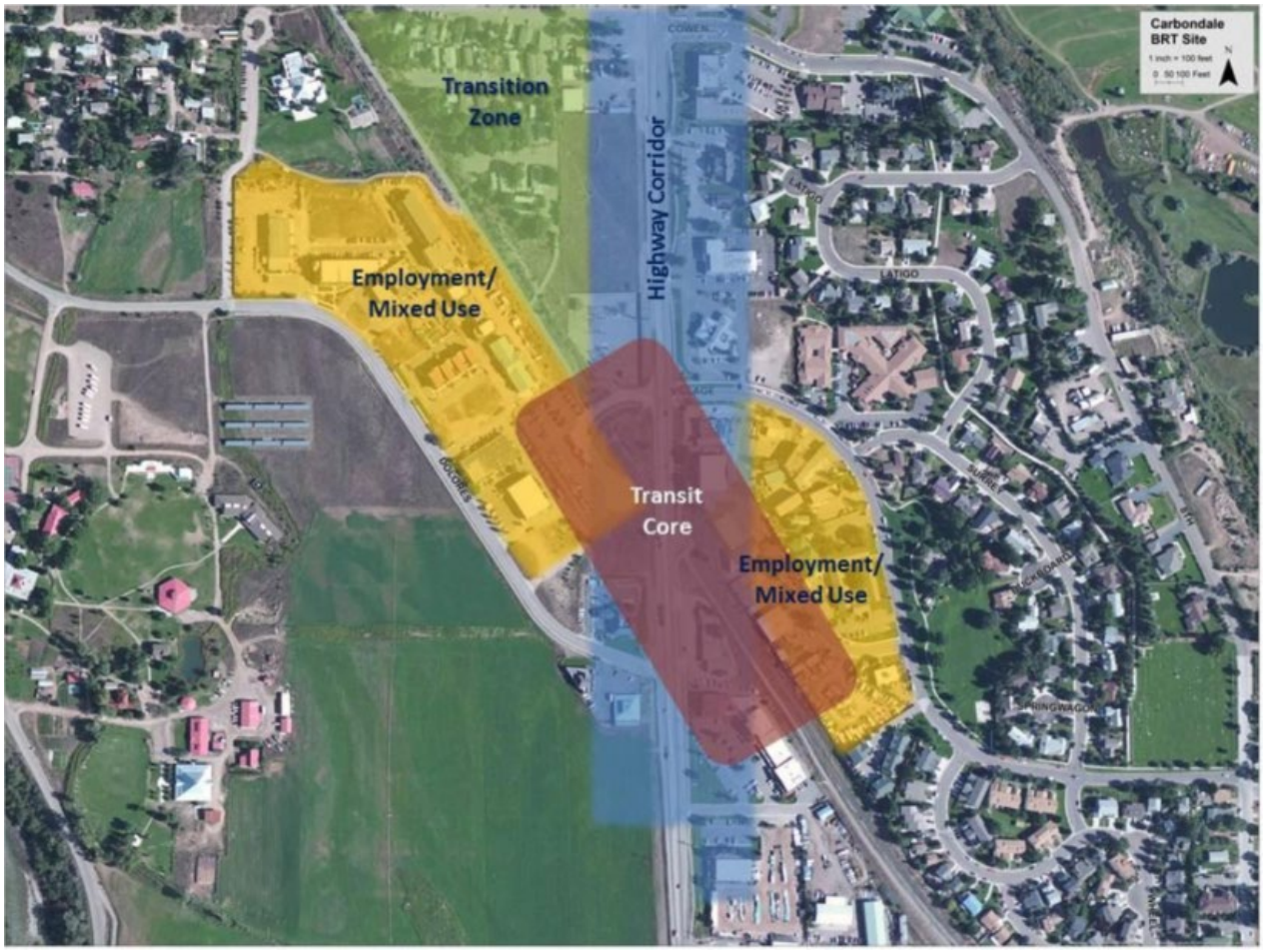
indicates a strong interest in planning and development of a conference center, hotel, health care facility, and senior housing.[57]

3. **El Jebel:** A BRT station with a park-and-ride that accommodates 80 vehicles on the corner of Highway 82 and El Jebel Road in El Jebel. Pedestrian and bicycle access is provided via the Rio Grande Trail, and a trail network north of Highway 82. Pedestrians/bicyclists do not need to cross the highway to access the station because there is a highway underpass west of El Jebel Road crossing Highway 82.
   Compared to other stations, the market readiness for development near the El Jebel station is low due to the lack of easily developable adjacent land, the location of the Urban Growth Boundary within the station area, and the limited capacity of the intersection between Highway 82 and El Jebel Road.
4. **Basalt:** A BRT station at corner of Highway 82 and Basalt Avenue with two BRT stops and a park-and-ride that accommodates 93 vehicles on the south side of Highway 82. Pedestrian/bicycle access is limited because existing trails fall short of reaching the station and there are sidewalk gaps on streets. However, a planned underpass will provide pedestrian/bicycle access across Highway 82 north of Basalt Avenue.
   The Basalt station area is at a high level of market readiness compared to other stations, given interest in development and property consolidation on the part of industrial and commercial property owners. However, one challenge for future development in the station area is that it should not detract from the downtown and must be compatible with the existing land uses to help connect the north and south parts of the town.
5. **Snowmass Mall:** A transit station in Snowmass Village served by a free shuttle operated by the local transportation department, which has a ridership of up to 7,000 passengers per day during peak season. The station is also near the mountain gondola routes southeast of the station. Pedestrian and bicycle access is provided via a network of dedicated bicycle paths that connect directly from Brush Creek trail to the station.
   The Snowmass station area is at a low level of market readiness compared to other stations because of the high cost of redevelopment in this resort area and the limited transportation capacity of the road and mobility networks.

The plan describes the Carbondale BRT Station framework, which envisions a transit core surrounded by commercial areas and employment centers, mixed use development, and a transition zone, as shown in **Figure A43**.

[57] RFTA. (2015). Regional TOD Assessment. RFTA. https://pitkincounty.com/DocumentCenter/View/3121/RFTA-Regional-TOD-Assessment-2014?bidId=

Figure A43: Carbondale BRT Station Area Framework



Source: RFTA Regional TOD Assessment, 2015

The plan includes enhanced trail connections linking neighborhoods to the transit core, connections between the Buggy and Rio Grande Trail, a transit gateway art project, and public space including shade structures, bicycle stations, and wayfinding.

Climate Action Plan

The City of Aspen's Climate Action Plan (CAP) establishes the goal of achieving citywide reductions in greenhouse gas emissions of 80% relative to 2004 levels by 2050. For the transportation sector in particular, relative to business-as-usual emissions, the plan's goal is to reduce emissions associated with vehicles by 2% in 2050.

The CAP identifies objectives and actions that can reduce greenhouse gas emissions associated with vehicles and parking. The plan recommends the following specific actions to promote multi-modal transportation options, reduce single-occupancy vehicle trips, more efficiently manage existing parking resources, and promote EVs:

- "Objective: Reduce VMT by Promoting Alternatives to Single Occupancy Vehicles
    - Actions:
    - Collaborate with employers to subsidize transit and mobility options for employees.

- Objective: Enhance First and Last Mile Connectivity to Transit.
    - Actions:
    - Establish and expand feeder transit network to increase access to primary transit stops (i.e. circulators, mobility as a service).
    - Expand bike and walk options between population and work centers to primary transit stops.
    - Support and expand mobility options for the first and last mile and/or full trips.
- Objective: Promote the adoption of alternative fuel vehicles for individuals and fleets.
- Objective: Redesign urban form and population density to reduce vehicle use.
    - Action:
    - Further develop bicycle infrastructure .
- Objective: Promote New Mobility Technologies and Business Models.
    - Action:
    - Support increased and targeted service during peak times on transit routes.
- Objective: Increase the cost of driving in certain places.
    - Actions:
    - Use parking policies and prices to disincentivize single-occupancy vehicle travel.
    - Support and research regional road pricing (i.e. congestion fees, tolls, dynamic pricing).
- Objective: Support relevant federal and state policies through active legislative and regulatory engagement.
    - Through continued engagement with community members, elected officials and partner organizations, Aspen will advance transportation and clean fuels policy".[58]

The City's transportation partners who will help implement the goals of the plan include:

- Clean Energy Economy for the Region
- Transportation Department
- Utilities Department
- Aspen/Pitkin County Airport
- Aspen Skiing Company
- Roaring Fork Transportation Authority
- Aspen Chamber Resort Association
- Roaring Fork Transportation Authority
- Colorado Communities for Climate Action
- The Mountain Pact

Aspen Affordable Housing Strategic Plan

The Aspen Affordable Housing Strategic Plan is an action-oriented planning document that outlines goals and objectives for support and implementation of affordable housing projects in the next 5 years. The plan is aligned

[58] City of Aspen. (2020). Aspen Climate Action Plan. City of Aspen. https://www.aspen.gov/DocumentCenter/View/4506/Aspens-Climate-Action-Plan-

with the Housing Vision statement: "We believe that a strong and diverse year-round community and a viable and healthy local workforce are fundamental cornerstones for the sustainability of the Aspen Area community."[59]

Existing policies and programs include:

- Aspen Area Community Plan & Land Use Code
    - The local land use code encourages and requires a certain amount of affordable housing development within the urban growth boundary.
- The Affordable Housing Certificates Program
    - This program, established in 2010, encourages development of affordable housing by providing credits for affordable housing units that are built. These credits can be sold to other developers to fulfill development requirements. The program is for new projects, conversions of market-based housing to deed-restricted, and historic properties.

The plan establishes the goal of 500 new affordable housing units, to be achieved through a combination of the following actions which leverage existing and new construction of housing stock:

- Replace expiring deed restrictions with permanent deed restrictions.
- Complete construction of the Lumberyard Project and completing the Burlingame Phase 3 project.
- Form partnerships with affordable housing developers.
- Develop financial resources for construction, expiring deed restrictions & land banking.
- Develop certificates of Affordable Housing Program Enhancements.
- Incentivize voluntary rightsizing of housing.

Transit Oriented Affordable Housing

The concept of transit-oriented affordable housing (TOAH) has long been a community and economic development strategy for the Upper Roaring Fork Valley. In recent decades, over 3,000 below-market rate units have been constructed to retain a sense of neighborhoods, house local workers, and reduce commute distances on Highway 82. Over 50% of Aspen's population lives in deed-restricted below market rate housing. However, over 60% of the City's workers commute from other communities, contributing to worsening traffic congestion. Rapid economic growth has spurred job creation at a rate that exceeds the rate of affordable housing construction, making commuting the only viable option for many employees in Aspen. [60]

To address this growing challenge, RFTA has designed park and ride facilities along Highway 82 in communities with affordable housing developments, including Basalt, El Jebel, and Carbondale. As communities in the Upper Valley are becoming built-out, finding sites for new housing development has been a growing challenge, especially because new housing provokes resistance from residents and increases burden on schools, hospitals, and municipal services. The goal of building more housing has come into direct conflict with the goal of preserving

[59] City of Aspen. (2022). Affordable Housing Strategic Plan. https://aspen.gov/DocumentCenter/View/8923/COA-Housing-StrategicPlan-May2022-Spread-LowRes#:~:text=HOUSING%20STRATEGIC%20PLAN-,WHAT%20IS%20THE%20HOUSING%20STRATEGIC%20PLAN%20GOAL%3F,within%20the%20next%20five%20years.
[60] Aspen Institute. (2017). Upper Valley Mobility Report. Task force on Transportation and Mobility. https://www.aspeninstitute.org/wp-content/uploads/2017/09/Community-Forum-Mobility-Report_Final.pdf

the region's small town character, resulting in development that is distant from major job centers, which puts pressure on transportation systems.

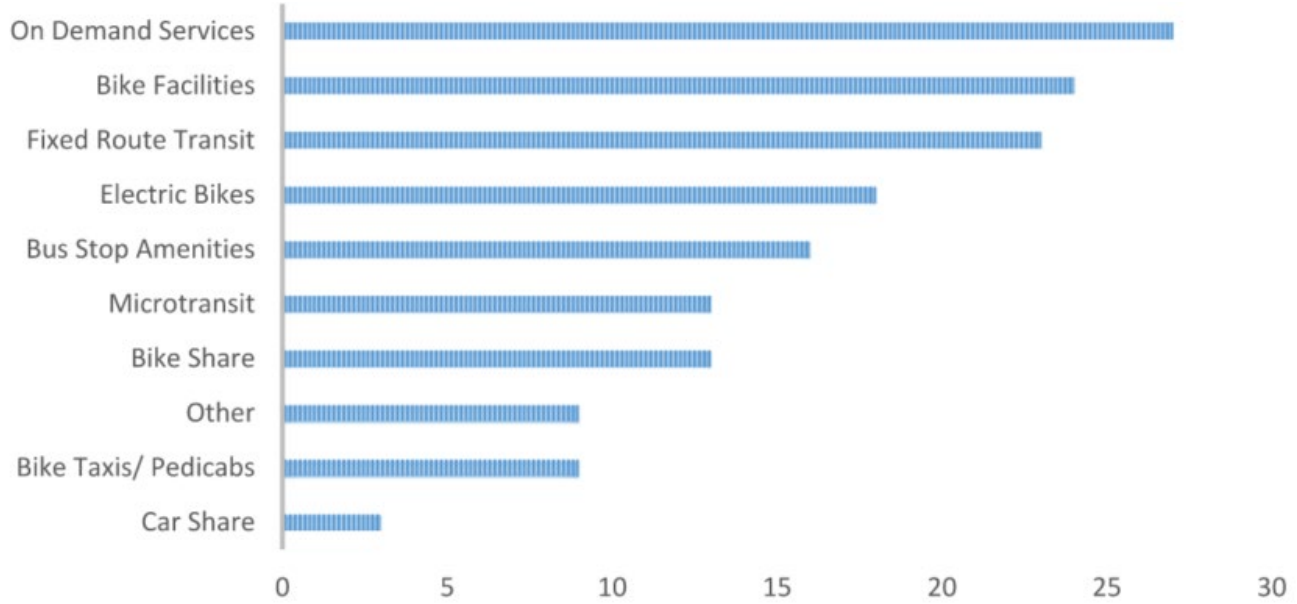
Other challenges include the cost of building affordable housing, (which requires subsidies, private sector investment, and tax incentives) and barriers to development such as local zoning codes and compliance with state mandated requirements.[61]

Summary of Community Feedback

City of Aspen Short Range Transit Plan

In August 2017, public outreach efforts for the Short-Range Transit Plan included an open house with interactive engagement activities (including a polling activity), 14 focus group meetings with various stakeholders, online and in-person surveys, and an online mapping activity.

Figure A44. Mobility Polling Activity Results



Source: Short Range Transit Plan, 2018

The open house polling activity results showed that the most popular strategies for improving Aspen's multimodal network were on-demand services (27% of participants), followed by bicycle facilities (24% of participants) and fixed-route transit services (23% of participants).

61

Other strategies that received support were carpool permits that give preferential parking access to carpool vehicles, dial-a-ride services (particularly in Red Mountain), and a transition to electric buses for fixed-route transit.

In response to the question, "What are your primary barriers to using modes other than driving?," the most common answers included the themes of needing to transport goods or family members, the lack of connected/safe bike and pedestrian infrastructure, and the convenience and efficiency of driving a car.

Future Travel Patterns

According to the 2014 RFTA Travel Patterns Study, both the resident population and number of jobs in the region are forecasted to grow at higher rates than the state average through 2035 and at higher rates than have been seen in the region in the past 10 years (population growth average of 1.8%/year and employment growth average of 1.6%/year within the region). According to the Colorado State Demography Office, the region's population is forecasted to grow at an average rate of 2.1% annually in Pitkin County, 2.6% annually in Eagle County and 3.0% annually in Garfield County through 2025. Population and employment growth are projected to be highest in Garfield County, where 66% percent of the region's jobs and 71% of the region's population will live in 2035. Employment in Pitkin County is forecasted to continue growing rapidly, although the ratio of jobs to residents is forecasted to decrease from 1.18 in 2013 to 1.13 by 2035.[62]

First and Last Mile Study

In 2020-2021, RFTA conducted outreach using a variety of in-person and virtual engagement activities, including Technical Advisory Committee Meetings, focus groups with community organizations and active transportation stakeholders, in-person tabling events, a virtual open house, a web map, and online survey. At in-person events, nearly half (44%) of participants engaged identified as Latino. Community feedback, focusing on equity, communication, and active transportation safety, is summarized below:

- "There were concerns raised that there is inequity in infrastructure and transit investment throughout the Roaring Fork Valley.
- Members of the Latino community feel that there should be more communication and targeted campaigns.
- to share information and changes in transit service or payment with this community since they represent a large portion of RFTA's ridership.
- Community members would like to see bikeshare expanded to residential neighborhoods and town centers.
- Community members want more designated, and comfortable bike infrastructure and more secure bike parking. A lack of secure bike parking was often cited as a barrier to transit access.
- Community members want to see expansion of local feeder buses to improve access to regional transit services.
- There is a need for infrastructure changes to make it safer and more comfortable for people walking and bicycling to access transit.

[62] Roaring Fork Transportation Authority. (2014). Travel Patterns Study. Roaring Fork Transportation Authority. https://www.rfta.com/wp-content/uploads/2015/12/2014-RFTA-Travel-Patterns-Report_2015-09-09.pdf

- The importance of increasing the use of technology to aid with transit and other mobility options.
- The need for improvements to transit access, information, and equity, specifically with regards to the
- Spanish-speaking community within the RFTA service area.
- Most people walk to access transit stops and stations."[63]

RFTA asked community members how they can improve services to enhance riders' experience using transit. In response to the question "What can RFTA do to make your connection to transit easier?," the most popular suggestions were to provide bikeshare near transit stations, add secure bicycle parking, and provide safer crosswalks. In response to the question "What can RFTA do to make your connection from transit to your next destination easier?," the most popular responses were provide safer crosswalks and improve bicycle networks.

[63] RFTA. (2022). First and Last Mile Study. RFTA. https://www.rfta.com/wp-content/uploads/2022/07/rfta-flmm-and-bike-share_v6.pdf

23-008902.00

10375 Park Meadows Dr.
Suite 425,
Lone Tree, CO 80124

303.694.6622
walkerconsultants.com

DATE:	December 28, 2023
TO:	
COMPANY:	City of Aspen
ADDRESS:	Aspen City Hall 427 Rio Grande Place
CITY/STATE:	Aspen, CO 81611
COPY TO:	
FROM:	Mallory Baker and Renata Langis
PROJECT NAME:	Comprehensive Transportation and Parking Plan
PROJECT NUMBER:	23-008902.00

The following memorandum summarizes the objectives, results, and key findings from Phase I of community engagement for the Comprehensive Transportation and Parking Plan.

PHASE I ENGAGEMENT: OBJECTIVES AND METHODOLOGY

Community engagement and collaboration for the Comprehensive Transportation and Parking Plan is separated into two distinct phases. The objectives for Phase I—the focus of this memorandum—are as follows:

- Introduce the project to Aspen community members
- Build trust and show our commitment to listening to the community and hearing their perspectives.
- Create a shared vision of success for the project and its outcomes.

Mediums used to achieve these objectives included:

- Project one-page flyer, project website, and newsletter
- One in-person visioning session with City staff (September 22, 2023)
- In-person visioning meetings with stakeholders (December 4, 5, and 6, 2023)
- Online and print survey distributed via City website, e-mail lists, social media, and focus groups

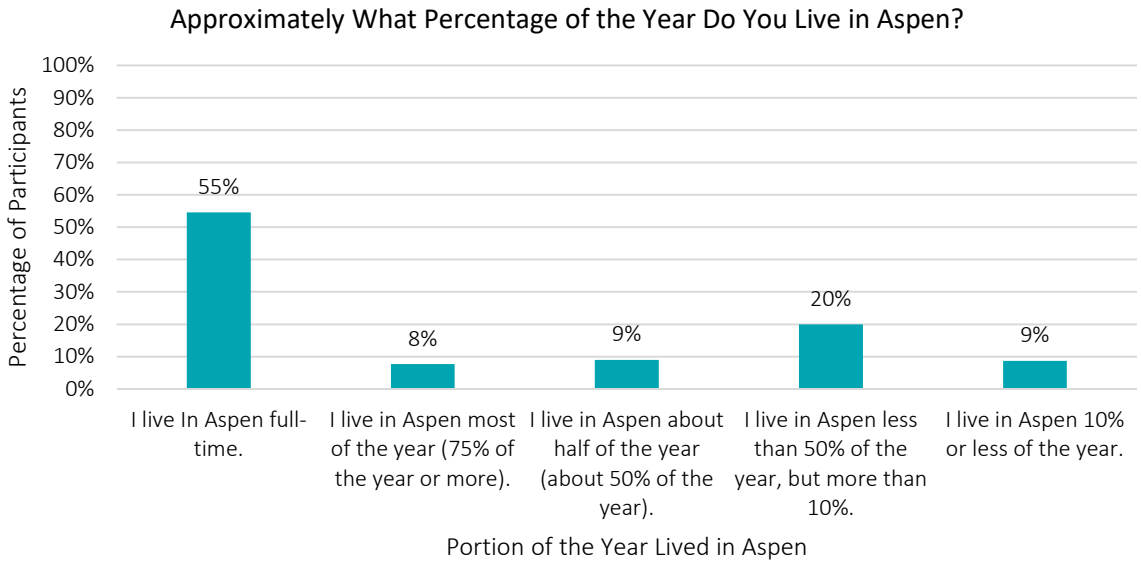
RESULTS

- **Overall Project Awareness:** Project information has been distributed through a variety of digital platforms. The project one-pager flyer is included in **Attachment A.**
- **Visioning Meeting:** City Staff participated in a visioning activity during the project kickoff meeting on September 22, 2023. The meeting minutes are included in **Attachment B.**
- **In-Person Feedback**: Stakeholders participated in in-person focus group meetings. The newsletter article summarizing key themes of stakeholder feedback is included in **Attachment C**.
- **Community Survey and Commuter Survey:** The community survey received 535 unique responses and the commuter survey received 48 unique responses. The survey results are summarized in the following section of this memorandum. Complete responses are provided in **Attachments D** and **E**.

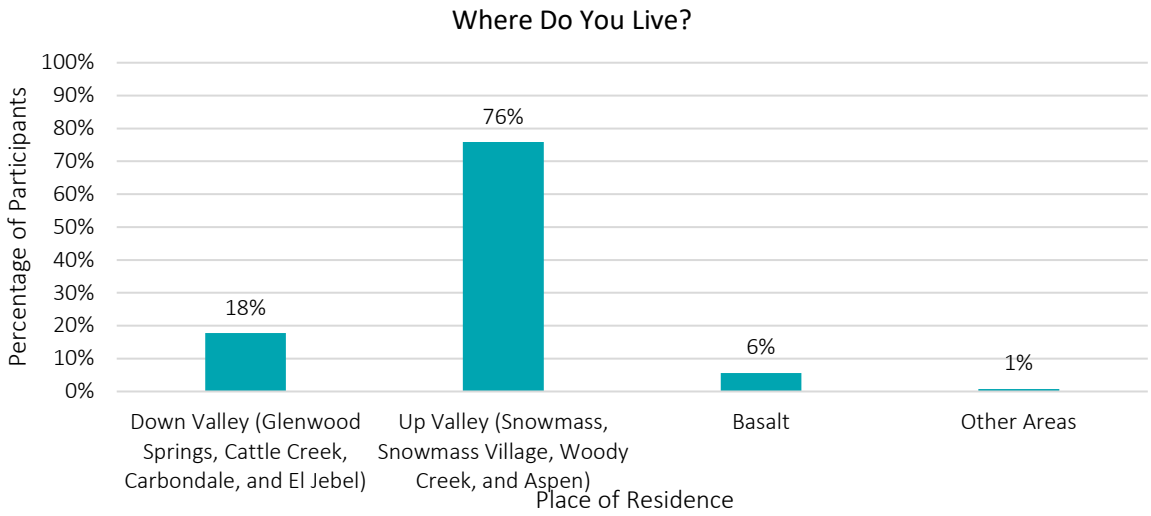
COMMUNITY QUESTIONNAIRE: KEY TAKEAWAYS

The following is a summary of results from the community survey. All responses are provided in **Attachment D.**

- **About half of survey participants who have a residence in Aspen live in the city full-time.** 55% of participants who identify as residents of Aspen reported that they live in Aspen year-round.



- **The overwhelming majority of community survey participants live Up Valley.** 76% of participants reported that they live in the southern portion of Roaring Fork Valley, including communities of Snowmass, Snowmass Village, Woody Creek, and Aspen.



- **The majority of survey participants (57%) reported that they work in Aspen.**

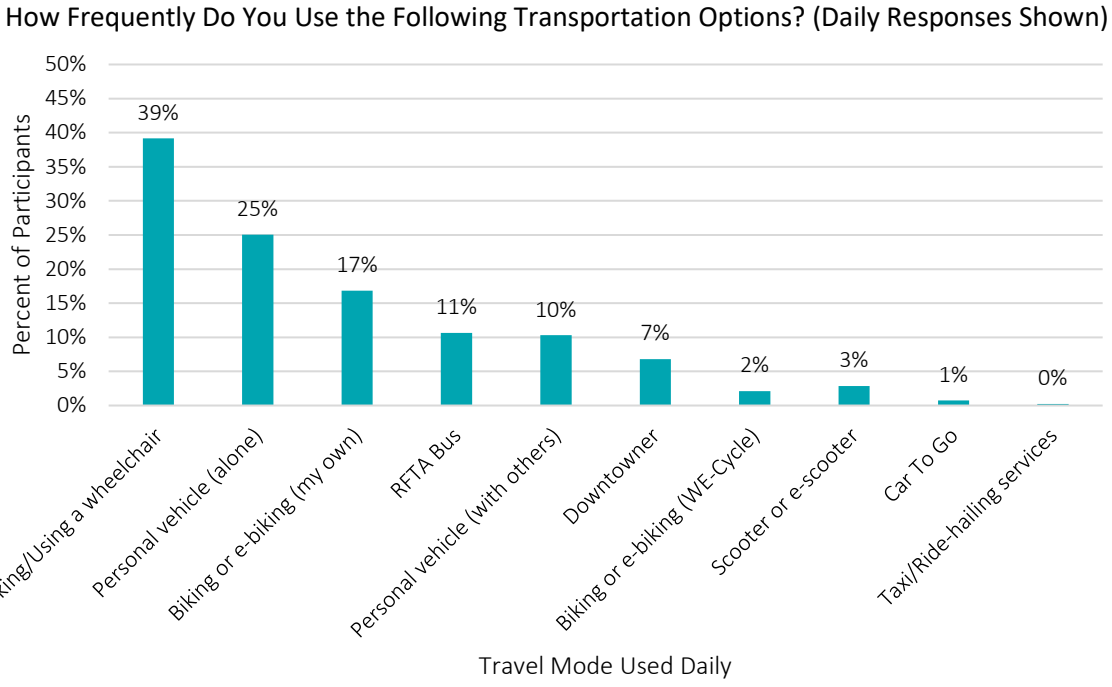
- **When asked about the impact of transit services on travel modes, participants agree that Aspen's Downtowner and local bus services reduce the need to drive.** 70% of participants agreed that the

Downtowner makes it easier to drive less and 69% agreed that local bus services make it easier to drive less.

- **When asked about the impact of personal bikes and Aspen's WE-Cycle bikeshare program on travel modes, the majority of participants agree that personal bicycles reduce the need to drive, but there was no clear consensus regarding the role of the bikeshare program.** 58% of participants agreed that having a personal bike makes it easier to drive less. However, 44% of participants neither agreed nor disagreed that the WE-Cycle program makes it easier to drive less, while 38% agreed that the program does reduce the need to drive.

- **A significant percentage of participants do not work a traditional schedule (5 days per week in the workplace).** 41% of participants work a hybrid schedule or fully remote job and 16% of participants currently do not work, indicating a reduced demand for work trips among survey participants.

- **When asked about travel modes, the modes participants used on a daily basis, in descending order, were walking, driving alone, riding a personal bike, riding the bus, and carpooling.**
  The percentage of participants who reported using these modes daily or almost daily are as follows: 1) Walking (39%), 2) Driving alone (25%), 3) Biking (17%), 4) Riding the Bus (11%), and 5) Carpooling (10%).



- **When it comes to parking management, the highest priority for participants is making it easier to find parking, followed by reducing vehicle congestion.** 32% of participants indicated that most important goal for parking is to make it easier to find parking and 24% of participants indicated that the second highest priority is to reduce vehicle congestion.

- **Regarding mobility options, such RFTA buses, the Downtowner, and WE-Cycle, the highest priority for participants is making it easier to get places, followed by reducing vehicle congestion.** 47% of

participants agreed that most important goal for mobility options is to make it easier to get around. 29% of participants agreed that the second highest priority is to reduce vehicle congestion.

- **Regarding travel choices, the most important factors that influence mode of travel for participants are quickness and convenience.** 28% of participants indicated that they choose the travel mode that will get them to their destination the quickest, and 27% indicated that they choose the travel mode that is the most convenient.

- **Regarding the impact of the transportation sector on climate change, there was not a clear consensus among participants on this topic.** 48% of participants agreed that the transportation sector has an important role to play in addressing climate change, while 28% felt that it was somewhat important and 24% felt that it plays an insignificant role in addressing climate change.

- **Regarding the relative easiness or difficulty of getting to key destinations, the destination that participants are most likely to be able to access with relative ease is shopping/dining areas** (35% of participants indicated that this was a very easy place to get to), while the destination that participants are least likely to access with ease is medical appointments (21% of participants indicated that this was a very easy place to get to)**.**

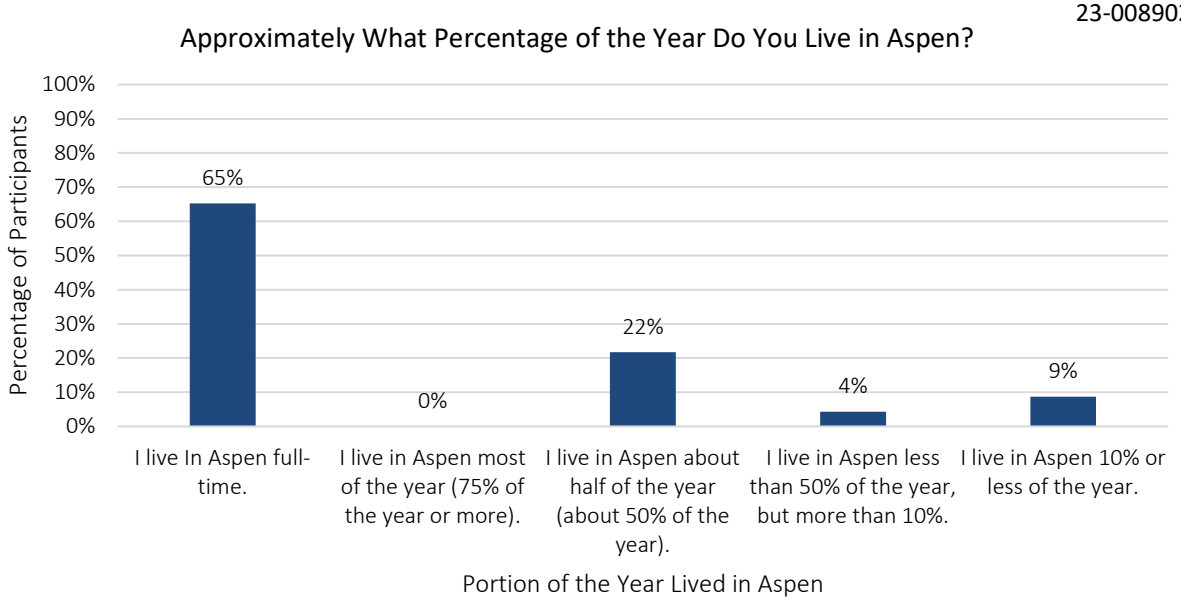
- **When asked about the greatest challenges about getting to their destination, the three top challenges that participants indicated were: 1) Traffic congestion (48% of participants), 2) Inability to find parking nearby (41% of participants), and 3) No transit option that goes to the destination (39% of participants).**

Community survey responses are provided in **Attachment D**.

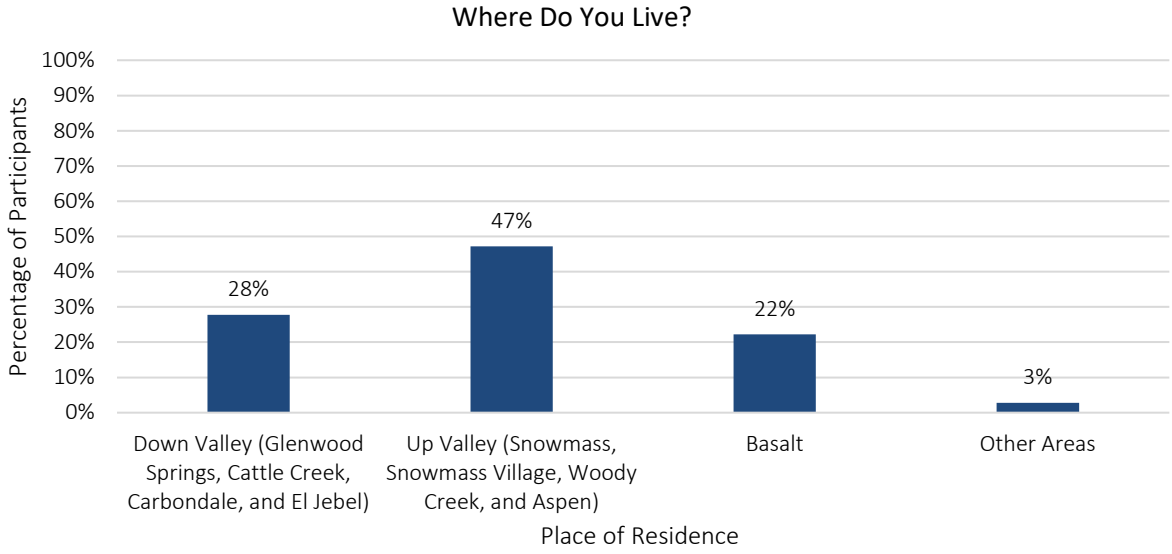
COMMUTER QUESTIONNAIRE: KEY TAKEAWAYS

The following is a summary of results from the commuter survey. All responses are provided in **Attachment E.**

- **The majority of commuter survey participants who identify as Aspen residents live in the city full-time.** 65% of participants who identify as residents of Aspen reported that they live in Aspen year-round.



- **In terms of place of residence, commuter participants were evenly distributed throughout the Roaring Fork Valley.** Roughly half of participants (47%) reported that they live in Up Valley (including communities of Snowmass, Snowmass Village, Woody Creek, and Aspen), and 50% of participants reported that they live in Basalt or Down Valley (including communities of Glenwood Springs, Cattle Creek, Carbondale, and El Jebel).



- **The overwhelming majority of commuter participants work in Aspen.** 92% of survey participants reported that they work in Aspen.

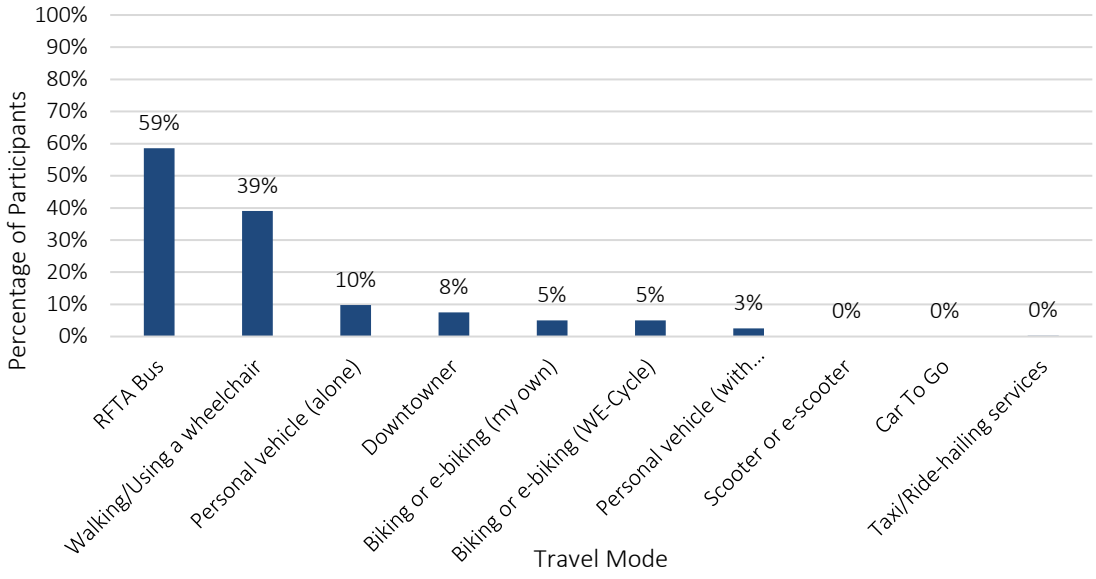
- **When about the impact of transit services on travel modes, commuter participants very strongly agree that Aspen's local bus services reduce the need to drive, but there was no clear consensus on the impact of Downtowner.** 93% of participants agreed that local bus services make it easier to drive less. Regarding the Downtower, 42% agreed that the program makes it easier to drive less, while 49% neither agreed nor disagreed.

- **When asked about the impact of personal bikes on travel modes, the majority of commuter participants agreed that they reduce the need to drive, but there was no clear consensus regarding the role of the bikeshare program.** 54% of participants agreed that a personal bike does reduce the need to drive. However, 46% of participants neither agreed nor disagreed that the WE-Cycle program makes it easier to drive less, while 46% agreed that the program does reduce the need to drive.

- **The majority of commuter participants work a traditional in-person schedule (5 days per week at the workplace).** 67% of participants work in-person at least 5 days per week, whereas 28% work a hybrid schedule with 1-4 days per week at the workplace.

- **When asked about travel modes, the modes commuter participants use on a daily basis, in descending order, were riding the bus, walking, driving alone, riding a personal bike, and carpooling.** The percentage of participants who use these modes daily or almost daily are as follows: 1) Riding the Bus (59%), 2) Walking (39%), 3) Driving alone (10%), 4) Riding Downtowner (8%), and 5) Riding a bike (5%).

How Frequently Do You Use the Following Transportation Options? (Daily Responses Shown)



- **When it comes to parking management, the highest priority for commuter participants is reducing vehicle congestion, followed by making walking and biking more pleasant.** 38% of participants indicated that the most important goal for parking is to reduce vehicle congestion and 30% of participants prioritized making it easier and more pleasant to walk and bike.

- **Regarding mobility options, such RFTA buses, the Downtowner, and WE-Cycle, the highest priority for commuter participants is making it easier to get places, followed by reducing emissions.** 34% of participants indicated that most important goal for mobility options is to make it easier to get around and 29% of participants prioritized reducing vehicle emissions.

- **Regarding travel choices, the most important factors that influence mode of travel for commuter**

participants are quickness and service quality/reliability. 44% of participants indicated that they choose the travel mode that will get them to their destination the quickest, and 24% indicated that they choose travel modes based on service quality and reliability.

- **Regarding the impact of the transportation sector on climate change, commuter participants strongly agreed that transportation is one of the most important sectors that can help address climate change.** A total of 73% of participants agreed that the transportation sector has an important role to play in addressing climate change; 39% of which indicated that the transportation sector is the most important in addressing climate change.

- **Regarding the relative easiness or difficulty of getting to key destinations, the destination that commuter participants are most likely to be able to access with relative ease is grocery stores** (38% of participants indicated that this was a very easy place to get to), while the destination that participants are least likely to access with ease is medical appointments (21% of participants indicated that this was a very easy place to get to)**.**

- **When asked about the greatest challenges about getting to their destination, the three top challenges that commuter participants indicated were 1) Traffic congestion (68% of participants), 2) No transit option that goes to the destination (34% of participants), and 3) The wait for public transportation is too long (24% of participants).**

Commuter survey responses are provided in **Attachment E**.

Demographics of Survey Participants

- For the community survey, participants were more likely to live Up Valley (76% of participants), were more likely to be White (82% of participants), were more likely to be over the age of 45 (57% of participants), and more likely to earn an annual income above the median household income in Aspen (72% of participants). About half of community survey participants who have a residence in Aspen indicated that they live in Aspen full-time (52%).

- For the commuter survey, participants were more likely to be full-time residents of Aspen (64% of participants who have an Aspen residence), were more likely to be Hispanic compared with community survey participants (17% of participants), were more likely to be under the age of 45 (63% of participants), were more likely to work in lodging/food service (29% of participants), and more likely to earn an annual income below the median household income in Aspen (79% of participants). About 63% of participants indicated that they faced housing challenges (spent 3-6 months looking for housing within their budget).

ATTACHMENTS

Attachment A: Project One-Page Flyer
Attachment B: Visioning Meeting Minutes
Attachment C: Summary of Feedback from Focus Group Meetings
Attachment D: Community Survey Responses
Attachment E: Commuter Survey Responses

CITY OF ASPEN

Parking and Transportation that **GETS US THERE.**

COMMUNITY OPEN HOUSE

- To A Healthier Aspen
- To A More Sustainable Aspen
- To A More Connected Aspen
- To A More Equitable Aspen
- To A Better Aspen

The City of Aspen and its partners manage a transportation and parking system that helps us—Aspen's residents, workforce, and visitors—get where we need to go.

Learn more about our transportation and parking options and help us find ways to improve and innovate at our **Aspen Gets Us There** Community Open House!

DAY:

Wednesday
February 7th, 2024

TIME:

5 PM -
7 PM

WHERE:

Pearl Pass Conference Room
(3rd Floor), Aspen City Hall
427 Rio Grande Pl.

Share your Voice!

Don't have time to join in person? Visit our **project page** on the Aspen Community Voice website to share your ideas and stay up to date on the project.

Aspen GETS US THERE.

www.aspencommunityvoice.com/aspen-gets-us-there | getsusthere@aspen.gov

Attachment B

CITY OF ASPEN COMPREHENSIVE TRANSPORTATION AND PARKING PLAN

PROJECT KICKOFF MEETING—AGENDA

SEPTEMBER 22, 2023, 9:00—10:30 AM

Meeting Attendees:

Jenn Ooton, Senior Project Manager

Lynn Rumbaugh, Transportation Planner

Michael Tunte, Landscape Architect and Construction Manager

Matt Kuhn, Parks and Open Space Director

Carly McGowan, Project Manager

Ben Anderson, Community Development

Lorena Vargas, Engineering

Sandy Doebler, Mobility Administrator

Emmy Garrigus, Lodging and Commercial Core Program Manager

Blake Fitch, Parking Operations Manager

Erin Loughlin, Field Operations Manager, Water

Nancy Lesley, Director of Events and Marketing

Willima Porter, Communications Director

Mike Tracey, Sergeant, Aspen Police Department

Tyler Christoff, Director of Public Works

Pete Rice, Director, Transportation and Parking

Courtney DeVito, Human Resources Director

Ashlyn Gerbaz, Communications Coordinator

Asal Vojdani, Procurement Officer

Aaron Laughlan, Utilities

Jessica Garrow, Consultant Team

Alison Bourquin, Consultant Team

Omar Peters, Consultant Team

Trung Vo, Consultant Team

Mallory Baker, Consultant Team

Drew Heckathorn, Consultant Team

Renata Langis, Consultant Team

Meeting Objectives:

1. Introductions and getting to know each other.
2. Introduce the project scope, schedule, and core objectives.
3. Discuss community engagement and collaboration plan.
4. Build a big, broad, and visionary view of success for the project and draw out concerns from a wide range of City staff members.

Meeting Summary

Meeting began with introductions from City staff and consultant teams, followed by a brief presentation about project objectives, community engagement, scope, and schedule by Mallory Baker.
Following the presentation, Mallory Baker facilitated a visioning exercise called a Success/Fear activity. Common themes in the discussion included real-time bus information, construction vehicles, equitable parking prices, affordable off-street parking options for employees, and the importance of storytelling in communications.

Success/Fear Statement Activity

The remainder of the meeting was spent on a "Success/Fear Statement" group exercise where participants responded to the following questions:

- When it comes to transportation systems in Aspen, what does **success** look like to you?
- What **concerns and fears** do you have as we begin this project?
- What is an outcome that **does not look like success** in this project?

- How do you think we could **harness** your concerns and fears?

Following is a list of comments submitted in-person and online through Mural for each question, followed by a discussion of each topic.

What Does A Successful Comprehensive Transportation and Parking Plan Look Like? (In-person comments in purple, Mural comments in blue)

- More frequent and spacious buses (local and valley).
- More community and visitor knowledge of parking and transit options (in real time).
- More transit.
- More local bus routes.
- Services beyond to-from.
- ADA compliance and accessibility.
- Resources available in multiple languages.
- Must look outside of Aspen and include commuters.
- Take into consideration all commuters (work, play, live).
- Do not forget about the workers. They need options to commute.
- Aligns with land use code to coordinate expectations about parking and role of transit.
- Includes the massive amount of down-valley construction vehicles.
- Encourage/reward carpooling.
- Acknowledges relationship between affordable housing and transportation parking.
- Less vehicle congestion/traffic.
- Decrease congestion for single-occupancy vehicles.
- Something that truly balances aspiration and community need/reality.
- Creates champions for the outcomes of the plan within key stakeholder groups.
- Changes values that have set expectations that on-street parking is private parking.
- More public parking at fair prices for commuters.
- Higher parking garage prices.
- Provides equitable options for mobility while maintaining vitality to the community.
- Equity in solutions - many workers cannot afford parking dynamic pricing.
- Inclusion of bike infrastructure in planning.
- Expanded walking malls in the core.

- Leaving "room" for future tech (ex. EV, autonomous vehicles).
- Technology solution showing open parking spots, commercial and neighborhood (and cost?).
- Using technology inherently to drive behavior change.
- User friendly technology.
- Pkg/trans. To have live updates on GIS (detours, permits, etc.).
- Incentives so that part-time residents use and understand options to not use their SUVs.
- Use of CMP (Construction Mitigation Plan) to change commuting behaviors of tradespersons.
- A new bridge and entrance to Aspen.
- Better experience for staff and customers. Tech to help in enforcement Tech to help customers more rapidly find parking.
- It includes bike access, speeds, parking etc.
- Pete takes all the heat and the rest of us cruise.
- Thinking broadly about options for commuters and residents.
- Fewer cars, less traffic, more folks walking, on bikes, and using transit.
- A community (from up and down valley) that has been thoughtfully engaged throughout the process.

Discussion on Vision of Success

Participant: Data analysis is critical to planning and implementation

Participant: If we had a comparison between the transit travel time compared with driving it would be helpful for making daily travel decisions.

It Might Surprise You, but Success Does Not Look Like…(In-person comments in purple, Mural comments in blue)

- Raising hourly parking rates.
- Parking for everyone at all times.
- Free for all for parking and single occupancy vehicles.
- On size fits all.
- Catering to "loud" voices in the community.
- An old bridge.
- Only focusing on one part of the overall transit and parking systems.
- A focus on parking prices. It needs to be broader.
- Sweeping changes to residential parking permits.

Discussion on What Success Doesn't Look Like

Participant: Higher parking prices. Many workers cannot afford the current price of parking.

Participant: They are wealthy enough that they just don't care about the barriers to mobility for other user groups. I'm a little concerned about creating a bias in which only some people can afford parking.

Mallory: People who are coming into Aspen should have an affordable parking option. Parking pricing can be really difficult. When we talk about dynamic pricing, are we referring to real-time pricing?

Participant: Yes.

Mallory Baker: The common perception about Aspen is that people in Aspen can afford higher parking prices. But that's not necessarily true for everyone. There are many people just trying to get by while living and working in a beautiful place.

A Fear About Our Efforts to Change Transportation Systems is….(In-person comments in purple, Mural comments in blue)

- Only focuses on parking rates.
- Adequate considerations for emergency response evacuation.
- Negative impacts on local businesses and therefore lack of buy-in from them.
- Long drive times will impact hiring. People will work other places.
- Transit driver shortage impacts transit service.
- Generational differences. Change.
- Minority voices
- "I want others to change." Not 'their' reality.
- Council "poke holes" in data.
- Council being afraid to make the "hard decisions."
- Decision makers focus only on "inner" circle benefits and no equity. Congestion Tolling.
- Aggression towards staff
- RFTA participation and staffing
- Staffing available to provide these services.
- RFTA employee retention.
- Business community fear to address parking.
- Loud voices driving decisions.
- Good ideas are killed by ineffective communication and consensus-building.
- Concerns from neighborhoods will drive solutions.

- The community won't be listened to.
- People who are affected by council decisions.
- We allow minority voices and vested interests to invalidate community interest.
- Squeaky wheel will overpower D.V. voices.
- Parking and change is hard. Do we have the courage to make changes?
- Change is sometimes hard for people to accept. The public not having acceptance to change.
- Understanding how construction-related traffic may or may not be changed through different modes of public transit (still going to have work trucks coming up to private residences even if there are other options for transit).
- Decisions could be made that respond to the loud voices, not the broader consensus.
- The business community in particular is upset by changes made in the Living Lab. I fear they will be hesitant if not downright opposed to changes to parking in the core.

Discussion on Fears

Participant: In a regional context, other jurisdictions are pressuring us to start pulling dynamic pricing in the downtown core. They don't understand the equity concerns. That's my biggest fear.

Participant: There are a large number of vehicles that come into Aspen that are underrepresented, Spanish-speaking workers. Their voices are often not being considered in the planning process.

Participant: Down valley doesn't really count as a community if their concerns are not being taken into consideration.

Participant: As a community communications director, I've received feedback that there are a few minority voices that dominate the discussion.

Participant: When we do make changes that are in line with the greater good of the public, if there are a few strong voices in opposition, then we have to change it back.

Mallory Baker: That addresses a comment on Mural, that we have the courage to make changes, especially the Council, who will be responsible for making decisions. Hopefully we can help Council have the courage to make the difficult decisions that they need to in order to address the priority of equity.

Participant: Council may cave in at the end, and we have seen that. Staff must continue to remind Council of the importance of priorities.

Participant: However, the main issue is political, because the people who are disproportionately affected often do not vote on these issues or have a voice in the process.

Mallory Baker: The relationship between the workforce and the business community is clear. The constituents, including business owners, can use their votes to support leadership that is in line with their transportation policies that address equity of commuting options for employees.

Participant: My fear is the business community in Aspen, and I put it in the mural. I fear that they will be downright opposed to any changes in the parking pricing. Pricing is not important to them, it's about the quantity and the location of parking.

Participant: A few business owners in Aspen are pushing the IMS (dynamic pricing).

Mallory Baker: The thing about parking is that community members don't always understand the relationship between location and pricing of parking, which are inherently linked.

Participant: Another fear is that the numerical data is often valued more than qualitative feedback, due to a focus on meeting Key Performance Indicators (KPIs).

We Can Harness These Fears By…

- Getting voices that work or use services.
- Considering workforce implications (housing, quality of life, etc.).
- Hearing from all transportation/parking customers including non-residents, down-valley commuters, etc.
- Need to work with IMS/Institute.
- Be very clear about outcomes and process early on.
- Public awareness: change perceptions of parking department being "bad guy" with knowledge on benefits of the department.
- Continual engagement with all of our big sectors, businesses really giving them a seat.
- Building advocates and champions early on in the process.
- Show the down valley relationship ("data" and "the why").
- Define the "invisible" user.
- FG with contractors.
- FG bus ride with councils.
- Giving a strong voice to the majority, not the loudest.
- Doing LOTS of engagement with broad sectors of the community.
- Ensure the "Sphere of Influence" is clear and that the community understands how decisions will be made with their feedback.
- A lot of public engagement to help them understand what these technologies can do for them.
- Explaining the "why" and how changes fit into the City's broader goals.

Discussion on Ways We Can Harness Fears

Participant: Storytelling can help communicate the demographic and transportation trends that have changed.

Mallory Baker: Data can be a vehicle for telling a story of who the primary users are, helping to personalize the transportation issues, making them more relatable to the public.

Mallory Baker: As we think about transportation options, wealthy folks frequently support climate goals as long as they do not have to make any changes in their lifestyle, such as driving less.

Participant: Council doesn't really experience commuting because they all live in the downtown core. So, taking the bus is not part of their reality and they cannot conceive of the challenges, nor do they engage with the people who do use transit.

Participant: I've lived here for two decades, and I agree that we need to collect data for a robust analysis but we also need to collect people's stories to understand the day-to-day experiences of residents and employees.

Mallory Baker: There are a few loud voices that don't ever touch the transportation system, yet they have strong opinions about it. That's one of the major concerns as we embark on this project.

Mallory Baker: Those few voices are not utilitarian and can be very powerful and potent, so we want to be able to avoid being derailed at the end of the project.

Participant: Little by little means that you're fighting for every little piece. How Denver does it is that the big plan is approved, and then you can work on the details of implementation. Here in Aspen, I'm going to council every two weeks for approval on each step of the process.

Mallory Baker: If we can take out the Council approval on every detail, and go with a storytelling and data driven approach to promote a higher level of decision-making, that would be beneficial to workflow and support project goals.

Next Steps:

If there are action steps involving specific departments, we will be in touch with you during the project planning process.

Meeting concluded at 10:30 MST.

Attachments:

Meeting PowerPoint Presentation

This document lists all comments provided during a Success/Fear Statement Exercise held as part of a series of Focus Group Visioning Meetings for the Aspen Gets Us There project. Meetings were held on December 4th, 5th, and 6th, 2023, and included the following groups:

- Aspen Chamber Resort Association (ACRA)
- Aspen Institute
- Bike Shops/Representatives
- Commercial Core and Lodging Commission (CCLC)
- Elected Officials Transportation Committee (EOTC)
- Lodging Companies/Representatives
- Next Generation Advisory Commission
- Private Transportation Providers (e.g., taxis, limos and rickshaws)
- Trip Reduction Grant Recipients/Employers

The Success/Fear Statement exercise constituted responses to the following prompts, which were answered through written post-it responses (both in-person and digitally via Mural, an online markerboard platform):

- A successful comprehensive transportation and parking plan looks like…
- It might surprise you, but to me, a successful plan does not look like…
- A fear I have about our efforts to change parking and transportation is…
- I think we can harness these fears by…

Prior to the exercise, a brief presentation was shared to provide an overview of the project history and context, scope, schedule and methodology, and the role and ongoing commitment of the Focus Group members. A copy of that presentation is provided as an attachment.

A successful comprehensive transportation and parking plan looks like…

- Fewer cars idling downtown Aspen
- No more traffic jams on Hwy 82
- Easy mobility in and out of area
- "Decrease SOV
- Decrease # vehicles in town
- Equity/available to all, no barrier
- Community commitment and buy-in
- Commuting time expectations
- New CC bridge
- E-bike control speed
- Communities will not be 100% behind anything"
- Enough housing to have enough drivers for RFTA

Focus Group Visioning Meetings: Success/Fear Statement Comments

- Less carbon pollution
- The IMS has the elements of success - reduction of carbon emissions and social equity
- Congestion reduction
- Airport is part of the solution
- Success is a larger view (10,000)
- Success is a combination of things: Remote work, Mass transit, and Airport
- Ease of morning/afternoon congestion (better flow in and out)
- Better bus - be part of the solution
- Down valley (entrance is at airport)
- Address emergency/hazard planning
- Parking - Parking passes are working
- Many fly (use increase in summer, passes). Fly in > ease of transit > no need to rent a car
- Identification of what/where the change actually is
- Definitely decreasing traffic and congestion!
- Like NYC - people know they don't need a car. Branding?
- I've always wanted to have a free bus service up and down the valley.
- Late night bus schedule.
- Violation fines/rates - habitual violators.
- Turnover!
- Less carbon pollution.
- Reconsider 4-hour parking/overtime parking
- Accessible angle parking in the downtown core
- Giving options for people to choose what works for them
- Considering if there was an emergency situation, how could all people evacuate safely? There is only one way in/out of Aspen
- Community/majority support (me too!)
- Identifies realities of the transportation network; based on those realities develops goals that work for community and businesses to strengthen overall community
- A successful comprehensive transportation and parking plan looks like…implementing technology to locate/order from local businesses
- App-based integration like Uber/Lyft for local transportation providers
- Some private providers don't support our commitments or a community
- Limit car ownership/HH
- Designated pick-up/drop-off areas
- Understand who is the traffic and what impact can we actually have?
- Balance between parking, public transportation, and alternative transportation modes
- Underground parking and other parking options
- Incentivized parking at intercept lot
- Alternate route in and out
- Finding parking options for Down valley commuters as well as transportation to work

- A system that continues to encourage access to and within Aspen without vehicles
- Working with several counties, cities & people in the valley. Agreement raising for the changes
- Underground parking for visitors, commuters and locals; flat rate and monthly rate; this would not be a reserved pass; if the garage is full you can't park there
- Long-term, future-forward, not just appeasing people right away, committing to a long-term goal, maybe it's a little painful to begin with
- Setting our sights on things that will be impactful 50-75 years from now
- Having a good pulse on emerging tech and creating adaptable infrastructure to accommodate change
- Innovative/creative alternatives
- Walking or biking is the easiest option
- Takes all groups into consideration (origin, destination, type of transportation, visitors, workers, etc.)
- Kids aren't driven to school every day
- Multiple transportation methods available and accessible to everyone
- Zero emissions
- Transit-oriented housing development
- Regenerative infrastructure (but still implementable)
- More car-sharing options

It might surprise you, but to me, a successful plan does not look like…

- Everyone being able to drive or park their cars wherever/whenever
- It's not just trucks
- What we have today!
- Saving 50% on commuting time
- Show a diagram WHO they are making decisions for
- Just more buses (induced traffic and transit capacity)
- Increasing prices or changes to lodging permits
- A single solution.
- Status quo. Need to address it. Not 1 lane
- Just fixing the S curve (just welcoming more cars)
- More lanes - never fixes anything, just adds more traffic
- Minimizing street parking or lots of new parking lots
- Just more parking or charging more (not a revenue source)
- Who is parking for? Visitors, residents, workforce
- Just more cars/parking
- Stop signs and traffic signs every block around the city
- Ignoring the fact that the most convenient option (usually) for people who own a car is to drive vs. take public transit
- One size fits all. We have to address several communities/groups

- Leaving things the same - status quo
- We need to serve our customers who are coming to our businesses
- We do not need to solve parking for employees
- Businesses/employees should be using bus as much as possible
- Does not look like: More parking on-street or more cars in Aspen
- Doing away with dozens of parking places each year. We need more!
- There is no single bullet/single solution
- Not sacrifice the services. Keep truck deliveries, etc. Do not change this.
- Cars are going to come - the number will not be reduced
- Everything to all people. Address all issues. We can't all have everything we want. There will be pain points
- Not remote parking with ped only core
- People do not want a walking core
- Is limited to Aspen only. Issues are broader
- Not advocating for all free parking. Want parking to turn over so more people can get in, park, visit businesses, then leave for the next person
- Not another mobility lab!
- Just another transportation plan
- Lowered speed limits
- More deliveries
- Less parking
- Additional fees/tolls
- More Ubers etc.
- Using existing infrastructure- new infrastructure may be needed

A fear I have about our efforts to change parking and transportation is…

- No meaningful action. Do IT!
- Just do it
- We don't do anything big enough to end traffic jams
- Does the community really want to solve this? Collective pain
- Painful politically
- Public will
- Any new ideas?
- What is equitable for some isn't equitable for all
- Public officials won't have the courage to act
- Not thinking long-term
- Not actually addressing problems - political will. So much feedback and data, but no progress
- Impacts to tourism; we need the guests!
- Ending up like Vail and no one lives here anymore - loss of community
- Loss of "TRUCKS" need the deliveries and services for H to work (Post office and FedEx business models)

Focus Group Visioning Meetings: Success/Fear Statement Comments

- Pedestrian only core
- Eroding public transit
- Aren't pursuing the right things - Do we have all the information? Can we push on new strategies?
- Roles/responsibilities: How does Pitkin County Board come into play?
- We won't be heard
- Resistance from businesses in the core
- People who drive feel alienated
- Waste money! Want to be doing things that work
- Politics
- Admire our problems rather than actually addressing them
- Painfully political and lack of holistic approach
- Trying to solve today's problems. Thinking long-term is important
- Making change = charging more $
- What does change look like?
- What would be the cost of making changes and who would that impact?
- Does this mean an increase of construction? If so, where and when would it take place?
- We have to focus on the tourist needs. Worried we focus on locals. We share our community
- Many of these changes require employees. We already have a hard time finding staff and housing
- I think we must start providing more parking instead of pretending we don't have a problem
- We cannot build our way out of parking demand. The demand will always be greater than our ability to build it
- Concerned that this will result in more parking spaces being taken away
- Concern that we will become like Vail where no one lives here (no housing, no affordable restaurants)
- Community resistance to new things
- This will just result in parking spaces being taken away, rather than helping the situation (this approach feels like we do not want people coming to visit when spaces are taken away)
- This will not be data driven (using data is critical for success!)
- People assume we do not have the same values because we are advocating for parking
- We will not be listened to
- Strictly investing in local government programs to address issues
- A fear I have about our efforts to change transportation and parking is…People doing what they want and driving a car in valley because they are more privileged. People not following the rules because they think they're above the law
- Not enough willingness to change. Government programs. If they are are failing.
- Increasing traffic by providing more parking

- Focus on ways to reward good habits, not punish normal behavior
- That it only focuses on the needs and conveniences of individuals rather than the greater good
- Spending years and money on a Band-aid
- Creating more problems with short-sighted solutions
- Makes Aspen more difficult/expense to live in (it's already expensive enough)
- Traffic and pollution gets worse!
- Limits ability for services/professionals to transport as needed
- Unintentionally exclude groups of people or limits accessibility

I think we can harness these fears by…

- Explore options. Find balance
- Supporting the public officials to act
- Data
- Storytelling (i.e. communities have a face)
- Look critically at success
- Fill in gaps
- Transit to trailheads/destinations
- Recognize not everyone will be happy - WHO? Guests, residents
- SHARE the community
- Make educated predictions about where things are going (trends) - make decisions
- Working alongside the local businesses and community to come to reasonable long-term solutions
- I think we can harness these fears by…having the police take more action, such as, cops riding around on bikes writing tickets
- Finding the "balance"
- Punishing the labor force for commuting
- Encouraging local community and businesses to innovate
- Maintain communication
- Not being afraid to fail and go back to the drawing board
- Recognize there has been progress on parking, congestion, etc. Find ways to have more change that is driven by data and an actual Plan
- Recognize that not everyone in an SOV is evil; sometimes you have to drive
- Address a plan for truck deliveries. We need them and need a system
- Fed/Amazon/UPS deliveries. Can the be required to follow rules? Address the national business model. Trip Hero?
- Adhere to the schedule - make action
- Slowly changing people's transportation habits. Slowly showing community new ways to get places
- Listening and including the voters in the big and final decisions!
- Make parking fines means tested?

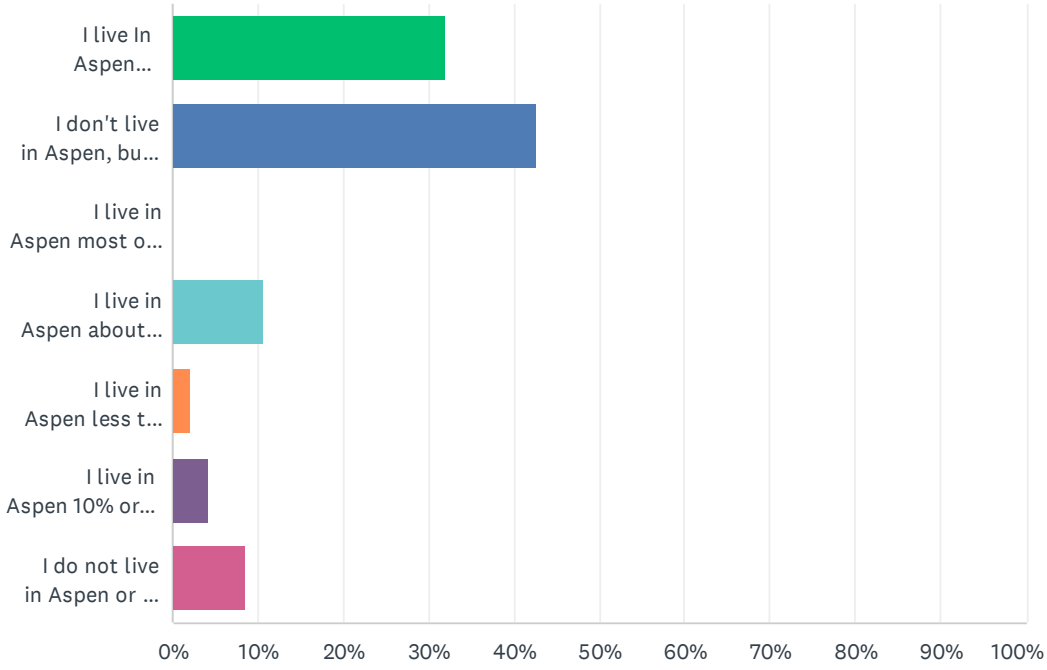
- Bike lanes for e-bikes specifically?
- Getting first-hand feedback from users
- Getting first-hand feedback from people in these communities on how change will affect them

Attachments

Focus Group Visioning Presentation

Q1 Approximately what percentage of the year do you live in Aspen?

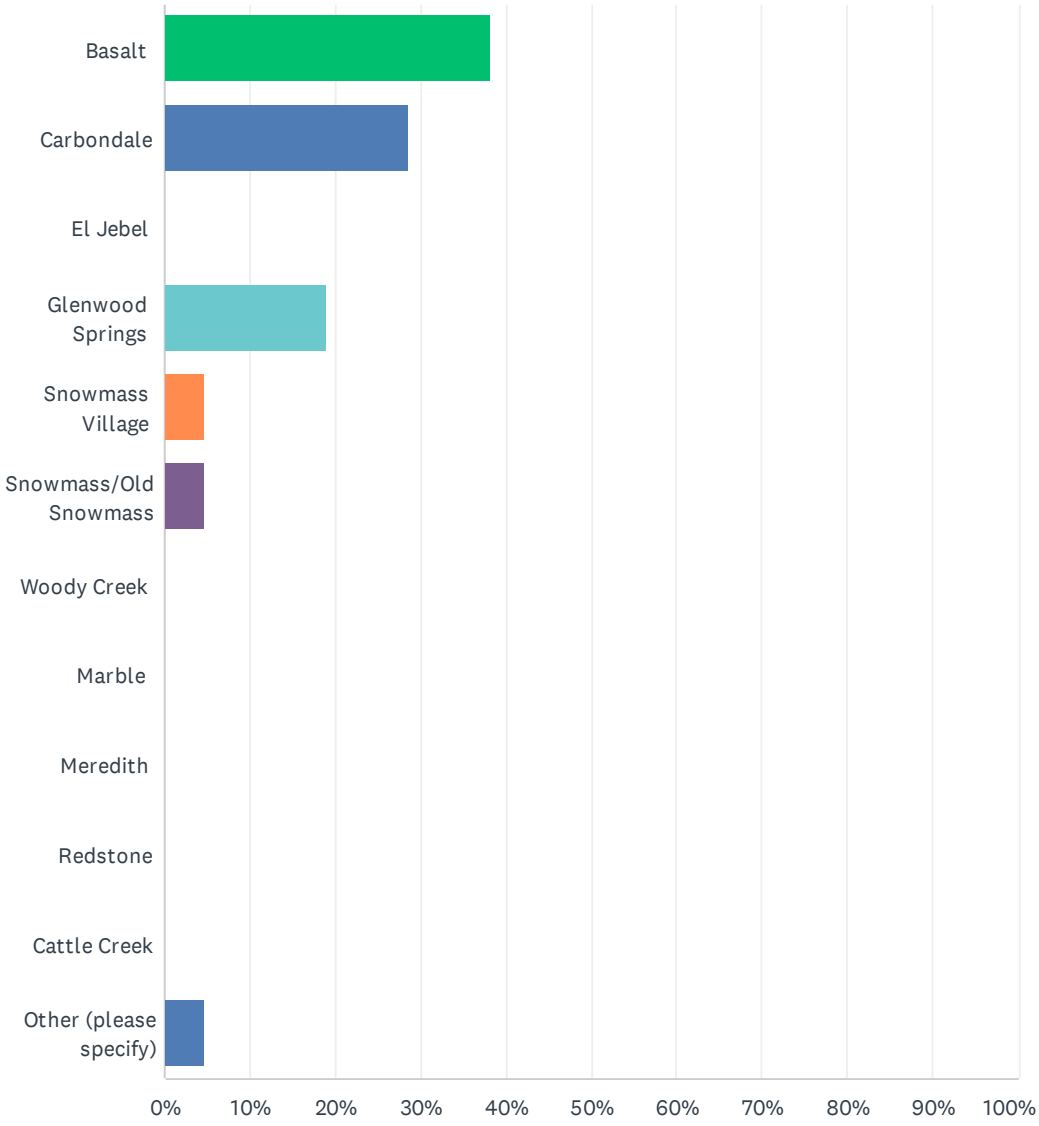
Answered: 47 Skipped: 1



ANSWER CHOICES	RESPONSES	
I live In Aspen full-time.	31.91%	15
I don't live in Aspen, but i do live in the broader Roaring Fork Valley.	42.55%	20
I live in Aspen most of the year (75% of the year or more).	0.00%	0
I live in Aspen about half of the year (about 50% of the year).	10.64%	5
I live in Aspen less than 50% of the year, but more than 10%.	2.13%	1
I live in Aspen 10% or less of the year.	4.26%	2
I do not live in Aspen or in Roaring Fork Valley.	8.51%	4
TOTAL		47

Q2 What community in the Roaring Fork Valley do you live in, or closest to?

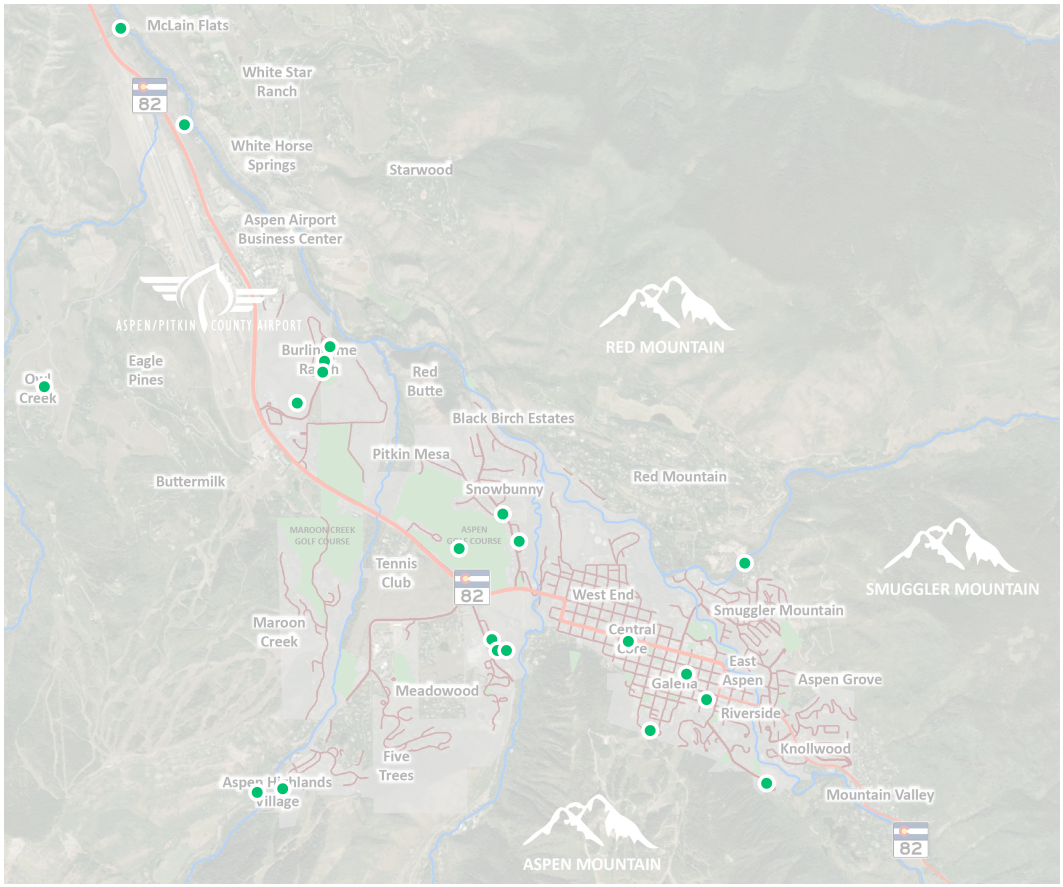
Answered: 21 Skipped: 27



ANSWER CHOICES	RESPONSES	
Basalt	38.10%	8
Carbondale	28.57%	6
El Jebel	0.00%	0
Glenwood Springs	19.05%	4
Snowmass Village	4.76%	1
Snowmass/Old Snowmass	4.76%	1
Woody Creek	0.00%	0
Marble	0.00%	0
Meredith	0.00%	0
Redstone	0.00%	0
Cattle Creek	0.00%	0
Other (please specify)	4.76%	1
TOTAL		21

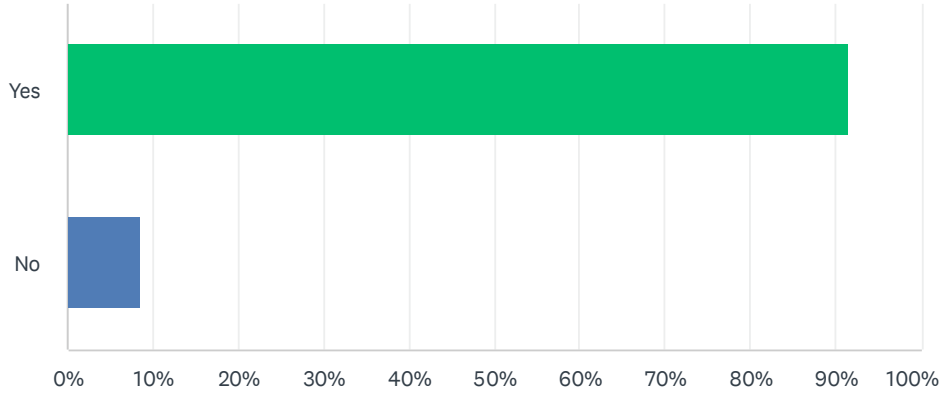
Q3 Approximately where in Aspen do you live?

Answered: 21 Skipped: 27



Q4 Do you work in Aspen?

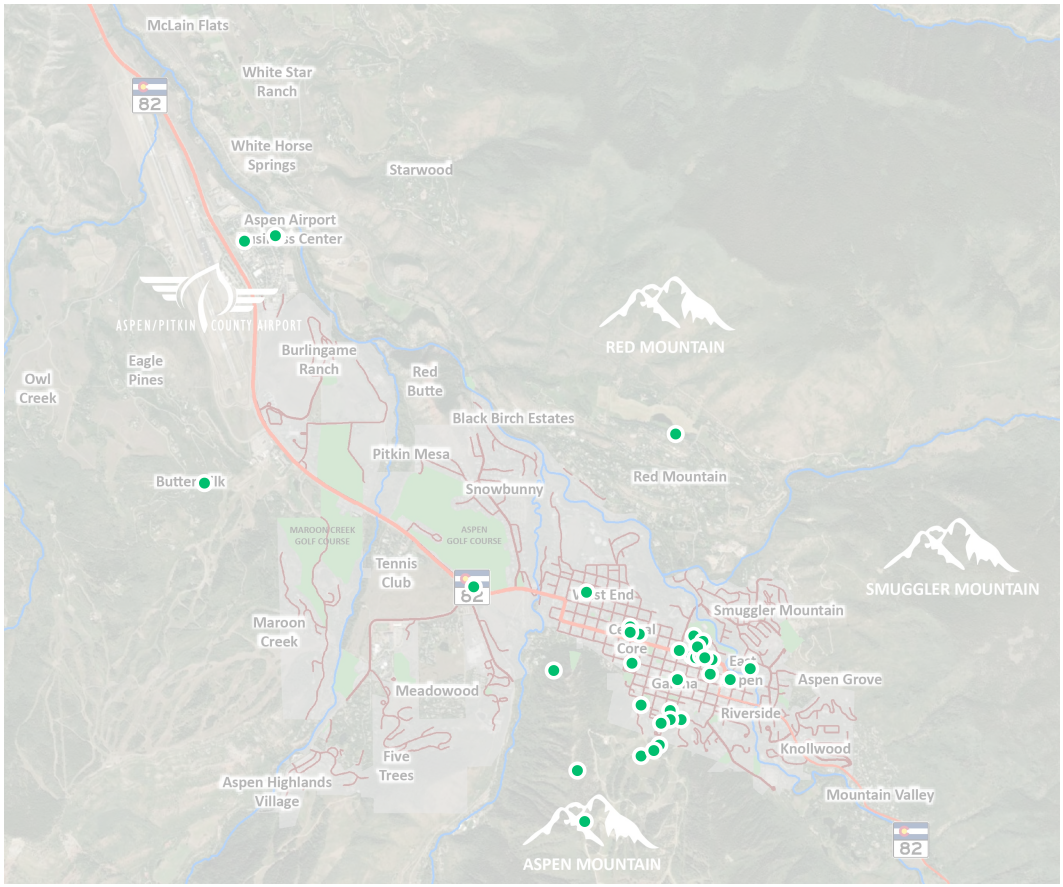
Answered: 47 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	91.49%	43
No	8.51%	4
TOTAL		47

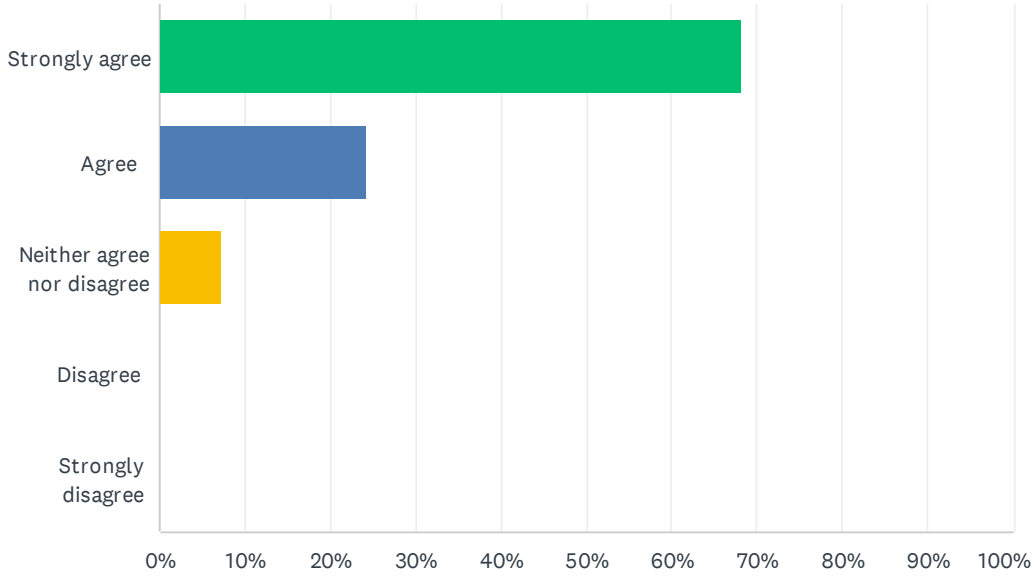
Q5 Approximately where in Aspen do you work?

Answered: 36 Skipped: 12



Q6 Aspen's bus service makes it easier for me to drive less.

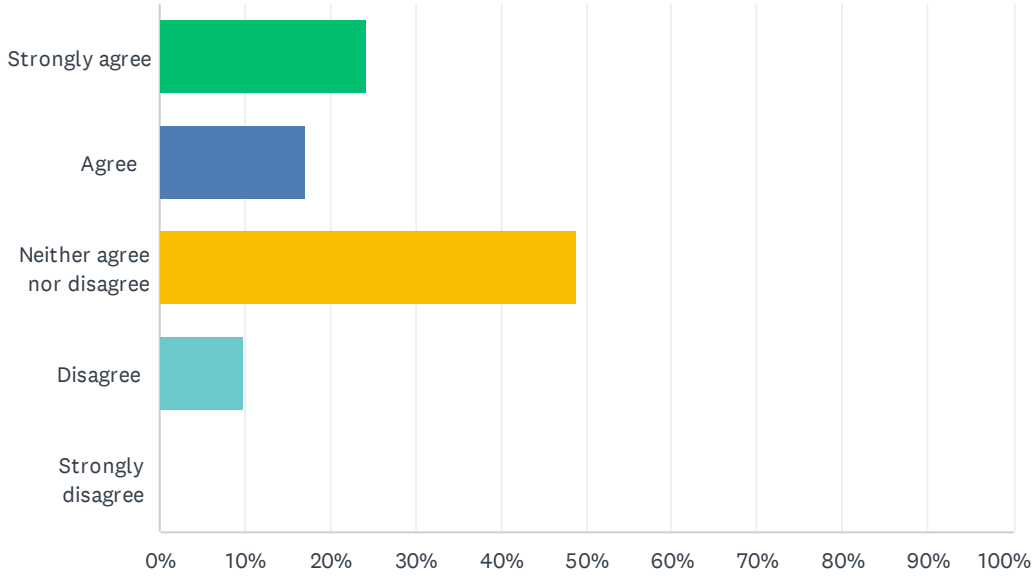
Answered: 41 Skipped: 7



ANSWER CHOICES	RESPONSES	
Strongly agree	68.29%	28
Agree	24.39%	10
Neither agree nor disagree	7.32%	3
Disagree	0.00%	0
Strongly disagree	0.00%	0
TOTAL		41

Q7 Aspen's Downtowner makes it easier for me to drive less.

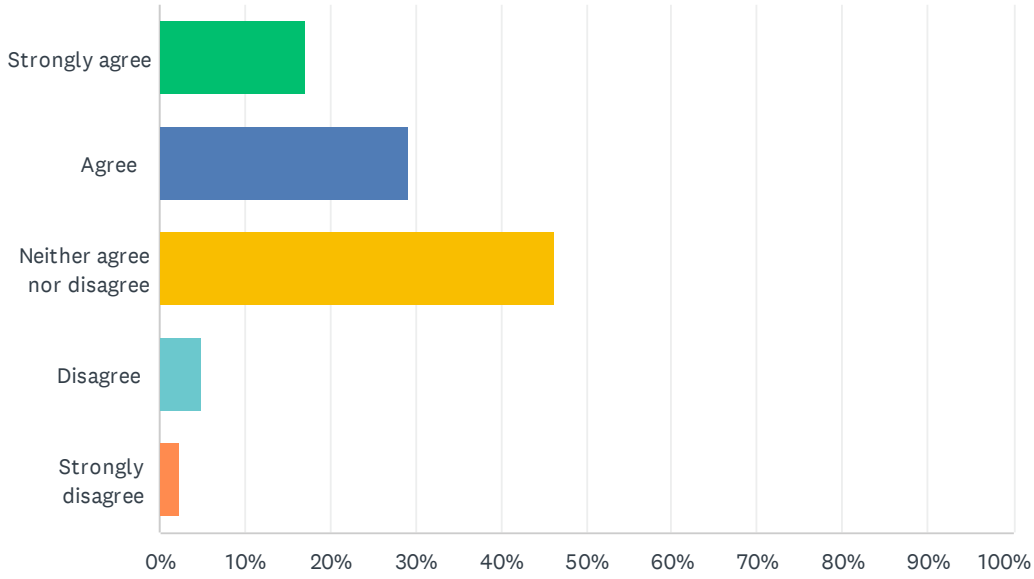
Answered: 41 Skipped: 7



ANSWER CHOICES	RESPONSES	
Strongly agree	24.39%	10
Agree	17.07%	7
Neither agree nor disagree	48.78%	20
Disagree	9.76%	4
Strongly disagree	0.00%	0
TOTAL		41

Q8 Aspen's WE-Cycle (bike share) service makes it easier for me to drive less.

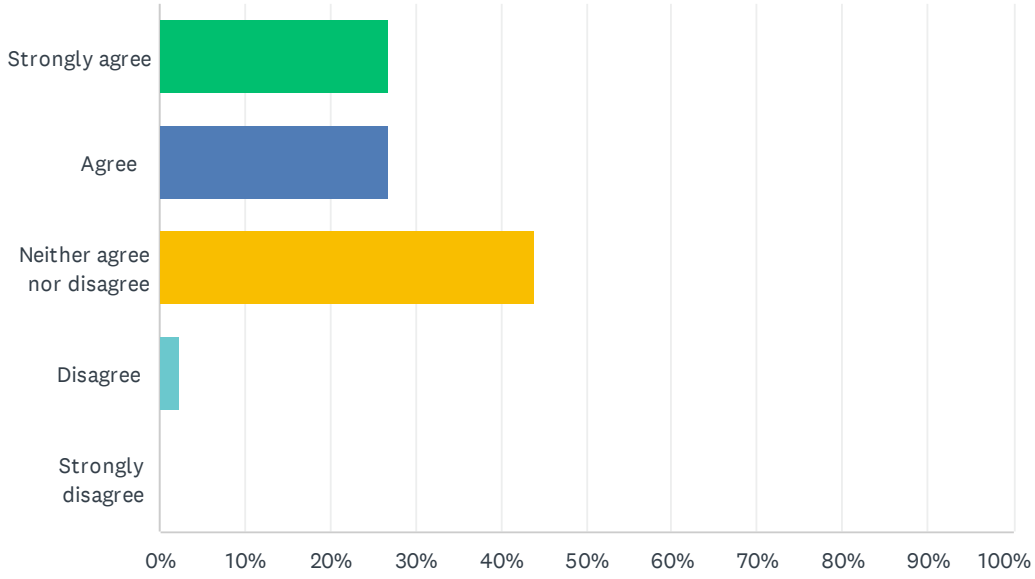
Answered: 41 Skipped: 7



ANSWER CHOICES	RESPONSES	
Strongly agree	17.07%	7
Agree	29.27%	12
Neither agree nor disagree	46.34%	19
Disagree	4.88%	2
Strongly disagree	2.44%	1
TOTAL		41

Q9 Owning my own bike/e-bike makes it easier for me to drive less.

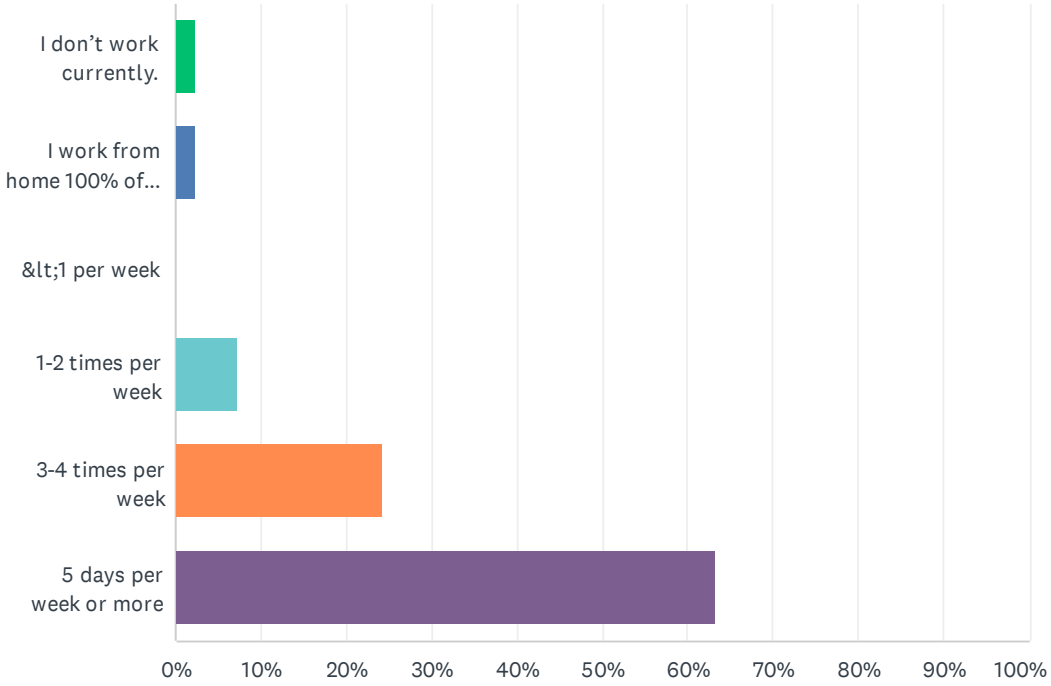
Answered: 41 Skipped: 7



ANSWER CHOICES	RESPONSES	
Strongly agree	26.83%	11
Agree	26.83%	11
Neither agree nor disagree	43.90%	18
Disagree	2.44%	1
Strongly disagree	0.00%	0
TOTAL		41

Q10 How frequently do you travel to your place of work?

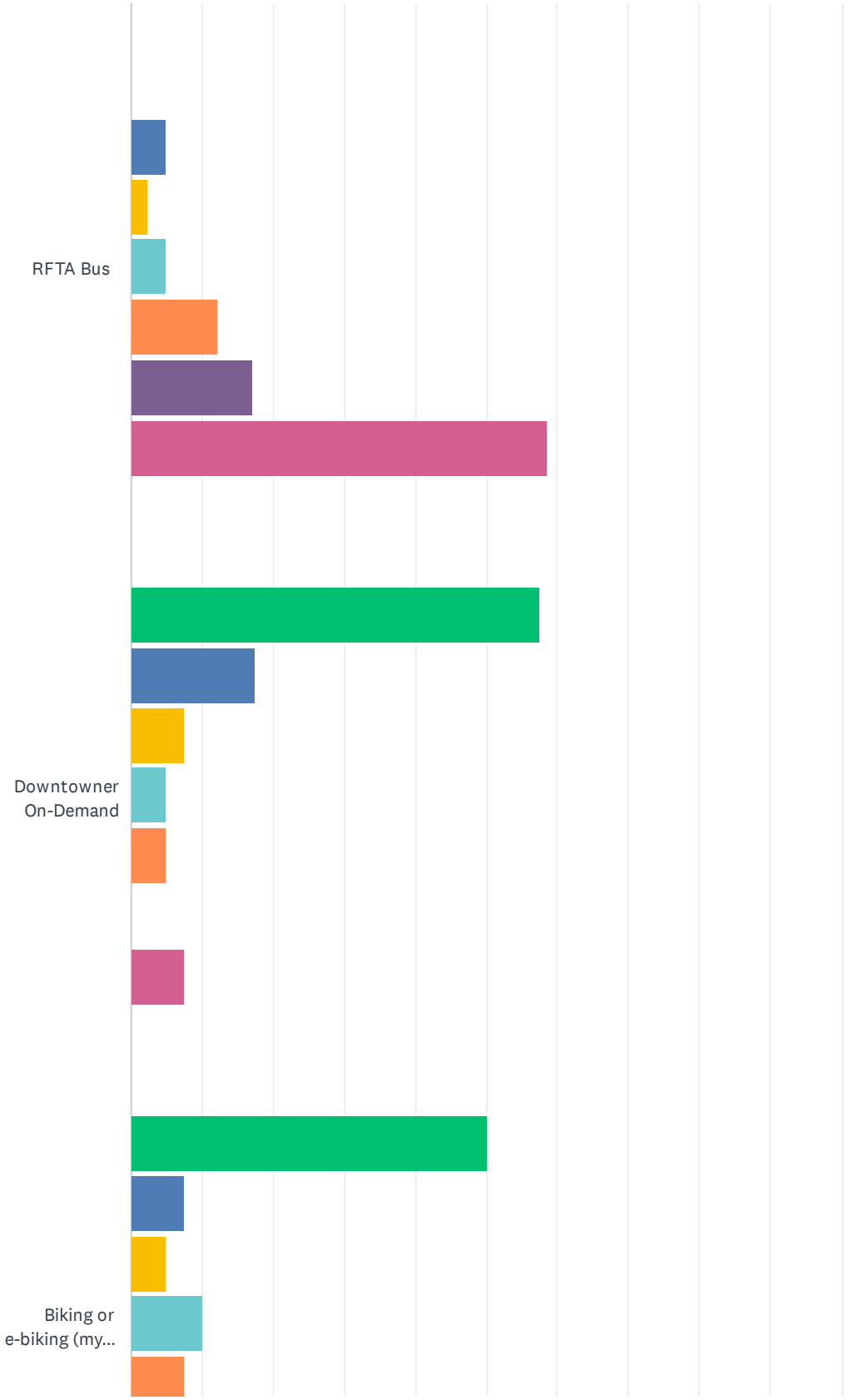
Answered: 41 Skipped: 7

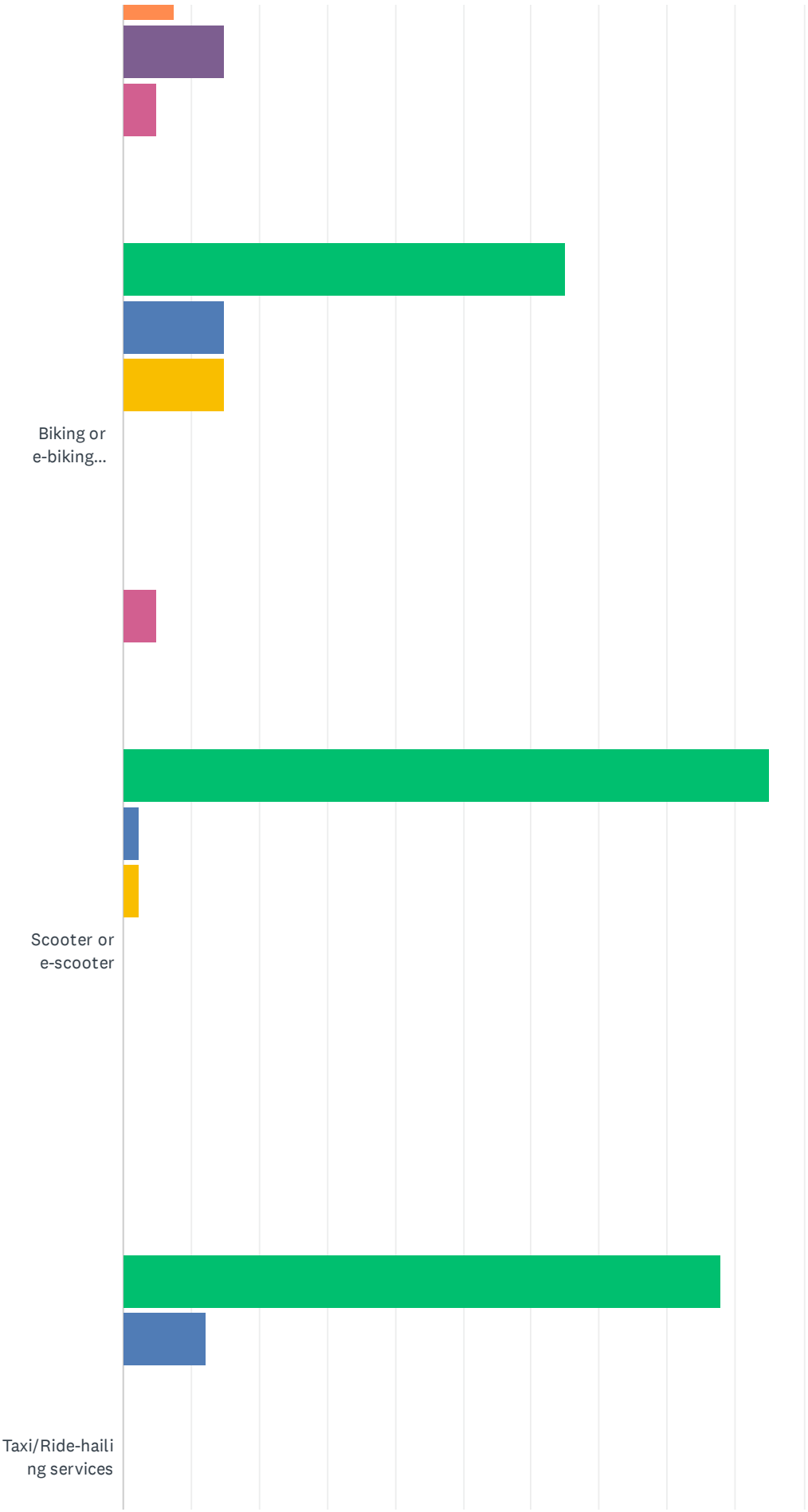


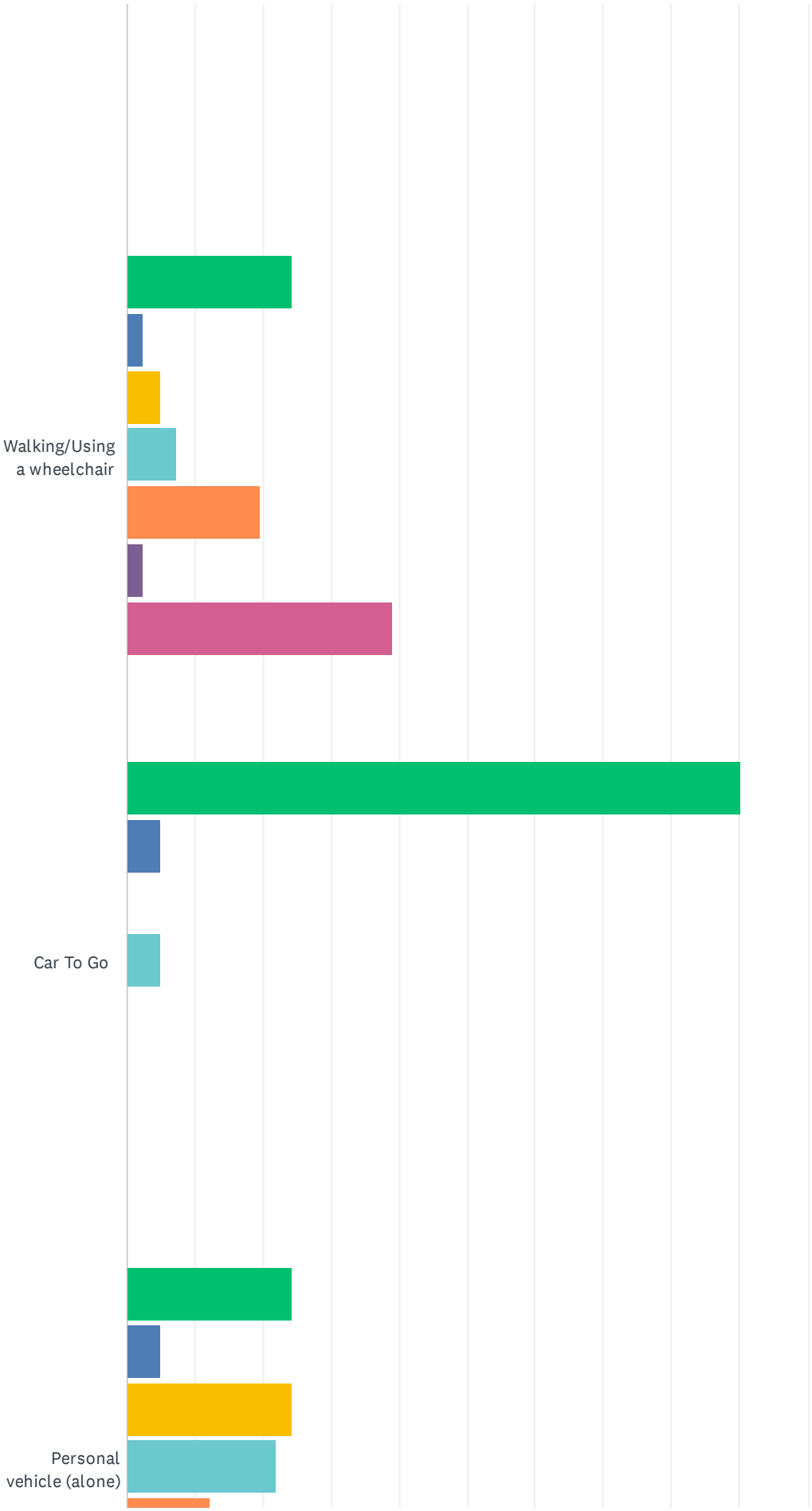
ANSWER CHOICES	RESPONSES	
I don't work currently.	2.44%	1
I work from home 100% of the time.	2.44%	1
<1 per week	0.00%	0
1-2 times per week	7.32%	3
3-4 times per week	24.39%	10
5 days per week or more	63.41%	26
TOTAL		41

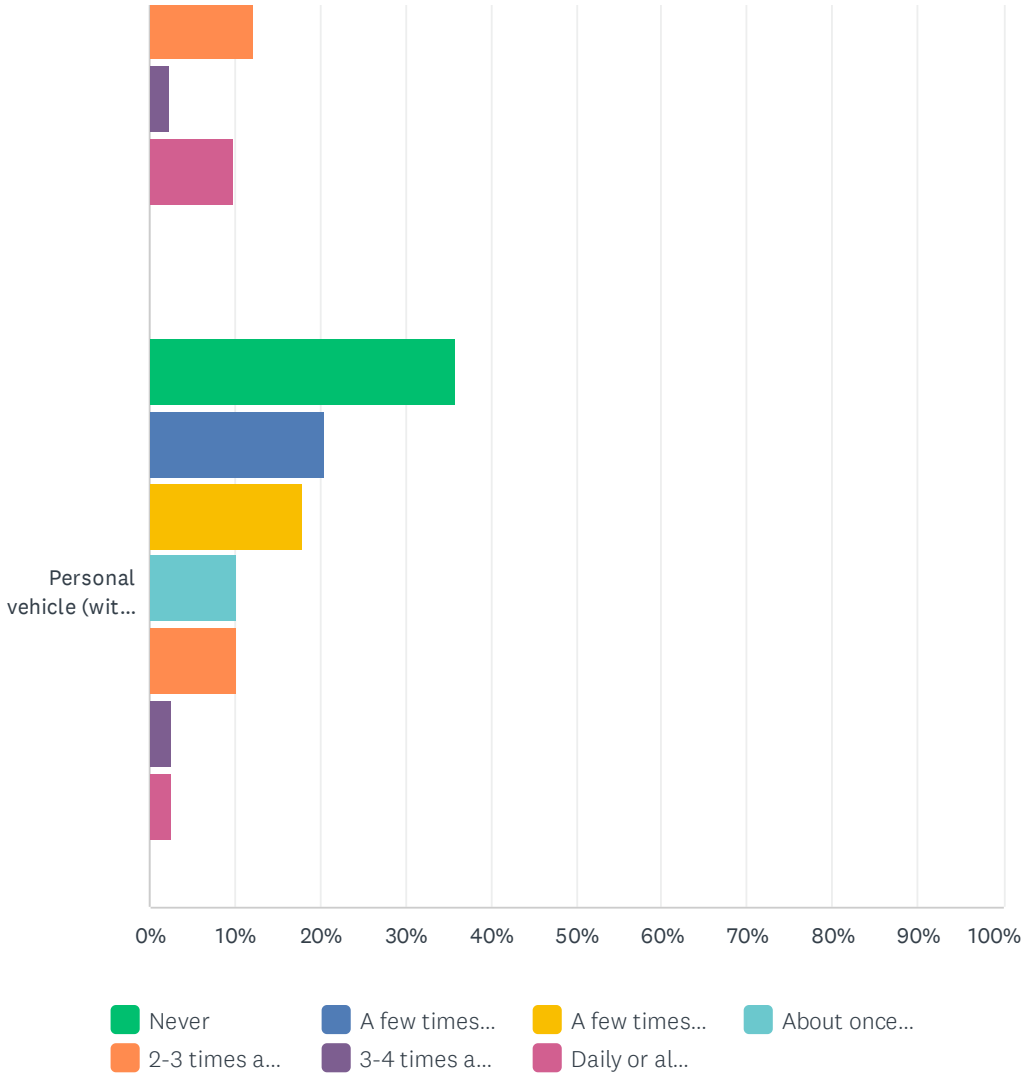
Q11 How frequently do you use the following transportation options?

Answered: 41 Skipped: 7




Biking or e-biking...
Scooter or e-scooter
Taxi/Ride-hailing services

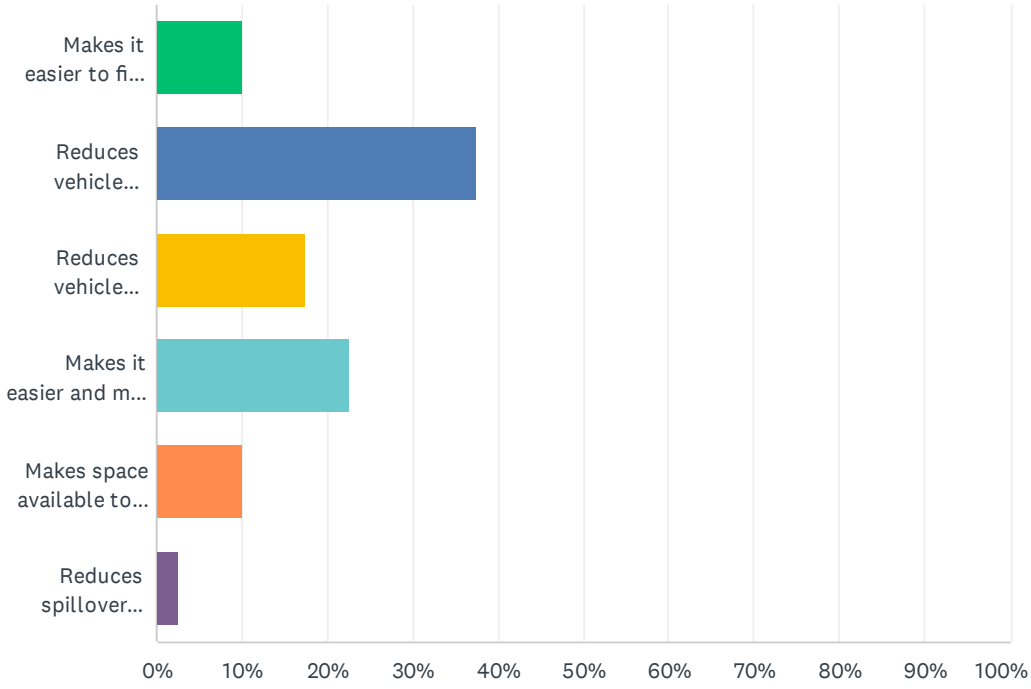

Walking/Using a wheelchair
Car To Go
Personal vehicle (alone)


Personal vehicle (wit...
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Never
A few times...
A few times...
About once...
2-3 times a...
3-4 times a...
Daily or al...

	NEVER	A FEW TIMES A YEAR	A FEW TIMES A MONTH	ABOUT ONCE A WEEK	2-3 TIMES A WEEK	3-4 TIMES A WEEK	DAILY OR ALMOST DAILY	TOTAL	WEIGHTED AVERAGE
RFTA Bus	0.00% 0	4.88% 2	2.44% 1	4.88% 2	12.20% 5	17.07% 7	58.54% 24	41	5.10
Downtowner On-Demand	57.50% 23	17.50% 7	7.50% 3	5.00% 2	5.00% 2	0.00% 0	7.50% 3	40	1.13
Biking or e-biking (my own)	50.00% 20	7.50% 3	5.00% 2	10.00% 4	7.50% 3	15.00% 6	5.00% 2	40	1.82
Biking or e-biking (WE-Cycle)	65.00% 26	15.00% 6	15.00% 6	0.00% 0	0.00% 0	0.00% 0	5.00% 2	40	0.75
Scooter or e-scooter	95.12% 39	2.44% 1	2.44% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	41	0.07
Taxi/Ride-hailing services	87.80% 36	12.20% 5	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	41	0.12
Walking/Using a wheelchair	24.39% 10	2.44% 1	4.88% 2	7.32% 3	19.51% 8	2.44% 1	39.02% 16	41	3.59
Car To Go	90.24% 37	4.88% 2	0.00% 0	4.88% 2	0.00% 0	0.00% 0	0.00% 0	41	0.20
Personal vehicle (alone)	24.39% 10	4.88% 2	24.39% 10	21.95% 9	12.20% 5	2.44% 1	9.76% 4	41	2.39
Personal vehicle (with others)	35.90% 14	20.51% 8	17.95% 7	10.26% 4	10.26% 4	2.56% 1	2.56% 1	39	1.56

Q12 Which of the following goals is of highest importance to you for Aspen's public parking system?

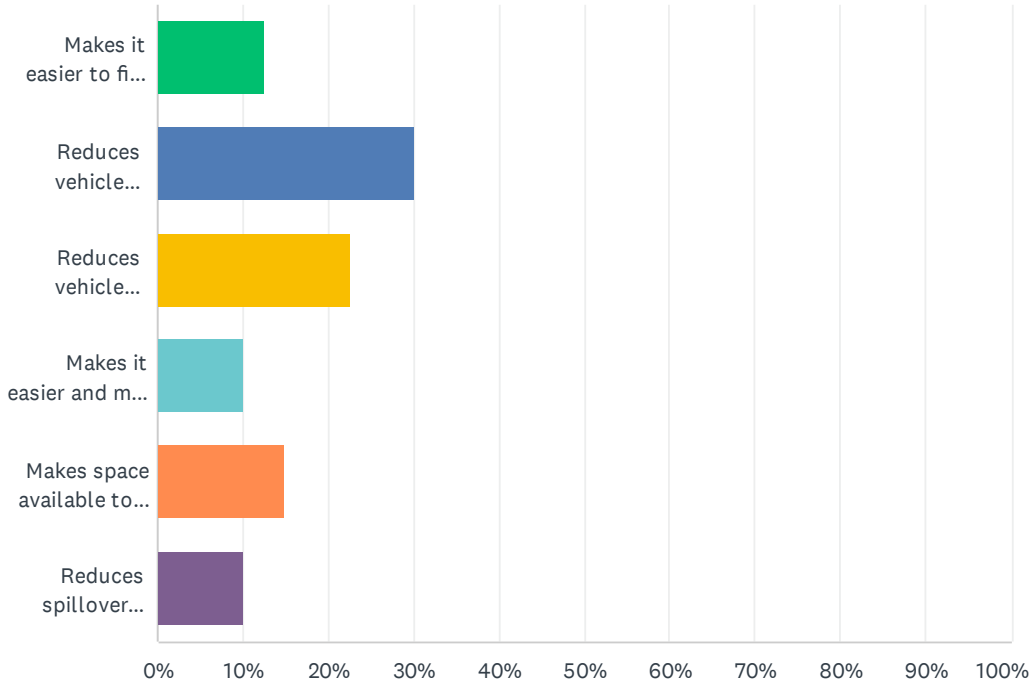
Answered: 40 Skipped: 8



ANSWER CHOICES	RESPONSES	
Makes it easier to find parking.	10.00%	4
Reduces vehicle congestion.	37.50%	15
Reduces vehicle emissions in support of climate action goals.	17.50%	7
Makes it easier and more pleasant to use other forms of travel, like walking and biking.	22.50%	9
Makes space available to those who need it most—for example, in a commercial area, customers and employees are prioritized.	10.00%	4
Reduces spillover parking from nearby destinations—like retail, restaurants, events and employment centers—into other neighborhoods.	2.50%	1
TOTAL		40

Q13 Which of the following goals is of second highest importance to you for Aspen's public parking system?

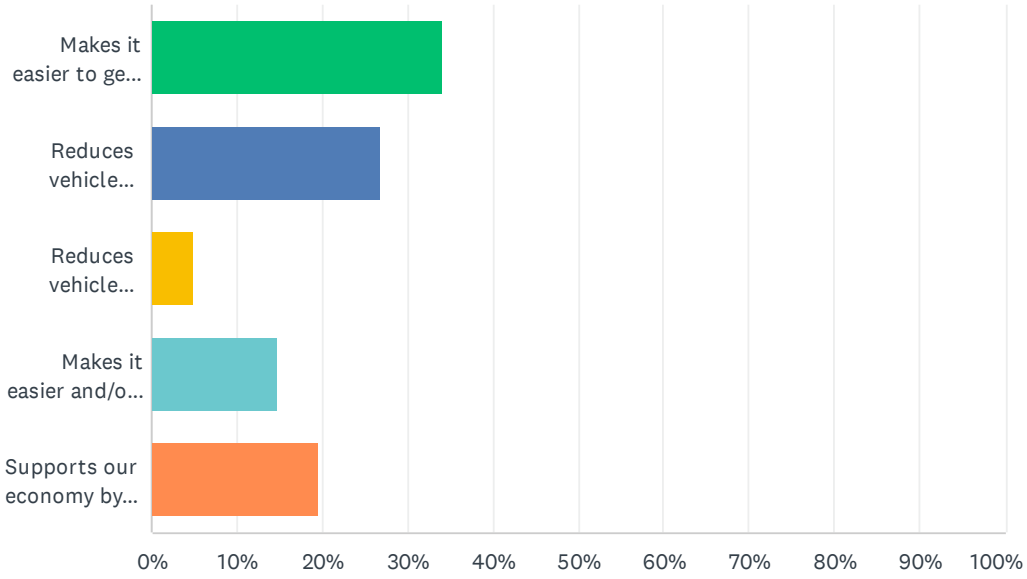
Answered: 40 Skipped: 8



ANSWER CHOICES	RESPONSES	
Makes it easier to find parking.	12.50%	5
Reduces vehicle congestion.	30.00%	12
Reduces vehicle emissions in support of climate action goals.	22.50%	9
Makes it easier and more pleasant to use other forms of travel, like walking and biking.	10.00%	4
Makes space available to those who need it most—for example, in a commercial area, customers and employees are prioritized.	15.00%	6
Reduces spillover parking from nearby destinations—like retail, restaurants, events and employment centers—into other neighborhoods.	10.00%	4
TOTAL		40

Q14 Which of the following goals is of highest importance to you when it comes to transportation options available to the community, like RFTA buses, the Downtowner, or WE Cycle?

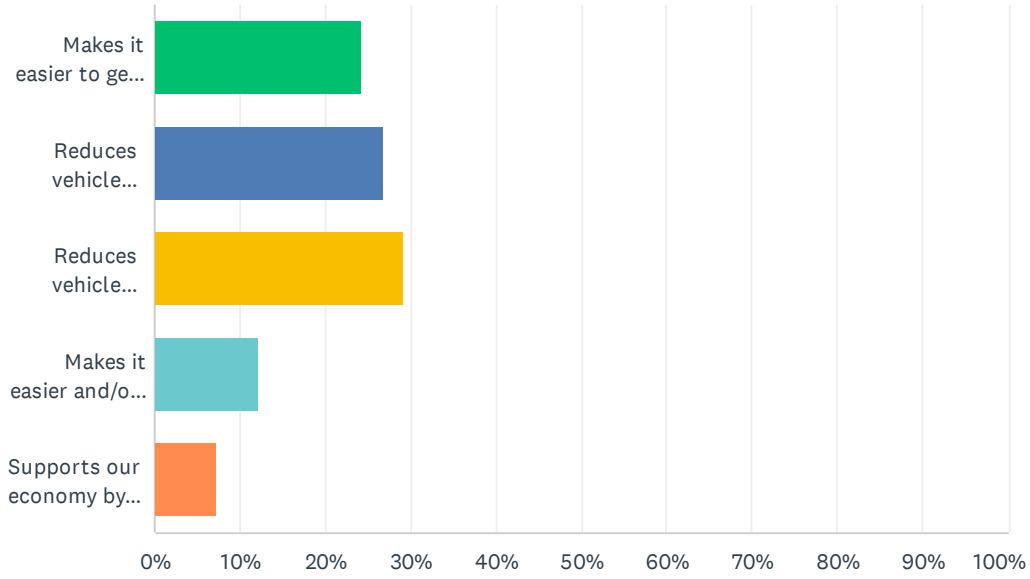
Answered: 41 Skipped: 7



ANSWER CHOICES	RESPONSES	
Makes it easier to get places.	34.15%	14
Reduces vehicle congestion and parking demand.	26.83%	11
Reduces vehicle emissions in support of climate action goals.	4.88%	2
Makes it easier and/or more pleasant and/or more convenient to own no or fewer cars.	14.63%	6
Supports our economy by helping people from all around the valley get to and around Aspen.	19.51%	8
TOTAL		41

Q15 Which of the following goals is of second highest importance to you when it comes to transportation options available to the community, like RFTA buses, the Downtowner, or WE Cycle?

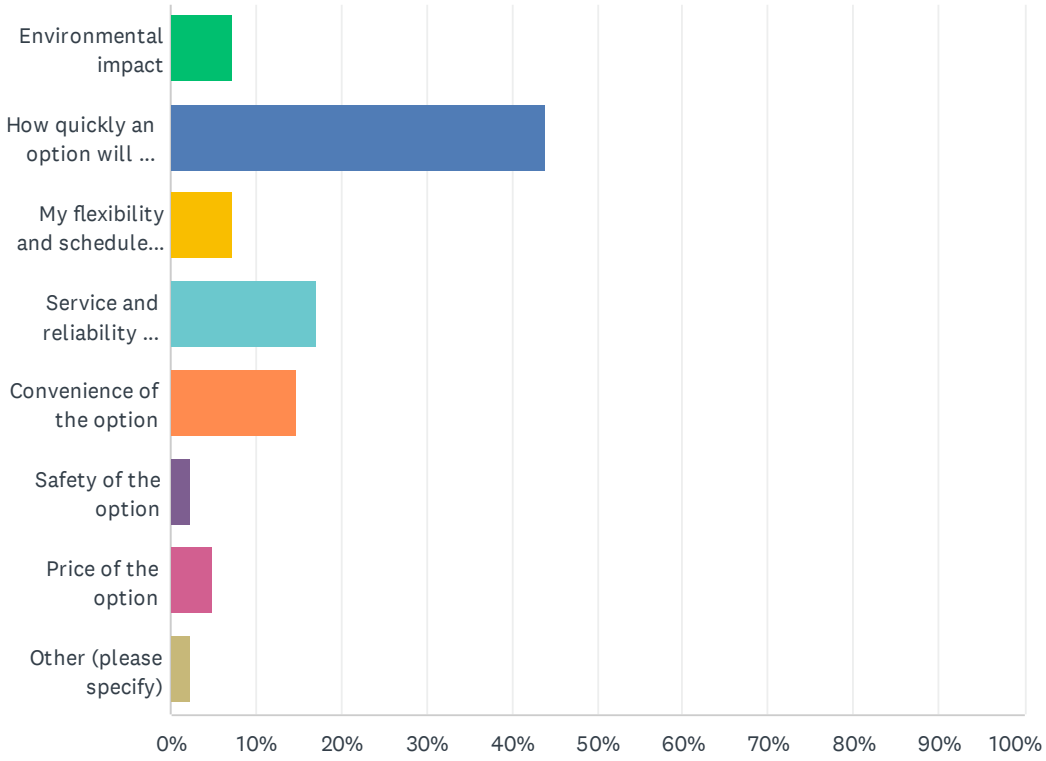
Answered: 41 Skipped: 7



ANSWER CHOICES	RESPONSES	
Makes it easier to get places.	24.39%	10
Reduces vehicle congestion and parking demand.	26.83%	11
Reduces vehicle emissions in support of climate action goals.	29.27%	12
Makes it easier and/or more pleasant and/or more convenient to own no or fewer cars.	12.20%	5
Supports our economy by helping people from all around the valley get to and around Aspen.	7.32%	3
TOTAL		41

Q16 Which of the following factors is of highest importance to you when making a decision about how to get somewhere?

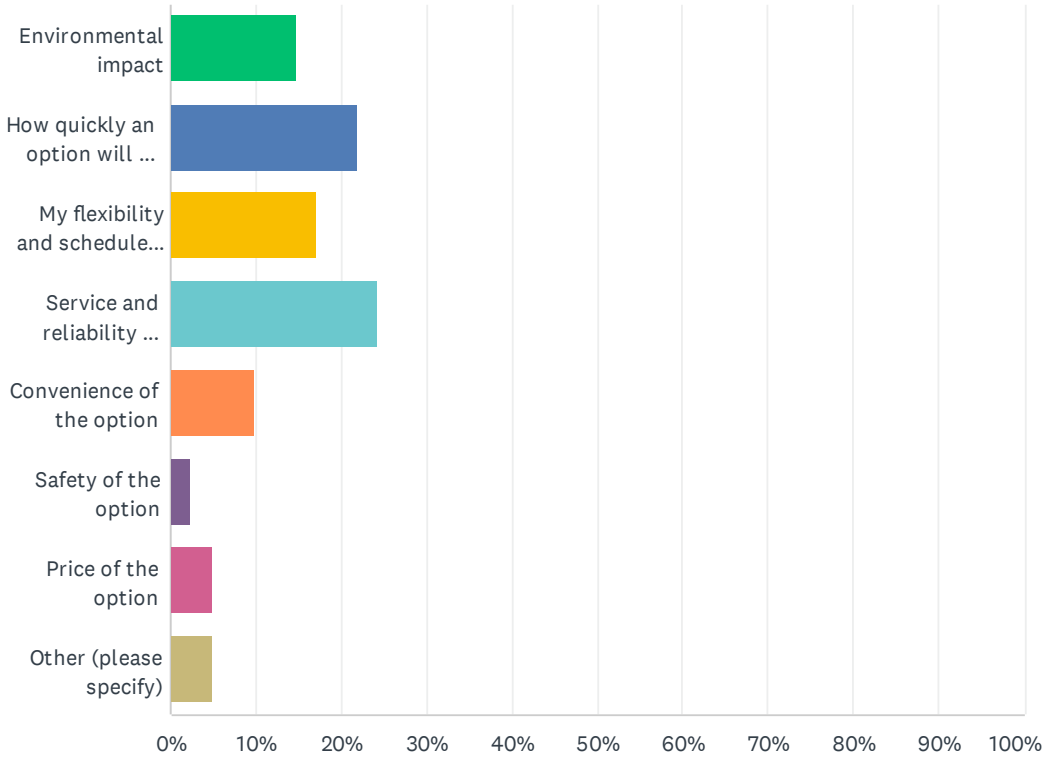
Answered: 41 Skipped: 7



ANSWER CHOICES	RESPONSES	
Environmental impact	7.32%	3
How quickly an option will get me to my destination	43.90%	18
My flexibility and schedule during the day (e.g. meetings or errands)	7.32%	3
Service and reliability of the option	17.07%	7
Convenience of the option	14.63%	6
Safety of the option	2.44%	1
Price of the option	4.88%	2
Other (please specify)	2.44%	1
TOTAL		41

Q17 Which of the following factors is of second highest importance to you when making a decision about how to get somewhere?

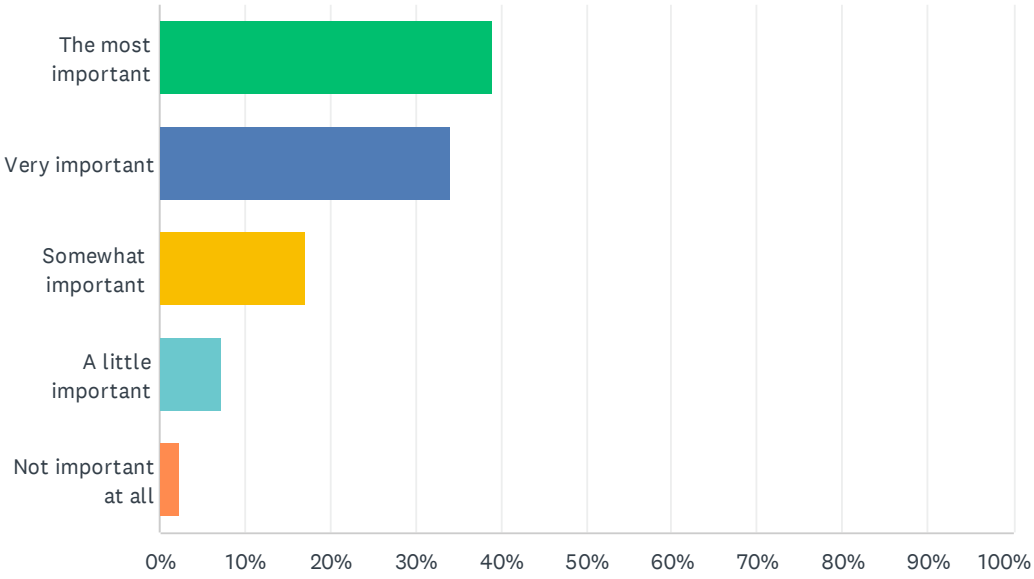
Answered: 41 Skipped: 7



ANSWER CHOICES	RESPONSES	
Environmental impact	14.63%	6
How quickly an option will get me to my destination	21.95%	9
My flexibility and schedule during the day (e.g. meetings or errands)	17.07%	7
Service and reliability of the option	24.39%	10
Convenience of the option	9.76%	4
Safety of the option	2.44%	1
Price of the option	4.88%	2
Other (please specify)	4.88%	2
TOTAL		41

Q18 In your view, how important is reducing personal vehicle usage in helping us address the climate crisis and meet our local climate goals?

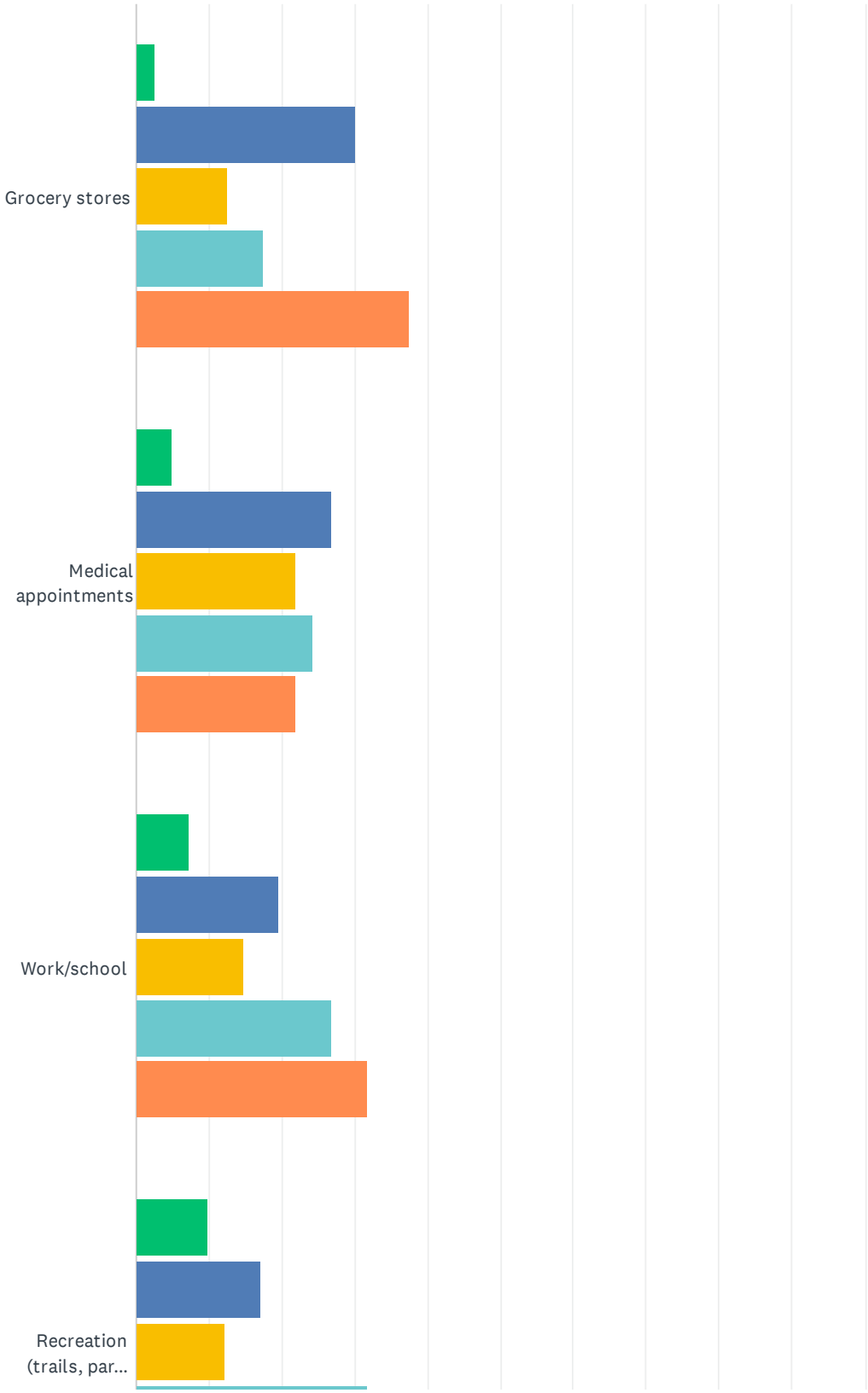
Answered: 41 Skipped: 7

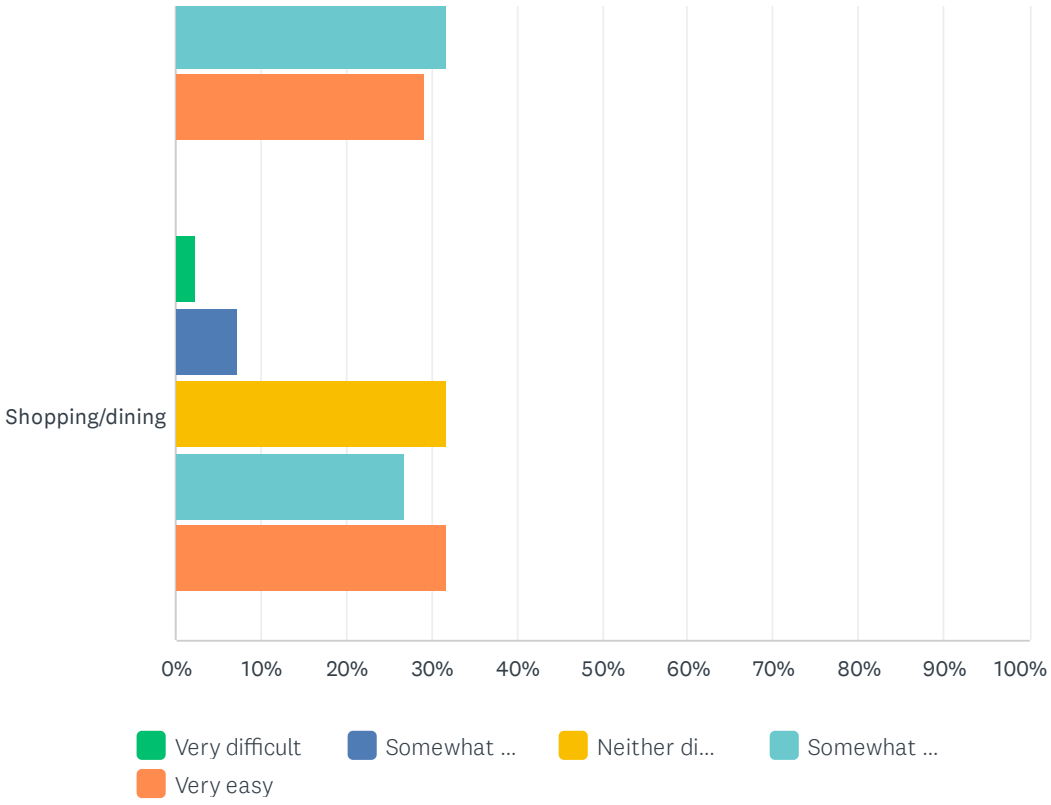


ANSWER CHOICES	RESPONSES	
The most important	39.02%	16
Very important	34.15%	14
Somewhat important	17.07%	7
A little important	7.32%	3
Not important at all	2.44%	1
TOTAL		41

Q19 In your experience, how difficult is it to get to the following destinations?

Answered: 41 Skipped: 7

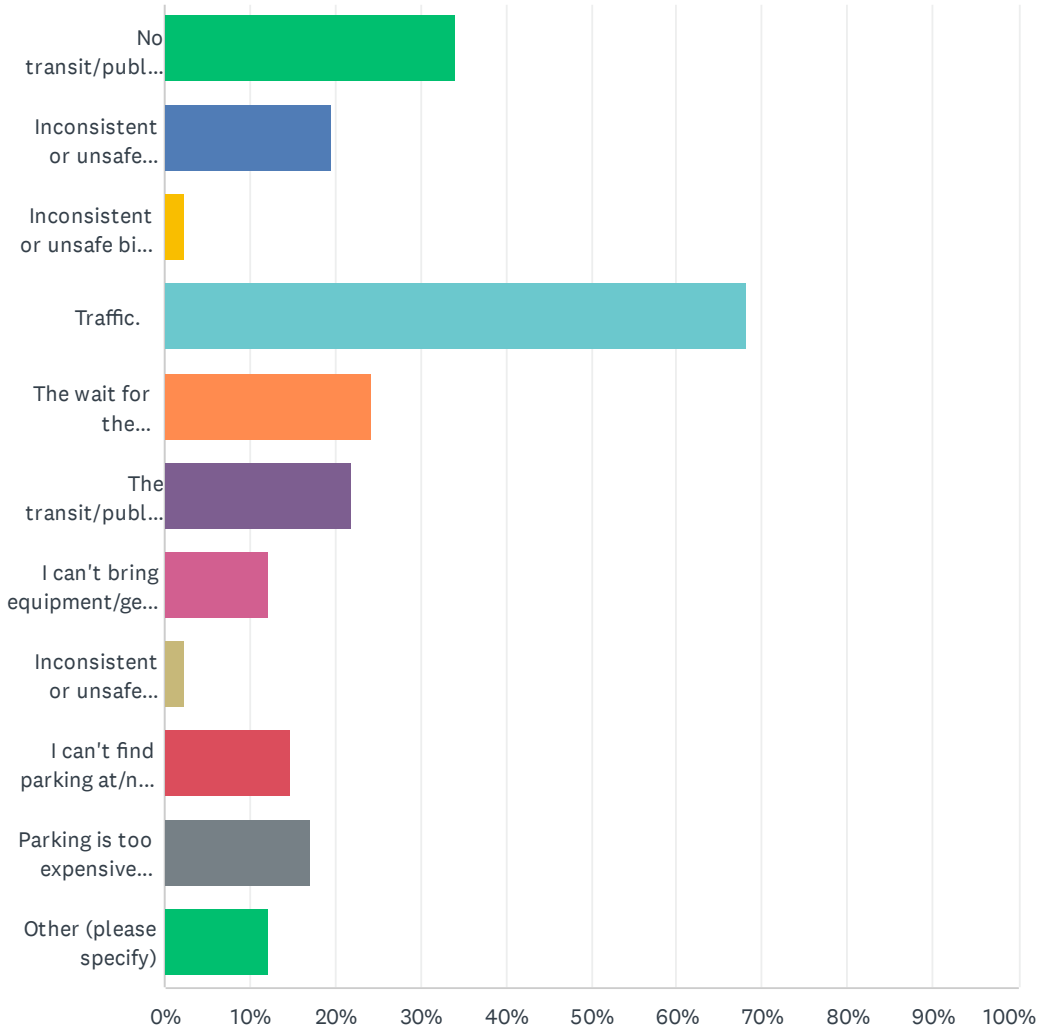




	VERY DIFFICULT	SOMEWHAT DIFFICULT	NEITHER DIFFICULT NOR EASY	SOMEWHAT EASY	VERY EASY	TOTAL	WEIGHTED AVERAGE
Grocery stores	2.50% 1	30.00% 12	12.50% 5	17.50% 7	37.50% 15	40	2.58
Medical appointments	4.88% 2	26.83% 11	21.95% 9	24.39% 10	21.95% 9	41	2.32
Work/school	7.32% 3	19.51% 8	14.63% 6	26.83% 11	31.71% 13	41	2.56
Recreation (trails, parks, etc.)	9.76% 4	17.07% 7	12.20% 5	31.71% 13	29.27% 12	41	2.54
Shopping/dining	2.44% 1	7.32% 3	31.71% 13	26.83% 11	31.71% 13	41	2.78

Q20 When a travel experience is difficult, which factors most heavily contribute to that difficulty? Choose your top two or three.

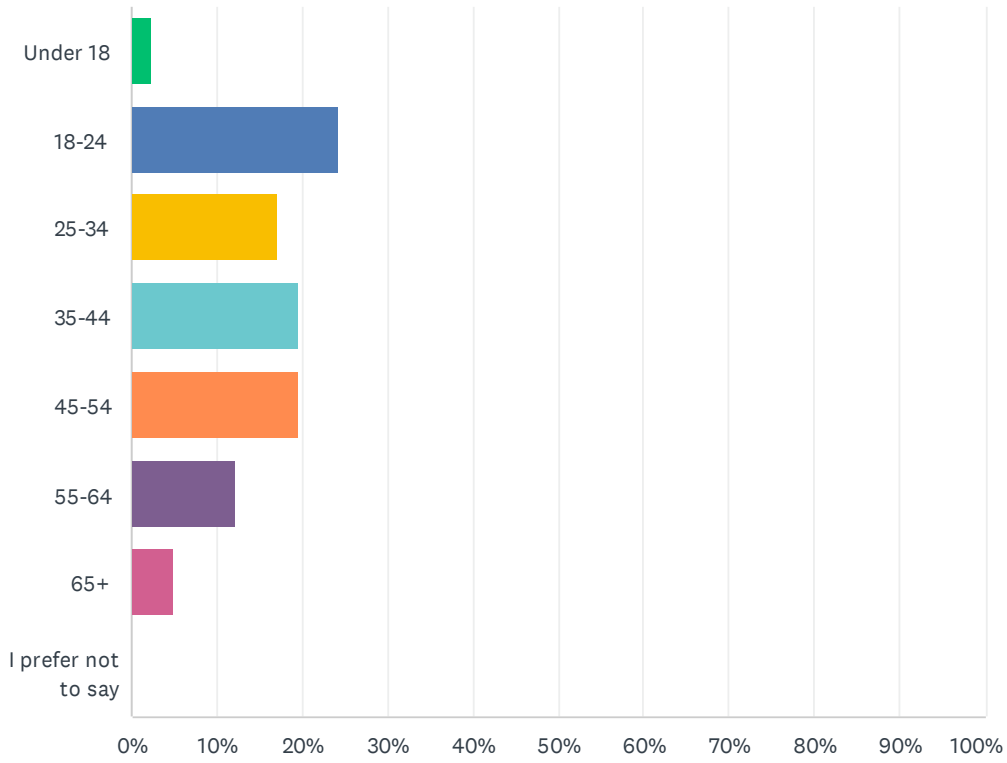
Answered: 41 Skipped: 7



ANSWER CHOICES	RESPONSES	
No transit/public transportation route that goes to the destination or close enough to it.	34.15%	14
Inconsistent or unsafe sidewalks/pedestrian crossings.	19.51%	8
Inconsistent or unsafe bike lanes/bike infrastructure.	2.44%	1
Traffic.	68.29%	28
The wait for the transit/public transportation option is too long.	24.39%	10
The transit/public transportation option is too crowded.	21.95%	9
I can't bring equipment/gear/items I need with me on the transit/public transportation option.	12.20%	5
Inconsistent or unsafe driving conditions, like difficult/blind turns.	2.44%	1
I can't find parking at/near the destination.	14.63%	6
Parking is too expensive at/near the destination.	17.07%	7
Other (please specify)	12.20%	5
Total Respondents: 41		

Q21 What is your age range?

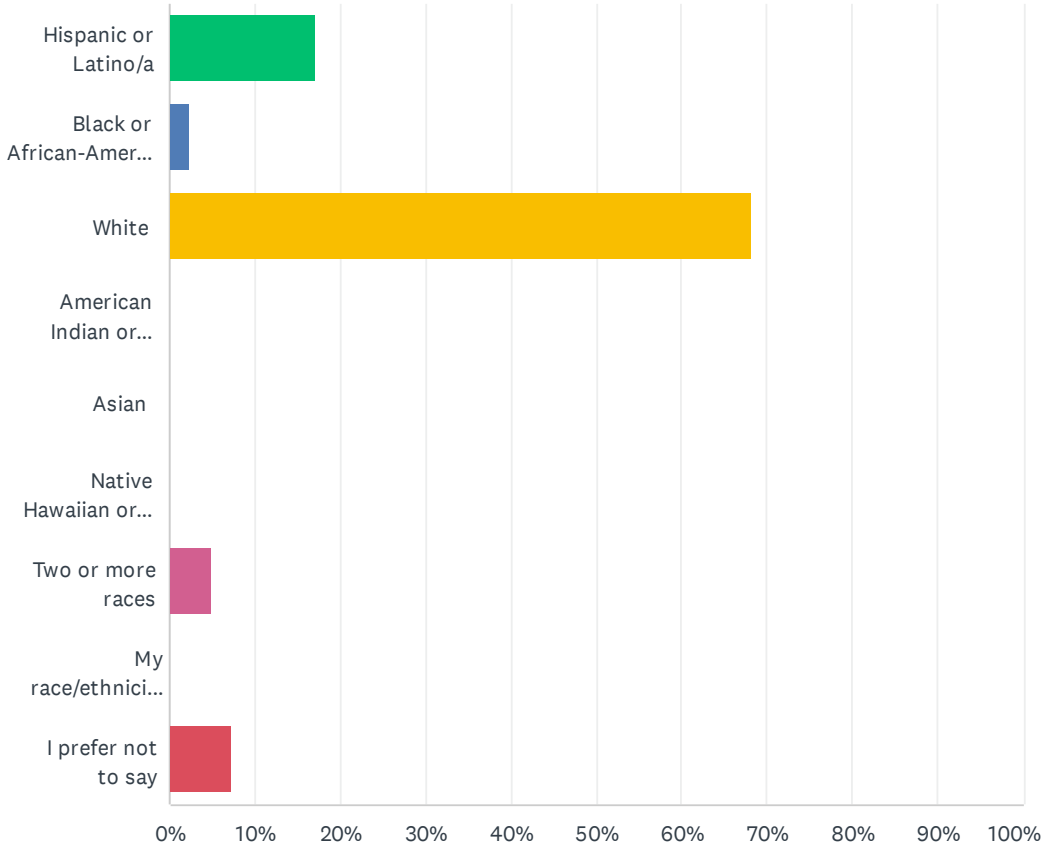
Answered: 41 Skipped: 7



ANSWER CHOICES	RESPONSES	
Under 18	2.44%	1
18-24	24.39%	10
25-34	17.07%	7
35-44	19.51%	8
45-54	19.51%	8
55-64	12.20%	5
65+	4.88%	2
I prefer not to say	0.00%	0
TOTAL		41

Q22 What race or ethnicity do you identify with most?

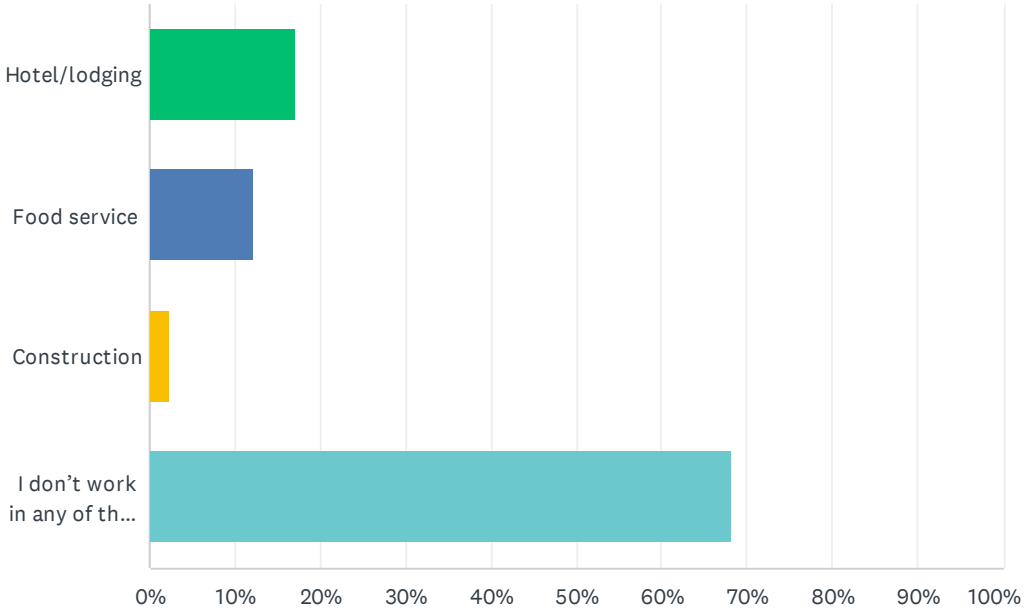
Answered: 41 Skipped: 7



ANSWER CHOICES	RESPONSES	
Hispanic or Latino/a	17.07%	7
Black or African-American	2.44%	1
White	68.29%	28
American Indian or Alaska Native	0.00%	0
Asian	0.00%	0
Native Hawaiian or Pacific Islander	0.00%	0
Two or more races	4.88%	2
My race/ethnicity is not listed here	0.00%	0
I prefer not to say	7.32%	3
TOTAL		41

Q23 Do you work in any of the following industries?

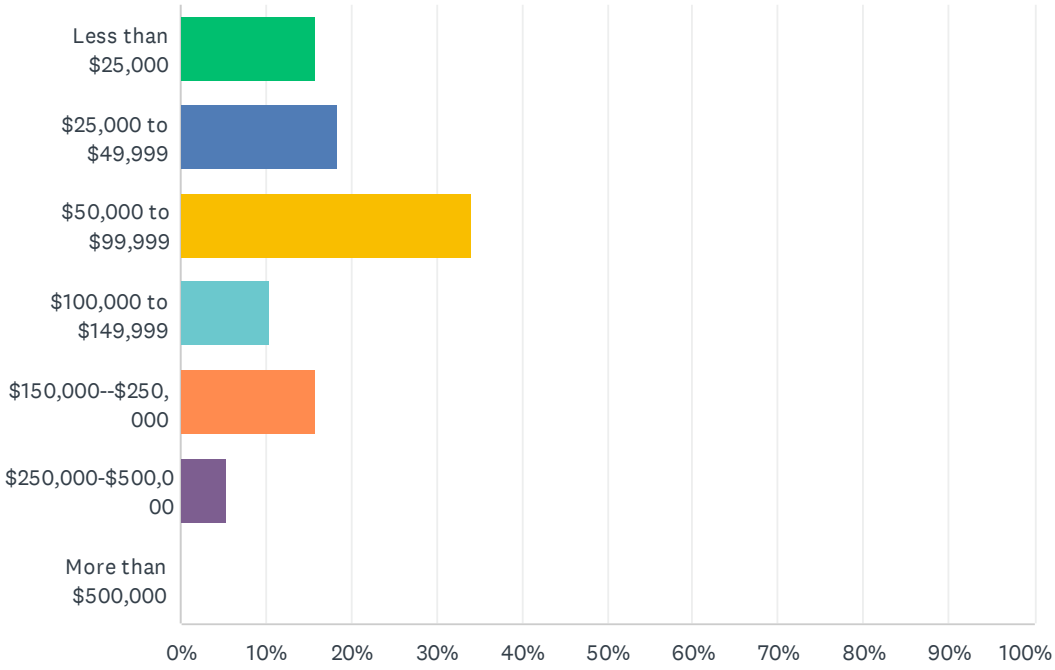
Answered: 41 Skipped: 7



ANSWER CHOICES	RESPONSES	
Hotel/lodging	17.07%	7
Food service	12.20%	5
Construction	2.44%	1
I don't work in any of these industries.	68.29%	28
TOTAL		41

Q24 How much pre-tax income does your household make in a typical year?

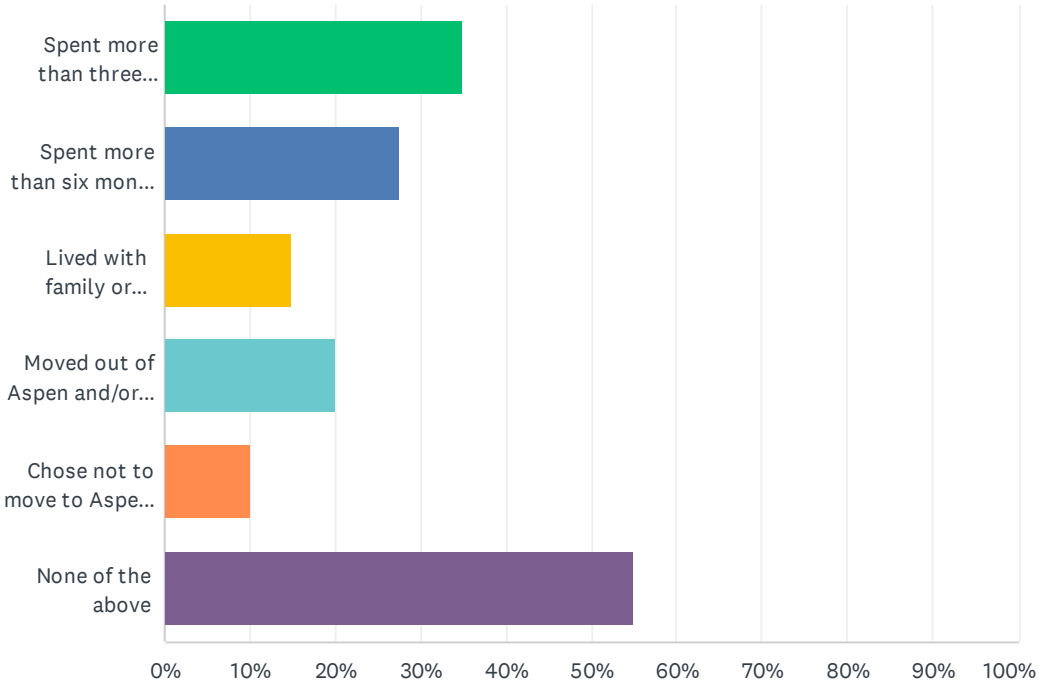
Answered: 38 Skipped: 10



ANSWER CHOICES	RESPONSES	
Less than $25,000	15.79%	6
$25,000 to $49,999	18.42%	7
$50,000 to $99,999	34.21%	13
$100,000 to $149,999	10.53%	4
$150,000--$250,000	15.79%	6
$250,000-$500,000	5.26%	2
More than $500,000	0.00%	0
TOTAL		38

Q25 Have you experienced any of the following in the last three years? Check all that apply.

Answered: 40 Skipped: 8



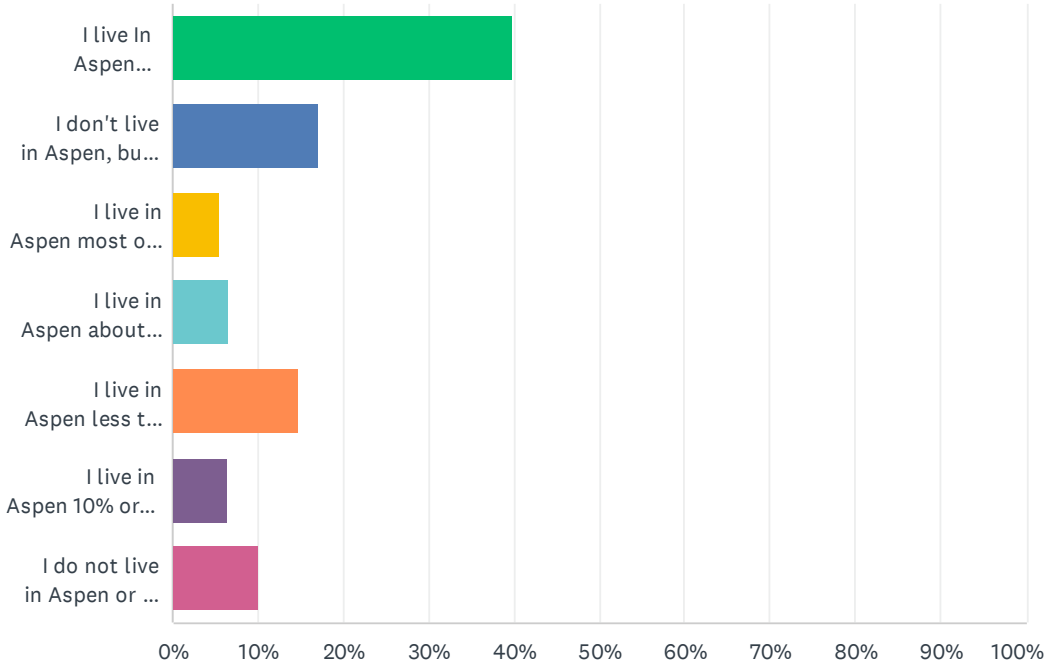
ANSWER CHOICES	RESPONSES	
Spent more than three months trying to find housing within my budget and close enough to my job.	35.00%	14
Spent more than six months trying to find housing within my budget and close enough to my job.	27.50%	11
Lived with family or friends because I couldn't find housing within my budget and close enough to my job.	15.00%	6
Moved out of Aspen and/or Roaring Fork Valley because I couldn't find housing within my budget.	20.00%	8
Chose not to move to Aspen and/or Roaring Fork Valley because I couldn't find housing within my budget.	10.00%	4
None of the above	55.00%	22
Total Respondents: 40		

Q26 Share your email address to be entered into our free lunch raffle!

Answered: 30 Skipped: 18

Q1 Approximately what percentage of the year do you live in Aspen?

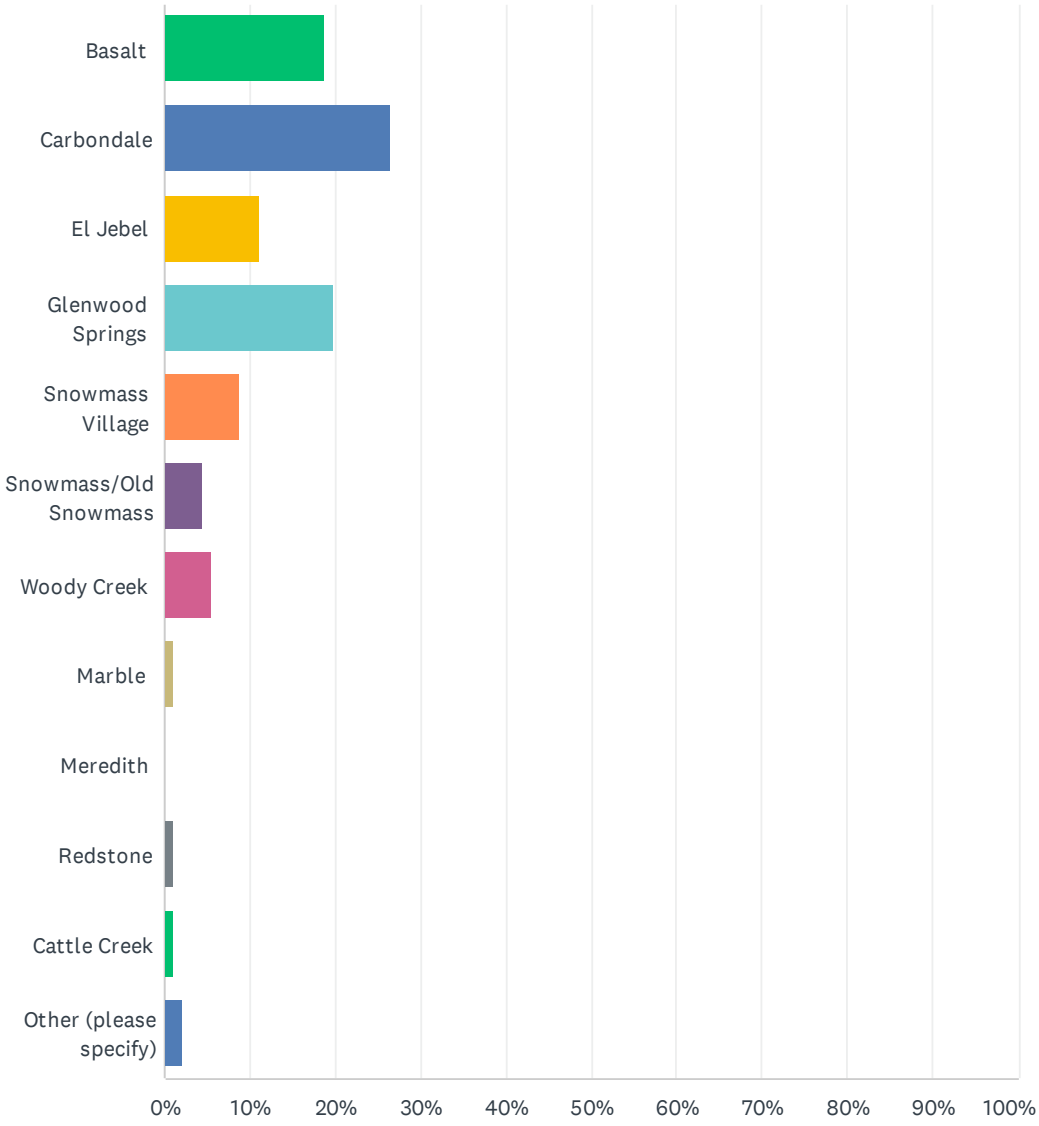
Answered: 534 Skipped: 1



ANSWER CHOICES	RESPONSES	
I live In Aspen full-time.	39.89%	213
I don't live in Aspen, but i do live in the broader Roaring Fork Valley.	17.04%	91
I live in Aspen most of the year (75% of the year or more).	5.62%	30
I live in Aspen about half of the year (about 50% of the year).	6.55%	35
I live in Aspen less than 50% of the year, but more than 10%.	14.61%	78
I live in Aspen 10% or less of the year.	6.37%	34
I do not live in Aspen or in Roaring Fork Valley.	9.93%	53
TOTAL		534

Q2 What community in the Roaring Fork Valley do you live in, or closest to?

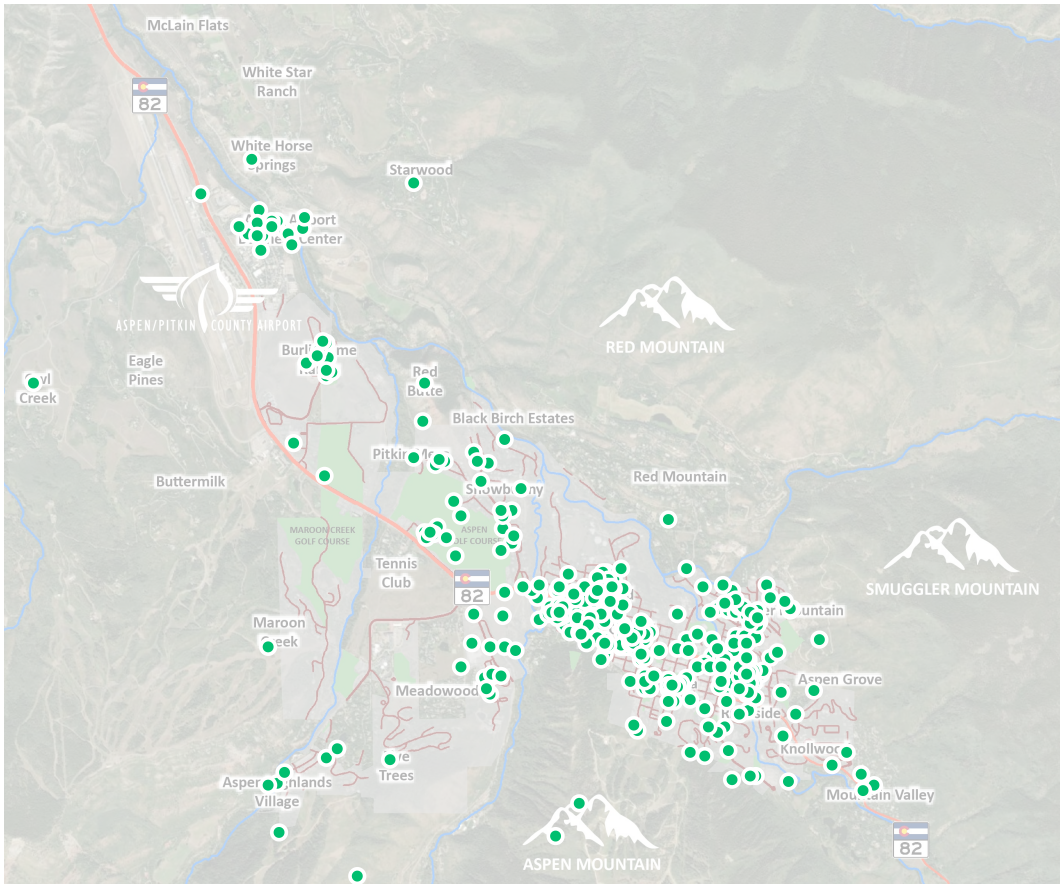
Answered: 91 Skipped: 444



ANSWER CHOICES	RESPONSES	
Basalt	18.68%	17
Carbondale	26.37%	24
El Jebel	10.99%	10
Glenwood Springs	19.78%	18
Snowmass Village	8.79%	8
Snowmass/Old Snowmass	4.40%	4
Woody Creek	5.49%	5
Marble	1.10%	1
Meredith	0.00%	0
Redstone	1.10%	1
Cattle Creek	1.10%	1
Other (please specify)	2.20%	2
TOTAL		91

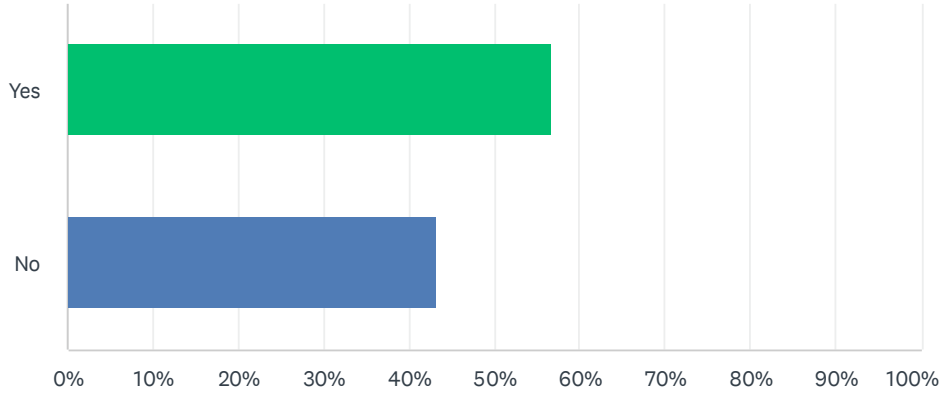
Q3 Approximately where in Aspen do you live?

Answered: 364 Skipped: 171



Q4 Do you work in Aspen?

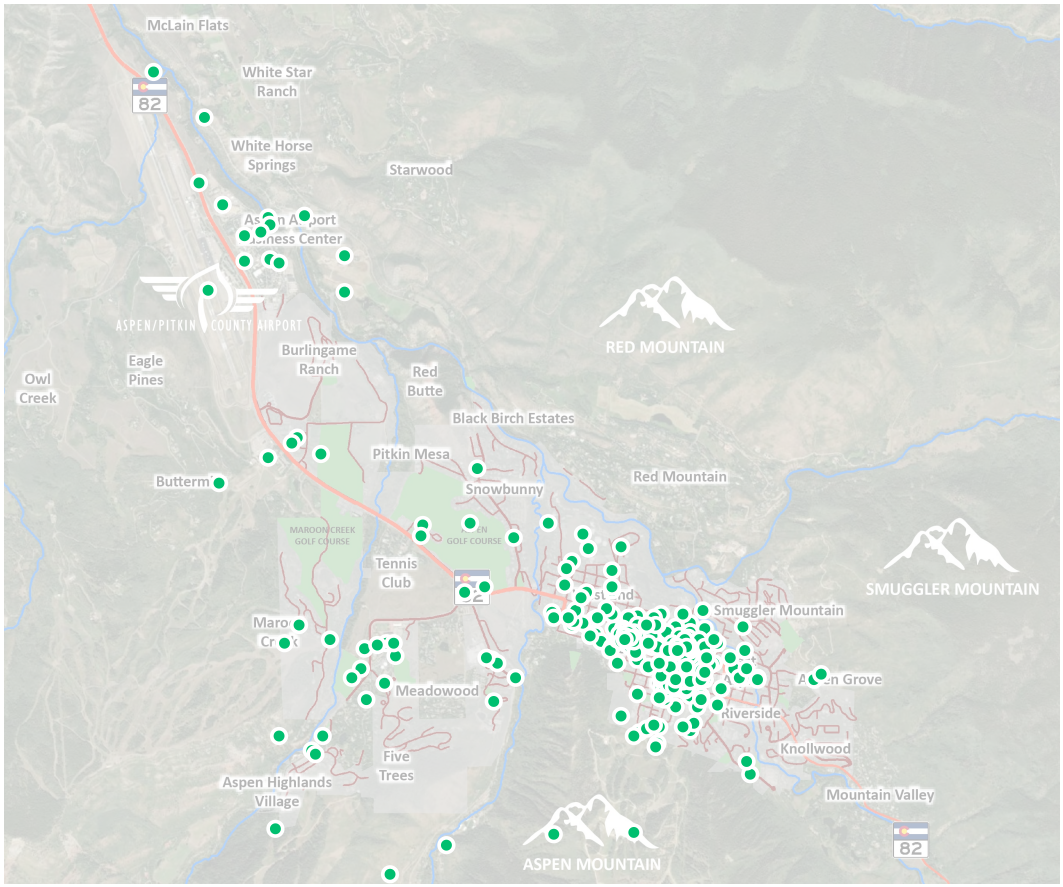
Answered: 522 Skipped: 13



ANSWER CHOICES	RESPONSES	
Yes	56.70%	296
No	43.30%	226
TOTAL		522

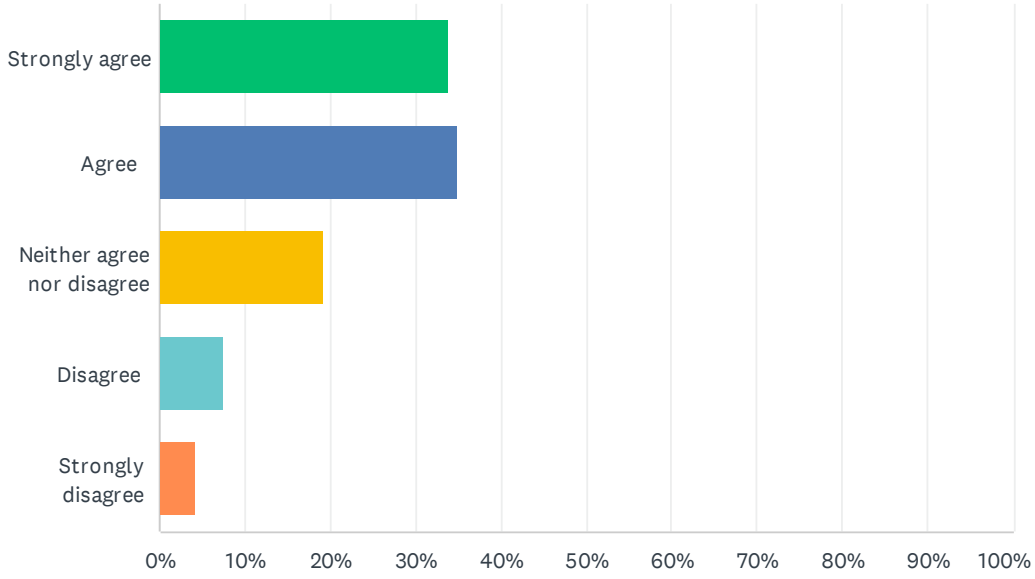
Q5 Approximately where in Aspen do you work?

Answered: 278 Skipped: 257



Q6 Aspen's bus service makes it easier for me to drive less.

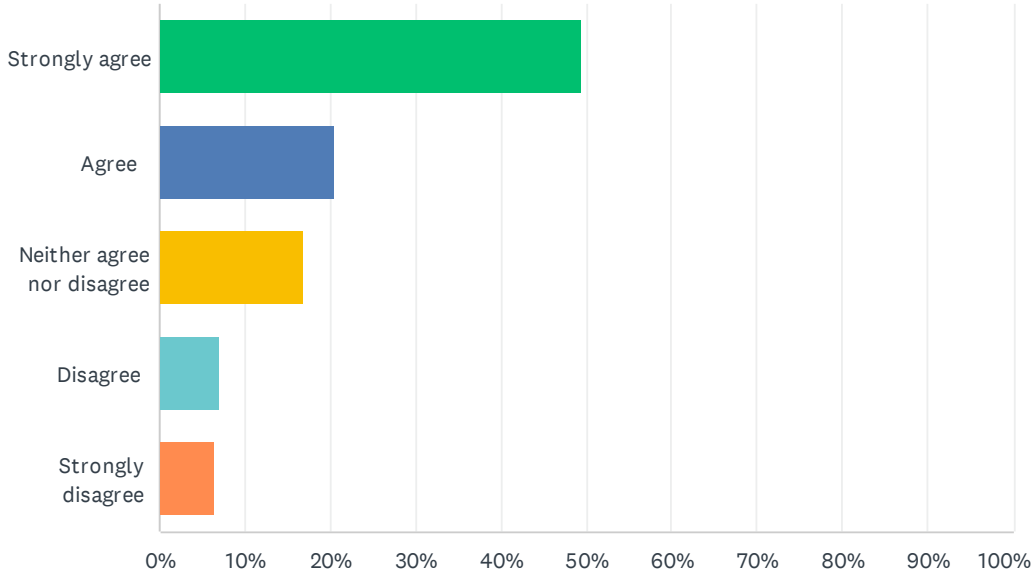
Answered: 442 Skipped: 93



ANSWER CHOICES	RESPONSES	
Strongly agree	33.94%	150
Agree	35.07%	155
Neither agree nor disagree	19.23%	85
Disagree	7.47%	33
Strongly disagree	4.30%	19
TOTAL		442

Q7 Aspen's Downtowner makes it easier for me to drive less.

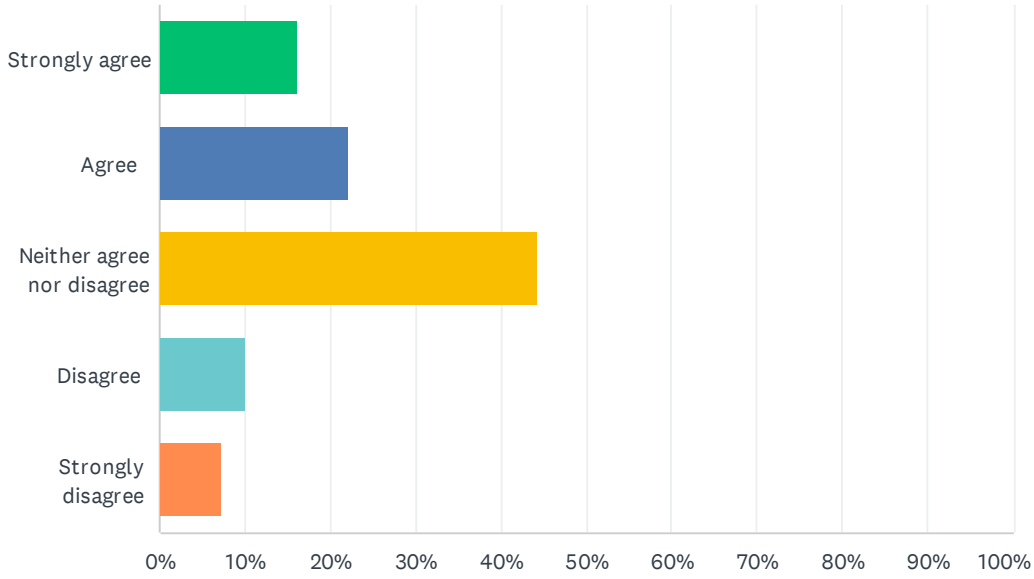
Answered: 441 Skipped: 94



ANSWER CHOICES	RESPONSES	
Strongly agree	49.43%	218
Agree	20.41%	90
Neither agree nor disagree	16.78%	74
Disagree	7.03%	31
Strongly disagree	6.35%	28
TOTAL		441

Q8 Aspen's WE-Cycle (bike share) service makes it easier for me to drive less.

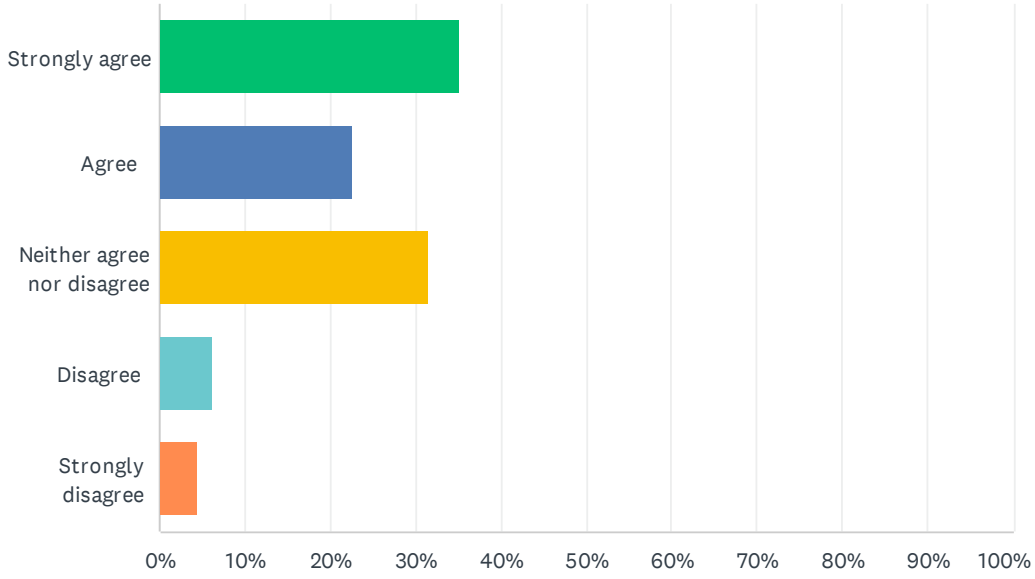
Answered: 440 Skipped: 95



ANSWER CHOICES	RESPONSES	
Strongly agree	16.14%	71
Agree	22.27%	98
Neither agree nor disagree	44.32%	195
Disagree	10.00%	44
Strongly disagree	7.27%	32
TOTAL		440

Q9 Owning my own bike/e-bike makes it easier for me to drive less.

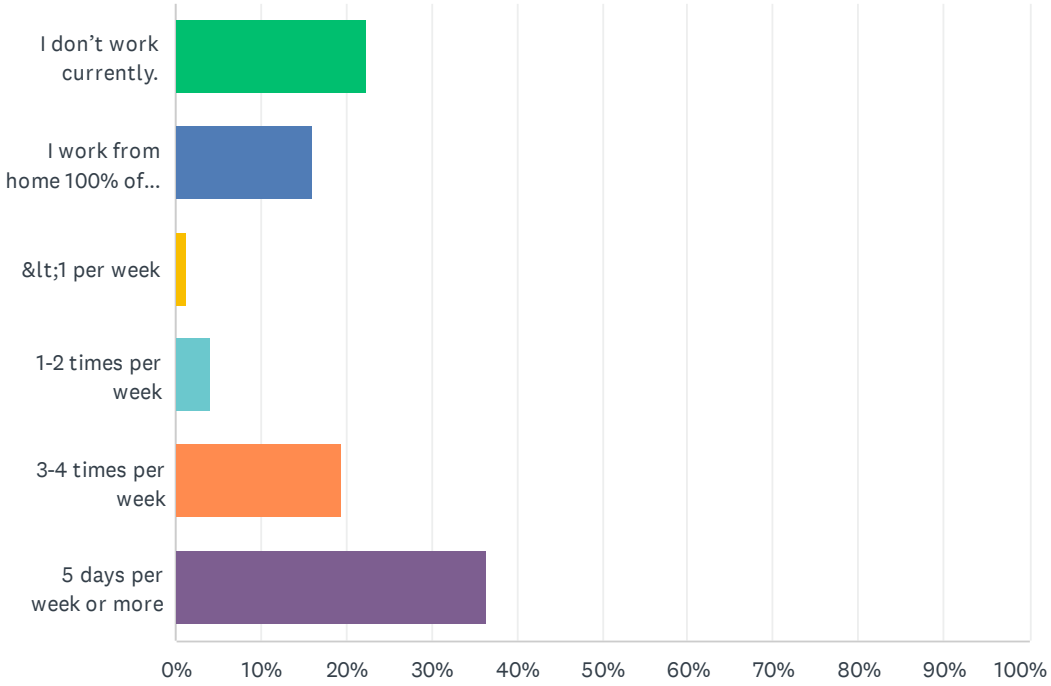
Answered: 441 Skipped: 94



ANSWER CHOICES	RESPONSES	
Strongly agree	35.15%	155
Agree	22.68%	100
Neither agree nor disagree	31.52%	139
Disagree	6.12%	27
Strongly disagree	4.54%	20
TOTAL		441

Q10 How frequently do you travel to your place of work?

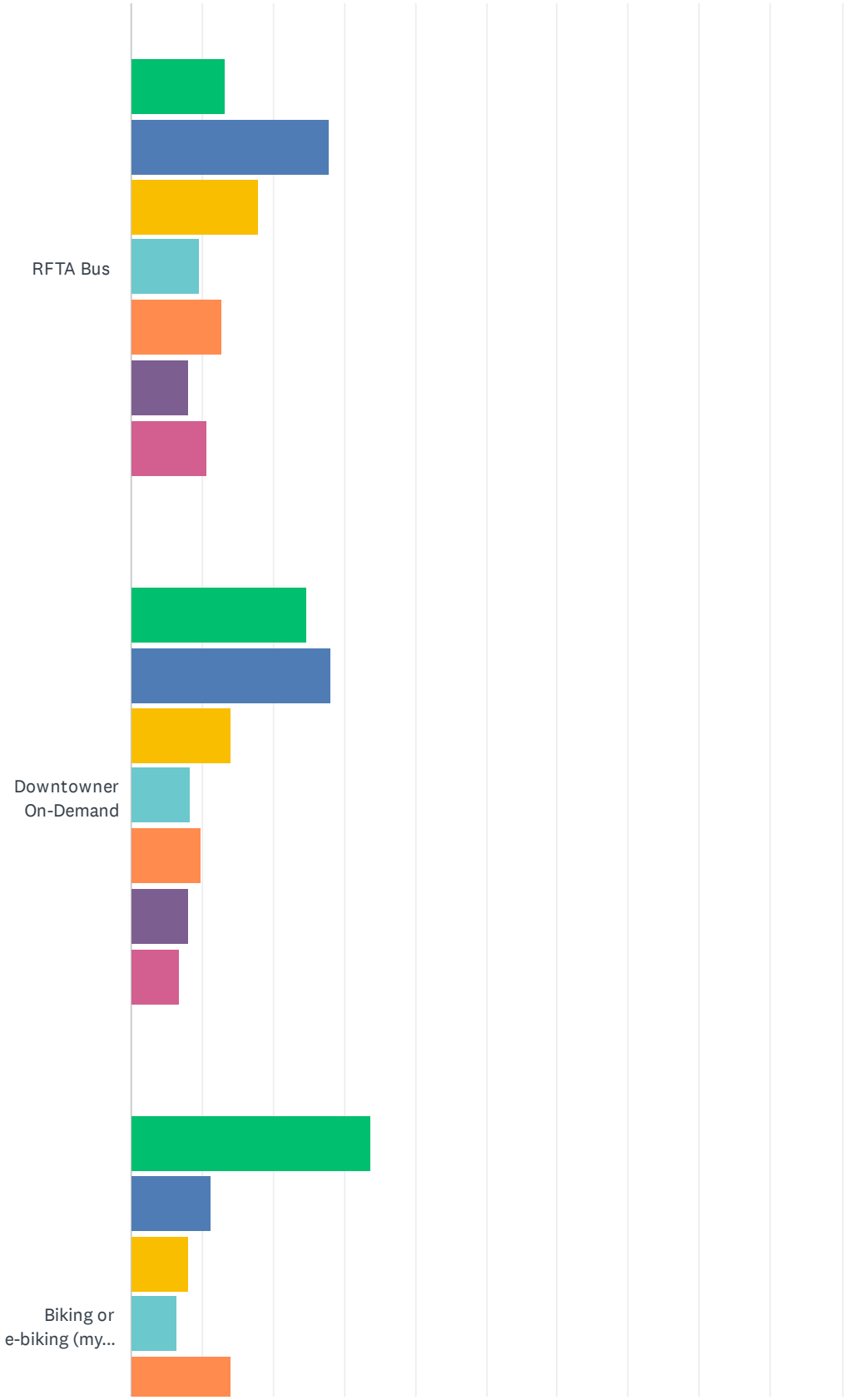
Answered: 436 Skipped: 99

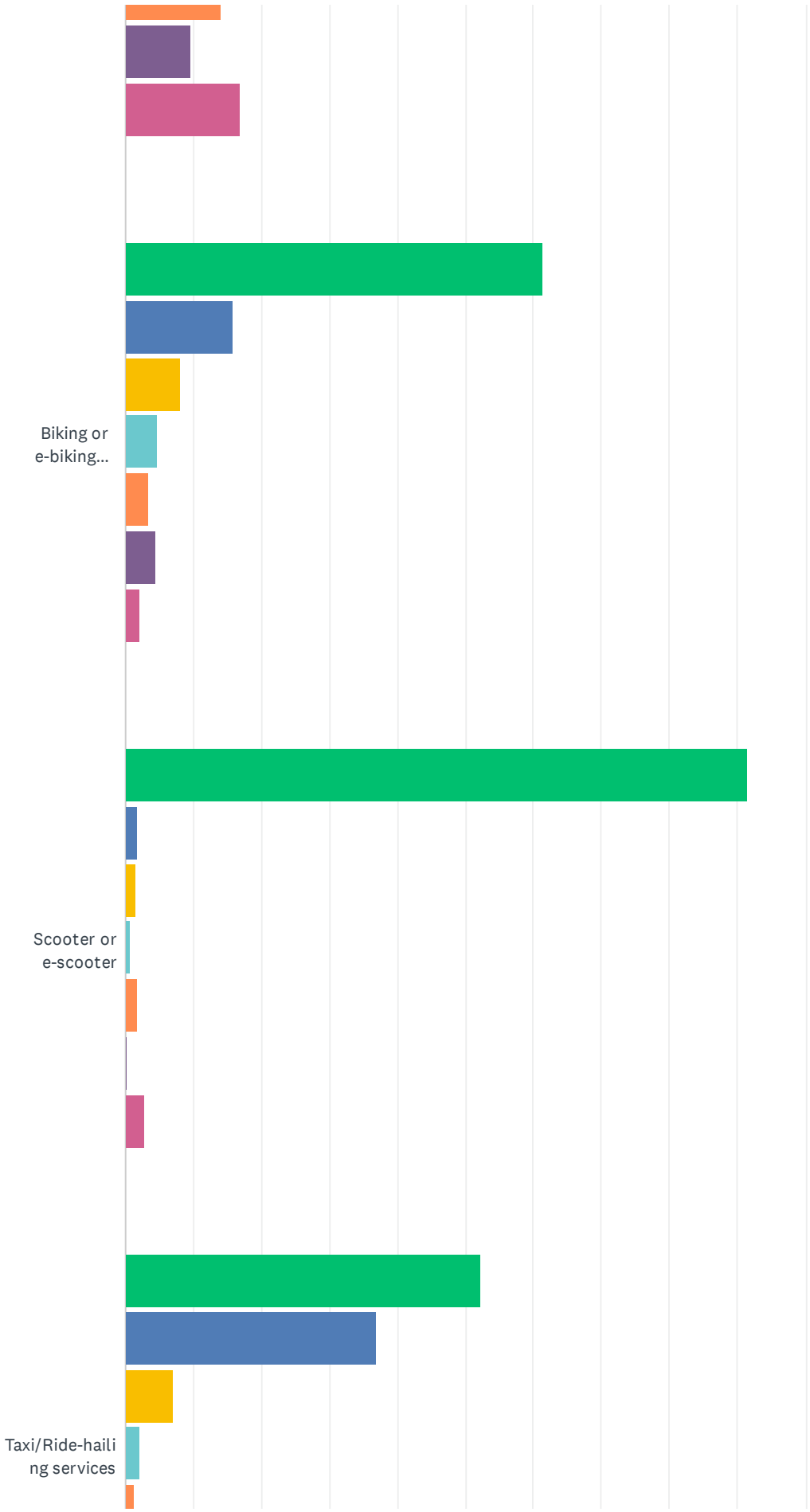


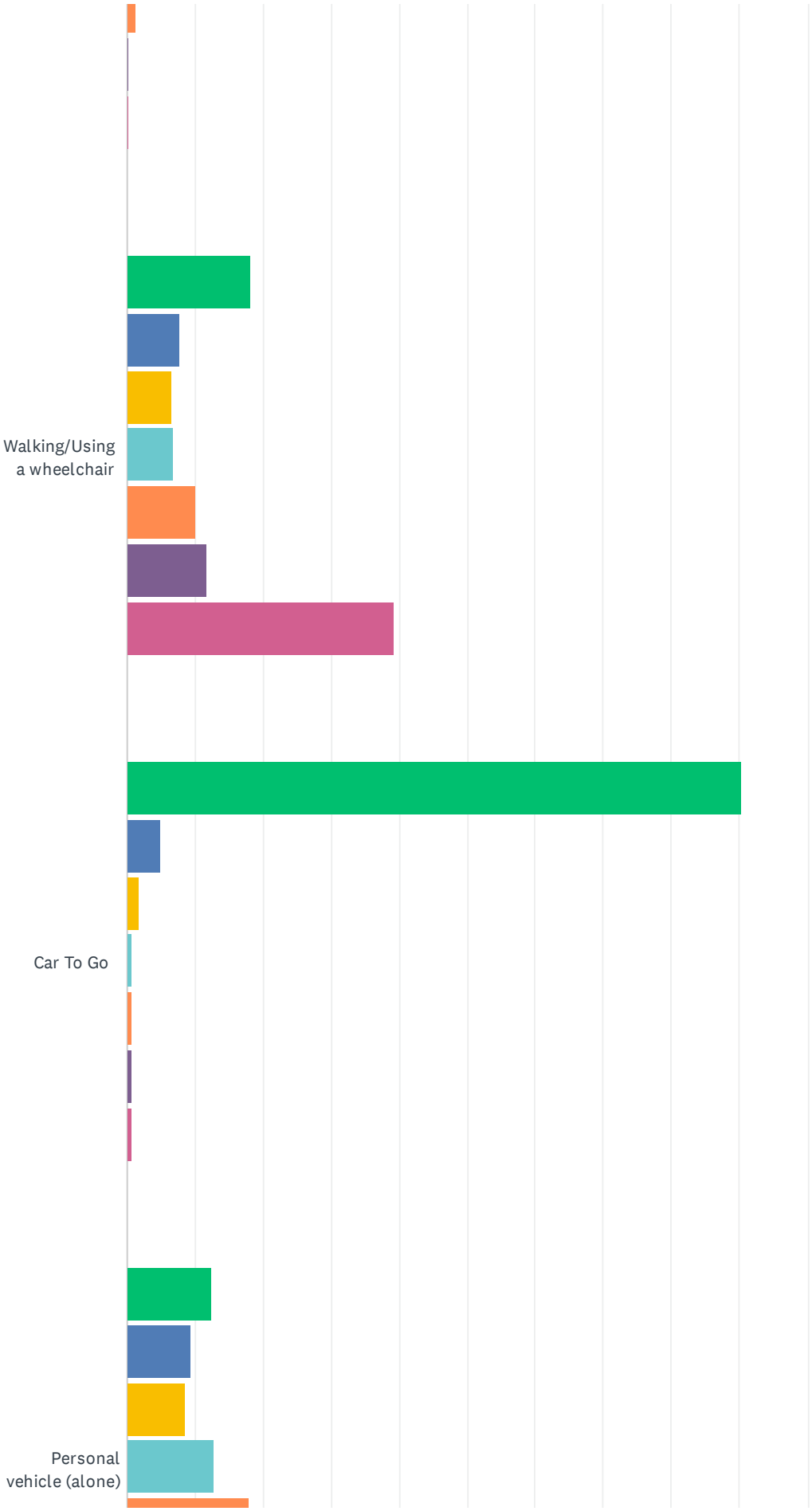
ANSWER CHOICES	RESPONSES	
I don't work currently.	22.48%	98
I work from home 100% of the time.	16.06%	70
<1 per week	1.38%	6
1-2 times per week	4.13%	18
3-4 times per week	19.50%	85
5 days per week or more	36.47%	159
TOTAL		436

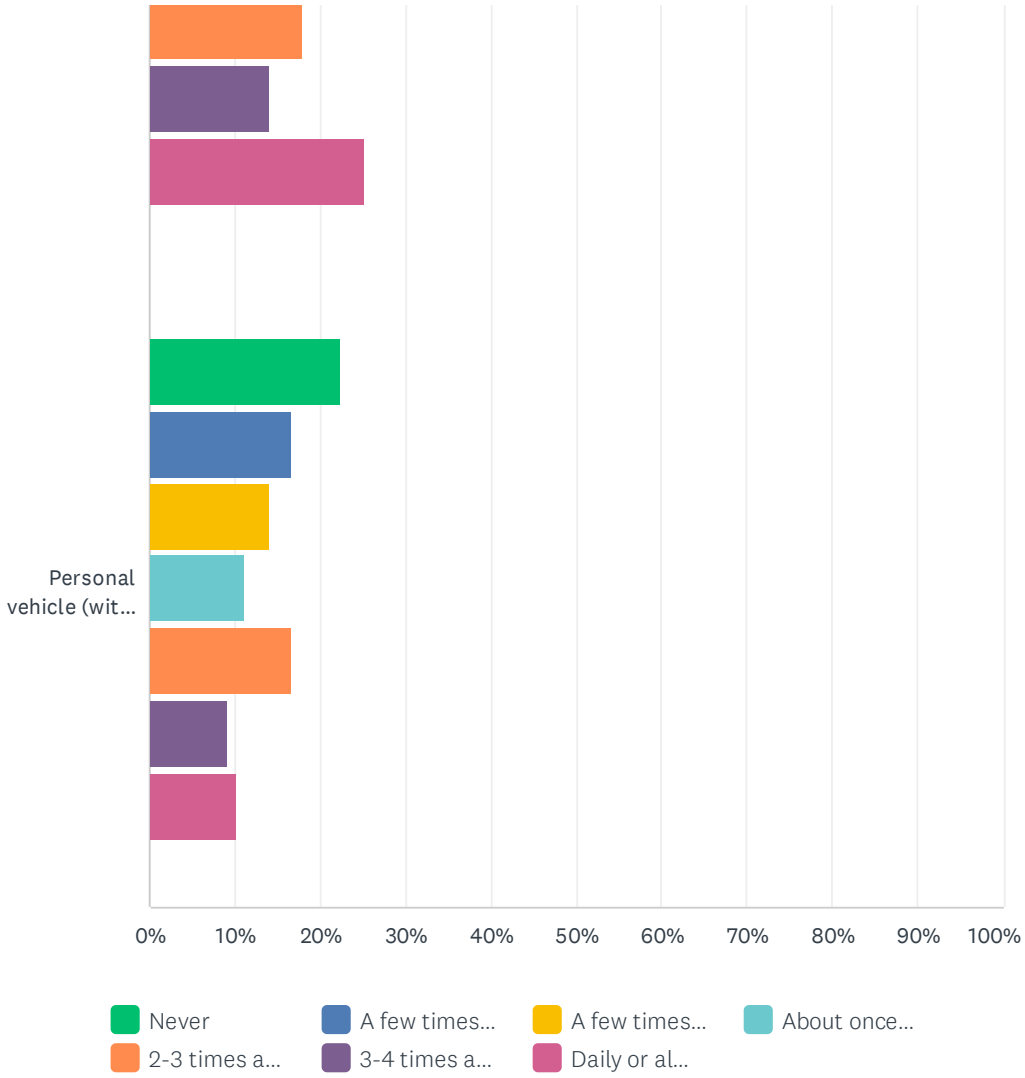
Q11 How frequently do you use the following transportation options?

Answered: 441 Skipped: 94




Biking or e-biking...
Scooter or e-scooter
Taxi/Ride-hailing services

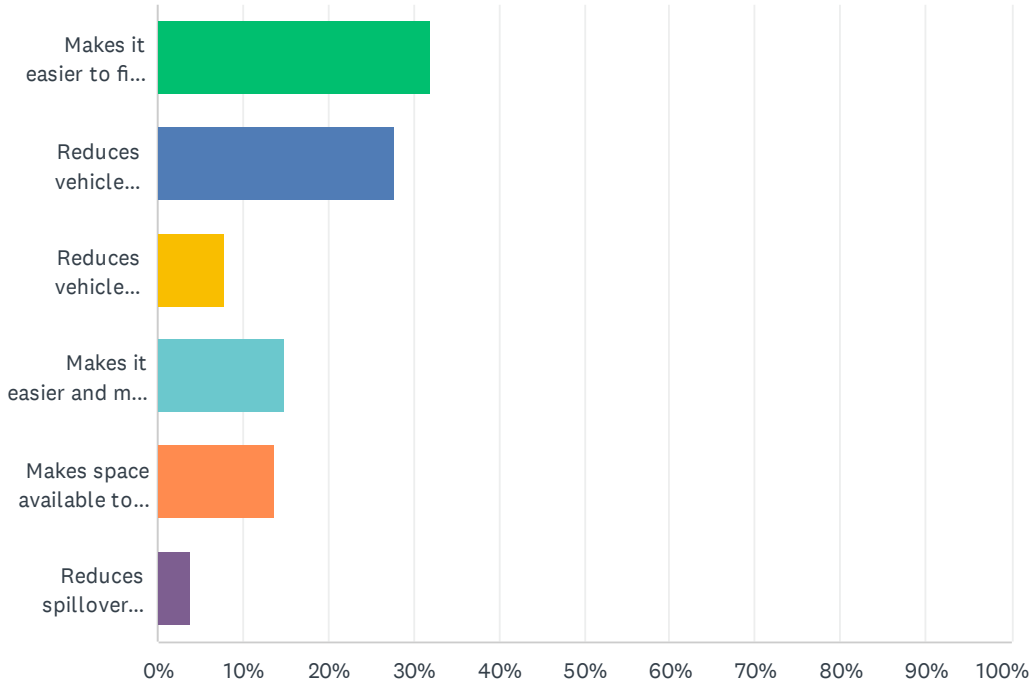

Walking/Using a wheelchair
Car To Go
Personal vehicle (alone)


Personal vehicle (wit...
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Never
A few times...
A few times...
About once...
2-3 times a...
3-4 times a...
Daily or al...

	NEVER	A FEW TIMES A YEAR	A FEW TIMES A MONTH	ABOUT ONCE A WEEK	2-3 TIMES A WEEK	3-4 TIMES A WEEK	DAILY OR ALMOST DAILY	TOTAL	WEIGHTED AVERAGE
RFTA Bus	13.19% 57	28.01% 121	17.82% 77	9.49% 41	12.73% 55	8.10% 35	10.65% 46	432	2.47
Downtowner On-Demand	24.71% 105	28.24% 120	14.12% 60	8.24% 35	9.88% 42	8.00% 34	6.82% 29	425	2.02
Biking or e-biking (my own)	33.73% 142	11.40% 48	8.08% 34	6.41% 27	14.01% 59	9.50% 40	16.86% 71	421	2.52
Biking or e-biking (WE-Cycle)	61.37% 259	15.88% 67	8.06% 34	4.74% 20	3.32% 14	4.50% 19	2.13% 9	422	0.95
Scooter or e-scooter	91.41% 383	1.67% 7	1.43% 6	0.72% 3	1.67% 7	0.24% 1	2.86% 12	419	0.32
Taxi/Ride-hailing services	52.25% 221	36.88% 156	7.09% 30	2.13% 9	1.18% 5	0.24% 1	0.24% 1	423	0.65
Walking/Using a wheelchair	18.05% 76	7.60% 32	6.65% 28	6.89% 29	9.98% 42	11.64% 49	39.19% 165	421	3.75
Car To Go	90.44% 369	4.90% 20	1.72% 7	0.74% 3	0.74% 3	0.74% 3	0.74% 3	408	0.22
Personal vehicle (alone)	12.30% 53	9.28% 40	8.58% 37	12.76% 55	17.87% 77	14.15% 61	25.06% 108	431	3.57
Personal vehicle (with others)	22.30% 93	16.55% 69	14.15% 59	11.03% 46	16.55% 69	9.11% 38	10.31% 43	417	2.52

Q12 Which of the following goals is of highest importance to you for Aspen's public parking system?

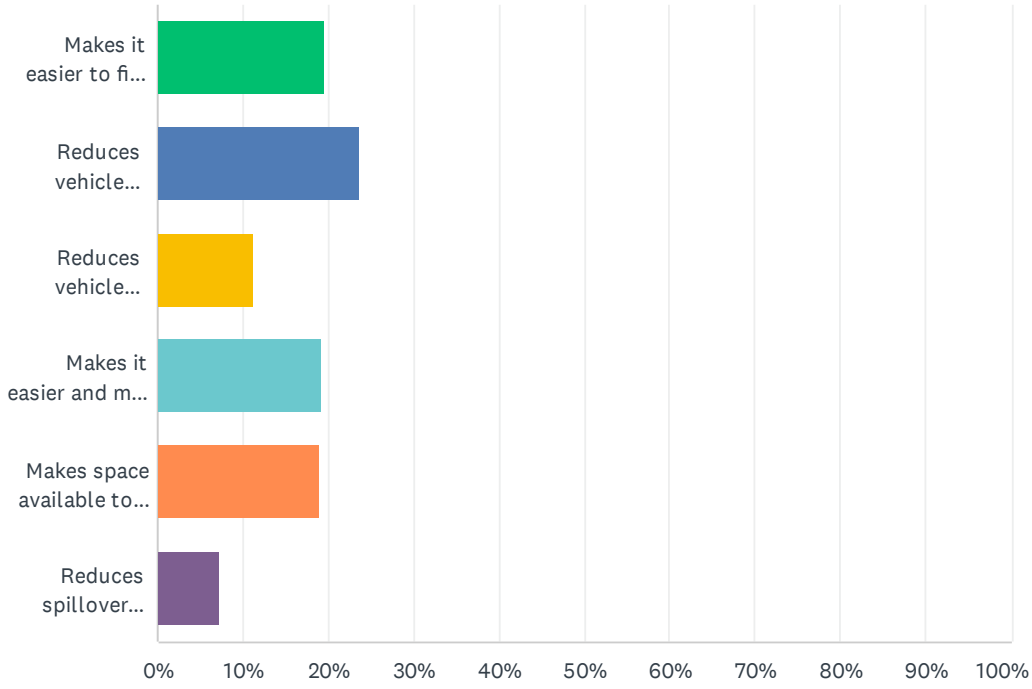
Answered: 434 Skipped: 101



ANSWER CHOICES	RESPONSES	
Makes it easier to find parking.	32.03%	139
Reduces vehicle congestion.	27.65%	120
Reduces vehicle emissions in support of climate action goals.	7.83%	34
Makes it easier and more pleasant to use other forms of travel, like walking and biking.	14.98%	65
Makes space available to those who need it most—for example, in a commercial area, customers and employees are prioritized.	13.59%	59
Reduces spillover parking from nearby destinations—like retail, restaurants, events and employment centers—into other neighborhoods.	3.92%	17
TOTAL		434

Q13 Which of the following goals is of second highest importance to you for Aspen's public parking system?

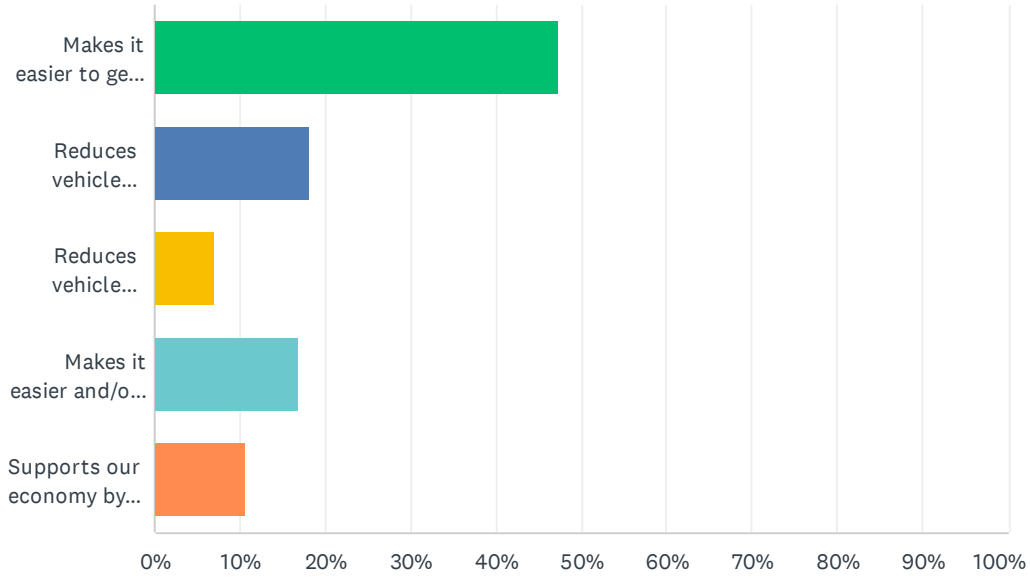
Answered: 427 Skipped: 108



ANSWER CHOICES	RESPONSES	
Makes it easier to find parking.	19.67%	84
Reduces vehicle congestion.	23.65%	101
Reduces vehicle emissions in support of climate action goals.	11.24%	48
Makes it easier and more pleasant to use other forms of travel, like walking and biking.	19.20%	82
Makes space available to those who need it most—for example, in a commercial area, customers and employees are prioritized.	18.97%	81
Reduces spillover parking from nearby destinations—like retail, restaurants, events and employment centers—into other neighborhoods.	7.26%	31
TOTAL		427

Q14 Which of the following goals is of highest importance to you when it comes to transportation options available to the community, like RFTA buses, the Downtowner, or WE Cycle?

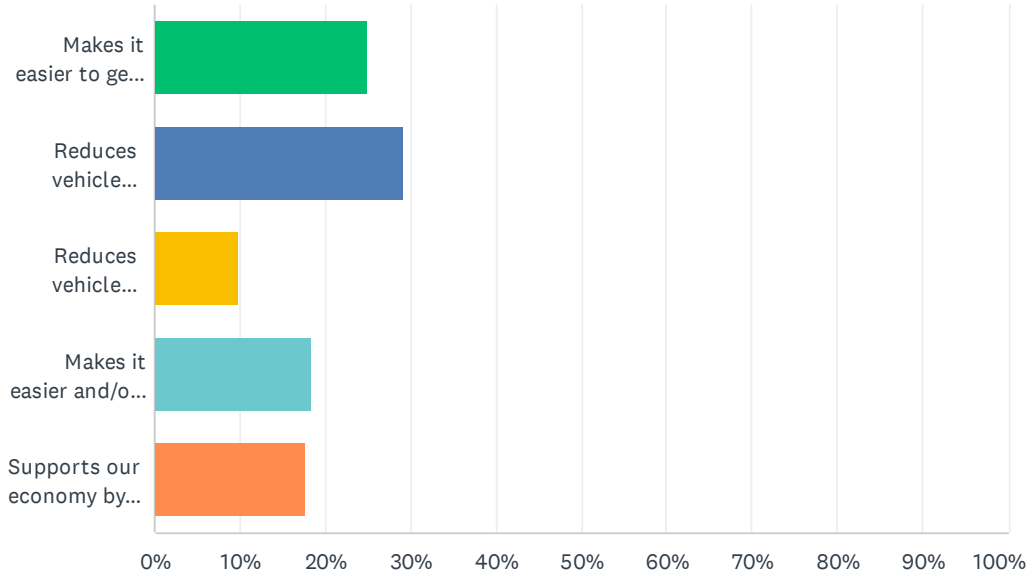
Answered: 438 Skipped: 97



ANSWER CHOICES	RESPONSES	
Makes it easier to get places.	47.26%	207
Reduces vehicle congestion and parking demand.	18.04%	79
Reduces vehicle emissions in support of climate action goals.	7.08%	31
Makes it easier and/or more pleasant and/or more convenient to own no or fewer cars.	16.89%	74
Supports our economy by helping people from all around the valley get to and around Aspen.	10.73%	47
TOTAL		438

Q15 Which of the following goals is of second highest importance to you when it comes to transportation options available to the community, like RFTA buses, the Downtowner, or WE Cycle?

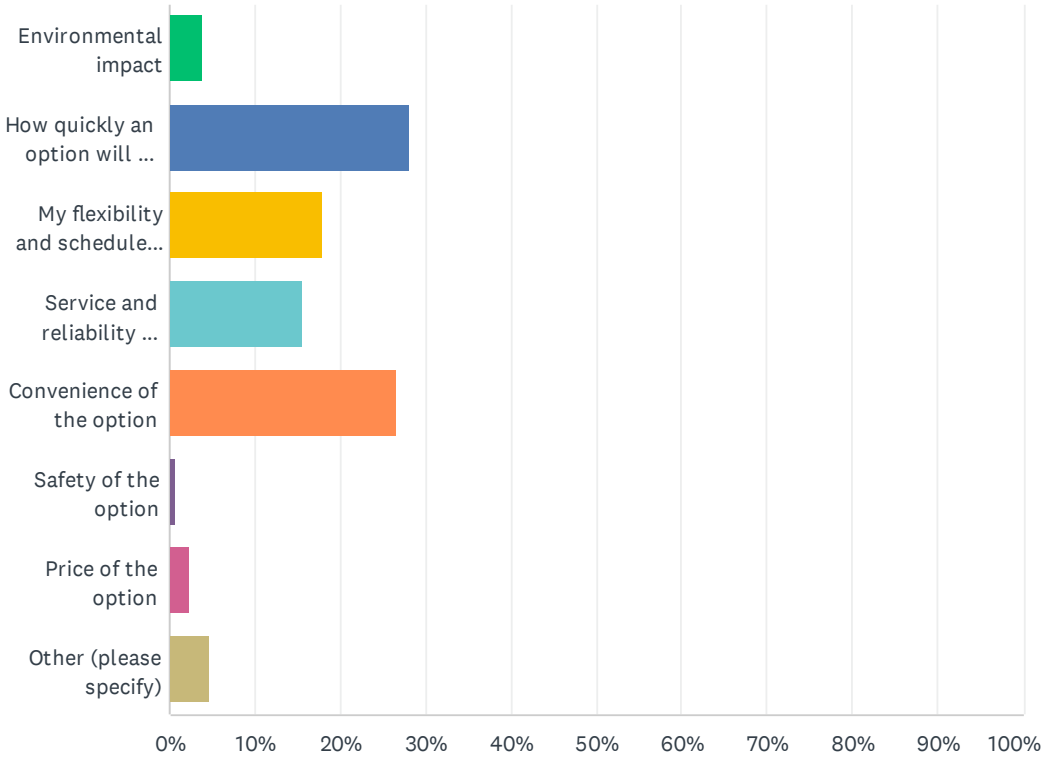
Answered: 436 Skipped: 99



ANSWER CHOICES	RESPONSES	
Makes it easier to get places.	25.00%	109
Reduces vehicle congestion and parking demand.	29.13%	127
Reduces vehicle emissions in support of climate action goals.	9.86%	43
Makes it easier and/or more pleasant and/or more convenient to own no or fewer cars.	18.35%	80
Supports our economy by helping people from all around the valley get to and around Aspen.	17.66%	77
TOTAL		436

Q16 Which of the following factors is of highest importance to you when making a decision about how to get somewhere?

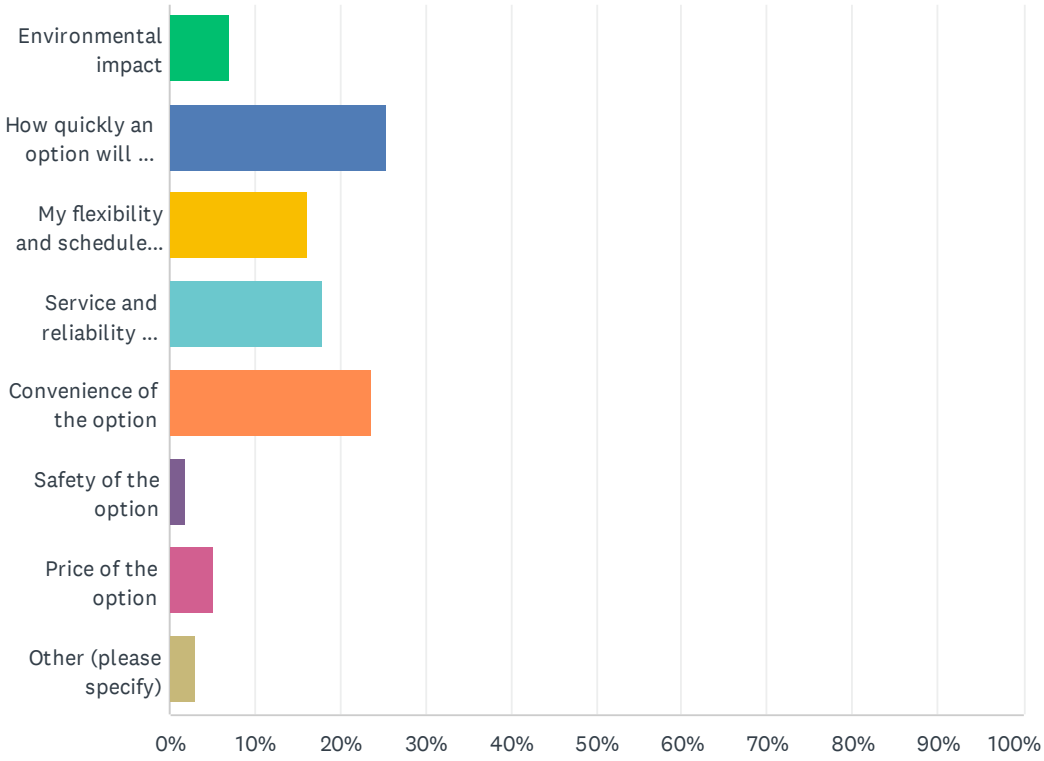
Answered: 439 Skipped: 96



ANSWER CHOICES	RESPONSES	
Environmental impact	3.87%	17
How quickly an option will get me to my destination	28.25%	124
My flexibility and schedule during the day (e.g. meetings or errands)	18.00%	79
Service and reliability of the option	15.49%	68
Convenience of the option	26.65%	117
Safety of the option	0.68%	3
Price of the option	2.28%	10
Other (please specify)	4.78%	21
TOTAL		439

Q17 Which of the following factors is of second highest importance to you when making a decision about how to get somewhere?

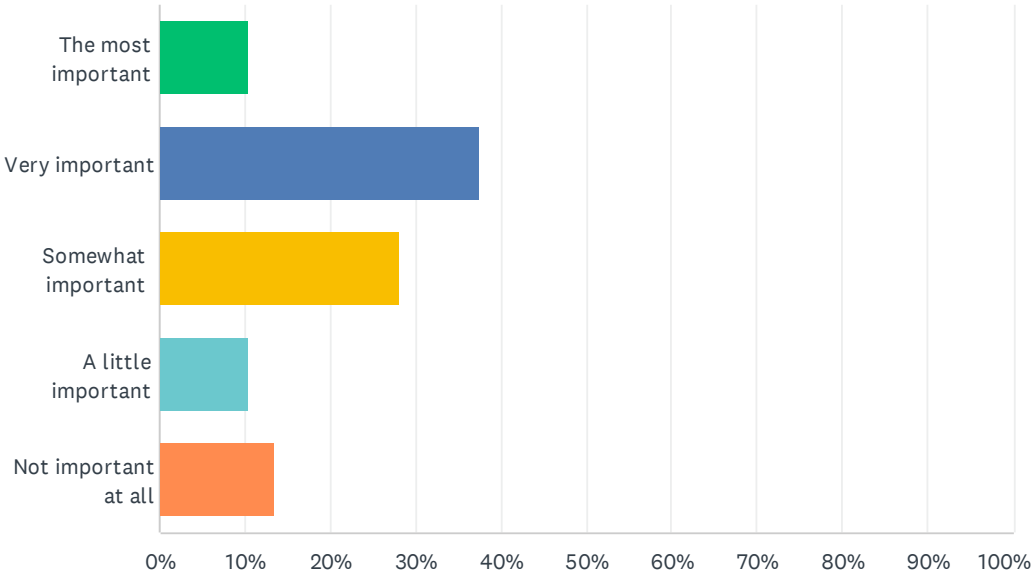
Answered: 437 Skipped: 98



ANSWER CHOICES	RESPONSES	
Environmental impact	7.09%	31
How quickly an option will get me to my destination	25.40%	111
My flexibility and schedule during the day (e.g. meetings or errands)	16.25%	71
Service and reliability of the option	17.85%	78
Convenience of the option	23.57%	103
Safety of the option	1.83%	8
Price of the option	5.03%	22
Other (please specify)	2.97%	13
TOTAL		437

Q18 In your view, how important is reducing personal vehicle usage in helping us address the climate crisis and meet our local climate goals?

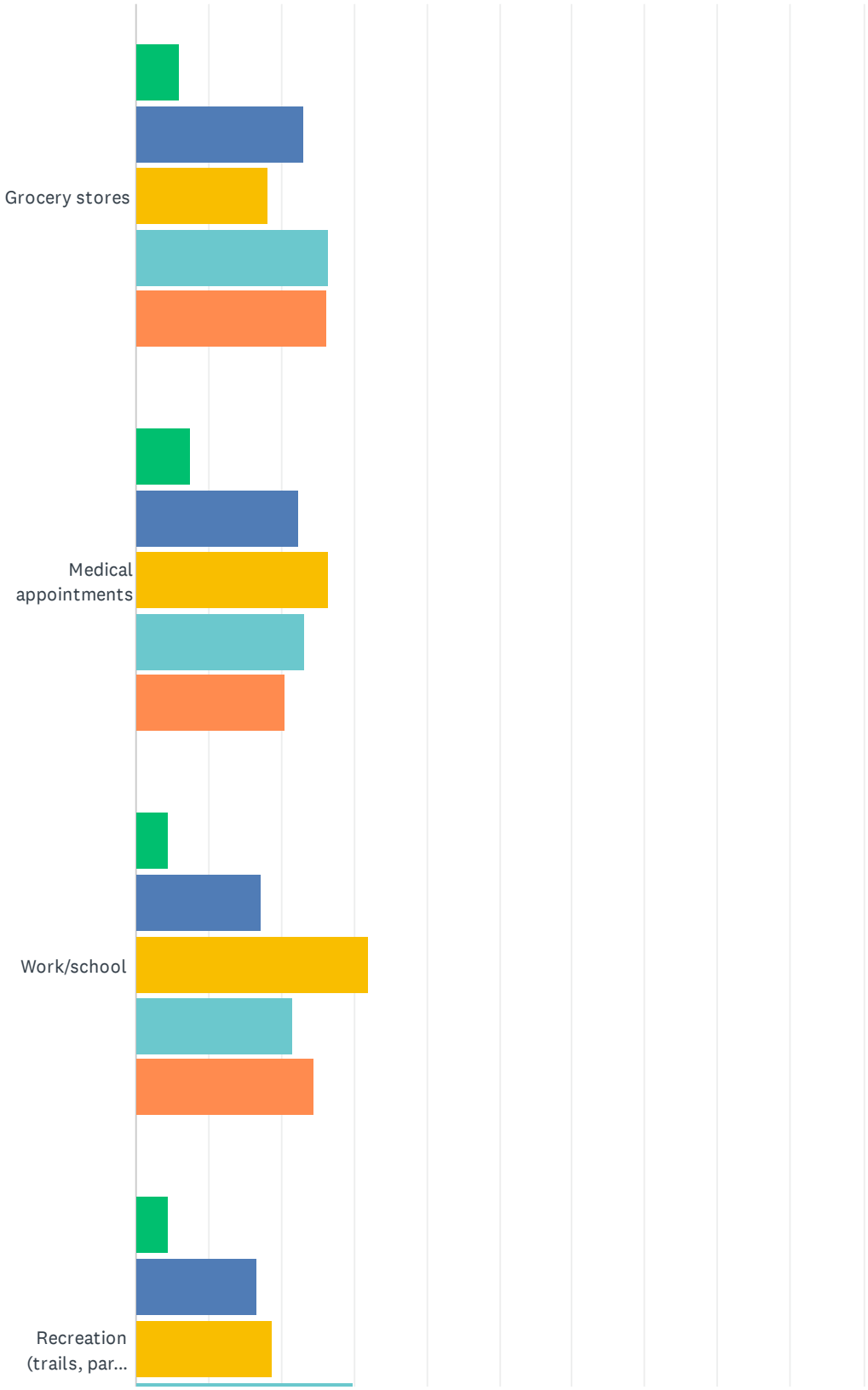
Answered: 438 Skipped: 97

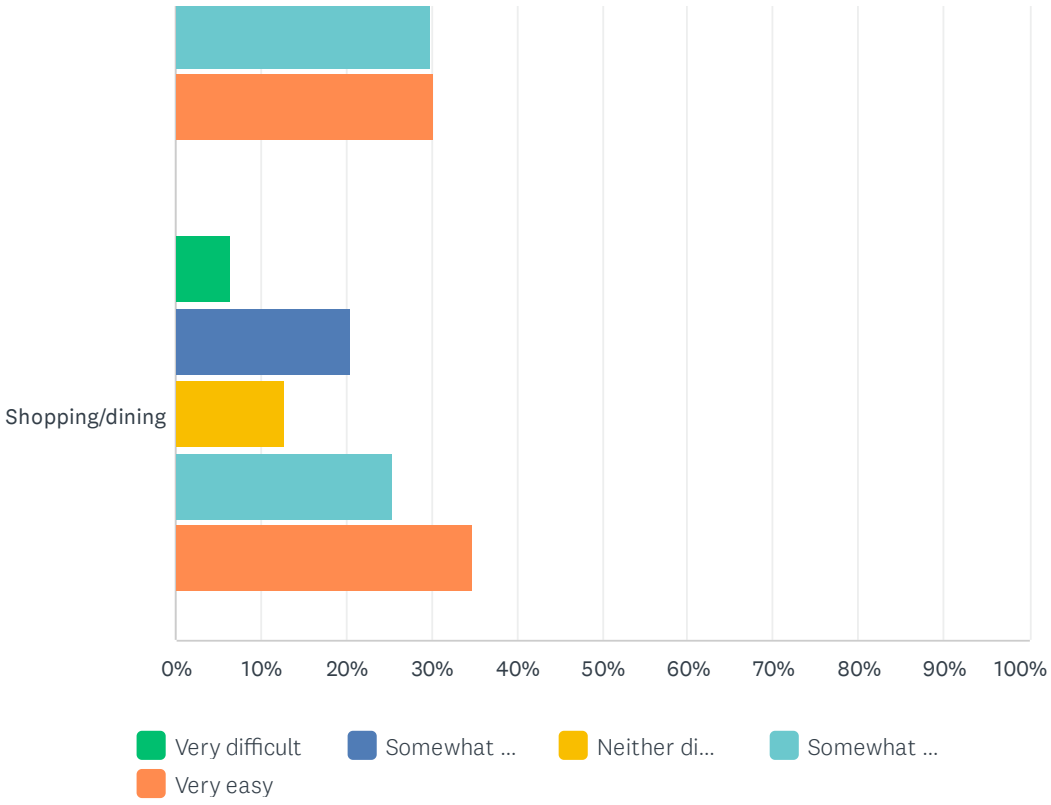


ANSWER CHOICES	RESPONSES	
The most important	10.50%	46
Very important	37.44%	164
Somewhat important	28.08%	123
A little important	10.50%	46
Not important at all	13.47%	59
TOTAL		438

Q19 In your experience, how difficult is it to get to the following destinations?

Answered: 435 Skipped: 100

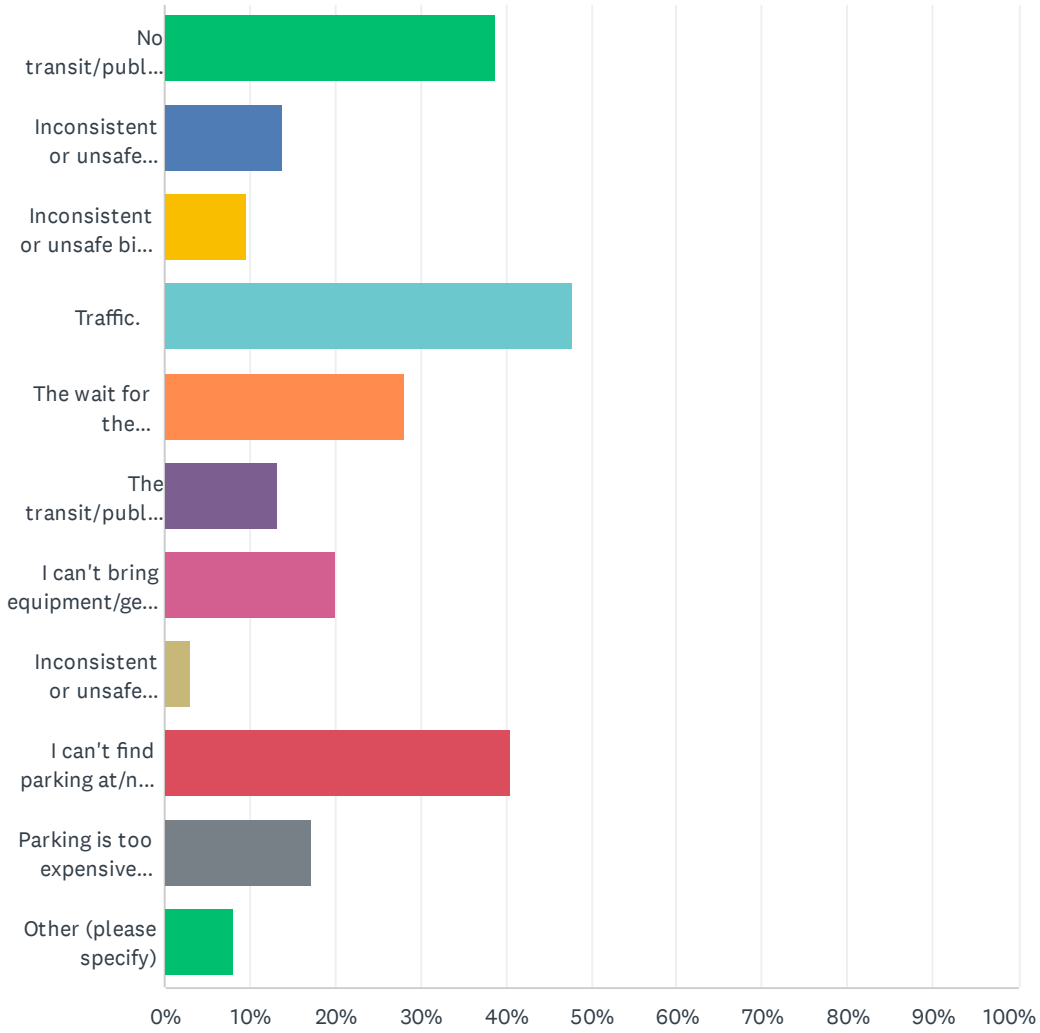




	VERY DIFFICULT	SOMEWHAT DIFFICULT	NEITHER DIFFICULT NOR EASY	SOMEWHAT EASY	VERY EASY	TOTAL	WEIGHTED AVERAGE
Grocery stores	5.99% 26	23.04% 100	18.20% 79	26.50% 115	26.27% 114	434	2.44
Medical appointments	7.40% 31	22.43% 94	26.49% 111	23.15% 97	20.53% 86	419	2.27
Work/school	4.51% 18	17.29% 69	32.08% 128	21.55% 86	24.56% 98	399	2.44
Recreation (trails, parks, etc.)	4.46% 19	16.67% 71	18.78% 80	29.81% 127	30.28% 129	426	2.65
Shopping/dining	6.31% 27	20.56% 88	12.85% 55	25.47% 109	34.81% 149	428	2.62

Q20 When a travel experience is difficult, which factors most heavily contribute to that difficulty? Choose your top two or three.

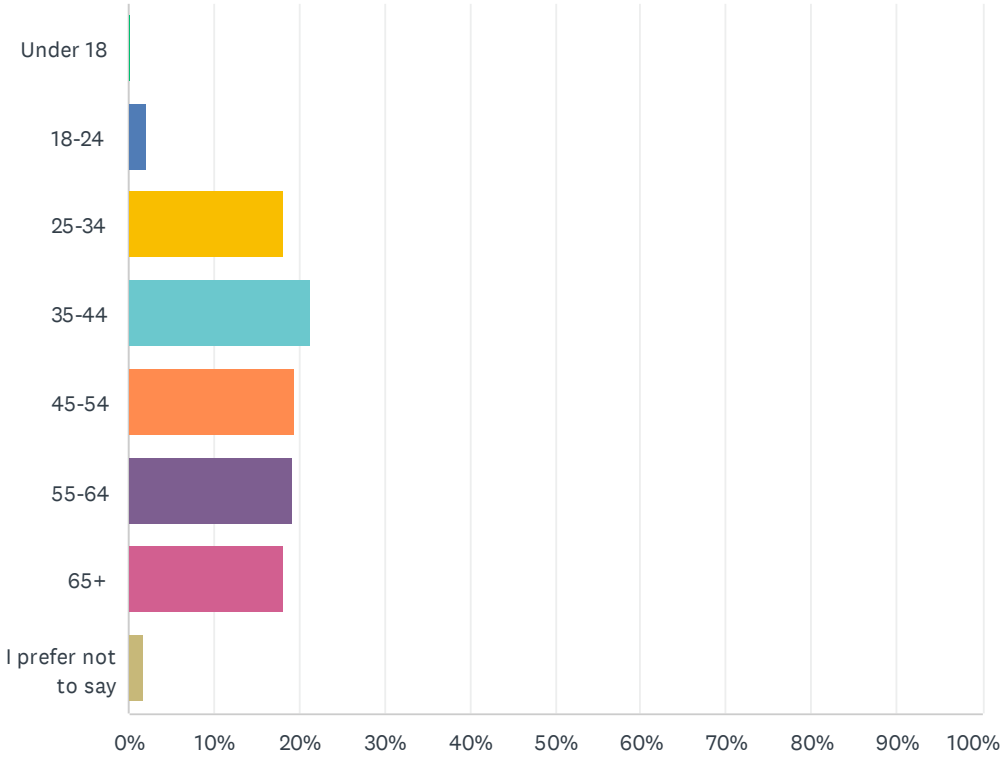
Answered: 431 Skipped: 104



ANSWER CHOICES	RESPONSES	
No transit/public transportation route that goes to the destination or close enough to it.	38.75%	167
Inconsistent or unsafe sidewalks/pedestrian crossings.	13.92%	60
Inconsistent or unsafe bike lanes/bike infrastructure.	9.51%	41
Traffic.	47.80%	206
The wait for the transit/public transportation option is too long.	28.07%	121
The transit/public transportation option is too crowded.	13.23%	57
I can't bring equipment/gear/items I need with me on the transit/public transportation option.	19.95%	86
Inconsistent or unsafe driving conditions, like difficult/blind turns.	3.02%	13
I can't find parking at/near the destination.	40.60%	175
Parking is too expensive at/near the destination.	17.17%	74
Other (please specify)	8.12%	35
Total Respondents: 431		

Q21 What is your age range?

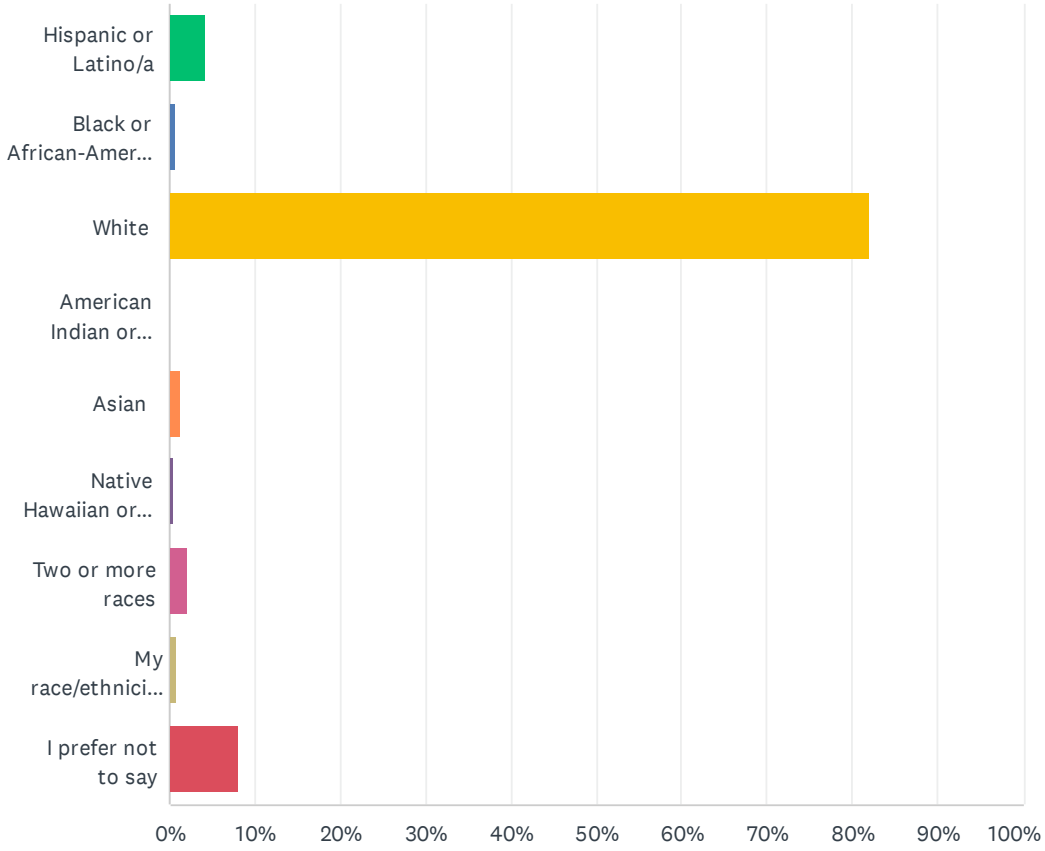
Answered: 437 Skipped: 98



ANSWER CHOICES	RESPONSES	
Under 18	0.23%	1
18-24	2.06%	9
25-34	18.08%	79
35-44	21.28%	93
45-54	19.45%	85
55-64	19.22%	84
65+	18.08%	79
I prefer not to say	1.60%	7
TOTAL		437

Q22 What race or ethnicity do you identify with most?

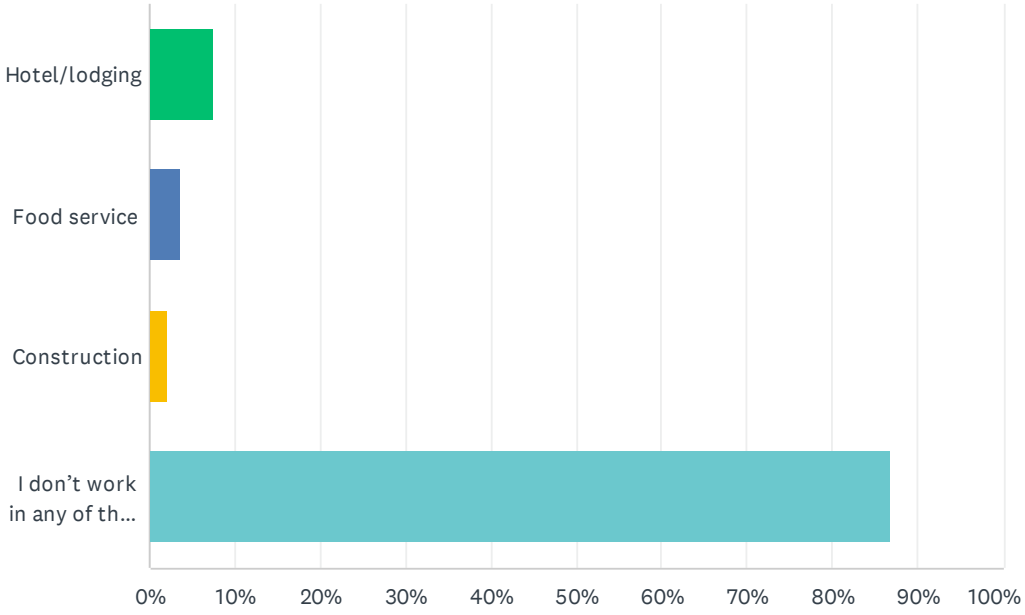
Answered: 436 Skipped: 99



ANSWER CHOICES	RESPONSES	
Hispanic or Latino/a	4.36%	19
Black or African-American	0.69%	3
White	82.11%	358
American Indian or Alaska Native	0.00%	0
Asian	1.38%	6
Native Hawaiian or Pacific Islander	0.46%	2
Two or more races	2.06%	9
My race/ethnicity is not listed here	0.92%	4
I prefer not to say	8.03%	35
TOTAL		436

Q23 Do you work in any of the following industries?

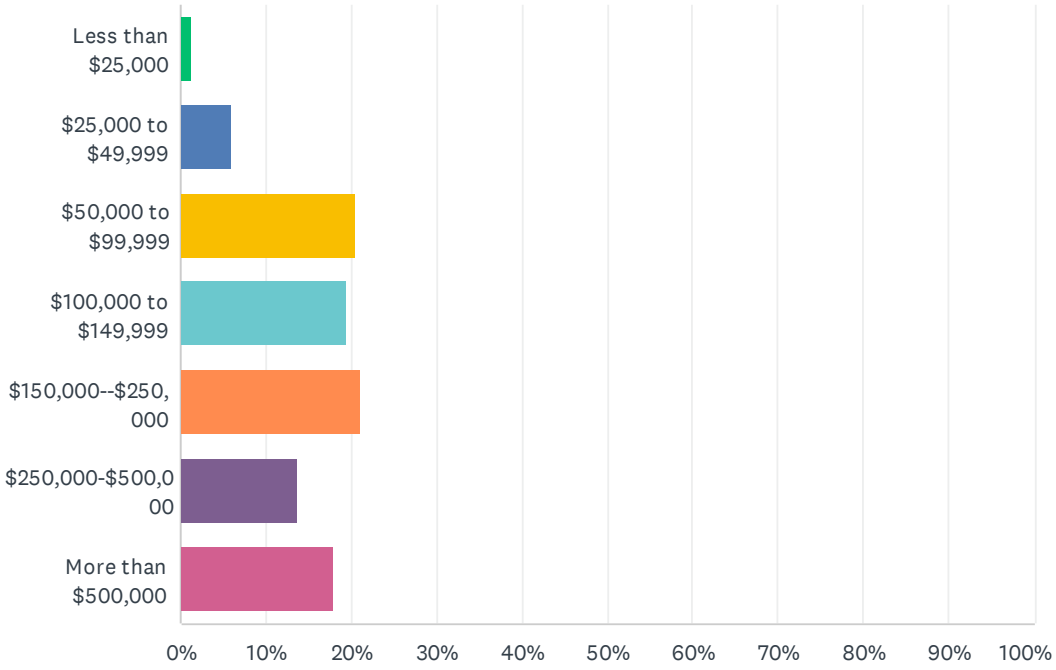
Answered: 437 Skipped: 98



ANSWER CHOICES	RESPONSES	
Hotel/lodging	7.55%	33
Food service	3.66%	16
Construction	2.06%	9
I don't work in any of these industries.	86.73%	379
TOTAL		437

Q24 How much pre-tax income does your household make in a typical year?

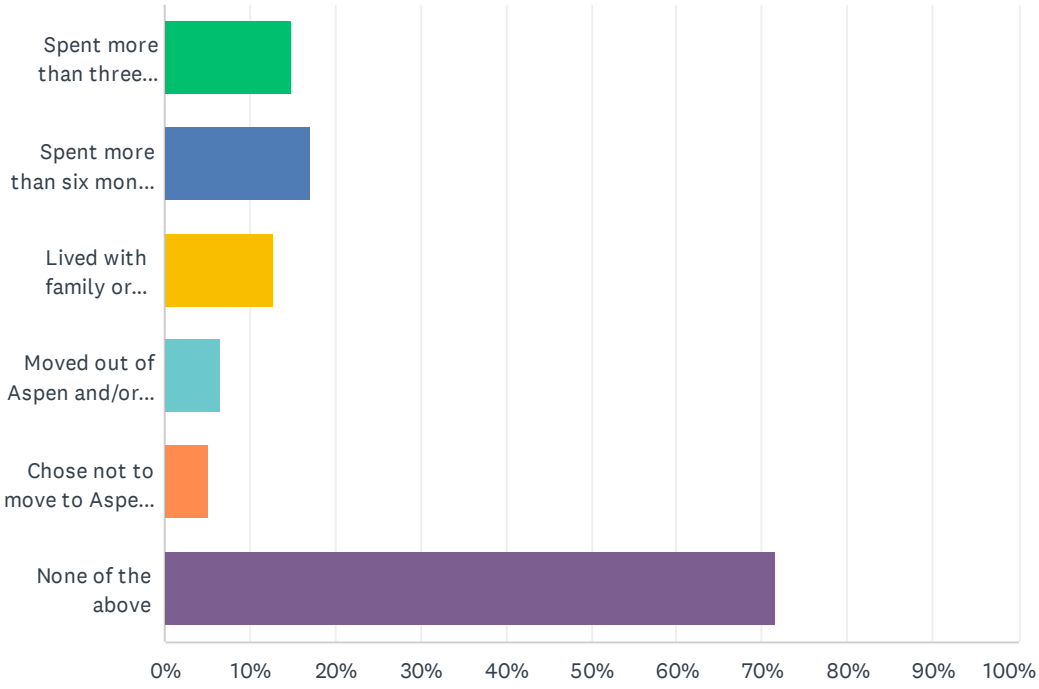
Answered: 395 Skipped: 140



ANSWER CHOICES	RESPONSES	
Less than $25,000	1.27%	5
$25,000 to $49,999	6.08%	24
$50,000 to $99,999	20.51%	81
$100,000 to $149,999	19.49%	77
$150,000--$250,000	21.01%	83
$250,000-$500,000	13.67%	54
More than $500,000	17.97%	71
TOTAL		395

Q25 Have you experienced any of the following in the last three years? Check all that apply.

Answered: 436 Skipped: 99



ANSWER CHOICES	RESPONSES	
Spent more than three months trying to find housing within my budget and close enough to my job.	14.91%	65
Spent more than six months trying to find housing within my budget and close enough to my job.	16.97%	74
Lived with family or friends because I couldn't find housing within my budget and close enough to my job.	12.84%	56
Moved out of Aspen and/or Roaring Fork Valley because I couldn't find housing within my budget.	6.65%	29
Chose not to move to Aspen and/or Roaring Fork Valley because I couldn't find housing within my budget.	5.05%	22
None of the above	71.56%	312
Total Respondents: 436		

DATE:	February 24, 2025
TO:	
COMPANY:	City of Aspen
ADDRESS:	Aspen City Hall 427 Rio Grande Place
CITY/STATE:	Aspen, CO 81611
COPY TO:	
FROM:	Ben Weber and Mallory Baker
PROJECT NAME:	Comprehensive Transportation and Parking Plan
PROJECT NUMBER:	23-008902.00

10375 Park Meadows Dr.
Suite 425,
Lone Tree, CO 80124

303.694.6622
walkerconsultants.com

The following memorandum summarizes the objectives, results, and key findings from Phase 2 of community engagement for the Comprehensive Transportation and Parking Plan.

PHASE 2 ENGAGEMENT: OBJECTIVES AND METHODOLOGY

Community engagement and collaboration for the Comprehensive Transportation and Parking Plan is separated into two distinct phases. The objectives for Phase 2—the subject of this memorandum—are:

- Introduce preliminary transportation and parking concepts to Aspen community members
- Build trust and show our commitment to listening to the community and hearing their perspectives.
- Create a shared vision of success for the project and its outcomes.

This second round of focus group meetings focused on gauging support for refined strategies—developed using previous focus group and community feedback—and identifying possible hurdles to implementation.

Each 90-minute meeting included a presentation with an update on project progress and a discussion of strategies in three key areas—parking, transit, and supportive transportation. The presentation also included a summary of strategy approaches and ideas for the region based on focus group and community feedback. Focus group attendees participated in a discussion on each strategy presented, sharing what they liked about the strategy, what they didn't like, and what additional considerations they felt were important. The presentation is included as an attachment.

Meetings were held on April 1st, 2nd, and 3rd, 2024, and included representatives from the following groups:

- Aspen Chamber Resort Association (ACRA)
- Aspen Skiing Company
- Bike Shops/Representatives
- Commercial Core and Lodging Commission (CCLC)
- Private Transportation Providers (e.g., taxis, limos and rickshaws)

Our conversations in early April 2024 also included:

- A two-hour pop-up at Rubey Park Transit Center, where we talked with commuters and got a sense of how strategies would impact their day-to-day lives.
- A two-hour open house at the Aspen Police Department Community Room, where participants also shared how strategies might impact them.

We also met with the Aspen City Council on April 1, 2024, for the first time in a work session to discuss and gather feedback on certain critical strategies. A recording of the work session can be found at this link. The City produced a document of Council direction, which is included at the end of the memo.

City staff held a drop-in style open house at Aspen City Hall on February 5, 2025, to present draft strategies to community members. Staff spoke with approximately 30 people during the event, which served as an opportunity for participants to ask questions and provide feedback on the ideas.

RESULTS

Parking
Strategies shared for parking included enhancing the Core parking inventory by returning Galena Street in the Core to angled parking, using premium fines and graduated fines to deter safety-related violations and habitual violation of parking rules, consolidating and digitizing parking permit times, using pricing and capping to manage use of parking permits, and communicating with users about parking availability through a mobile application. Focus group participants were generally supportive of these strategies. Discussion focused primarily on the following topics:

- Taking steps to not have an overly enforcement-focused culture that might reduce Aspen's friendliness and community spirit.
- Fairness and equity in permit offerings.
- Taking steps to make digitization of permit options as smooth as possible for the user, especially if it involves providing a license plate number.
- Incorporating parking availability signage on the ground and a mobile application at key decision points, like along Main Street.

Transit
Strategies shared for transit included using service standards to make data-based decisions about routes and resources, leveraging Downtowner as a first- and last-mile connection, and "hubbing" Downtowner pick-up and drop-off in the Core. Focus group participants were also generally supportive of these strategies. Discussion focused primarily on the following topics:

- Using creative approaches like marketing, combining routes, or using on-demand service to cover areas instead of looking to eliminate transit service/coverage.
- Leveraging Downtowner as a first- and last-mile connection in areas without proximal access to transit (1/4 mile or less) and also in areas where the walk to a bus stop is very difficult—like in hilly areas.
- Avoid using Downtowner as "everyone's personal Uber."
- We should make sure that, as we consider the expansion of Downtowner, wait times don't exceed 20 minutes.
- Concerns around "hubbing" of pick-up and drop-off points, and support of the same—concerns focused on the current service levels and the popularity of Downtowner, while supporters felt that even with a maximum 2-block walk, people would still get a lot of value from this transportation option. Some focus group participants shared stories of existing businesses that use a "hubbing" model in the Core, such as outfitter companies that ask their clientele to walk to central locations to pick up or drop off gear.

Supportive Transportation: Strategies shared for supportive transportation included expanding carshare by partnering with a private operator, using e-cargo bikes for local deliveries, and expanding e-bike and e-cargo bike

access at WE-cycle stations. Again, focus group participants were generally supportive of these strategies. The discussions focused on the following topics:

- Safety and size of e-cargo bikes—ensuring that e-cargo bikes for deliveries aren't so large that they take up the same amount of space as a standard delivery vehicle.
- Clear use cases for e-cargo bikes—understanding what kinds of businesses would use them regularly for deliveries, how long of a delivery route they could be used for, etc.
- Increasing access to e-bikes and making sure riders are comfortable and safe.
- Interest in more community access to e-cargo bikes to carry gear, groceries, etc.

Regional Approaches

Regional considerations were a less intensive focus in this meeting, as this Plan focuses mostly on City resources and will offer clear policy direction and support for regional strategies once ideas for Aspen are a bit further along. However, focus group participants did briefly discuss regional ideas, and were especially interested in coordinating with RFTA on service standards, encouraging more resources allocated to the BRT (e.g., shorter wait times, more buses to reduce crowding, etc.), encouraging regional fare policies like fare-free routes from Down Valley into Aspen, and leveraging the Intercept Lot as a remote parking option more formally.

INCLUSIONS AND ATTACHMENTS

Inclusion A: April 1, 2024, City Council Direction Document
Attachment A: April 2024 Presentation to Focus Group Members
Attachment B: April 1, 2024, City Council Presentation
Attachment C: April 1, 2024, City Council Memorandum

Inclusion A: April 1, 2024, City Council Direction Document

Strategy	Review Further?	Notes
Transit Service Standards	**Yes.** Majority supportive of further review.	One member is not supportive and believes this is a Council function for decision making. Concerns about ensuring coverage to all neighborhoods and about community feedback process. Council directed staff to bring back examples of service standards used to make changes from other communities that would improve Aspen. Bring back examples of service standards tailored to different service types.
Partner for Car Share Expansion	**Yes.** Majority supportive of further review.	Concerns about financial, operational impacts to members. The direction is to bring back models that show a subsidized use rate and operator service standards. Interest in expanding the program if private/public model is utilized.
Downtowner Goal Setting/Expansion/Hubs	**Yes.** Majority supportive of further review.	Interest in first/last mile and gap filler service. Not interested in City-wide service, or service where transit service is accessible/high. A member is interested in allowing drivers to own their vehicles.
WE-cycle Electrification and First/Last mile Expansions	**Yes.** Majority supportive of further review.	
Employer Grants/Cargo Bikes	**Yes.** Majority supportive of further review.	
Return Angle Parking on Galena Street	**No.** Majority not supportive of further review.	Two members supportive of angle parking return and interested in one-way streets as an option. Majority of council would like to pursue safety through Safe Streets for All.
Increased Fines for Safety/Mobility Violations	**Yes.** Majority supportive of further review.	One member not in favor. Several Council members interested in a fine reduction for swift payment. Interest in requiring a court appearance to increase compliance. Two members interested in a exploring free parking during off-season, but majority do not want to continue this discussion. Majority of Council supportive in goals that increase compliance.
Align Parking with TDM Goals (reduce number of permits, digitization of permits, cap some permits, clearer rules around permits)	**Yes.** Majority supportive of further review.	All request much more information, data and examples and methods for providing balance to business needs.
Better Utilization of Parking Pricing (demand- based pricing tiers, market-based pricing, range of pricing in parking ordinance)	**Yes.** Majority supportive of further review.	One member not in favor; this is a Council function to protect staff. All request much more information, data and examples and discussion of balance for business needs.

Note: Comments from Councilman Guth provided post-meeting.

Aspen Gets Us There

Focus Group Meetings—April 2024

CITY OF ASPEN

Aspen GETS US THERE.

Presentation Agenda

Aspen

GETS US THERE.

- Team Re-Introductions and Goal Today
- Quick Progress Update
- Summary of Focus Areas and Ideas for Discussion
- Parking
- Transit
- Supportive Transportation
- Next Steps

Quick Progress Update

Fall 2023—Winter 2024
Discovery + Visioning

Project Kickoff
Data Collection/Analysis
Example Practices Evaluation
Vision and Guiding Principles

Winter—Spring 2024
Strategies Identification and Vetting

Strategy Identification
Strategy Vetting
Council Input and Review (April 1)

Spring—Summer 2024
Action Planning

Implementation and Action Plan
Council Input/Review (TBD)
Roll-Out Prioritization and Timeline

Focus Area/Idea Summary

Parking

- **Enhance Core Parking Inventory**
- **Safety through Parking Enforcement**
- **Consolidate and Digitize Parking Permit Types**
- **Parking Permit Pricing and Other TDM Measures**
- **User Communications**

Focus Area/Idea Summary

Transit

- **Service Standards and Route Review**
- **Downtowner Goals**
- **Downtowner Expansion**
- **“Hubbing” Downtowner Pick-Up and Drop-Off**

Focus Area/Idea Summary

Supportive Transportation

- **Carshare Expansion with Private Operator**
- **E-Cargo Bikes for Zero-Emission Deliveries**
- **Expanded E-Bike Access for First/Last Mile**

Enhance Core Parking Inventory

Angled parking on Galena Street prior to configuration changes.

What?
Re-stripe Galena to angled during Spring 2024 Core re-striping.

Why?
Maintain and maximize existing Core inventory.

Safety Through Parking Enforcement

What?
Levy premium fines for violations impeding mobility freedom in the right-of-way (like parking in a crosswalk, bus lane, or bike lane). Apply graduated fines to focus enforcement on habitual violators.

Why?
Enhance safety with proven methods that don't reconfigure parking in the Core.

Consolidate and Digitize Parking Permit Types

What?
Eliminate outdated or counter-productive permit types and align permit categories with actual usage cases. Look to phase out others where another option exists.

Digitize and track permits effectively, rather than relying on a combined system.

Why?
Better understand data and needs; improve transparency and clarity; leverage technology.

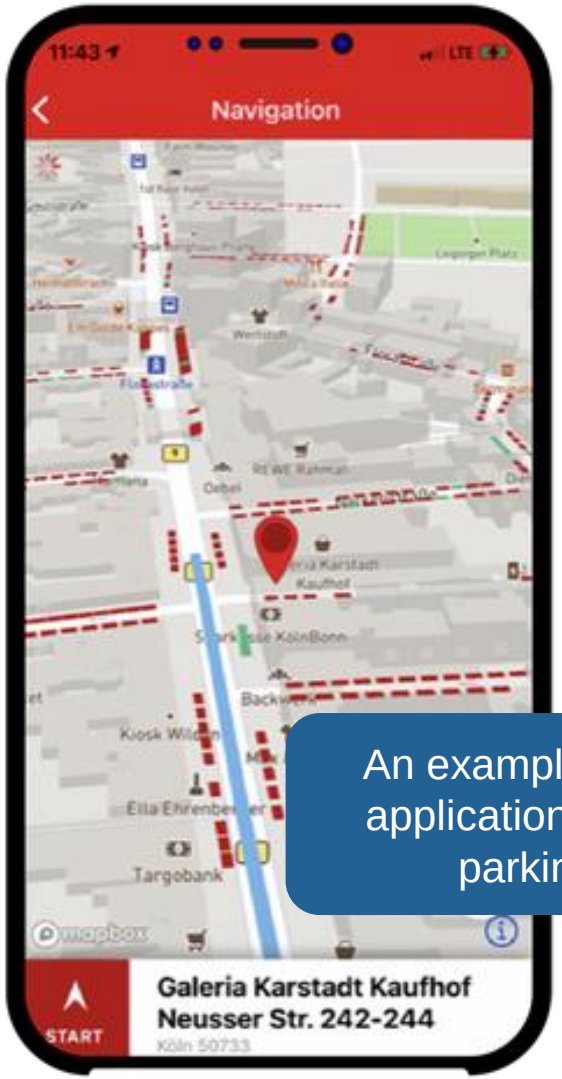
Parking Permit Pricing and Other TDM Measures

What?
Set permit prices at levels that, at minimum, recover costs, and encourage other modes of travel. Consider capping permit offerings in some cases. Offer subsidies for TDM-supportive decisions (e.g., carpool), or to promote equity.

Why?
Better align parking permit program with TDM goals; directly confront inbound, outbound, and internal traffic congestion.

Jackson Hole caps available parking permits for lodge guests and charges market rates with subsidies available to carpoolers.

App-Based User Communications



An example of a parking guidance application tied to camera-derived parking availability data.

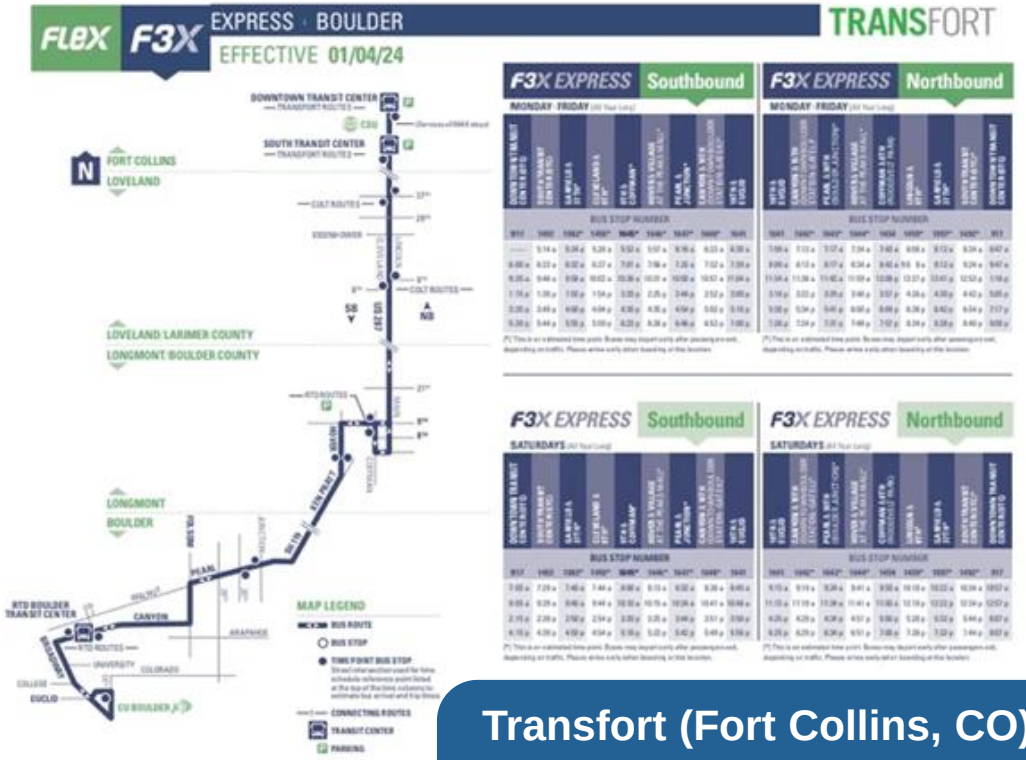
What?
Incorporate enhanced parking guidance for users through a mobile application.

Why?
Reduce user frustration and vehicle congestion in Core areas.
Communicate to users without sign clutter or light ordinance issues.

Service Standards and Route Review

What?
Quantitative commitments to transit service standards (e.g., ridership, on-time performance, crowding, service frequency), and a clear process for when and how to change routes to better meet needs and allocate resources.

Why?
Respond proactively and quickly to changing transportation behaviors while addressing community's desire for clarity and transparency in service decisions.



Transfort (Fort Collins, CO) has adopted Service Standards and a metric-based Route and Fare Change Policy.

Downtowner Goals and KPIs

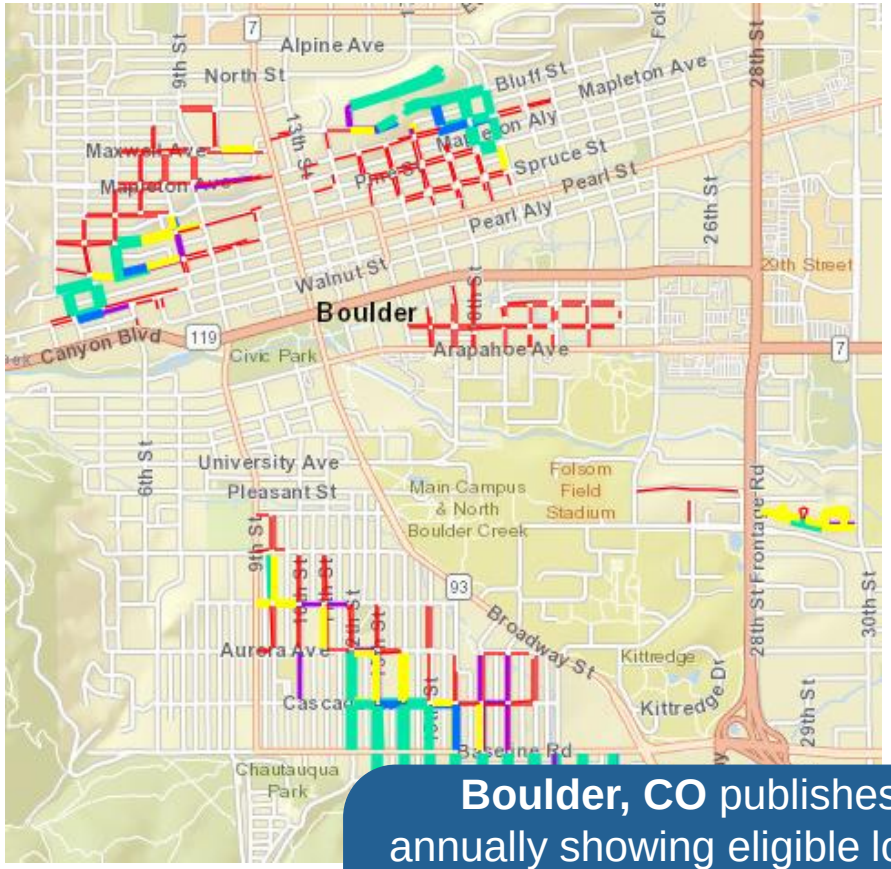
What?
Set and manage goals for Downtowner using KPIs. Recommended goals focus on providing access to the transit system for neighborhoods with a greater than ¼ mile walking distance to a bus stop with a direct route to the Core.

Why?
Leverage Downtowner as a first- and last-mile connector, while enhancing its use as a transportation option to Core amenities and services.

Downtowner Expansion

What?
Using goals/KPIs and service standards (e.g., maximum 20-minute wait time), identify neighborhoods eligible for Downtowner expansion, and solicit community input to make a final decision.

Why?
Promote objectivity and transparency in Downtowner expansion decisions; maintain existing service standards; allow for community influence and input.



Boulder, CO publishes a map annually showing eligible locations for its commuter/neighborhood parking and transit passes, and then solicits community feedback from people within those neighborhoods.

“Hubbing” Downtowner Pick-Up and Drop-Off

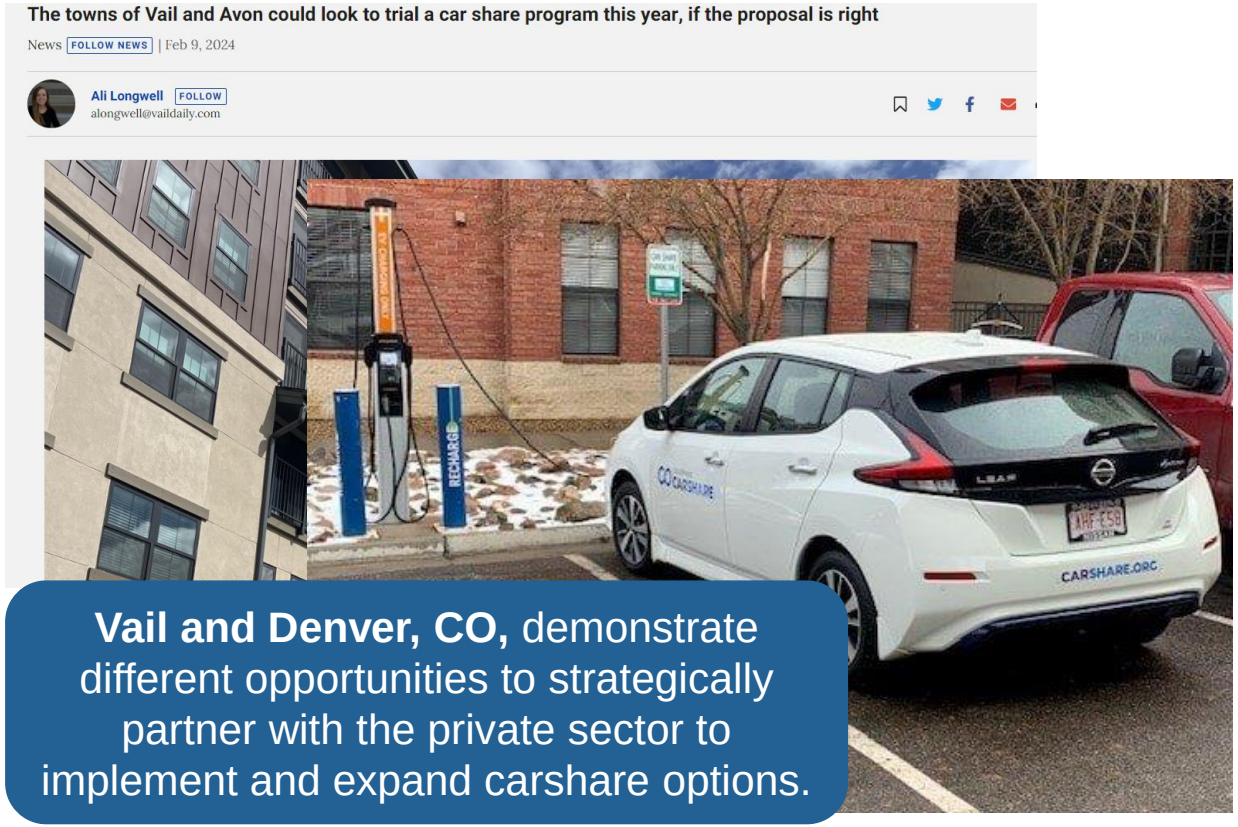
What?
Set “hubs” for Downtowner pick-up and drop-off with a maximum 2-block walk for any rider.

Why?
Reduce induced congestion and vehicle circulation in Core areas.

Carshare Expansion

What?
Partner with a private sector company to operate carshare program while retaining control over goals and impacts.

Why?
Expand reach and impact of carshare program without current constraints on scalability.



Vail and Denver, CO, demonstrate different opportunities to strategically partner with the private sector to implement and expand carshare options.

E-Cargo Bike Fleets for Zero-Emission Deliveries

What?
City-provided and/or supported e-cargo bike access for local businesses to use for deliveries.

Why?
Support local business activity while enhancing safety and reducing congestion on Core streets.

Expanded E-Bike Access

What?
Increasing available electrified fleet and potentially introducing several e-cargo bikes at WE-cycle stations.

Why?
Enhance first- and last-mile connections (even for those carrying gear!)

Regional Considerations

- **Parking policy "playbook"—**Down Valley communities already showing some interest
- Coordinate with RFTA on **service standards** development
- Support **more resources** to BRT—headways, crowding
- RFTA **fare** policies
- Increased **leveraging of Intercept Lot** through signage, parking availability information, and defined use

Quick Progress Update

Fall 2023—Winter 2024
Discovery + Visioning

Project Kickoff
Data Collection/Analysis
Example Practices Evaluation
Vision and Guiding Principles

Winter—Spring 2024
Strategies Identification and Vetting

Strategy Identification
Strategy Vetting
Council Input and Review (April 1)

Spring—Summer 2024
Action Planning

Implementation and Action Plan
Council Input/Review (TBD)
Roll-Out Prioritization and Timeline

Next Phase

Next Steps

- **Incorporate direction and feedback** to refine strategies and identify critical details for implementation.
- **Develop implementation and action plan** based on refined strategies, to include budget-level costs, staffing, and technology needs, as well as phasing/timing of initiatives.
- **Refine high-level recommendations for regional policies** based on City strategies and action steps.
- **Return to Council for a second work session** to discuss action steps.

Thank You.

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ASPEN GETS US THERE:

Planning Update

Pete Rice, Lynn Rumbaugh, Sandy Doebler, Carly McGowan, Mallory Baker

April 1, 2024

PLAN OVERVIEW AND PURPOSE

- **Key Objectives:** Align all facets of Aspen's transportation and parking system with City goals and mission.
- **Advancement of Council Goals:** Critical point of achievement for Council's 2023-2025 Mobility goal.
- **Alignment with City Values:** Advances all aspects of Aspen's organizational values, including Service, Partnership, Stewardship and Innovation.
- **Goal Today:** Hear consultant team's recommendations on where we can make the most impact given our goals, and provide Council the opportunity provide direction on what to keep, what to cull, and what to consider prior to developing an action plan

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TOPICS OF FOCUS TODAY

- **Transportation**
  - Service Standards and Route Review Process
  - Carshare Expansion through Private Operator
  - Downtowner Expansion Process
  - **Break for Questions and Feedback**
- **Parking**
  - Core Parking Inventory and Safety
  - Parking Permits
  - Short-Term Parking Pricing
  - **Break for Questions and Feedback**

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PLAN SCHEDULE AND PROGRESS

Fall 2023—Winter 2024
Discovery + Visioning

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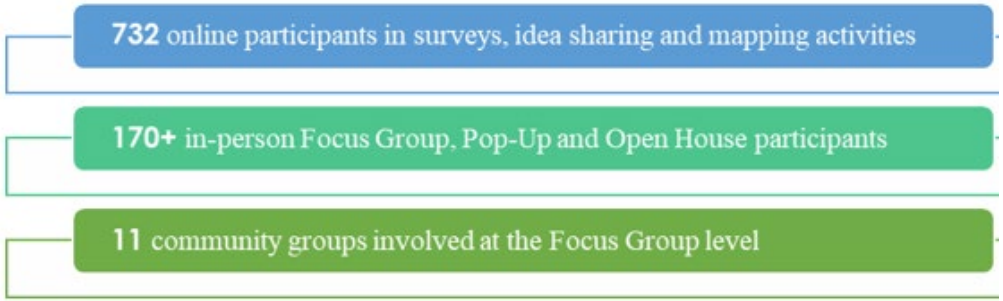
COMMUNITY COLLABORATION

Overall Results To-Date



Focus Groups included:

- ACRA
- Institute
- Ski Co
- Bike shops/representatives
- CCLC
- Other lodging companies
- Emergency responders
- Private taxi/transportation providers
- Local employers
- Next Gen members
- EOTC staff

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COMMUNITY COLLABORATION

Key Principles

- **Framing: Community engagement as part of the data collection process—as critical as quantitative data analysis.**
- True Collaboration at Various Stages
- Transparency
- Idea and Perspective Sharing

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DATA AND INDUSTRY ANALYSIS

- **Data Inventory, Review and Analysis** including detailed parking inventory, occupancy and transaction data, granular ridership data across all modes, user experience data, financial information and more.
- **Collaboration with Providers/Partners** to gather complementary data sets and understand qualitative challenges, opportunities and potential constraints.
- **Experiential Observations** to get to know Aspen's transportation and parking system first-hand in multiple contexts.
- **Example Practices and Innovations Review** to get inspired, learn from mistakes, and understand what's possible.

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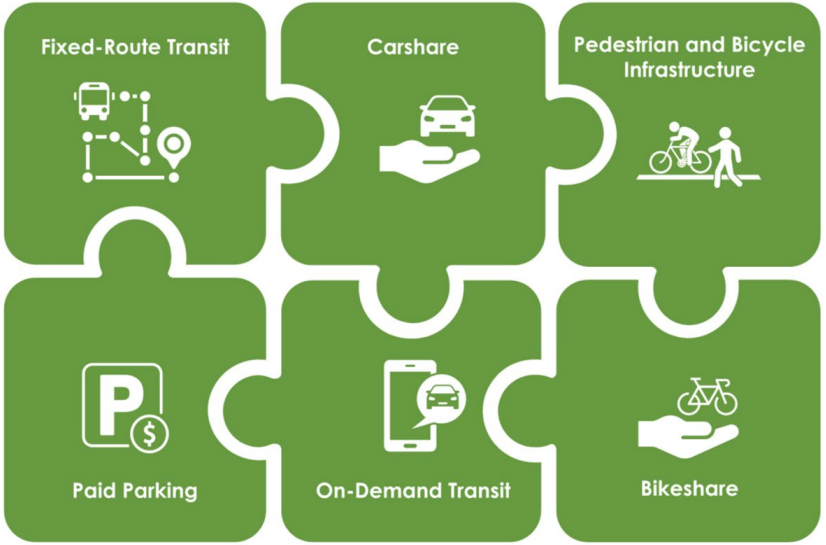
OVERALL CONCLUSIONS

- An **admirable and exemplary** system.
- **Interdependent** components.
- Extensive historic focus on **individual service level, option maximization**.
- Showing the signs of **shifting** demographics and behaviors.
- **Opportunities** for:
  - *Goal clarity for every mode.*
  - *Flexibility and responsiveness as needs change.*
  - *Sustainable resource allocation to enable continued success.*



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OPPORTUNITIES: TRANSPORTATION

Transportation Topics of Focus

- **Service Standards and Route Review Process**
  - Would you support a process wherein quantitative/qualitative service standards would be set by staff with Council approval, and used by staff to review routes?
- **Carshare Expansion through Private Operator**
  - Would you support a partnership with a private operator to expand carshare offerings to more Aspen community members?
- **Downtown Expansion Process**
  - Would you support a clear, objective quantitative and qualitative evaluation process for Downtowner expansion?

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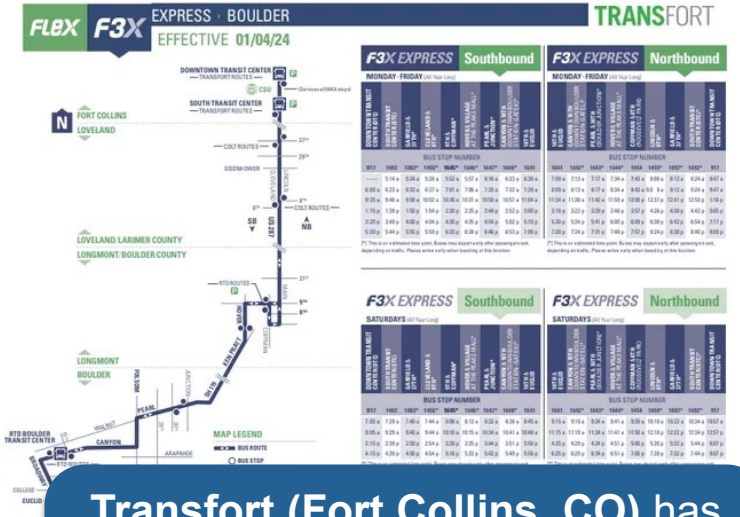
OPPORTUNITIES: TRANSPORTATION

The Why: Respond proactively and quickly to changing transportation behaviors while addressing community's desire for clarity and transparency in service decisions.

The Possibilities:

- ***Service standards:*** Quantitative commitments to service and productivity of routes.
- ***Service coverage analysis:*** A way to prioritize service expansion based on parts of the City that have less access than others.
- ***Service alternatives review:*** Putting the service standards to work by revising routes based on their performance in accordance with the standards.



Transfort (Fort Collins, CO) has adopted Service Standards and a metric-based Route and Fare Change Policy.

Examples: Transfort (Fort Collins), High Valley Transit (Park City), TART (Tahoe)

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OPPORTUNITIES: TRANSPORTATION

Service Standards In Action

Residential Route		Pass/Hour	Pass/Mile
	Exceeds	>40	>2
	Satisfactory	20-40	1.5-2
	Marginal	15-20	1-1.5
	Unsatisfactory	<15	<.5
Regional Route		**Pass/Hour**	**Pass/Mile**
	Exceeds	>30	>2
	Satisfactory	20-30	1-2
	Marginal	15-20	75-1
	Unsatisfactory	<15	<.75

Service Type	Time	Load Standard
Rapid Transit Route	Peak*	150% Seated Capacity
	Off Peak	Seated Capacity
Commercial Route	Peak*	125% Seated Capacity
	Off Peak	Seated Capacity
University Route	Peak**	125% Seated Capacity
Residential Ro		
Regional Rou		

Examples of Transfort's service standards. Other common standards include minimum service frequency, on-time performance, and route directness.

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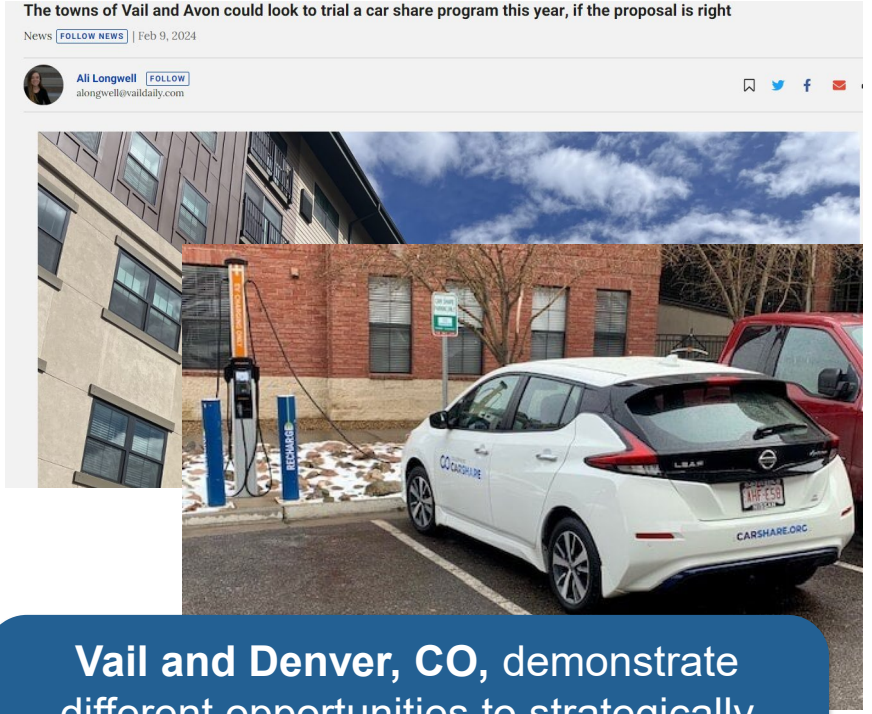
1. In their service analysis, Transfort identifies a residential route that has performed at unsatisfactory levels, on average, for an entire year. **They mark the route for additional evaluation/monitoring**.
2. The route **performs at unsatisfactory levels** for an additional 2 years.
3. Transfort decides to **reduce route frequency** from every 15 minutes to every 30 minutes to better reflect demand, **increases route marketing**, and identifies opportunities to **expand first/last mile** connections to some stops.
4. The route is **still very low performing** after all these measures, so Transfort **looks at other measures** to serve customers while improving efficiency and resource allocation—like combining the route with another that arrives and departs from a common terminal, or looking at on-demand service instead of fixed-route.

OPPORTUNITIES: TRANSPORTATION

The Why: Expand reach and impact of carshare program without current constraints on scalability.

The Possibilities: Clear goals and KPIs, seeking a private sector partner to help expand the carshare program

Examples: Vail, CO, Denver, CO, Knoxville, TN



Vail and Denver, CO, demonstrate different opportunities to strategically partner with the private sector to implement and expand carshare options.

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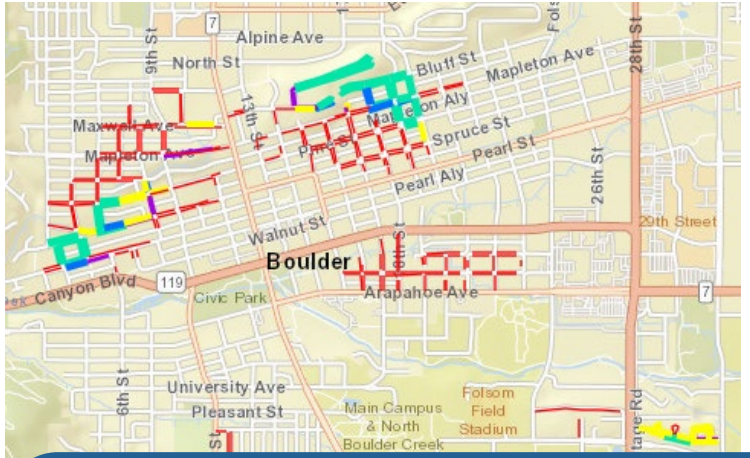
OPPORTUNITIES: TRANSPORTATION



Boulder, CO publishes a map annually showing eligible locations for its commuter/neighborhood parking and transit passes, and then solicits community feedback from people within those neighborhoods.

The Why: Expand popular Downtowner service in a way that maximizes impact.

The Possibilities: Clear goals and KPIs focused on supporting access to transit and central services/destinations, strategic expansion, community participation, "hubbing" pick-up/drop-off points

Quick Examples: Boulder, CO, Austin, TX

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OPPORTUNITIES: TRANSPORTATION

Transportation Topics of Focus

- **Service Standards and Route Review Process**
  - To what extent do you support a process wherein quantitative/qualitative service standards would be set by staff with Council approval, and used by staff to review routes?
- **Carshare Expansion through Private Operator**
  - To what extent do you support a partnership with a private operator to expand carshare offerings to more Aspen community members?
- **Downtown Expansion Process**
  - To what extent do you support a clear, objective quantitative and qualitative evaluation process for Downtowner expansion?

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OPPORTUNITIES: PARKING

Parking Topics of Focus

- **Parking Inventory and Safety**
  - Do you agree that the city should return Galena street parking to angled during Spring 2024 re-striping?
  - Do you agree that premium fines and graduated fines should be used as measures to reduce parking violations and enhance safety?
- **Parking Permits**
  - Do you agree that parking permit offerings, pricing, and enforcement should be managed in support of TDM goals?
- **Parking Pricing**
  - Would you support a process wherein staff and City Council would set, and staff would implement, a data-driven process for adjusting parking rates to better manage demand in the Core?

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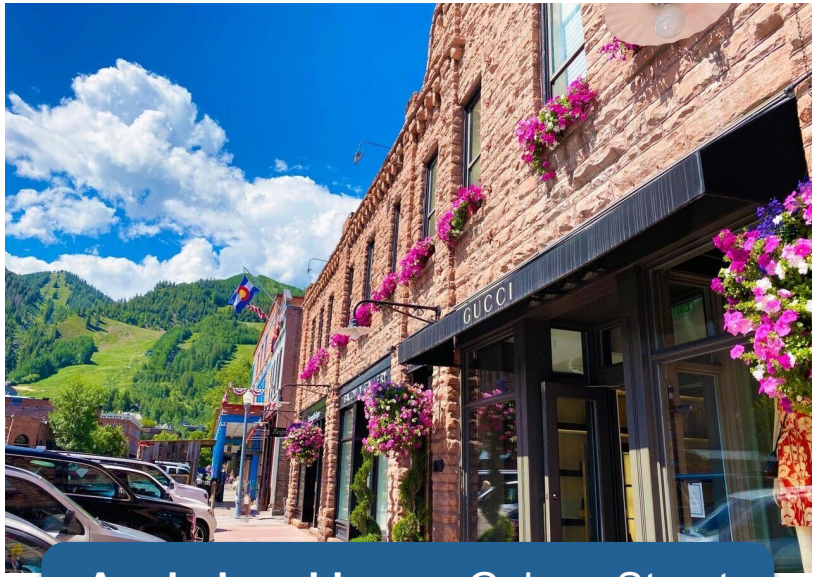
OPPORTUNITIES: PARKING



Angled parking on Galena Street prior to configuration changes.

The Why: Maintain and maximize core inventory while increasing safety for all.

The Possibilities: Returning Galena street parking to angled parking; leveraging premiums and graduated fines to reduce parking violations that impede safety and mobility freedom.

Examples: Missoula, MT; Boulder, CO (and Aspen for some violations!)

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OPPORTUNITIES: PARKING

The Why: Better align parking permit program with Aspen's goals, purpose, reduce confusion and inequity, and enable effective enforcement.

The Possibilities: Consolidating permit types to 2-3 categories, leveraging a combination of pricing, capping, and clear qualifications, and digitizing all permits.

Examples: Jackson, WY; Portland, OR

Jackson Hole caps available parking permits for lodge guests and charges market rates with subsidies available to carpoolers.

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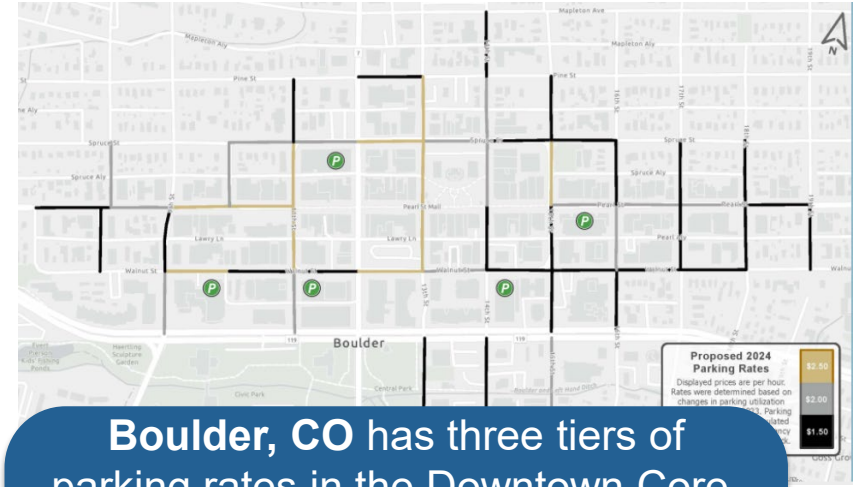
OPPORTUNITIES: PARKING



Boulder, CO has three tiers of parking rates in the Downtown Core. City staff analyze parking occupancy twice each year and update rates based on occupancy thresholds and corresponding price ranges in their ordinance and regulations.

The Why: Make pricing of our limited parking inventory—***900*** spaces to meet demand from ***9,000-18,000+*** vehicles/day—a more effective parking management tool.

The Possibilities: Ordinance changes for more responsive pricing based on evolving needs; incorporating location-based pricing to reduce user frustration and VMT in the Core

Examples: Leavenworth, WA; Boulder, CO

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OPPORTUNITIES: PARKING

Parking Topics of Focus

- **Parking Inventory and Safety**
  - Do you agree that the city should return Galena street parking to angled during Spring 2024 re-striping?
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- **Parking Pricing**
  - Would you support a process wherein staff and City Council would set, and staff would implement, a data-driven process for adjusting parking rates to better manage demand in the Core?

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OTHER OPPORTUNITIES

Transportation

- Expanding employer support through existing Transportation Options Program (TOP) to help business reduce emissions, like a zero-emissions delivery program using e-cargo bikes and expanded grant opportunities.
- Expanded electrification of bike share services.
- Increase first/last mile opportunities in areas of the city without proximal transit access (<1/4 mile)

Parking

- Simplified and digitized signage/wayfinding on-the-ground/digital
- Loading zone location review based on activity; re-enter a version of the Smart Loading Zone program

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NEXT STEPS

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Discovery + Visioning

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Next Phase

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NEXT STEPS

- **Incorporate Council direction and feedback**, and additional feedback from Focus Group participants and the broader community to refine strategies and identify critical details for implementation.
- **Develop implementation and action plan** based on refined strategies, to include budget-level costs, staffing, and technology needs, as well as phasing/timing of initiatives.
- **Include high-level recommendations for regional policies** based on City strategies and action steps.
- **Return to Council for a second work session** to discuss action steps.

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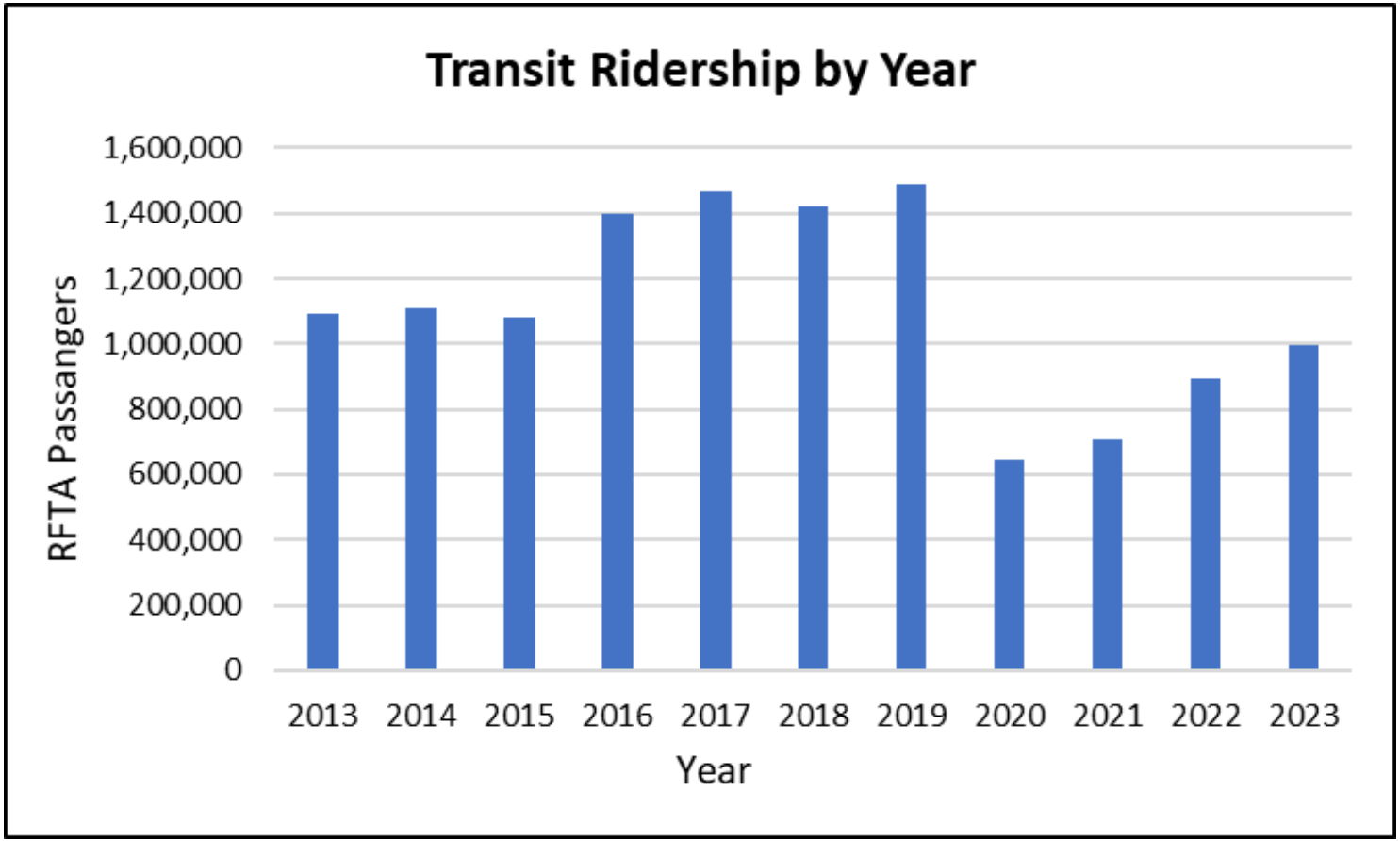
Transit Ridership by Year



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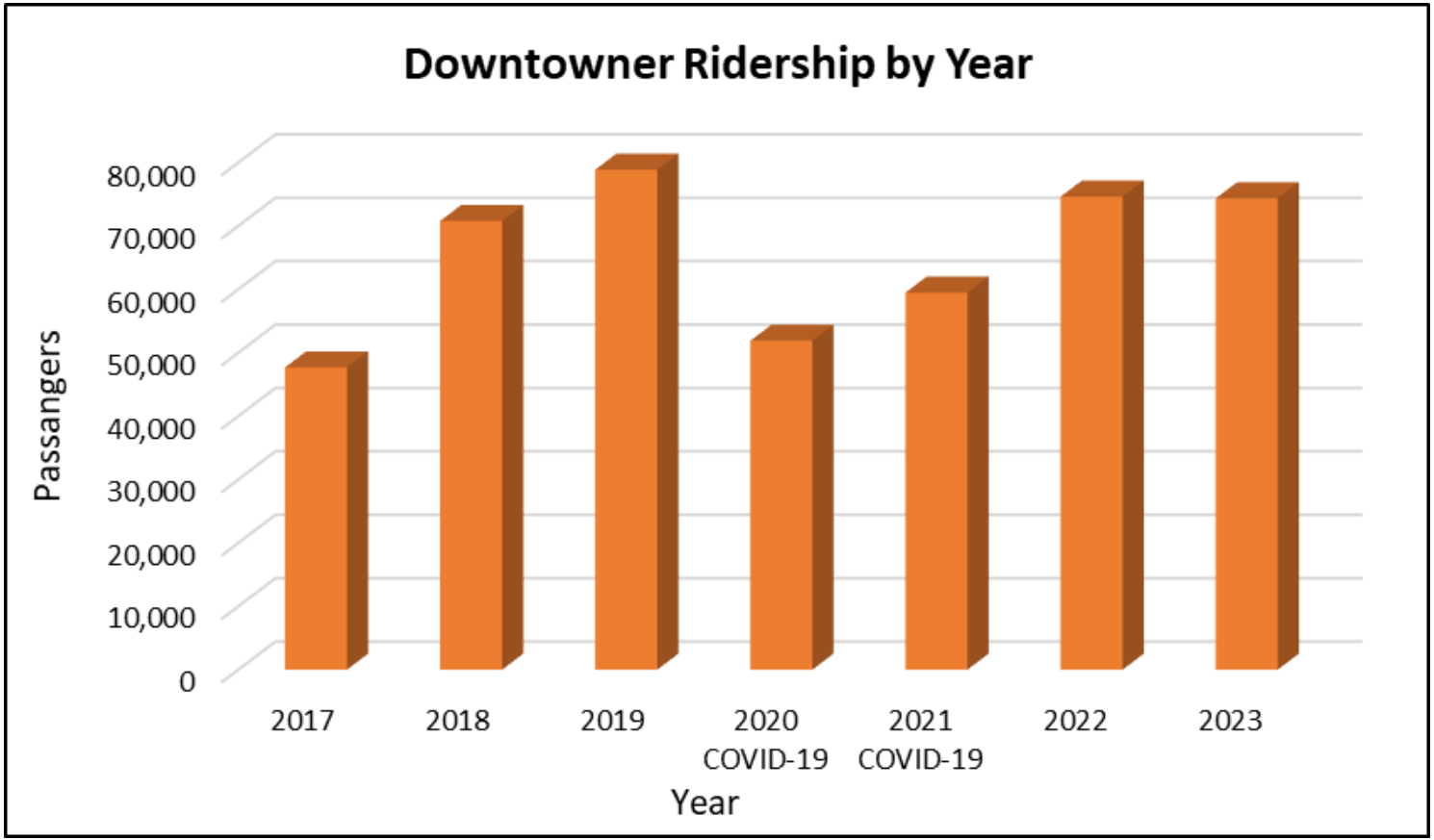
Downtowner Ridership by Year



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AGENDA

CITY COUNCIL WORK SESSION

April 1, 2024

4:00 PM, City Council Chambers
427 Rio Grande Place, Aspen

Zoom Meeting Instructions

Join from a PC, Mac, iPad, iPhone or Android device:
Please click this URL to join: https://us06web.zoom.us/j/82648145525?pwd=4uvEc10IbwRefzbUAJWHgOt2jrdNVl.1
Passcode: 81611

Or join by phone:
Dial:
US: +1 346 248 7799
Webinar ID: 826 4814 5525
Passcode: 81611
International numbers available: https://us06web.zoom.us/u/kbDxqebS6t

I. Work Session

I.A Aspen Gets Us There - Transportation and Parking Study
Aspen Gets Us There_CC Work Session Memo_Final.docx
Attachment A Public Outreach Summary.pdf
Attachment B Existing Conditions Executive Summary.pdf
Attachment C Existing Conditions.pdf

I.B Council Board and Commission Updates

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MEMORANDUM

TO:	Mayor Torre and Aspen City Council
FROM:	Pete Rice, P.E., Director of Transportation and Parking Lynn Rumbaugh, TDM-cp, Mobility Division Manager Sandy Doebler, Mobility Administrator Carly McGowan, Senior Project Manager
THROUGH:	Tyler Christoff, Assistant Director of Public Works Scott Miller, Director of Public Works
MEETING DATE:	April 1, 2024
RE:	Aspen Gets Us There Planning Update: Existing Conditions, Public Outreach and Initial Strategies

---

REQUEST OF COUNCIL:

This memo provides Council with an update on the comprehensive transportation and parking planning process branded *Aspen Gets Us There*. The Council update will provide a summary on the full process for this project, some interesting existing conditions utilized for strategic planning and critical feedback receive from the public during outreach. Additionally, Council will be asked to provide direction and perspective on initial strategies identified by the consultant team. A more fulsome discussion of prioritized strategies encapsulating Council feedback in this work session will be discussed at a subsequent work session in late Summer.

SUMMARY AND BACKGROUND

In the summer of 2023, Aspen City Council adopted its top six goals one of which states: *Improve and expand our efficient, multi-modal, and integrated transportation system to reduce vehicle miles traveled (VMT) and air pollution.* As a step towards this important goal, a contract with Walker Consultants was approved for the purpose of undertaking a comprehensive parking and transportation study.

The study, which kicked off in fall of 2023, is the first in many years to consider both transportation services and parking policies holistically as VMT-reduction tools. The project is divided into three phases as outlined below.

The Walker Consultants team, led by Mallory Baker, will provide Council with an overview of the discovery and strategy phases of the project to assure the project is proceeding in a positive direction for the community. Council will serve a critical role at this juncture by providing direction on which strategies resonate with Council's vision and perspective on the challenges and opportunities of our transportation and parking system.

DISCUSSION:

Collaboration with the Community: The Aspen Gets Us There project has included community collaboration as a driving force at every stage in the project. The project has so far leveraged small group interactions, online engagement through an Aspen Community Voice webpage, surveys, pop-ups, a community open house, and small-group conversations with people representing 11 different community organizations/groups to identify challenges and opportunities, build a vision, and articulate a strategic path forward. To date, the team has engaged the community in two key stages of the project—Visioning and Initial Strategy Vetting—and are continuing engagement with the community through Consensus-Building focus group meetings, a

transit center pop-up, and a community open house in early April. Below is a quantitative summary of the community's involvement and voice to-date.

Community groups/organizations involved in focus group meetings include:

- Aspen Chamber Resort Association (ACRA)
- Aspen Institute
- Aspen Skiing Company
- Bike Shops/Representatives
- Commercial Core and Lodging Commission (CCLC)
- Lodging Companies/Representatives
- Emergency responders
- Private Transportation Providers (e.g., taxis, and rickshaws)
- Local employers through the City of Aspen Transportation Options Program
- Members of the former Next Generation Advisory Committee
- Elected Officials Transportation Committee (EOTC) staff

A summary of community feedback key themes from both Visioning and Initial Strategy Vetting, as well as detailed notes from focus group meetings and survey results, can be found in **Attachment A**.

Existing Conditions: Through site visits, outreach, review of data and interviews with staff and vendors, the consultant team developed a thorough understanding of existing conditions related to transportation and parking in Aspen and the region. An Executive Summary of the Existing Conditions Report can be found in **Attachment B**. The entire report is included as **Attachment C**.

Initial Transportation and Parking Strategies: Walker has developed an initial series of high-level strategies closely guided by community vision, data analysis centered on how users experience each mode of transportation and parking, and example practices from communities nationwide. These initial strategies are intended to advance the project mission and specifically address challenges and opportunities faced by Aspen's transportation and parking system. The strategies of focus for this work session include high-level initiatives to improve operation of City transportation/parking services to support short-term, mid-term, and long-term gains in customer experience and perceived value, mobility freedom, and emissions/vehicle miles travelled reduction. In a future work session after finalizing strategy with Council during this work session, other potential strategies and recommendations for regional policy direction will be discussed.

Through the process Discovery and Visioning phase, the Walker Consultants team has drawn the following overall conclusions:

Through the support, vision and high-level direction of Council, the City of Aspen currently operates an admirable transportation and parking system comprising many different and interdependent components, including fixed-route transit, on-demand transit, carshare and bikeshare, bicycle and pedestrian infrastructure, and paid parking. For years, system operation has centered maximization of offerings and exceptional service at an individual level. While this robust focus on customer service is commendable and worth maintaining, at times it has led to unclear goals, lack of flexibility and contextuality, and difficulty with allocating available resources in a sustainable way. It has become even more important to address these issues head-on given the demographic shifts in our community, changes in transportation choices and behaviors in a post-COVID world, and universal issues around hiring and staffing in the parking and transportation space.

Drawing from these conclusions, the consultant team's recommended **Gets Us There** strategies include:

- **A clear goal for every mode,** enabling clarity and purpose for each transportation and parking choice's role in the larger system.
- **Regimented data collection and reporting practices** to create data-driven, impartial, and responsive decision-making and demonstrate a transparent commitment to our community.
- **Clear protocols for change and expansion** to support objectivity, equity, consistency, and accountability to users and taxpayers and help the community understand decisions.
- **Technology as a tool for efficiency and excellence**, both for the end user and for the people who operate our systems.
- **Maximized impact of our existing infrastructure and funds** so that we can provide quality service that is sustainable for both staffing and the community.

Below is a summary of the critical opportunities identified through the Gets Us There process that we'd like to discuss with Council, and an overview of potential strategies to address these challenges. Transportation is discussed first, followed by Parking.

Transportation

- **The Opportunity:** The COVID-19 pandemic intensified and expedited changes in transportation patterns and behaviors—for example, an increasing number of Aspen residents work from home regularly and use the transit system both as a commute option and as a way to get to recreation, shopping, and dining opportunities at different times throughout the day. Further, while some routes, like Galena Street and Cemetery Lane, have seen substantial dips in ridership since before the pandemic, others, like Mountain Valley, the winter-only Highlands route and Castle Maroon saw much more modest reductions. Focus group participants and the community have noted these changes, and are supportive of more effective, objective allocation of our transit resources to meet these changing and diverse needs. The community is supportive of clearer standards for changing bus service, including schedules, routing, and frequency,

based on data and community needs. Possible strategies to address this opportunity include:

  - ***Service Standards:*** Service standards are consistent quantitative and qualitative standards that dictate level of service and inform how or when to change a route that is no longer serving needs. Examples of service standards may include passenger trips per hour, minimum service frequency, maximum wait time for on-demand or percentage of on-time service for fixed-route, and standards around bus capacity—like what percentage of riders can be standing before a bus is too crowded. Many smaller transit agencies, like Transfort in Fort Collins, Colorado and High Valley Transit in Park City, Utah, use service standards to inform service planning and resource allocation.
  - ***Service Coverage Analysis:*** An annual service coverage analysis could include an assessment of parts of the city where people don't have proximal (0.25-mile walking distance) access to a bus stop with a direct connection to Core services, including the Transit Center. This analysis will help inform target areas for expansion of service so that people who don't currently have very strong access are prioritized.
  - ***Service Alternatives Review:*** Many transit agencies use their service standards to analyze and make changes to routes that are chronically underperforming—where another service choice may better serve riders. In other cases, they may increase service or other operational components (like vehicle resources) on routes that are performing well above goals and need more support. Using this strategy, Aspen's Transportation staff will use the service standards adopted by Council to make these decisions and better respond to changes in customers' needs.

- **The Opportunity:** Downtowner service is a popular and successful service offering free on-demand point-to-point transportation within and nearby Aspen's Downtown Core. Service ridership nearly rebounded to pre-COVID levels in 2022 (roughly 74,000 annual rides that year as compared to nearly 78,000 rides in 2019) and there is significant interest in expanding the service to more Aspen

neighborhoods. However, despite widespread interest in service expansion, community members have expressed concern about impacts to overall service levels—like longer wait times—and adding more primarily single-occupancy vehicles to core areas. Further, the community has shown interest in leveraging Downtowner to support existing fixed-route service and offer more connectivity in areas that don't have strong fixed-route options, rather than as an alternative to the bus. This approach is consistent with how many communities—from Park City, Utah to Austin, Texas—choose when and where to offer on-demand service. Possible strategies to address this opportunity include:

- **Goals and Key Performance Indicators (KPIs):** Set clear goals for Downtowner service. Recommended goals and associated KPIs include:
  - Facilitating connections to transit service for people residing in neighborhoods within city limits without proximal (0.25-mile walking distance) access to a bus stop (KPIs: year-over-year increases in bus system usage and ratings of bus system among Downtowner users, and decrease in car ownership among Downtowner users).
  - Providing connections to services in the Core with priority for people residing in neighborhoods within city limits without proximal (0.25-mile walking distance) access to a bus stop that provides direct access to the Core. (KPIs: year-over-year decrease in aggregate parking demand in the Core, year-over-year increase in ease of access to Core services among Downtowner users).

  These KPIs will provide Council and Staff the objective data needed to make decisions that will support the Aspen community, instead of having to rely on incomplete data or anecdotal/individual information.
- **Strategic Expansion:** Make areas eligible for Downtowner service expansion based on their ability to meet the stated goals and KPIs, while meeting service standards (e.g., a maximum 20-minute wait time). Areas that may be prioritized for initial expansion based on their contiguity with existing service area and the number of households without proximal

access to a bus option include Knollwood and some portions of Mountain Valley.

- **Community Participation:** In addition to assessing a neighborhood's ability to meet goals and KPIs, this strategy would include a formalized opportunity for the community to request service in their area. For example, a neighborhood meeting goals and KPIs would receive Downtowner service after a certain number of customer requests from neighborhood residents was received.
- **"Hubbing" Pick-Up and Drop-Off In/Near Core:** Identify pick-up and drop-off "hub" options in and near the Core to reduce or eliminate point-to-point transportation and vehicle circulation in tight Core streets, with a service goal of a two-block maximum walk.

Other Opportunities and Strategies Under Consideration include seeking a private sector partner to help expand the carshare program and serve more users, and targeted funding of employer support through the existing Transportation Options Program (TOP) to help businesses reduce emissions, like a zero-emissions delivery program supported by an e-cargo bicycle fleet, and expanded grant opportunities. Additional electrification of bike share services as well as thoughtful first/last mile expansion in areas of the city without proximal access to transit will also be further reviewed.

Transportation Strategies Alignment with City of Aspen Organizational Values:

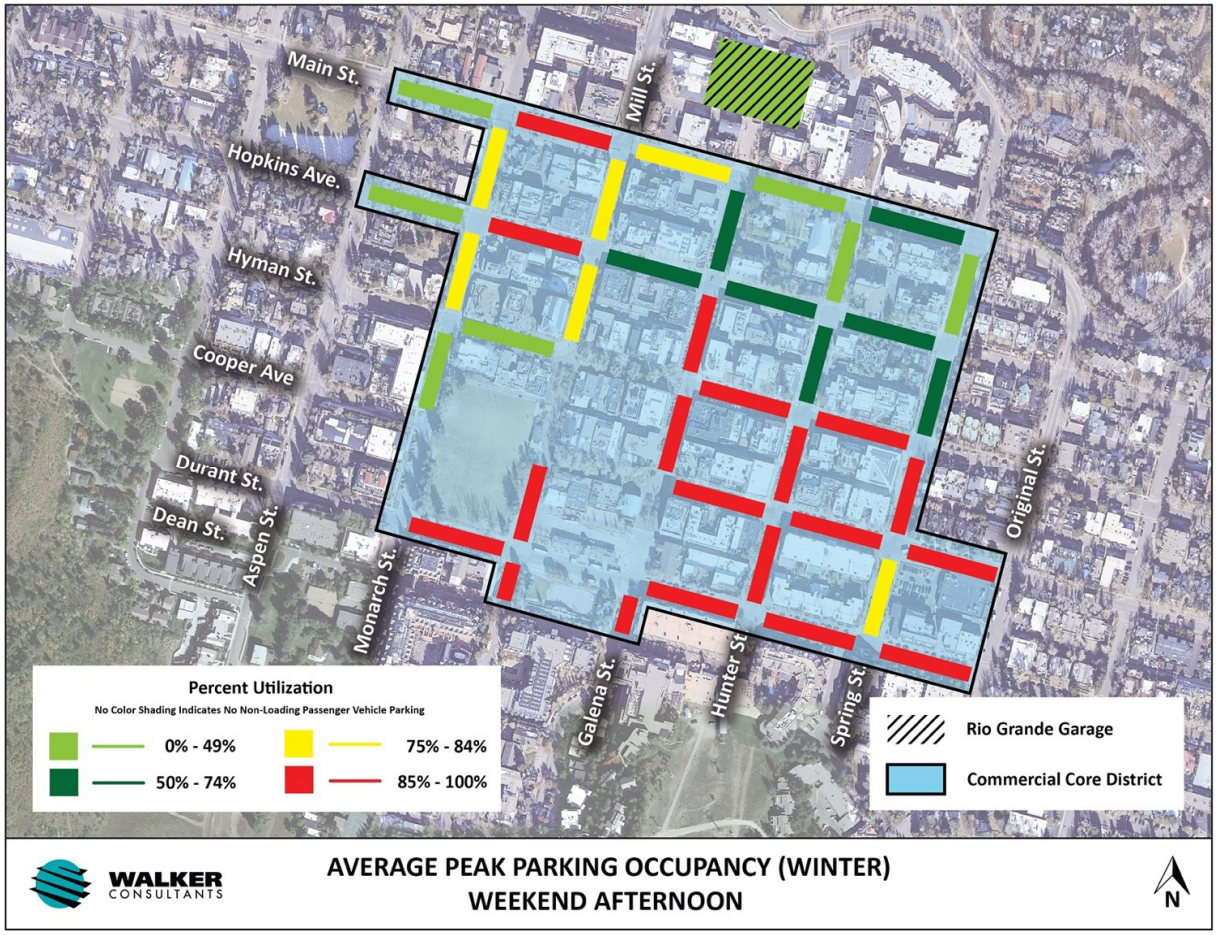
- **Service:** These strategy ideas embody the Service value by expanding mobility freedom and opportunity for even more Aspen constituents, finding the best transportation choices to fit users' unique needs, and expanding popular options like on-demand, WE-cycle and carshare.
- **Partnership:** These strategies embody the Partnership value by strengthening and deepening partnerships with key service providers and vendors and increasing the City's support of the business community through the TOP program.

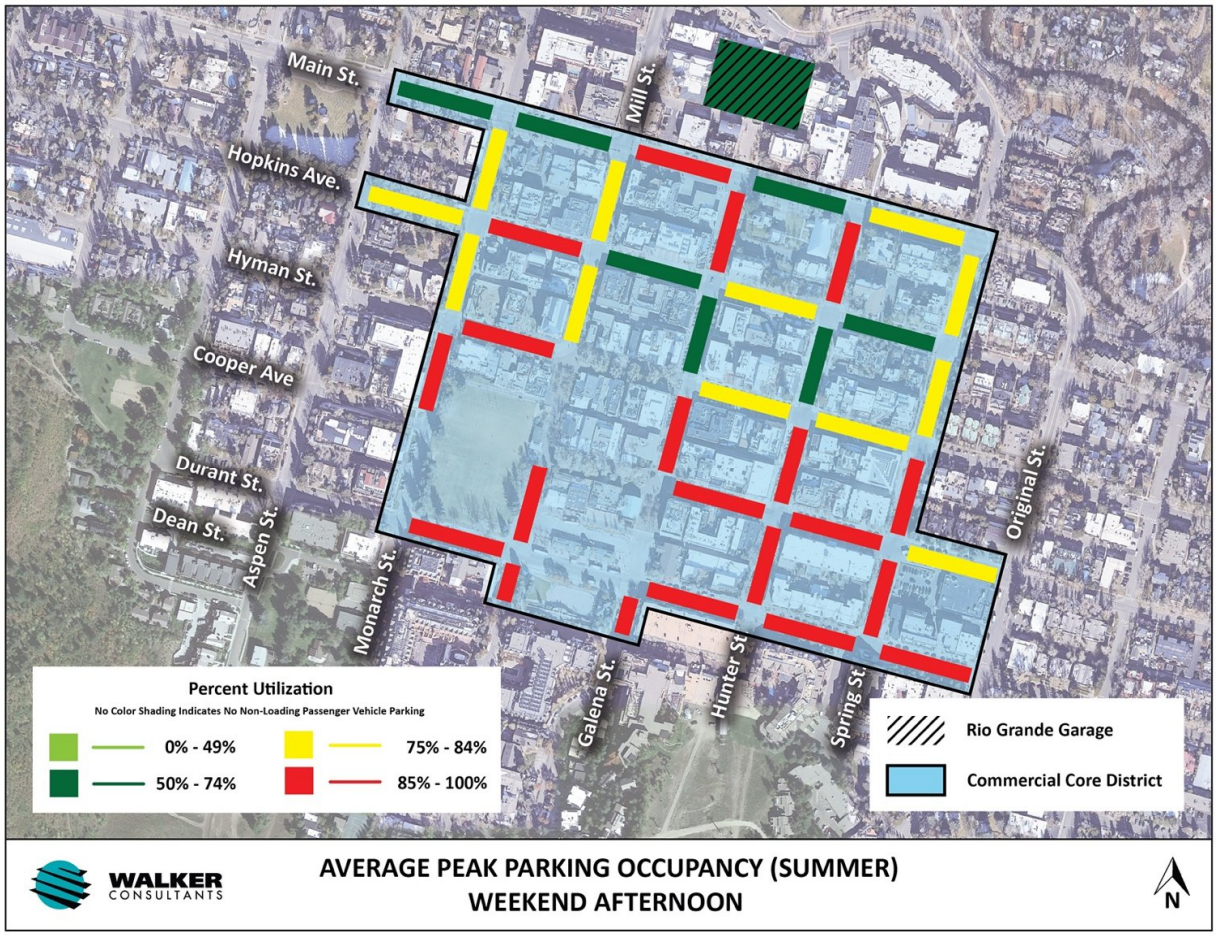
- **Stewardship:** These strategies embody the Stewardship value by creating a clear, objective, and balanced approach to addressing diverse user needs while maximizing available resources and prioritizing overall system health and sustainability. Further, these strategies set goals and key performance indicators for such transportation choices as on-demand transit and carshare to support the ability of these options to advance sustainability, emissions, and mobility freedom goals.
- **Innovation:** These strategies embody the Innovation value by centering the specific experiences, needs and vision of the singular Aspen community.

Parking

- **The Opportunity:** Our Downtown Core has very limited parking inventory. The community is clear in their desire to maintain this parking, and their interest in ways to improve safety that do not involve widespread conversion of on-street spaces to other uses. Potential strategies to address this opportunity include:
    - **Gaining Back Existing Core Inventory:** Re-striping Galena street as angled parking instead of parallel parking to recoup former parking inventory levels on this high-demand street, and encourage lower speeds by narrowing the travel lane.
    - **Premium Violation Fines:** In keeping with the community's commitment to safety and effective parking management, pursue measures like premium fines and graduated fines (higher fines for every time the rule is violated by an individual within a calendar year) for violations that impede others' ability to move freely throughout the core and make things less safe for pedestrians and cyclists (like parking in a crosswalk). Graduated fines also have a proven reductive impact on the volume of parking violations—a key benefit in Aspen, where non-compliance is frequent. The goal of these measures is to reduce violations and improve safety and efficiency for all—not to hit a quota, or increase revenue.

- **The Opportunity:** Demand distribution issues occur frequently in the Core—where some street parking is very busy (like Galena between Durant and Hyman, or Cooper between Galena and Spring) while other street parking a few blocks away (like much of Main and Hopkins) is much less utilized. The Winter and Summer peak occupancy maps developed for this study and shown below demonstrate this trend.





The results are myriad and negative, including user frustration, excessive vehicular circulation leading to emissions, double-parking, other activity that blocks roadways, increases vehicle miles travelled in the Core, and decreases vitality, vibrancy and safety. Possible strategies to address this challenge include:

- **Enhanced Demand-Based Pricing:** Consider some location-based differentiation in pricing—for example, higher hourly pricing in the Core on streets closer to Aspen Mountain, and lower hourly pricing farther away. For example, Boulder, Colorado has “tiered” pricing in their Downtown Core area where prices are set based on semi-annual checks of occupancy levels to improve demand distribution. Even during the off-season, limited Core inventory is highly-utilized, and may benefit from additional demand distribution techniques, like location-based pricing.

    - **Pricing Flexibility:** Consider removing exact rates from the Code of Ordinances in favor of a range of rates with flexibility and discretion to adjust rates based on demand and regular data collection and analysis, so that the system can be more flexible and responsive to users' evolving needs. Many communities who have implemented a form of demand-based pricing use this regulatory model.
    - **Simplify on-the-ground user communications** through more standardized signage and wayfinding and a mobile application-based parking guidance system that would help inform parkers available options, payment, and rules.
- **The Opportunity:** Aspen has nine different types of special permits, many of which have different validation processes (e.g., some are digital and some require physical tags). This can be confusing to users and makes proper enforcement and validation difficult. Some permit types, like the Business permit and the Lodging permit, are used both for their intended purpose and as a de facto "commuter permit", which was not an intended purpose of these options. Further, the many different permit types and the many people who have preferential access to the public right-of-way results in inefficiencies in our limited inventory and inequities (some people getting options others don't have access to). Without intervention, these permits can also detract from our transportation demand management and mode shift goals by subsidizing and inadvertently encouraging driving and parking among people who have other convenient options.
    - **Consolidate permit types** into 2-3 categories, and build permit types that respond to demand—like having a designated permit category for commuters. Consider elimination of permits that are outdated or no longer in service to Aspen's needs or mission. For example, the free Electric Vehicle permits do not contribute to mode shift goals and subsidize a parking option for primarily wealthier community members, as most EVs

are still about 15-20% more expensive on average[1] than gas-powered vehicles, although this gap is shrinking.

- **Digitize all permits** to make things easier for both the user and for enforcement.
- **Price permits at market rates** to improve efficiency, improve cost recovery, and advance TDM goals. This is particularly important for some permit types, like the Lodge Permits, which have been the same price ($3 for 7 days of parking) for many years, and do not recoup costs.
- **Consider capping some permit sales** to align with other City requirements—like Parking Maximums—and support TDM goals.
- **Instead of having separate special permits, look at subsidized rates for options** that really support Aspen's goals as a city—for example, carpooler commuters could get a commuter permit, but would be eligible for a lower rate based on the number of people included in the carpool.

Parking Strategies Alignment with City of Aspen Organizational Values:

- Service: These strategy ideas embody the Service value by increasing the efficiency of our limited available parking inventory, building more opportunity for more people to use our parking system, reducing frustrations that can arise when parking isn't available, and finding ways to improve and enhance transparency and communication.
- Partnership: These strategies embody the Partnership value by enhancing the parking system's responsiveness to the needs of our various communities and user groups.
- Stewardship: These strategies embody the Stewardship value by increasing the efficiency, utility, and usability of our existing parking system to as many users as possible, and reducing pressures on the City to build more expensive, trip-generating parking inventory.
- Innovation: These strategies embody the Innovation value by centering the specific experiences, needs and vision of the singular Aspen community.

[1] Based on 2021-2023 data from BlastPoint and Autolist reports.

Other Opportunities and Strategies Under Consideration include better aligning loading zone locations with activity data to support the business community and reduce double-parking and Core traffic, looking at options to bring back Smart Loading Zones, and more flexible permit and pricing options in the Rio Grande garage to improve utilization year-round.

FINANCIAL IMPACTS:

Financial requests are not included in this memo. Staff will return to Council with a financial package related to the strategies of interest identified by Council at the April 1 meeting.

ENVIRONMENTAL IMPACTS: The Aspen Gets Us There plan and resulting adoption of transportation and parking strategies are crucial steps toward the goal of *Improving and expanding our efficient, multi-modal, and integrated transportation system to reduce vehicle miles traveled (VMT) and air pollution.*

ALTERNATIVES: This April 1 work session is intended to be iterative and exploratory, with Council providing their perspective, direction and advice on the strategies presented. At this meeting, staff will seek Council input on these higher level strategies and return with an action plan based upon that input. and working with the community on information obtained through this work session.

RECOMMENDATIONS:

Staff recommends that Council review and discuss strategies at the April 1 meeting and provide feedback at that time. Staff will return with actions items based on the information.

CITY MANAGER COMMENTS:

ATTACHMENTS:

Attachment A: Aspen Gets Us There Outreach Summary and Detailed Minutes/Analysis

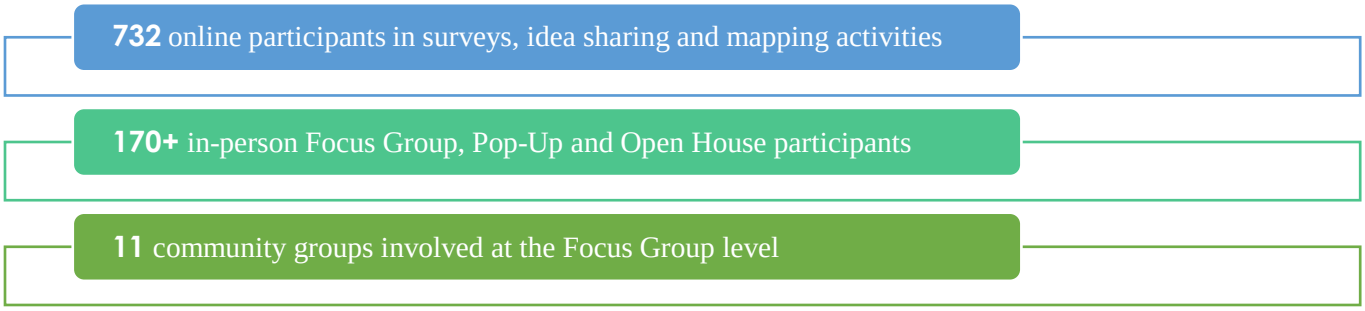
Attachment B: Aspen Gets Us There Existing Conditions Executive Summary

Attachment C: Aspen Gets Us There Existing Conditions Report

How Does Our Strategic Direction Align with Community Feedback?

The Aspen community has informed every step of this process, through small group interactions, online engagement on Aspen Community Voice, surveys, pop-ups, and a community open house.

Quantitative Summary of To-Date Engagement and Participation



Community groups/organizations involved in focus group meetings include:

- Aspen Chamber Resort Association (ACRA)
- Aspen Institute
- Aspen Skiing Company
- Bike Shops/Representatives
- Commercial Core and Lodging Commission (CCLC)
- Lodging Companies/Representatives
- Emergency responders
- Private Transportation Providers (e.g., taxis, and rickshaws)
- Local employers through the City of Aspen Transportation Options Program
- Members of the former Next Generation Advisory Committee
- Elected Officials Transportation Committee (EOTC) staff

To date, we have engaged the community in two key stages of the project—Visioning and Initial Strategy Vetting—and are continuing engagement with the community through Consensus-Building focus group meetings, a transit center pop-up, and a community open house in early April. Following are key themes—derived from both in-person conversations and online engagement through surveys and idea-sharing—in each stage.

VISIONING

Overall Vision and Guidance for Plan Success

The following guidance for plan success was developed from conversations in our focus group meetings.

- Committed to the priorities that Aspen has set as a community—support of transportation choices beyond the personal vehicle, reducing carbon emissions and congestion, innovation and excellence.

- Rejected “silver bullet” solutions—just adding more buses, or more on-demand service, or more parking alone will not suffice.
- Stressed the importance of smart, supportive strategies that advance and augment effective business access and economic strength and vitality—like the need for parking even in our limited-resource community, and new ideas to bolster the efficiency of our parking system.
- Energized by future-forward, adaptable, proactive ideas that enable responsive change at the ground level and result in long-term health and sustainability for our community.
- Eschewed short-term solutions that meet immediate needs—take the time to make meaningful change that will be felt for generations.

Fears and Concerns Related to the Aspen Gets Us There Work

The following fears and concerns were highlighted in conversations in our focus group meetings.

- Afraid that once plans come to be adopted and implemented, they will be stopped or significantly watered down by a few strong voices.
- Concerned that small changes focused on the needs of a few would be prioritized over big, impactful changes that would center the needs of many. Rejected “silver bullet” solutions—just adding more buses, or more on-demand service, or more parking alone will not suffice.
- Cautious about just focusing on pricing increases that would make an expensive community even more expensive, especially for certain groups, like the employees who are so important to our city’s success.

Influential Transportation and Mobility Behaviors and Experiences

We gleaned the following summary takeaways from our initial community survey and idea-sharing and mapping activities on Aspen Community Voice.

- **Evolving commute patterns and behaviors.** Many respondents are working remotely as their primary commute method, and relying on transportation for more recreation and service trips in addition to stnadard commute trips.
- **Preference for speed and convenience as top factors in decision-making.** While respondents indicated strong commitment to Aspen’s priorities as a community—like environmental sustainability—they still listed speed and convenience as the top factors in making a decision about which transportation option to choose.
- **Support for and belief in the power of transportation options like bus service—even among folks who don’t use them frequently.** People in Aspen really value and support the City’s transit system, even if they don’t use it often themselves.
- **Demographic diversity across all transportation modes.** Transit systems—and especially bus systems—in many communities tend to serve users primarily on the lower end of the income spectrum. Conversely, Aspen’s transportation system(and bus system in particular) serves a wide range of demographics, backgrounds, and use cases. Respondents who used Downtowner at least once per week tended, on average, to be on the higher end of the income spectrum, mostly work from home, and primarily use the service for recreational, shopping, and dining trips.

- **Strong desire for initiatives that improve ease of locating parking.** Parking was cited as the second most common difficulty in getting around Aspen (after traffic).

STRATEGY VETTING

Overall Strategy Direction:

- **Systematic Changes:** Participants were generally very proud of the transportation and parking system Aspen has built, but saw the need for several critical changes to our city's system-wide approach.
- **Data Collection, Retention, and Responsiveness:** Participants reiterated and intensified favor for data-based decision-making, and supporting staff in using data to improve system efficiency and serve more people with quick, responsive action. On the parking side, participants showed interest in improved data collection and retention practices—like for on-street parking and permit usage—and using that data to make changes, like pricing tweaks or changes in the number of permits sold. On the transportation side, participants supported using data—like ridership data—to determine where to add or change service.
- **Prioritization:** Participants generally supported the idea of prioritizing expansion or enhancement of transportation services/offerings for those living in neighborhoods with less access to existing transportation options.
- **Resource Allocation:** Despite a general acknowledgement that Aspen is a high-resource community, participants expressed concern about resource allocation, and stressed the importance of allocating resources for transportation options sensibly.
- **Modernizing and Strengthening of Parking and Curb Access:** Participants were excited by strategies to better leverage and modernize our limited parking and curb inventory, and make things easier and more friendly for users unfamiliar with the system. Specific strategies embraced by participants included dynamic wayfinding signage displaying parking availability, more differentiation in on-street pricing based on demand, enforcement strategies (like additional penalties) focused on habitual and/or serious parking violators, digitized and enforced loading zone options, and digitized, more direct permit and pass options for longer-term parkers—like residents and commuters.
- **Considering Private Sector Parking:** Participants shared an interest in a better understanding of private parking resources—what resources are available, how they're utilized, and how they impact transportation choices—and in expanding publicly-available parking options through partnerships with the private sector—like through private development funding public parking operations and technology, or through agreements to use privately-constructed parking for private use.
- **Leveraging and Maximizing Existing Transportation Resources:** Participants supported allocating resources to maximize the impact of existing transportation options. Specific examples included leveraging the Downtowner/on-demand service as a first- and last-mile connection to existing transit stops, and allocating more buses for high ridership routes to reduce crowding and wait times while reducing service to routes with very low ridership.
- **Reducing Point-to-Point Vehicle Transportation:** Participants were excited by options to reduce point-to-point vehicle transportation and enhance first- and last-mile connections. In particular, participants showed an interest in "hubbing" pick-up and drop-off points for on-demand transportation both in/near the core and in neighborhoods—where users could walk a

block or two to get a ride. Participants also liked the idea of these hubs serving grander purposes for neighborhoods—physical connections for our communities to transportation options, as well as gathering spaces with amenities like bike charging and parking, a coffee shop or a bodega.

- **Leveraging Regional Resources:** While participants understood that we have the most influence over City-operated transportation and parking options/services, they were also excited by strategies leveraging regional options and opportunities—like partnering with the County to leverage the Intercept (Brush Creek) park-and-ride as a remote parking option, using dynamic signage on Highway 82 to share information about parking availability/options and transportation into the city, and an integrated payment/trip-planning app for all transportation options valley-wide.
- **Influencing What's Next for the Region:** Participants emphasized Aspen's influence over the region, and encouraged use of this Plan to at least demonstrate support and envision options for regional changes—for example, recommending fare changes for down-valley RFTA trips, and increasing headways on the BRT route during peak hours.

Specific Strategy Support

The following strategies have strong support from the community based on our strategy vetting community survey and idea-sharing activities on Aspen Community Voice.

- Reducing service on bus routes to reallocate resources to support higher frequency or otherwise improved service on high-demand routes. Notably, most respondents did not see the need for more on-demand or bus service during shoulder seasons or in summer.
- Prioritizing expansion of transportation service based on where existing transportation options are weaker.
- Expanding Downtowner availability, with priority to areas without strong bus service.
- Finding ways to expand carshare options and availability for residents and commuters.
- Initiatives that improve demand distribution of parking—like responsive pricing and making more parking available on a "first-come, first-served" basis instead of by permit.
- Leveraging higher parking fines and enforcement techniques to reduce habitual violations, inequitable use of the public-right-of-way, and vehicle-vehicle, vehicle-pedestrian, and vehicle-cyclist conflicts.

Focus group newsletters and attachments and survey results are provided in the attachment.

Date:	June 2, 2024
To:	Lynn Rumbaugh, Pete Rice, Sandy Doebler, and Carly McGowan
Company:	City of Aspen, Colorado
From:	Ben Weber, Renata Langis, Greg Strangeways
Project Name:	Aspen Gets Us There: Transportation and Parking Plan
Project Number:	23-008902

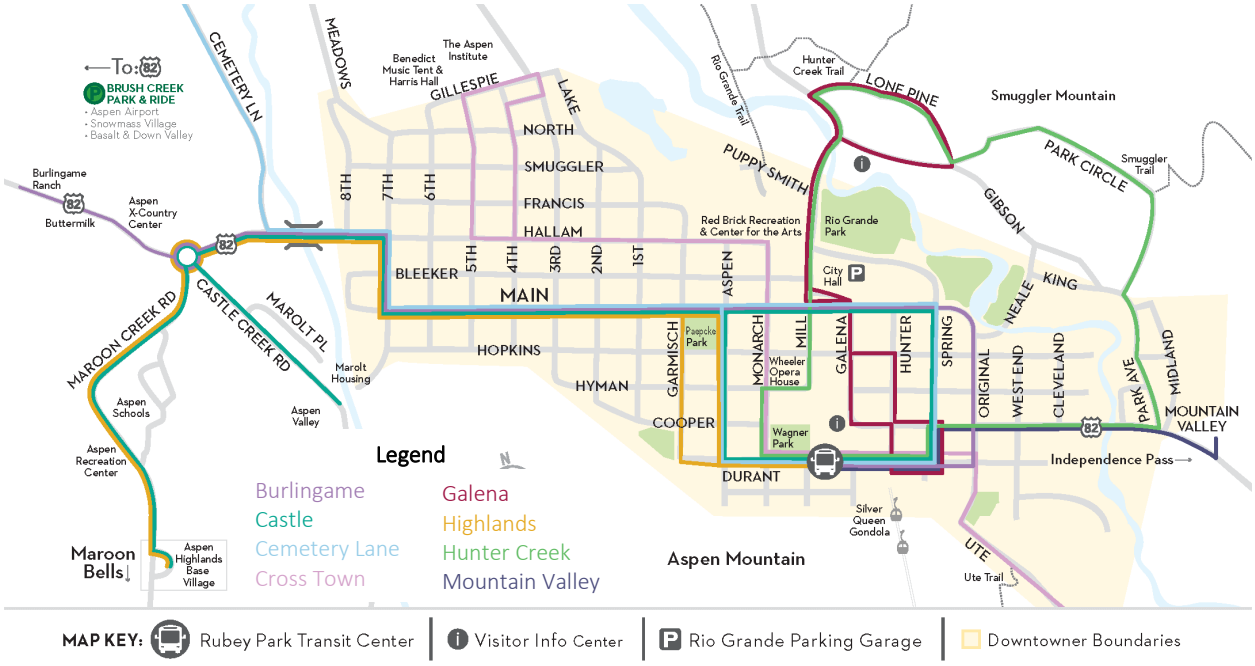
Aspen Free Shuttles Overview

The City of Aspen offers a convenient and eco-friendly transportation solution through its Free Shuttles, enhancing mobility and accessibility. These complimentary shuttles serve both residents and visitors, providing a reliable and efficient way to move around the City without a car.

The Free Shuttle network has the following key features:

- **Comprehensive and Accessible:** The Free Shuttles provide comprehensive coverage of the City, connecting key destinations within Aspen, including popular attractions, community services, residential areas, and transportation hubs. The buses are operated and maintained by the Roaring Fork Transportation Authority (RFTA), the regional transit agency, and the vehicles are ADA-accessible.
- **Frequent and Convenient Schedules**: Service varies somewhat by season but generally provides frequent departures and extended hours of operation.
- **Year-Round Operation and Seasonal Adaptability**: Core parts of the network operate year-round, enhancing its value for residents and businesses. Service levels are adjusted between peak and off-peak seasons.
- **Ridership within Expected Range**: Productivity is typically measured in passengers per vehicle revenue hour (one vehicle in service for one hour equals one vehicle revenue hour or VRH). Our analysis estimates Aspen service from November 2022 through November 2023 averaged 18.6 passengers/VRH. While 2023 data is not yet available for other agencies, this is similar to pre-COVID 2019 information as reported to the National Transit Database for other resort areas as follows:
    - Park City, UT – 33 buses in maximum service, 20.5 passengers/VRH
    - Martha's Vineyard, MA – 28 buses in max service, 19.5 passengers/VRH
    - Palm Beach County, FL – 118 buses in max service, 17.8 passengers/VRH
- **Post-COVID Ridership Loss:** For the 12 months from November 2022 to November 2023, the Aspen Free Shuttles had 1.1 million riders, consistent with historical trends. The 20-year average annual transit ridership for local bus routes is approximately 1 million boardings. Compared to 2018-2019 ridership, ridership in 2022-2023 is lower, making up only 74% of the almost 1.5 million riders in 2019. However, it should be noted that Aspen Free Shuttle ridership in 2019 was higher than the historical average, partly due to a spike in tourism. In Aspen, some trips may have shifted to the Downtowner on-demand service or the WE-cycle bike share system during the summer, both of which have recovered higher proportions of pre-COVID ridership.

Figure 1. Aspen Free Shuttles Routes Map



Source: Roaring Fork Transportation Authority (RFTA), 2024

Service Analysis

Definitions

The Free Shuttles consist of eight routes, several operating only during certain seasons (as described in the following seasonal analysis). This section details information about specific Free Shuttle routes, including the span of service hours and each route's productivity. The data used for analysis was provided by the Roaring Fork Transportation Authority (RFTA) for 2022-2023, representing four seasons and 12 months of service for the Aspen Free Shuttles transit system. Routes are divided by season to facilitate comparison and analysis of performance metrics. The following definitions are used in the analysis for each route/season:

- Number of Vehicles: the number of buses needed simultaneously to serve the route to meet the planned schedule.
- Number of Operation Days: the days each season when the Free Shuttles are in service.
- Span of Service Number of Hours: the number of daily operating hours.
- Total Boardings: this is the total boardings for the entire season[1].
    - The Winter Season was from November 21, 2022, to April 16, 2023.
    - The Spring Season was from April 17, 2023, to June 4, 2023
    - The Summer Season was from June 5, 2023, to September 3, 2023
    - The Fall Season was from September 4, 2023, to November 19, 2023
- Vehicle Revenue Hours: the number of vehicles on the route multiplied by the number of days multiplied by the number of hours in the daily span of service.
- Passengers per Revenue Hour: the number of boardings divided by the vehicle revenue hours; this is a commonly used measure of productivity.

The received raw boarding and alighting data consists solely of 'valid' trips, as determined by a set of business rules used for data validation in the RFTA passenger counting system. Trips that do not pass this validation process are discarded, which may occur due to detours, bus malfunctions, or other factors. As a result, the received raw data may contain fewer actual trips than the number of trips operated for a given route/day.

To standardize the boarding data across different routes, Walker utilized the average daily boarding per trip multiplied by the number of operational days. This approach assumes that each bus route operates a consistent weekday and/or weekend schedule within the same season (i.e., assumes that all scheduled trips were operated even if passenger boardings were not reported).

Unless otherwise specified, the following tables and charts reflect data from the Roaring Fork Transportation Authority (RFTA).

[1] Seasons reflect dates provided to the project team from RFTA on March 4, 2024.

Winter Season

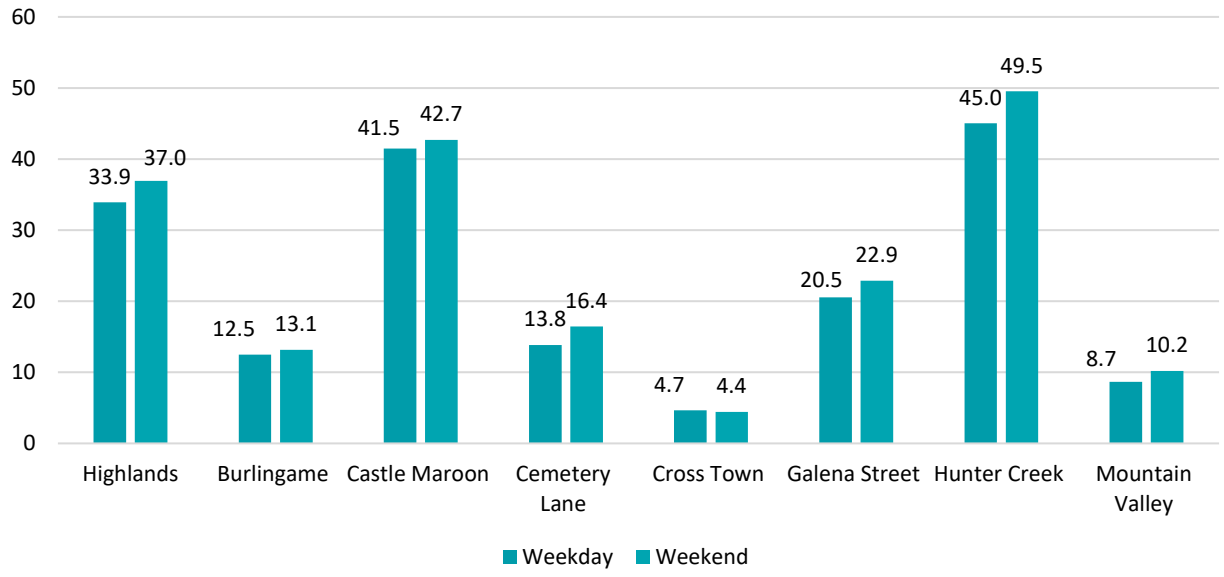
Table 1 below is a summary of service productivity indicators for each route in the system:

- Castle Maroon and Hunter Creek recorded the highest winter season total weekday and weekend boardings.
- Hunter Creek achieved the highest passengers per revenue hour (weekday: 45.0; weekend: 49.5), while Cross Town had the lowest (weekday: 4.7; weekend: 4.4).

Table 1. Winter Season Service by Route

Route Name	No. of Vehicles	No. of Operation Days		Span of Service - No. of Hours		2022-2023 Winter Boarding		Vehicle Revenue Hour		Passengers per Revenue Hour	
		Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd
Highlands	1	105	42	14	13.5	49,827	20,951	1,470	567	33.9	37.0
Burlingame	2	105	42	18	17.5	47,235	19,323	3,780	1,470	12.5	13.1
Castle Maroon	2	105	42	20	18	174,284	64,525	4,200	1,512	41.5	42.7
Cemetery Lane	1	105	42	20	18	29,062	12,427	2,100	756	13.8	16.4
Cross Town	1	105	42	15.5	15.5	7,575	2,889	1,628	651	4.7	4.4
Galena Street	2	105	42	9.5	9.5	40,993	18,275	1,995	798	20.5	22.9
Hunter Creek	1	105	42	20	18	94,548	37,444	2,100	756	45.0	49.5
Mountain Valley	1	105	42	19.5	17.5	17,779	7,493	2,048	735	8.7	10.2

Figure 2. Winter Season Passengers per Revenue Hour by Route



Another analysis was conducted to evaluate the operational efficiency of each bus route by hour. Table 2 and Figure 3 illustrate the passengers per revenue hour during the winter season. Red boxes denote continuous periods of at least four hours with greater than 40 passengers per vehicle revenue hour, and blue boxes denote continuous periods of at least four hours with fewer than 5 passengers per vehicle revenue hour.

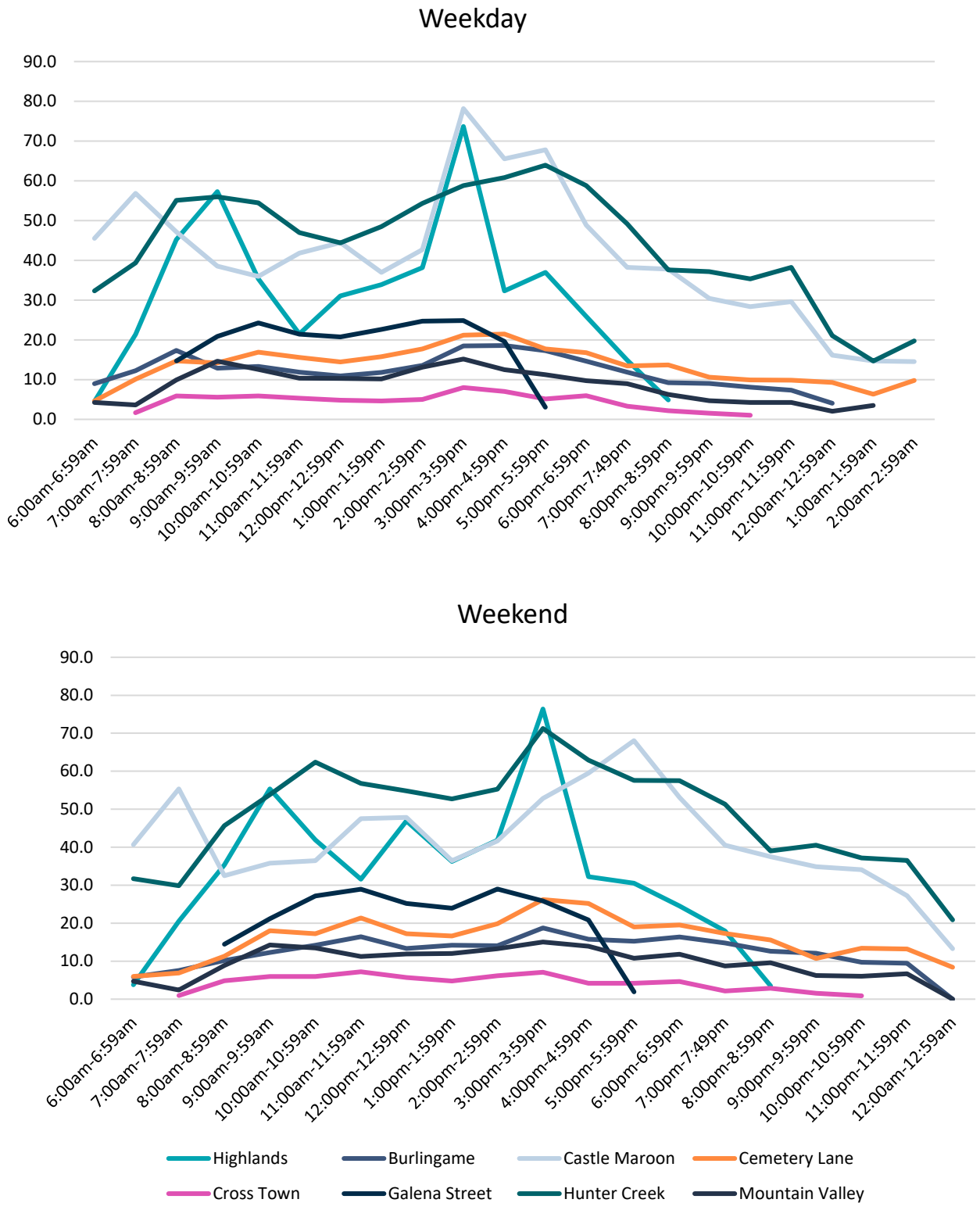
The Hunter Creek route is very busy daylong on weekdays and weekends, while Castle Maroon and Highlands experience surges in demand in mid-afternoon.

Table 2. Winter Season Passengers per Revenue Hour by Route and Hour of Day

Time	Highlands		Burlingame		Castle Maroon		Cemetery Lane		Cross Town		Galena Street		Hunter Creek		Mountain Valley	
	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd
6:00am-6:59am	4.5	3.8	9.0	5.8	45.5	40.7	4.6	6.0					32.3	31.7	4.2	4.7
7:00am-7:59am	21.4	20.5	12.2	7.5	56.9	55.3	10.1	6.9	1.7	1.0			39.4	29.9	3.6	2.4
8:00am-8:59am	45.2	35.4	17.3	10.2	47.2	32.5	14.7	11.3	5.9	4.8	14.7	14.5	55.1	45.7	9.9	8.9
9:00am-9:59am	57.3	55.4	12.9	12.3	38.5	35.8	14.2	18.0	5.6	6.0	20.8	21.2	55.9	53.8	14.6	14.2
10:00am-10:59am	35.3	41.9	13.3	14.2	36.0	36.4	16.9	17.2	5.9	5.9	24.2	27.2	54.4	62.4	12.6	13.5
11:00am-11:59am	21.5	31.6	11.9	16.5	41.8	47.5	15.6	21.4	5.3	7.2	21.4	28.9	46.9	56.8	10.3	11.3
12:00pm-12:59pm	31.1	46.9	10.9	13.3	44.5	47.8	14.4	17.2	4.8	5.7	20.7	25.2	44.4	54.8	10.3	11.9
1:00pm-1:59pm	33.9	36.3	11.8	14.2	37.0	36.4	15.8	16.6	4.6	4.7	22.7	24.0	48.5	52.7	10.2	12.0
2:00pm-2:59pm	38.1	41.8	13.6	14.1	42.7	41.7	17.7	19.9	5.0	6.2	24.7	29.0	54.3	55.3	13.1	13.3
3:00pm-3:59pm	73.7	76.4	18.4	18.7	78.2	52.8	21.2	26.2	8.0	7.1	24.8	25.9	58.8	71.3	15.2	15.0
4:00pm-4:59pm	32.3	32.3	18.6	15.8	65.6	59.5	21.5	25.2	7.0	4.2	19.6	20.9	60.8	62.9	12.5	13.9
5:00pm-5:59pm	37.0	30.5	17.3	15.2	67.8	68.1	17.7	19.0	5.1	4.2	3.1	1.9	63.9	57.6	11.2	10.8
6:00pm-6:59pm	25.9	24.6	14.6	16.4	48.8	53.1	16.8	19.5	5.9	4.7			58.8	57.5	9.8	11.8
7:00pm-7:49pm	14.9	18.0	11.9	14.8	38.2	40.6	13.4	17.3	3.3	2.1			49.2	51.4	9.0	8.7
8:00pm-8:59pm	4.9	3.5	9.2	12.6	37.8	37.5	13.7	15.6	2.2	2.9			37.6	39.0	6.3	9.6
9:00pm-9:59pm			9.0	12.1	30.4	34.9	10.6	10.7	1.6	1.6			37.1	40.5	4.7	6.2
10:00pm-10:59pm			8.1	9.7	28.3	34.1	9.9	13.4	1.0	0.9			35.3	37.2	4.2	6.0
11:00pm-11:59pm			7.4	9.5	29.6	27.2	9.9	13.2					38.2	36.5	4.3	6.7
12:00am-12:59am			4.1	*	16.1	13.3	9.3	8.4					21.1	20.9	2.0	*
1:00am-1:59am					14.7	*	6.3	*					14.7	*	3.5	*
2:00am-2:59am					14.5	*	9.8	*					19.7	*		

*Aspen Free Shuttle service operated during these periods, but ridership data was unavailable for this analysis.

Figure 3. Winter Season Passengers per Revenue Hour on Weekday and Weekends by Route and Hour



*Several Aspen Free Shuttle routes ran later than 1:00am in Winter, but ridership data was unavailable for this analysis.

Spring Season

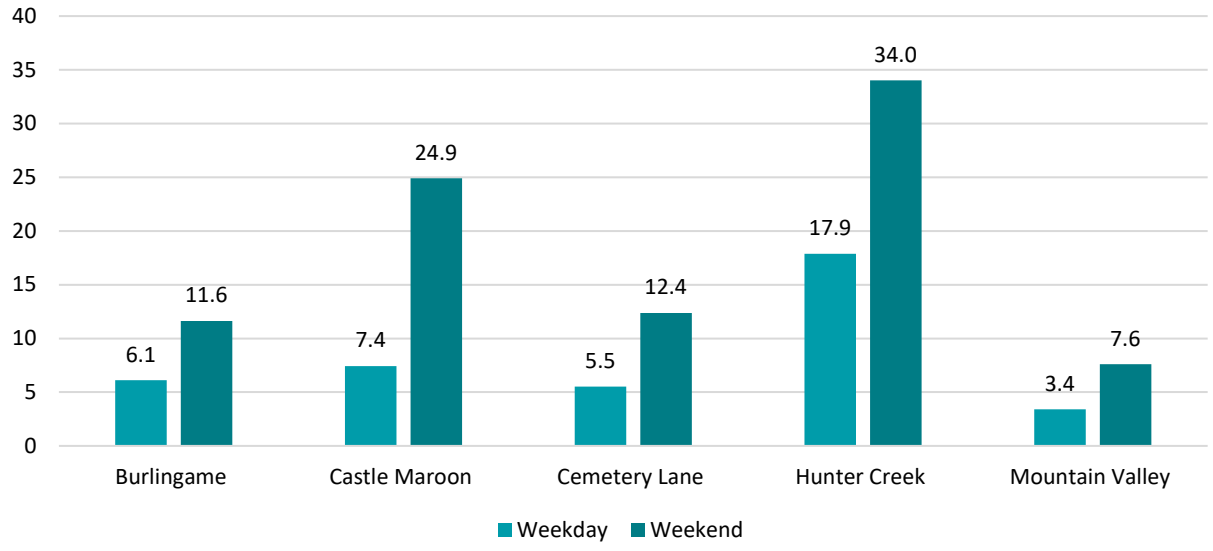
Five routes operate during the Spring. Table 3 below provides an overview of service productivity indicators for each route in the system:

- Hunter Creek recorded the highest spring season total weekday and weekend boardings.
- Hunter Creek also achieved the highest passengers per vehicle revenue hour (weekday: 17.9; weekend: 34.0), while Mountain Valley had the lowest (weekday: 3.4; weekend: 7.6).

Table 3. Spring Season Service by Route

Route Name	No. of Vehicles	No. of Operation Days		Span of Service - No. of Hours		2023 Spring Boarding		Vehicle Revenue Hour		Passengers per Revenue Hour	
		Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd
Burlingame	2	35	14	18	17.5	7,715	5,703	1,260	490	6.1	11.6
Castle Maroon	2	35	14	17.5	17.5	9,113	12,204	1,225	490	7.4	24.9
Cemetery Lane	1	35	14	17.5	17	3,374	2,946	613	238	5.5	12.4
Hunter Creek	1	35	14	17	17	10,629	8,099	595	238	17.9	34.0
Mountain Valley	1	35	14	17	17	2,024	1,811	595	238	3.4	7.6

Figure 4. Spring Season Passengers per Revenue Hour by Route



Another analysis was conducted to evaluate the operational efficiency of each bus route by hour. Table 4 and Figure 5 illustrate the passengers per revenue hour during the spring season. Although ridership data was grouped into weekday and weekend categories, it should be noted that the following routes operate a reduced service schedule on Sundays during the spring season, from approximately 9:00 am to 9:00 pm: Castle Maroon, Cemetery Lane, Hunter Creek, and Mountain Valley. Thus, ridership data after 10:00 pm on weekends represents ridership only on Saturday nights. Red boxes denote continuous periods of at least four hours with greater than 40 passengers per vehicle revenue hour, and blue boxes denote continuous periods of at least four hours with fewer than 5 passengers per vehicle revenue hour.

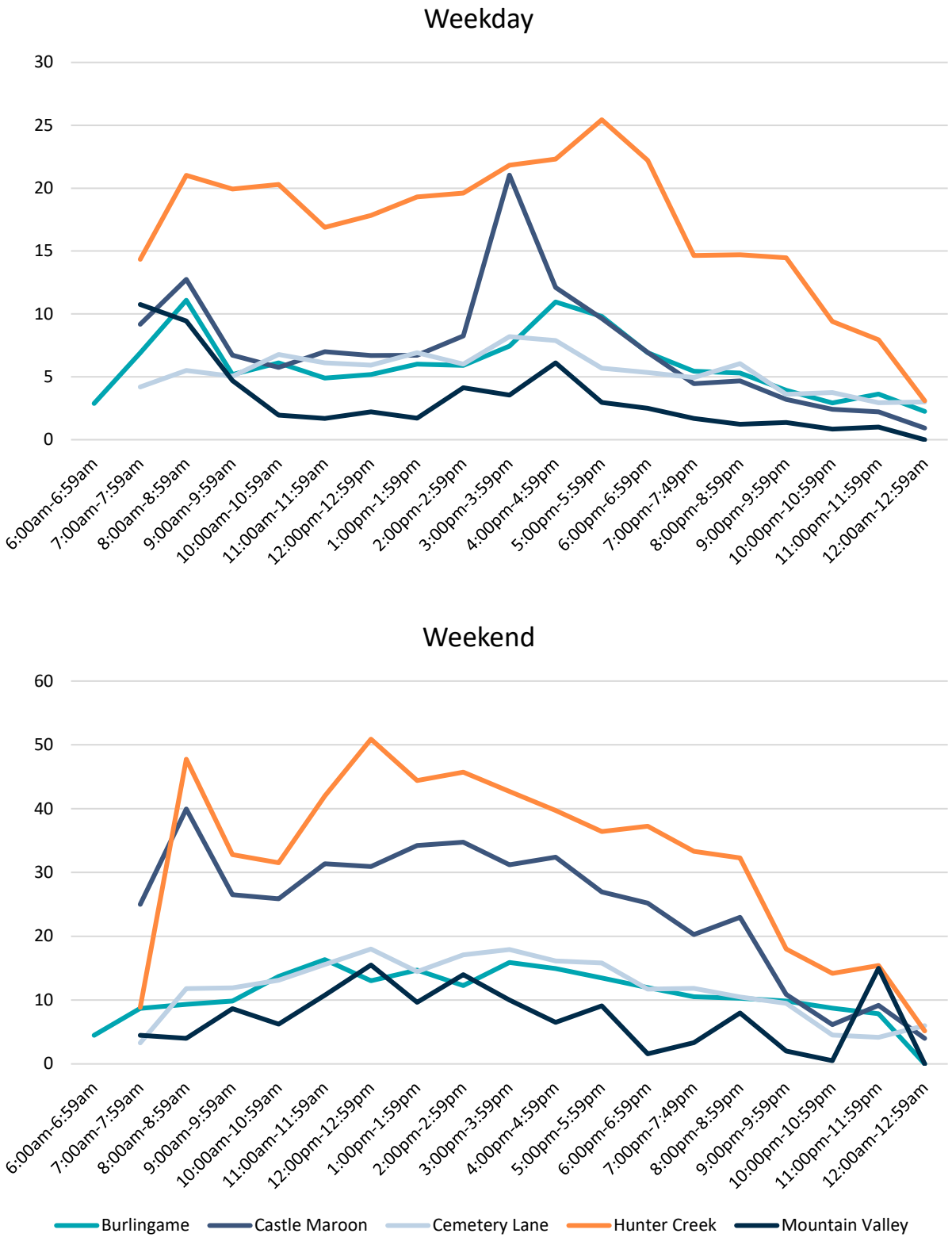
Most routes have steady ridership levels throughout the day on both weekdays and weekends, except for a mid-afternoon weekday surge in demand on the Castle Maroon route.

Table 4. Spring Season Passenger per Revenue Hour by Route and Hour of Day

Time	Burlingame		Castle Maroon		Cemetery Lane		Hunter Creek		Mountain Valley	
	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd
6:00am-6:59am	2.9	4.5								
7:00am-7:59am	6.9	8.7	9.2	25.0	4.2	3.3	14.3	8.9	10.8	4.5
8:00am-8:59am	11.1	9.3	12.7	40.0	5.5	11.8	21.0	47.8	9.4	4.0
9:00am-9:59am	5.2	9.8	6.7	26.5	5.0	11.9	19.9	32.8	4.7	8.7
10:00am-10:59am	6.1	13.7	5.7	25.9	6.8	13.1	20.3	31.5	1.9	6.3
11:00am-11:59am	4.9	16.3	7.0	31.4	6.1	15.6	16.9	42.0	1.7	10.8
12:00pm-12:59pm	5.2	13.0	6.7	30.9	5.9	18.0	17.8	50.9	2.2	15.5
1:00pm-1:59pm	6.0	14.7	6.7	34.2	6.9	14.5	19.3	44.4	1.7	9.7
2:00pm-2:59pm	5.9	12.3	8.3	34.7	6.0	17.1	19.6	45.7	4.1	14.0
3:00pm-3:59pm	7.5	15.9	21.0	31.2	8.2	17.9	21.8	42.7	3.5	10.0
4:00pm-4:59pm	11.0	15.0	12.1	32.4	7.9	16.1	22.3	39.7	6.1	6.5
5:00pm-5:59pm	9.8	13.5	9.6	26.9	5.7	15.8	25.4	36.4	3.0	9.1
6:00pm-6:59pm	6.9	11.9	6.9	25.2	5.4	11.7	22.2	37.3	2.5	1.6
7:00pm-7:49pm	5.4	10.5	4.5	20.3	4.9	11.9	14.6	33.3	1.7	3.3
8:00pm-8:59pm	5.3	10.3	4.7	23.0	6.0	10.5	14.7	32.3	1.2	8.0
9:00pm-9:59pm	3.9	9.9	3.2	10.9	3.6	9.5	14.5	18.0	1.4	2.0
10:00pm-10:59pm	2.9	8.7	2.4	6.2	3.7	4.5	9.4	14.2	0.8	0.5
11:00pm-11:59pm	3.6	7.9	2.2	9.2	2.9	4.2	7.9	15.4	1.0	15.0
12:00am-12:59am	2.3	*	0.9	4.0	3.0	6.0	3.1	5.2	*	*

*Aspen Free Shuttle service operated during these periods, but ridership data was unavailable for this analysis.

Figure 5. Spring Season Passengers per Revenue Hour on Weekdays and Weekends by Route and Hour



Summer Season

Table 5 below summarizes service productivity indicators for each route in the system:

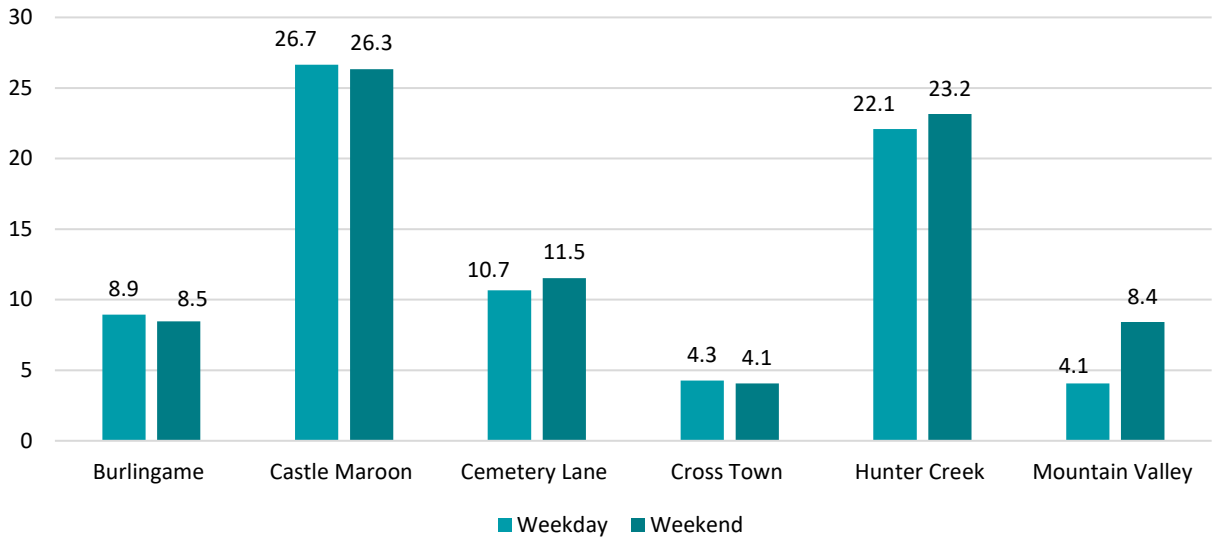
As in Winter, Castle Maroon and Hunter Creek recorded the highest summer season total weekday and weekend boardings of all the routes.

- Castle Maroon achieved the highest passengers per vehicle revenue hour (weekday: 26.7; weekend: 26.3), while Cross Town had the lowest (weekday: 4.1; weekend: 8.4).

Table 5. Summer Season Service by Route

Route Name	No. of Vehicles	No. of Operation Days		Span of Service - No. of Hours		2023 Summer Boarding		Vehicle Revenue Hour		Passengers per Revenue Hour	
		Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd
Burlingame	2	80	32	18	17.5	25,718	9,472	2,880	1,120	8.9	8.5
Castle Maroon	2	80	32	20	18	85,282	30,343	3,200	1,152	26.7	26.3
Cemetery Lane	1	80	32	18	17.5	15,360	6,458	1,440	560	10.7	11.5
Cross Town	1	80	32	15.5	15.5	5,287	2,014	1,240	496	4.3	4.1
Hunter Creek	1	80	32	19.5	17.5	34,450	12,965	1,560	560	22.1	23.2
Mountain Valley	1	80	32	19.5	18	6,358	4,846	1,560	576	4.1	8.4

Figure 6. Summer Season Passengers per Revenue Hour by Route



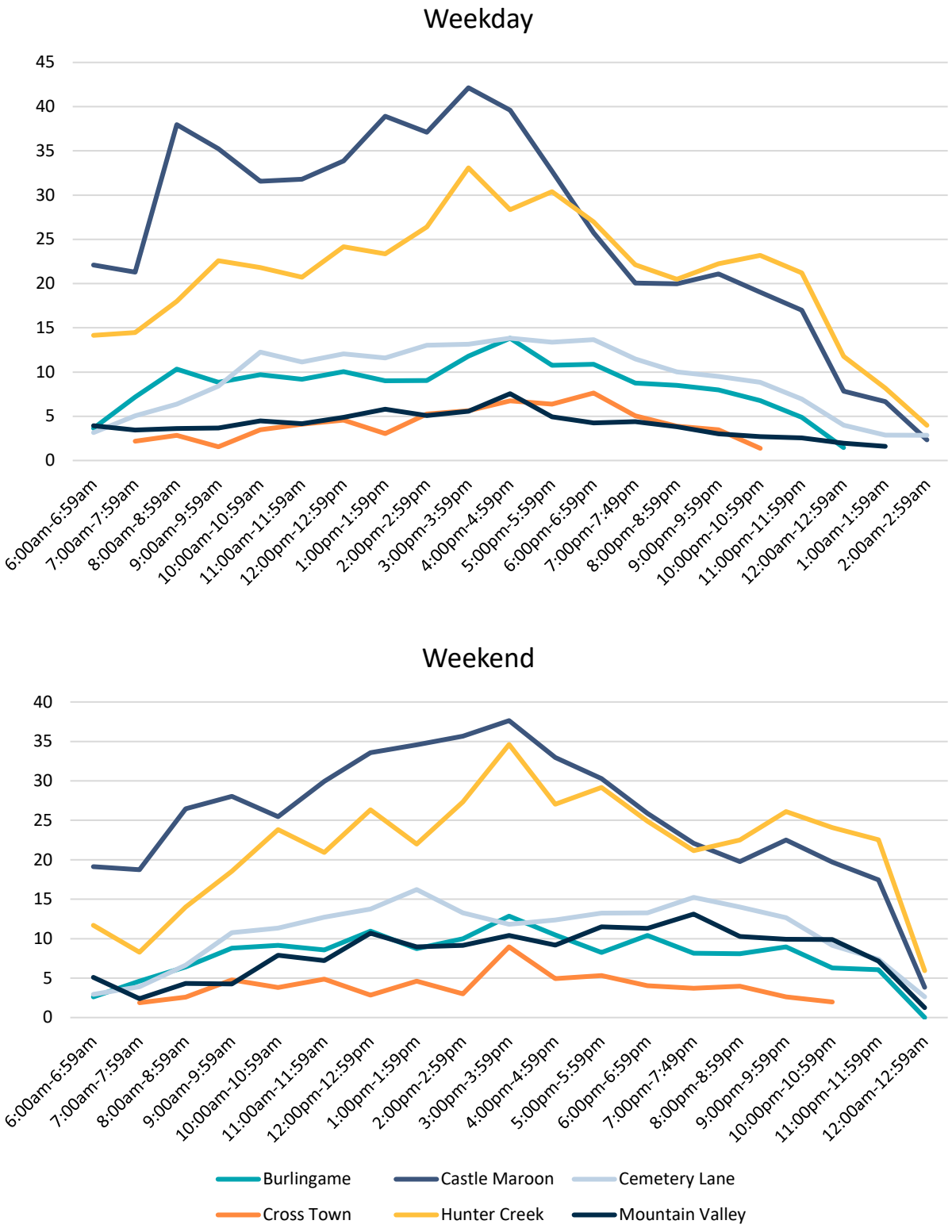
Another analysis was conducted to evaluate the operational efficiency of each bus route by hour. Table 6 and Figure 7 illustrate the passengers per revenue hour during the summer season. Red boxes denote continuous periods of at least four hours with greater than 40 passengers per vehicle revenue hour, and blue boxes denote continuous periods of at least four hours with fewer than 5 passengers per vehicle revenue hour.

Table 6. Summer Season Passenger per Revenue Hour by Route and Hour of Day

Time	Burlingame		Castle Maroon		Cemetery Lane		Cross Town		Hunter Creek		Mountain Valley	
	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd
6:00am-6:59am	3.7	2.6	22.1	19.1	3.2	2.9			14.1	11.7	3.9	5.1
7:00am-7:59am	7.2	4.6	21.3	18.7	5.1	3.9	2.2	1.9	14.5	8.3	3.4	2.4
8:00am-8:59am	10.3	6.4	38.0	26.4	6.4	6.6	2.9	2.6	18.0	14.0	3.6	4.3
9:00am-9:59am	8.8	8.8	35.2	28.1	8.4	10.8	1.6	4.8	22.6	18.5	3.7	4.3
10:00am-10:59am	9.7	9.1	31.6	25.5	12.2	11.3	3.5	3.8	21.8	23.8	4.5	7.9
11:00am-11:59am	9.2	8.6	31.8	29.9	11.1	12.7	4.1	4.9	20.7	20.9	4.2	7.2
12:00pm-12:59pm	10.0	11.0	33.9	33.6	12.0	13.8	4.6	2.8	24.2	26.3	4.9	10.7
1:00pm-1:59pm	9.0	8.7	38.9	34.6	11.6	16.2	3.0	4.6	23.4	22.0	5.8	9.0
2:00pm-2:59pm	9.0	10.0	37.1	35.7	13.0	13.3	5.3	3.0	26.4	27.3	5.1	9.2
3:00pm-3:59pm	11.8	12.9	42.1	37.6	13.1	11.8	5.6	9.0	33.1	34.6	5.6	10.4
4:00pm-4:59pm	13.8	10.5	39.6	33.0	13.8	12.4	6.7	4.9	28.4	27.0	7.6	9.2
5:00pm-5:59pm	10.8	8.2	32.7	30.3	13.4	13.2	6.4	5.3	30.4	29.2	4.9	11.5
6:00pm-6:59pm	10.9	10.4	25.8	25.9	13.7	13.3	7.6	4.0	27.0	24.9	4.3	11.3
7:00pm-7:49pm	8.8	8.2	20.1	22.1	11.5	15.2	5.1	3.7	22.1	21.2	4.4	13.1
8:00pm-8:59pm	8.5	8.1	20.0	19.8	10.0	14.0	3.9	4.0	20.5	22.5	3.8	10.3
9:00pm-9:59pm	8.0	8.9	21.1	22.5	9.5	12.7	3.5	2.6	22.2	26.1	3.0	9.9
10:00pm-10:59pm	6.8	6.3	19.0	19.7	8.8	9.2	1.4	2.0	23.2	24.1	2.7	9.9
11:00pm-11:59pm	4.9	6.1	17.0	17.5	6.9	7.4			21.2	22.5	2.6	7.2
12:00am-12:59am	1.5	*	7.8	3.8	4.0	2.6			11.8	5.9	1.9	1.3
1:00am-1:59am			6.7	*	2.9	*			8.2	*	1.6	*
2:00am-2:59am			2.3	*	2.9	*			4.0	*		

*Aspen Free Shuttle service operated during these periods, but ridership data was unavailable for this analysis.

Figure 7. Summer Season Passengers per Revenue Hour on Weekday and Weekends by Route and Hour



*Several Aspen Free Shuttle routes ran later than 1:00am in Winter, but ridership data was unavailable for this analysis.

Fall Season

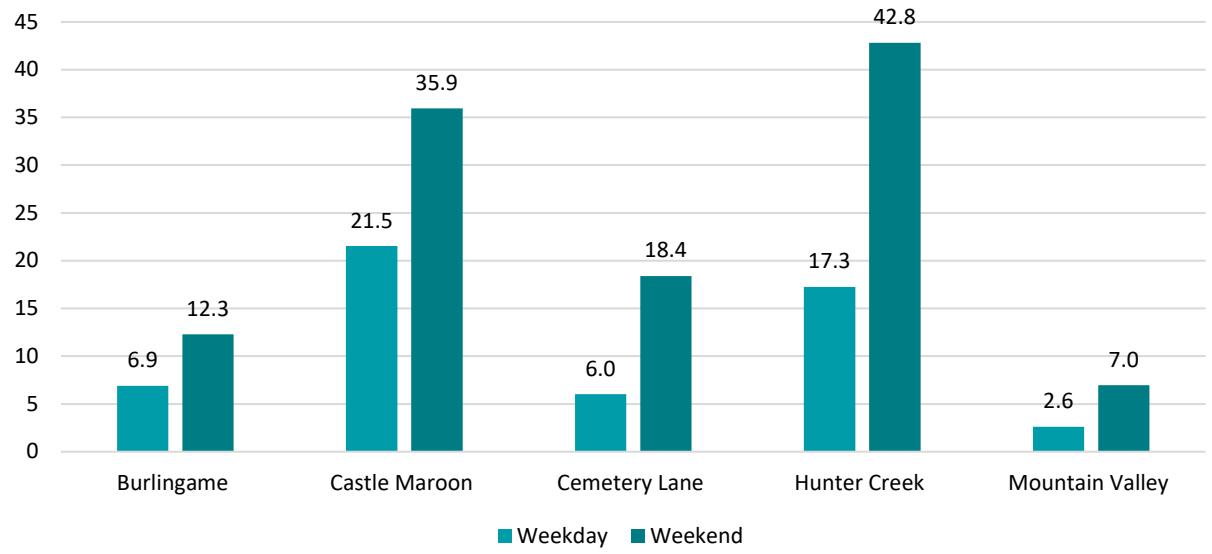
Only five routes operate during the Fall. Table 7 below is a detailed summary of service productivity indicators for each route in the system:

- Just as during the peak winter and summer seasons, Castle Maroon and Hunter Creek recorded the highest fall season total weekday and weekend boardings of the active routes.
- Castle Maroon and Hunter Creek achieved the highest passengers per vehicle revenue hour on weekdays (21.5) and weekends (42.8), respectively, while Mountain Valley had the lowest (weekday: 2.6; weekend: 7.0).

Table 7. Fall Season Service by Route

Route Name	No. of Vehicles	No. of Operation Days		Span of Service - No. of Hours		2023 Fall Boarding		Vehicle Revenue Hour		Passengers per Revenue Hour	
		Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd
Burlingame	2	55	22	18	17.5	13,628	9,460	1,980	770	6.9	12.3
Castle Maroon	2	55	22	20	18	47,366	28,465	2,200	792	21.5	35.9
Cemetery Lane	1	55	22	20	18	6,617	7,286	1,100	396	6.0	18.4
Hunter Creek	1	55	22	20	18	18,979	16,954	1,100	396	17.3	42.8
Mountain Valley	1	55	22	19.5	17.5	2,816	2,679	1,073	385	2.6	7.0

Figure 8. Fall Season Passengers per Revenue Hour by Route



Another analysis was conducted to evaluate the operational efficiency of each bus route by hour. Table 8 and Figure 9 illustrate the passengers per revenue hour during the fall season. Although ridership data was grouped into weekday and weekend categories, it should be noted that the following routes operate a reduced service schedule on Sundays during the fall season, from approximately 9:00 am to 9:00 pm: Castle Maroon, Cemetery Lane, Hunter Creek, and Mountain Valley. Thus, ridership data after 10:00 pm on weekends represents ridership only on Saturday nights. Red boxes denote continuous periods of at least four hours with greater than 40 passengers per vehicle revenue hour, and blue boxes denote continuous periods of at least four hours with fewer than 5 passengers per vehicle revenue hour.

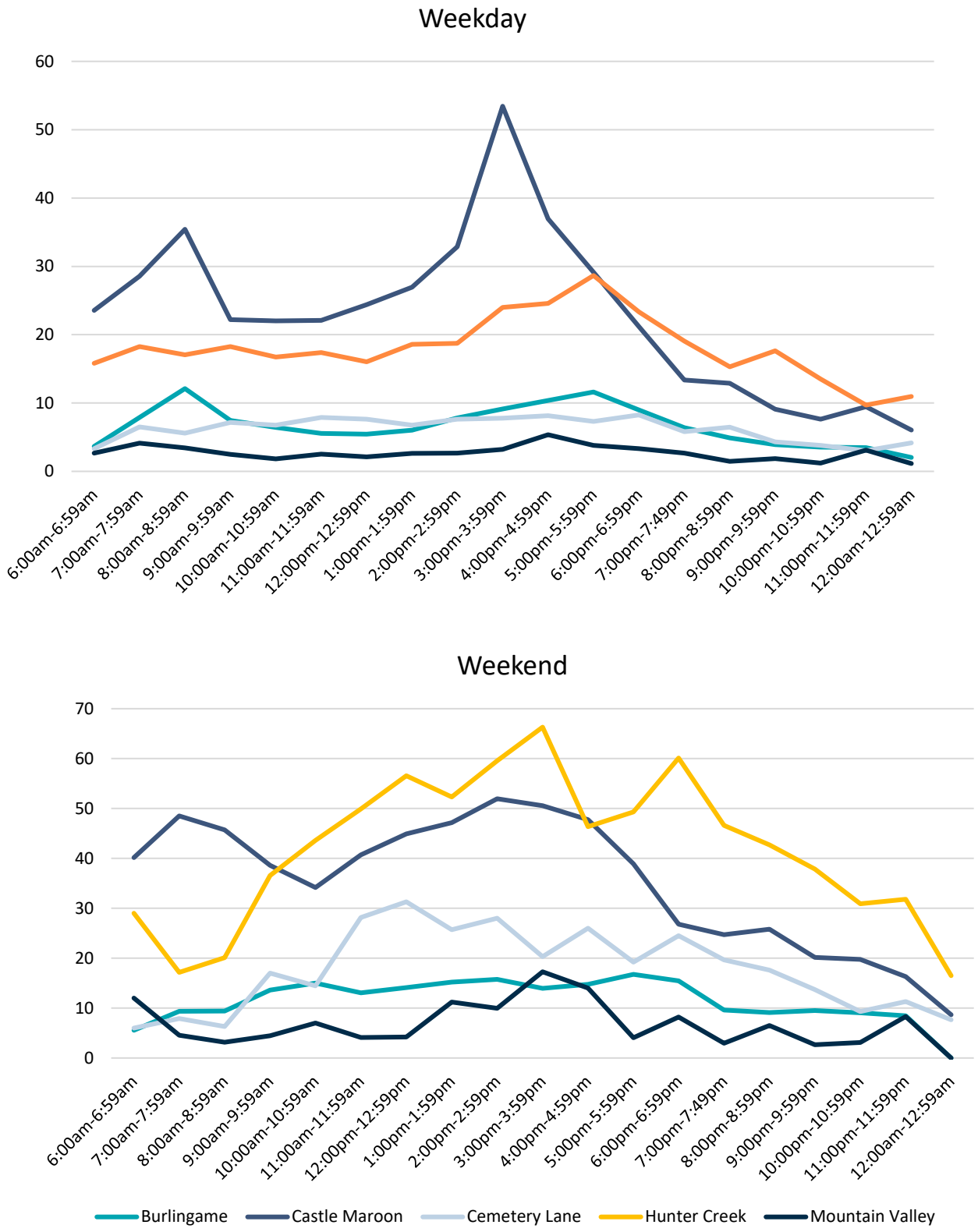
Most routes have steady ridership throughout the day, but Castle Maroon experiences a mid-afternoon weekday surge in demand.

Table 8. Fall Season Passenger per Revenue Hour by Route and Hour of Day

Time	Burlingame		Castle Maroon		Cemetery Lane		Hunter Creek		Mountain Valley	
	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd	Wkday	Wknd
6:00am-6:59am	3.6	5.6	23.6	40.2	3.3	6.0	15.8	29.0	2.7	12.0
7:00am-7:59am	7.9	9.4	28.6	48.5	6.5	7.9	18.3	17.2	4.1	4.6
8:00am-8:59am	12.1	9.4	35.4	45.7	5.6	6.3	17.0	20.1	3.4	3.2
9:00am-9:59am	7.4	13.6	22.2	38.6	7.2	17.0	18.3	36.5	2.5	4.5
10:00am-10:59am	6.4	15.0	22.0	34.2	6.7	14.5	16.7	43.6	1.8	7.0
11:00am-11:59am	5.6	13.0	22.1	40.7	7.9	28.2	17.4	49.9	2.5	4.1
12:00pm-12:59pm	5.4	14.1	24.4	44.9	7.6	31.3	16.0	56.6	2.1	4.2
1:00pm-1:59pm	6.0	15.2	27.0	47.1	6.8	25.7	18.6	52.3	2.6	11.2
2:00pm-2:59pm	7.8	15.8	32.9	52.0	7.6	28.0	18.7	59.5	2.7	10.0
3:00pm-3:59pm	9.1	14.0	53.4	50.5	7.8	20.3	24.0	66.3	3.2	17.3
4:00pm-4:59pm	10.4	14.8	37.0	47.8	8.1	26.0	24.6	46.4	5.4	14.0
5:00pm-5:59pm	11.6	16.8	29.2	38.9	7.3	19.2	28.7	49.3	3.8	4.1
6:00pm-6:59pm	9.0	15.5	21.2	26.8	8.3	24.5	23.3	60.1	3. 3	8.2
7:00pm-7:59pm	6.4	9.6	13.4	24.7	5.8	19.6	19.0	46.6	2.7	2.9
8:00pm-8:59pm	4.9	9.1	12.9	25.8	6.5	17.6	15.3	42.7	1.5	6.5
9:00pm-9:59pm	3.9	9.5	9.1	20.2	4.3	13.7	17.6	37.9	1.9	2.7
10:00pm-10:59pm	3.5	9.0	7.6	19.8	3.8	9.3	13.5	30.9	1.2	3.1
11:00pm-11:59pm	3.5	8.5	9.5	16.3	3.0	11.3	9.7	31.8	3.1	8.3
12:00am-12:59am	2.0	*	6.0	8.7	4.2	7.7	11.0	16.5	1.1	*

*Aspen Free Shuttle service operated during these periods, but ridership data was unavailable for this analysis.

Figure 9. Fall Season Passengers per Revenue Hour on Weekday and Weekends by Route and Hour



Demand-Based Paid Parking

Demand-based pricing refers to adjusting parking rates based on periodic parking occupancy observations. Demand-based pricing ensures parking availability and increased space turnover in highly utilized downtown parking spaces. As a result, demand-based pricing reduces traffic congestion and GHG emissions resulting from cruising for parking.

Walker evaluated how Aspen's on-street parking occupancy in the Commercial Core might be impacted by demand-based pricing. First, Walker identified high-demand, mid-demand, and low-demand block faces based on the following occupancy rates:

- High demand: above 85% of parking spaces occupied
- Mid-demand: 65%-85% of parking spaces occupied
- Low demand: below 65% of parking spaces occupied

Walker evaluated two scenarios:

- *Scenario 1*: Peak period rates (11:00 a.m. to 2:59 p.m.) increased by $2/hour in high-demand blockfaces, maintained for mid-demand blockfaces, and reduced by $1/hour for low-demand blockfaces.
- *Scenario 2*: Peak period rates (11:00 a.m. to 2:59 p.m.) increased by $1/hour in high-demand blockfaces, maintained for mid-demand blockfaces, and reduced by $0.50/hour for low-demand blockfaces.

The following key assumptions were made in the analysis:

- Overall parking occupancy in the system would not change as a result of the price changes, but rather demand will shift between high-demand, mid-demand, and low-demand blockfaces.
- The increase in price in the high-demand blockfaces would result in cars parking in mid-demand or low-demand blockfaces, instead.
- Decreases in parking prices would not increase demand for parking in low-demand areas.

Table 1 summarizes the proposed peak parking pricing changes for Scenario 1. The price elasticity of demand indicates the percent change in demand due to a percent change in price. An elasticity of 0.1, indicates that for each one hundred percent increase in price, demand declines by 10 percent. Walker analyzed a price elasticity of both 0.1 and 0.2, with 0.1 indicating less sensitivity to price and 0.2 indicating greater sensitivity to price.

Table 1: Scenario 1 On-Street Meter Peak Pricing Changes (11:00 p.m. to 2:59 p.m.)

	Inventory	Price Elasticity	Current Peak Parking Rate	Future Peak Parking Rate
High Demand (>86%)	*337*	-0.1 and -0.2	$6/hour	$8/hour
Mid-Demand (65%-85%)	*391*	-0.1 and -0.2	$6/hour	$6/hour
Low-Demand (<64%)	*54*	-0.1 and -0.2	$6/hour	$5/hour
TOTAL	***782***			

Table 2 shows the projected occupancy in high-demand, mid-demand, and low-demand areas in Scenario 1 as a result of the pricing changes. It is projected that with an increase in pricing in high-demand blockfaces, occupancy would decrease from 92 percent to between 86 percent and 89 percent (depending on the elasticity factor). As a result, more vehicles would park in mid-demand blockfaces, increasing parking demand on those blockfaces from 78 percent to between 80 percent and 83 percent (depending on the elasticity factor).

Table 2: Scenario 1 On-Street Meter Projected Occupancy

Scenario 1	Inventory	Current Occupancy	Current Occupancy %	Projected Occupancy	Projected Occupancy %
High Demand (>86%)	*337*	311	92%	290-300	86%-89%
Mid-Demand (65%-85%)	*391*	303	78%	313-324	80%-83%
Low-Demand (<64%)	*54*	31	57%	31	57%
TOTAL	***782***	**645**	**82%**	**645**	**82%**

Table 3 summarizes the proposed peak parking pricing changes for Scenario 2. The same price elasticity factors are applied to Scenario 2 as were applied to Scenario 1.

Table 3: Scenario 2 On-Street Meter Peak Pricing Changes (11:00 a.m. to 2:59 p.m.)

Scenario 2	Inventory	Price Elasticity	Current Peak Parking Rate	Future Peak Parking Rate
High Demand (>86%)	*337*	-0.1 and -0.2	$6/hour	$7/hour
Mid-Demand (65%-85%)	*391*	-0.1 and -0.2	$6/hour	$6/hour
Low-Demand (<64%)	*54*	-0.1 and -0.2	$6/hour	$5.50/hour
TOTAL	***782***			

Table 4 shows the projected occupancy in high-demand, mid-demand, and low-demand areas in Scenario 2. It is projected that with an increase in pricing in high-demand blockfaces, occupancy would decrease from 92 percent to between 89 percent and 91 percent (depending on the elasticity factor). As a result, more vehicles would park in mid-demand blockfaces, increasing parking demand on those blockfaces from 78 percent to between 79 percent and 80 percent (depending on the elasticity factor).

Table 4: Scenario 2 On-Street Meter Projected Occupancy

Scenario 2	Inventory	Current Occupancy	Current Occupancy %	Projected Occupancy	Projected Occupancy %
High Demand (>86%)	*337*	311	92%	300-306	89%-91%
Mid-Demand (65%-85%)	*391*	303	78%	308-313	79%-80%
Low-Demand (<64%)	*54*	31	57%	31	57%
TOTAL	***782***	**645**	**82%**	**645**	**82%**

Paid Parking Sensitivity Analysis

Walker evaluated dynamic on-street parking rates to result in 85 percent or less occupancy in high-, mid-, and low-demand blockfaces in the Commercial Core. Walker determined that this occupancy target could be achieved if peak period (11:00 a.m. to 2:59 p.m.) rates increase by $5 per hour in high-demand blockfaces, are maintained in mid-demand blockfaces, and are reduced by $1 per hour in low-demand blockfaces.

The following key assumptions were made in the analysis:

	Inventory	Price Elasticity	Current Peak Parking Rate	Future Peak Parking Rate
High Demand (>86%)	*337*	-0.1	$6/hour	$11/hour
Mid-Demand (65%-85%)	*391*	-0.1	$6/hour	$6/hour
Low-Demand (<64%)	*54*	-0.1	$6/hour	$5/hour
TOTAL	***782***			

- Overall parking occupancy in the system would not change as a result of the price changes, but rather demand will shift between high-demand, mid-demand, and low-demand blockfaces.
- The increase in price in the high-demand blockfaces would result in cars parking in mid-demand blockfaces, instead.
- Decreases in parking prices would not increase demand for parking in low-demand areas.

Table 1 summarizes the hypothetical peak parking pricing changes. The price elasticity of demand indicates the percent change in demand due to a percent change in price. Walker analyzed an elasticity of -0.1, which indicates that for each one hundred percent increase in price, demand declines by 10 percent. This elasticity factor is on the low end, which assumes parking patrons are not very sensitive to price changes.

Table 5: On-Street Meter Peak Pricing Changes (11:00 p.m. to 2:59 p.m.)

Table 2 shows the projected occupancy in high-demand, mid-demand, and low-demand as a result of the pricing changes. It is projected that with an increase in pricing in high-demand blockfaces, occupancy

would decrease from 92 percent to 85 percent. As a result, more vehicles would park in mid-demand blockfaces, increasing parking demand on those blockfaces from 78 percent to 84 percent.

Table 6: On-Street Meter Projected Occupancy

	Inventory	Current Occupancy	Current Occupancy %	Projected Occupancy	Projected Occupancy %
High Demand (>86%)	*337*	311	92%	285	85%
Mid-Demand (65%-85%)	*391*	303	78%	329	84%
Low-Demand (<64%)	*54*	31	57%	31	57%
TOTAL	***782***	**645**	**82%**	**645**	**82%**

Inspiration Library

Aspen is a pioneer and an innovator when it comes to parking and transportation policy and programs, from variable parking rates to fare-free transportation options. The City of Aspen continues its steadfast work to achieve ambitious goals for mode split, climate action, and mobility equity by embarking on a Comprehensive Transportation Demand Management (TDM) & Parking Plan. The plan addresses a broad range of citywide mobility and transportation issues pertinent to all modes—passenger and freight vehicles, transit, pedestrian, and bicycle transportation—with the goal of maximizing the utility, effectiveness, and long-term sustainability of the City's mobility, parking, and commercial delivery policies and programs.

Mountain communities with high levels of outdoor recreational tourism, such as Aspen, have four characteristics that make effective transportation systems a vital part of economic, social, and environmental well-being. First, mountain communities face geographic constraints to transportation, with narrow roadways and limited travel lanes, requiring higher efficiency transportation options than single occupancy vehicles (SOV) to effectively manage congestion. Second, they have high travel demands due to seasonal tourism, typically peaking in winter and summer, exacerbating existing traffic congestion. Third, mountain communities have user groups with different travel demands, including residents, employees, and tourists/day skiers. Fourth, in successful resort communities, often there are wide income disparities between residents and employees due to the high cost of housing, requiring a diversity of options that are amenable to all income groups. This document provides a summary of best practices implemented in mountain communities, resort communities, and other communities with seasonal tourism and wide income disparities.

Project Background and Goals

Based on a review of local and regional transportation planning documents, the project team developed example practices that showcase successful strategies implemented in other communities facing similar transportation and mobility challenges. Example practices support the following goals:

Mobility for All – Strategies that provide affordable transportation options that are convenient for a variety of user groups, including service workers, residents, and visitors.

Sustainability – Strategies that reduce air pollution and GHG emissions associated with transportation, including passenger vehicles, commercial fleets of cars and trucks, and public sector fleets and buses.

Balanced Mode Share – Strategies that make single-occupancy vehicle trips less attractive while improving the convenience and safety of other modes, incentivizing mode shifts from vehicle use to walking, biking, and transit.

Example practices are organized into the following categories:

1. Messaging and Marketing
2. Parking Management
3. Curb Access Pricing
4. Deliveries

5. Transit and Active Transportation
6. Other TDM Measures
7. Affordable and Workforce Housing

Each example practice includes demographic information about the showcased community, a description of the best practice, and an explanation of how it supports the goals of mobility for all, sustainability, and/or balanced mode share.

Messaging and Marketing

Marketing TDM to Broader/New Audiences

1. **Interactive transportation map and guide for Disneyland resorts in Anaheim, California**

Demographics

The City of Anaheim is a mid-sized suburban city in Orange County, California home to Disneyland. In 2021, the popular tourist destination city had a population of 348,204. The city's median household income was $81,806 in 2021. The resident population is predominantly Hispanic; the largest ethnic/racial groups in descending order are Hispanic (54%), White (23%), and Asian (17%).

Practice Description and Strategy Alignment

One of the reasons why Disneyland is such a popular place among Americans is that it is designed as a walkable neighborhood, with the pedestrian corridor known as Main Street USA. Disneyland resorts (including deluxe, moderate, and value resorts) promote a park-once approach and encourage visitors to experience the park on foot by providing customized local transit options specific to each resort, with an online map that users can click on to find transit routes for their resort destination. The interactive transportation map and guide for Disneyland resorts makes it easier for visitors to enjoy a vacation without driving. This practice supports the transportation goal of a balanced mode share by encouraging use of existing transit services and shuttles, helping to reduce reliance on a private vehicle for travel within the resort and amusement park.

2. **Motor coach information for visitors to plan their trip to Cache Creek Resort in Yolo County and Graton Resort in Rohnert Park, California**

Demographics

Yolo County is a rural county in California and home to Cache Creek Casino Resort. In 2021, Yolo County had a population of 216,703. The city's median household income was $78,386 in 2021. In terms of race and ethnicity, the largest racial/ethnic groups in descending order are White (45%), Hispanic (32%), Asian (14%), and mixed race (5%).

The City of Rohnert Park is a small suburban city in Sonoma County, California and home to Graton Resort and Casino. In 2021, Rohnert Park had a population of 44,420. The city's median household income was $82,808 in

2021. In terms of race and ethnicity, the largest racial/ethnic groups in descending order are White (57%), Hispanic (28%), and Asian (6%) populations.

Practice Description and Strategy Alignment

Cache Creek Casino Resort and Graton Resort and Casino are two casinos in Sonoma County, California that provide bus information (routes and schedules) on their websites for major cities throughout the San Francisco Bay Area to make it easy for visitors to plan their trip without a car. The motor coaches are marketed as luxury motorcoaches to appeal to resort visitors, offering amenities and comfort, including comfortable seats, climate control, and Wi-Fi on-board. In addition, the motor coach services are priced at a nominal fee to appeal to the masses, with incentives like casino or restaurant vouchers provided for riders. Successfully promoted through a marketing service such as Coach Cruiselines, which offers various digital and print advertising for resorts, this practice helps reduce reliance on a private vehicle to get to the resort, supporting the transportation goal of a balanced mode share.

Parking and Right-of-Way Management

Short-Term Parking

3. **Zone-Based Parking Fees to Encourage Turnover and Higher Use of Off-Street Facilities in Boulder, Colorado**

Demographics

The City of Boulder is an urban city in Colorado, home to the University of Colorado. In 2021, Boulder had a population of 104,930. The city's median household income was $74,902 in 2021. In terms of race and ethnicity, the resident population is predominantly White (78%), with smaller Hispanic (11%) and Asian (6%) populations.

Practice Description and Strategy Alignment

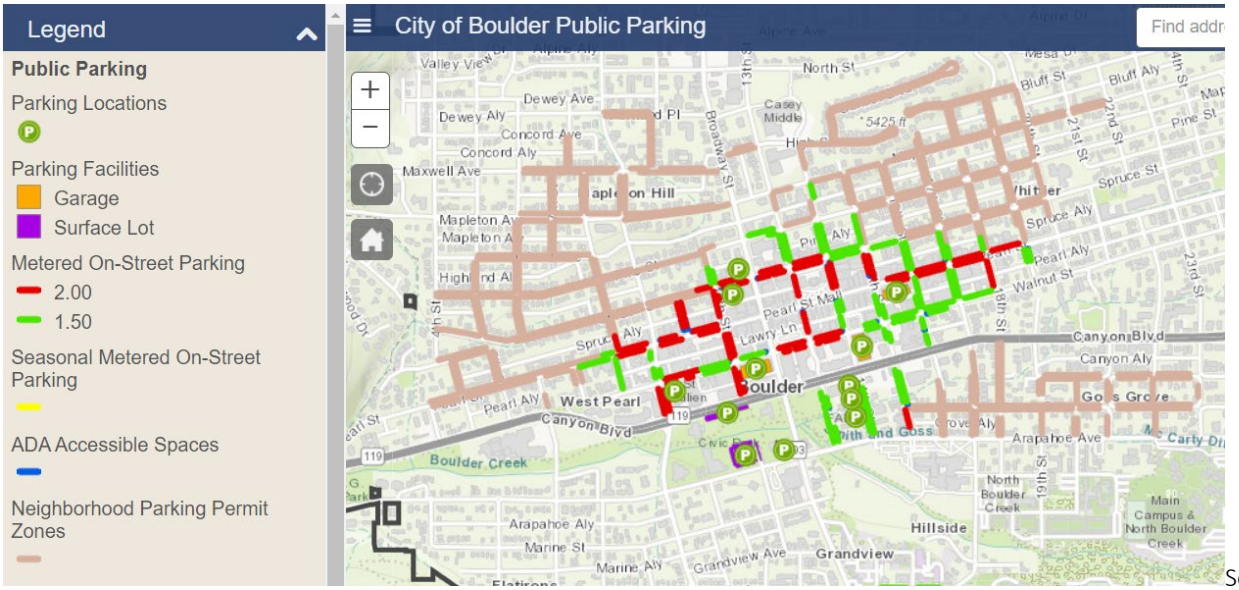
The City of Boulder implemented a zone-based pricing strategy that establishes higher on-street parking prices than off-street parking prices and establishes zones with tiered pricing based on average occupancy rates. **Figure 1** shows the two downtown parking zones, with higher occupancy zone in red and the lower occupancy zone in green.

The City has priced the zone with higher occupancy, located nearest to downtown destinations, at a rate of $2.00 per hour. The zone with lower occupancy is priced at a lower rate of $1.50 per hour.[1] Meanwhile, off-street parking facilities are priced at a lower rate of $1.25 per hour for the first 2 to 6 hours to encourage higher utilization of off-street parking, with a $3.00 flat rate between 3:00 pm and 3:00 am to encourage visits to

[1] City of Boulder. (2023). Public Parking Map. City of Boulder. https://bouldercolorado.gov/city-boulder-public-parking-map

downtown during off-peak hours.[2] On-street parking prices are adjusted based on typical peak parking occupancy measured on an annual basis in order to be responsive to changing parking demand in downtown Boulder. Zone-based pricing of on-street parking according to demand supports the transportation goals of balanced mode share and sustainability by charging a higher fee for parking to encourage mode shifts to low-carbon travel modes, including walking, biking, and transit.

Figure 1. City of Boulder On-Street Parking Pricing Model



Source: City of Boulder, 2023

4. **Fully Dynamic Pricing of Public Parking in San Francisco, California and Seattle, Washington**

Demographics

The City of San Francisco is a large urban coastal city in northern California. In 2021, San Francisco had a population of 865,933. The city's median household income was $126,187 in 2021. The largest ethnic/racial groups in descending order are White (39%), Asian (34%), Latino (15%), mixed-race (5%) and Black (5%).

The City of Seattle is a large urban coastal city in Washington. In 2021, Seattle had a population of 726,054. The city's median household income was $105,391 in 2021. The largest ethnic/racial groups in descending order are White (62%), Asian (16%), Latino (7%), mixed-race (7%), and Black (7%).

Practice Description and Strategy Alignment

SF*park* is perhaps the most comprehensive and sophisticated parking demand management plan currently implemented in the U.S. In 2008, the San Francisco Municipal Transportation Agency (SFMTA) approved an ordinance to pilot SF*park* a performance pricing pilot that set and adjusted rates for on-street parking meters and

[2] Bray, Jennifer. (March 23, 2023). City of Boulder changes on-street parking pricing in high-demand areas of downtown. City of Boulder. https://bouldercolorado.gov/news/city-boulder-changes-street-pay-parking-pricing-high-demand-areas-downtown-effective-april-3

off-street facilities (garages and lots) in the downtown area based on utilization goals. Downtown parking meter prices ranged from $0.25 to $6.00 per hour and varied by block, time of day, and day of the week, and were enforced on Mondays through Saturdays from 9:00 a.m. to 6:00 p.m.

During the pilot, sensor technology monitored real-time information about where parking was available. SFMTA used this data to adjust rates and transmit space availability to a smartphone app for drivers to quickly find open spaces. Based on this occupancy data, meters were adjusted quarterly in $0.25 increments. Rates are raised by $0.25 on blocks where average occupancy is above 80% and lowered by $0.25 on blocks where average occupancy is below 60%. Rates were not changed on blocks that hit the occupancy target of between 60% and 80%.

SFMTA's demand-based rate adjustment schedule is summarized in **Figure 2**.

Figure 2. SFMTA's Demand-Based Rate Adjustment Schedule

Source: City of San Francisco

SF*Park*'s on-street meter pricing pilot program was paired with performance-based pricing for 14 of the city's publicly-owned parking garages[3]. When the pilot ended, San Francisco extended performance parking to all meters. An evaluation of SF*park* by Adam Millard-Ball of UC-Santa Cruz found that the pilot achieved the target occupancy rate and resulted in a 50% decrease in drivers cruising the block to find a parking spot[4].

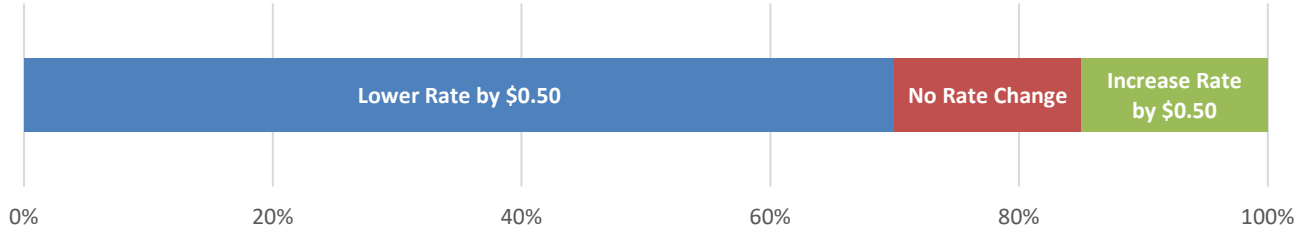
In 2010, the City of Seattle established demand-based parking pricing through an ordinance similar to that of San Francisco, allowing the Seattle Department of Transportation (SDOT) to set rates based on location, time of day, maximum time allowed and other factors. Prices were set between a minimum of $0.50 per hour up to $5.00 per hour based on measured occupancy, with the goal of having one or two spaces available on each block face throughout the day.

The primary difference between demand-based pricing in San Francisco and Seattle is the method and cost of data collection. SDOT manually collects annual occupancy data in all paid parking areas, totaling 11,500 parking spaces, whereas in San Francisco, sensors in parking meters were used. Similar to the approach used to change parking prices in San Francisco, SDOT used occupancy data to adjust parking rates by comparing observations to the target occupancy rate of 70% to 85% occupancy. Based on this occupancy data, meters were adjusted quarterly in $0.50 increments. Rates are raised by $0.50 on blocks where average occupancy is above 85% and lowered by $0.50 on blocks where average occupancy is below 70%. Rates were not changed on blocks that hit the occupancy target of between 70 % and 85%. To evaluate when it may make sense to extend paid parking hours, the City collects data for two hours after paid parking ends.

[3] https://www.sfmta.com/demand-responsive-parking-pricing
[4] https://people.ucsc.edu/~adammb/publications/Millard-Ball_Weinberger_Hampshire_2014_Assessing_the_impacts_SFPark.pdf

SDOT's demand-based rate adjustment schedule is summarized in **Figure 3**.

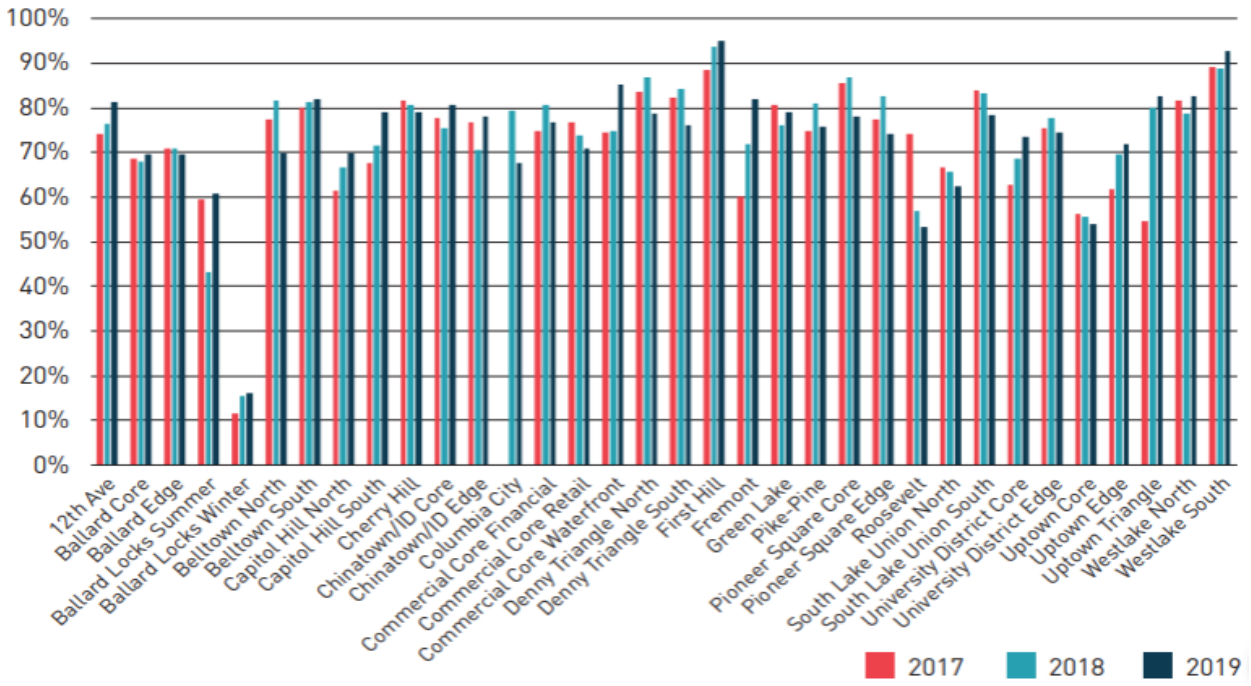
Figure 3. SDOT's Demand-Based Rate Adjustment Schedule



Source: City of Seattle

Since 2011, SDOT has made over 300 different rate and hours of operations changes, including rate increases and decreases. This policy has resulted in achieving the target range of one to two available spaces on a block face. Average occupancy by paid area between 2017 and 2019 is shown in **Figure 4.**

Figure 4. SDOT Average Occupancy by Paid Area, 2017 to 2019



Source: City of Seattle

Findings from the City of Seattle, Washington's performance-based parking pricing program show that pricing parking based on demand can support neighborhood-based business, make parking more convenient, maximize existing parking capacity, improve congestion and vehicle emissions and create a transparent, data-based process.

Key to the success of a performance-based parking pricing program is granting the parking manager flexibility within regulations to update rates based on established metrics. The challenges associated with a performance pricing program include the administrative costs of managing the program and the need for robust data collection and analysis to understand utilization.

Dynamic parking pricing supports the transportation goals of balanced mode share and sustainability by charging a higher fee for parking to encourage mode shifts to low-carbon travel modes, including walking, biking, and transit.

Residential Parking and TDM Programs

5. Residential Parking Permits in Boulder, Colorado

Demographics

The City of Boulder is an urban city in Colorado, home to the University of Colorado. In 2021, Boulder had a population of 104,930. The city's median household income was $74,902 in 2021. In terms of race and ethnicity, the resident population is predominantly White (78%), with smaller Hispanic (11%) and Asian (6%) populations.

Practice Description and Strategy Alignment

The City of Boulder has a robust on-street parking permit program that provides permit options for residents, employees who live within Boulder, and non-resident commuters. Permits are available for any of Boulder's 12 Neighborhood Parking Permit zones. Managed/enforced times generally extend for business hours on weekdays, though some zones have longer hours and are also enforced on Saturdays, depending on the specific context and needs of each zone. Time limits for non-permitted vehicles range from zero to three hours, depending on zone. The three permit programs (residential, business, and commuter permit programs) are summarized below.

Resident Permits. These permits come in the form of a window sticker. The associated fee is $30 per vehicle per calendar year, as of 2022. Each resident may purchase up to a maximum of two visitor permits for most zones for $5 per permit, which enables stays of up to 24 hours per visitor. For any property over 4 units, or for the West Pearl NPP, the limit is one permit per person. Vehicles with resident permits may park anywhere within the permit area to which the permit is linked. Finally, residents may receive up to two guest permits that allow guests to park for periods of two weeks.

Business Employee Permits. These permits come in the form of a hangtag. The associated fee is $75 per permit per calendar year. Most eligible businesses may purchase up to three permits, though large businesses may apply for additional permits. According to Section 4-23-2 of Title 4, Chapter 23 (Neighborhood Parking Zone Permits) of the municipal code, large businesses may be issued additional permits based on this formula: half the number of FTEs minus the number of off-street parking spaces under the control of the business at that location.

Vehicles with employee permits may park anywhere within the permit area to which the permit is linked. For businesses that have received more than three permits, the permits are linked to specific vehicles, and a list of

vehicles for which permits are issued must be provided to the City as part of the application. The City excludes home occupations/businesses from the definition of "business" in the context of parking permits.

Commuter Permits. These permits also come in the form of a hangtag. The associated fee is $105 per permit per quarter, as of 2022. These permits are available only on a first-come, first-serve basis, and there is a set limit of how many commuter permits may be available in each NPP after resident and business permits are accounted for.

Vehicles with commuter permits may only park on a particular assigned block number within the respective permit area. By code, the maximum number of non-resident permits issued on any given block face within any zone is four.

The Neighborhood Parking Program, distinct from a traditional residential parking permit program in that it offers parking for non-resident user groups, supports the transportation goal of balanced mode share by limiting parking in residential areas to specific users. Other user groups are encouraged to use other transportation modes to visit destinations near neighborhood districts.

6. Transportation Wallet Program in Portland, Oregon

Demographics

The City of Portland is an large city in Oregon, home to Portland State University. In 2021, Portland had a population of 647,176. The city's median household income was $78,176 in 2021. In terms of race and ethnicity, the resident population is predominantly White (69%), with smaller Hispanic (11%), Asian (8%), and Black (6%) populations.

Practice Description and Strategy Alignment

The Transportation Wallet program originated in 2016, when the Portland City Council first allowed the issuance of a permit surcharge fee to fund a TDM program, along with measures to limit the number of parking permits issued and in circulation. The Northwest Parking District, a vibrant residential and mixed-use area northwest of Downtown Portland, Oregon, leverages a residential parking permit "surcharge" to subsidize non-drive alone travel modes like transit and bikeshare.

The parking district charges a $120 surcharge on top of the $75 per year permit charge. The second and third permits for eligible residents have a price of $390 and $585, respectively. The district strives to price permits according to market rates to control and influence parking demand, while providing multimodal options and surcharge waivers for low-income qualifying residents.

The funds earned from the TDM surcharge help subsidize a district wide TDM program. The core element of the program is a "Transportation Wallet," which residents and businesses that opt-out of parking permits can receive free of charge. The Transportation Wallet includes the following multimodal transportation resources:

- $100 Tri-Met Hop card, which can be used on Tri-Met and C-Tran (Vancouver, WA) public transit routes
- Portland Streetcar annual pass

- $25 BIKETOWN (bikeshare) credit
- $30 scooter credit for use on with Spin scooter company

Transportation Wallets can also be purchased for $99 by residents who do not have a parking permit.

The Transportation Wallet Program is a TDM initiative that supports the transportation goal of balanced mode share by providing residents with more transportation choices at an affordable price, encouraging mode shifts from vehicle trips to walking, biking, and transit trips.

Resort Parking

7. Daily resort parking fee ($30-$50/night) and parking discounts to incentivize carpooling and shuttle use at Solitude Mountain Resort in Salt Lake County, Utah and Jackson Hole Mountain Resort in Jackson, Wyoming.

Demographics

Salt Lake County is the most populous county in Utah. In 2021, the County had a population of 1,173,331. Salt Lake County's median household income was $82,206 in 2021. In terms of race and ethnicity, the resident population is predominantly White (70%), with smaller Hispanic (19%) and Asian (4%) populations.

Jackson, Wyoming is the most populous town in Teton County and is the county seat. In 2021, Jackson had a population of 10,728. Jackson's median household income was $83,289 in 2021. The resident population is predominantly White (74%) with a significant Hispanic (20%) population.

Practice Description and Strategy Alignment

At Solitude Mountain Resort in Salt Lake County, Utah and Jackson Hole Mountain Resort in Jackson, Wyoming, parking fees are charged daily ($35/day and $45/day, respectively) to manage parking demand and encourage efficient use of parking facilities on a daily basis

The higher lodge permit price, charged on a daily basis, and the limited issuance of lodge permits, may be passed along to lodge guests in the form of higher daily parking fees at resorts. This practice can help reduce congestion and parking demand associated with visitors in and around Aspen, supporting the transportation goals of balanced mode share and sustainability.

Solitude Mountain Resort in Salt Lake County, Utah requires a reservation system for parking at ski resorts. However, parking prices vary depending on the time of the season and the number of occupants, with free parking for vehicles with 4 or more occupants.[5] The reservation system requires visitors to plan ahead for their visit and increases the likelihood of finding a parking space upon arrival. In addition, the fee structure incentivizes groups to carpool and visit during non-peak days of the week and periods of the ski season, helping to distribute parking demand and more efficiently use the resort parking facilities. The result of more evenly distributed

[5] Park Solitude. (2023). Parking Basics. Solitude Mountain Resort. https://www.parksolitude.com/parkingbasics

parking demand is a better parking experience for users during peak periods. Figure 6 shows parking fees at Solitude Mountain Resort by season, day of the week, and vehicle occupancy.

Figure 6. 2022-2023 Parking Fees at Solitude Mountain Ski Resort

Season	Day of the Week	Parking Fee by Vehicle Occupancy			
		Single	Two	Three	Four or
Early and Late Season	Monday through Sunday	$10	$5	Free	Free
Peak Season (late December to early April)	Monday through Thursday	$20	$10	Free	Free
	Friday through Sunday	$35	$25	$10	Free

Source: Park Solitude

The strategy of providing a discount for carpool vehicles requires parking staff to ensure compliance with carpooling requirements or a technology that can detect passengers. However, the strategy is effective for encouraging visitors to carpool or park in a remote parking lot to reduce or eliminate the parking fee, supporting the transportation goal of balanced mode share. In addition, carpooling allows more people to use parking facilities, maximizing efficiency and improving sustainability by reducing the number of vehicle trips.

Jackson Hole Mountain Resort in Jackson, Wyoming offers free parking at the Village Road Transit Center, located 7 miles away. Similar to Solitude Mountain, Jackson Hole Mountain Resort has variable parking prices depending on the time of year and offers free parking for vehicles with four or more occupants in the Ranch Lot, which is located walking distance (0.3 miles) from the Base Village.[6] The primary differences between parking fees at the two ski resorts are that at Jackson Hole Mountain Resort, a free parking option is provided with shuttle transportation, reservations are not required, and no discount is given to vehicles with two or three occupants. Figure 7 shows parking fees for various parking facilities at Jackson Hole Mountain Resort by season and vehicle occupancy.

Figure 7. 2023-2024 Parking Fees at Jackson Hole Mountain Resort

Season	Parking Fee by Vehicle Occupancy	
	Single Occupant	Four or more occupants
Village Lot, Crystal Springs Lot, and Cody Lot		
Off-Peak Season (Dec. 25 or earlier, Jan. 3-12, Jan. 16-Feb. 15, and weekdays from Jan. 7 through March 22, 2024)	$35	$35
Peak Season (Dec. 26-Jan. 2, Jan. 13-15, Feb. 16-19 & weekends from Jan 6 through March 24, 2024)	$45	$45
Ranch Lot		
Off-Peak Season (Dec. 25 or earlier, Jan. 3-12, Jan. 16-Feb. 15, and weekdays from	$18	Free
Peak Season (Dec. 26-Jan. 2, Jan. 13-15, Feb. 16-19 & weekends from Jan 6	$25	Free

Source: Jackson Hole, Wyoming

[6] Jackson Hole Resort. (2022). Parking in Teton Village. Jackson Hole Resort. https://www.jacksonhole.com/getting-around

The strategies of requiring parking reservations and daily parking fees are effective TDM strategies for resorts that support carpooling and use of shuttles, in alignment with the transportation goals of balanced mode share and sustainability.

8. **Citywide Shuttle Serving Resorts and Residents in Crested Butte, Colorado**

Demographics

The town of Crested Butte is a small mountain resort town with a 2021 population of 1,419. The city's median household income was $64,714 in 2021. In terms of race and ethnicity, the resident population is predominantly White (94%), with a small Hispanic population (4%).

Practice Description and Strategy Alignment

Crested Butte demonstrates that a bike friendly downtown is possible even without any dedicated bicycle infrastructure. How is this possible? PeopleForBikes editor Jack Foersterling argues the town's antidotes to car dependency are boots, bikes, and busses.[7] In addition to slow speed limits (15 miles per hour) and the centrally located network of hiking trails , the town's free bus makes it possible for anyone, including employees and visitors, to enjoy the downtown without a car.

The benefit of a city-wide shuttle is that it can serve multiple resorts, serving more clientele with higher frequency service[8]. The Mountain Express Shuttle in Crested Butte, Colorado is operated by a single agency and provides service to resorts and residential neighborhoods alike. Service is frequent (every 20 minutes) and the transit center is located near several major resorts, making it possible for visitors to park once in off-street parking areas and use shuttles for their local transportation needs (shopping, dining, hiking, etc.).

This shuttle service contributes to a safer environment for walking and biking in the town, which is considered one of the safest mountain towns for biking. The city received a Bicycle Network Analysis score of 87 out of 100 and ranked number 4 in the 2022 PeopleforBikes City Ratings.[9] Citywide shuttles serving resorts and residents support the transportation goals of balanced mode share and sustainability by encouraging mode shifts to low-carbon travel modes, including walking, biking, and transit.

Curb access pricing

9. **Curbside management plan that prioritizes curb functions and maximizes utility of public curbsides for mobility and transportation uses in Boulder and Denver, Colorado.**

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[7] Foersterling, Jack. (June 29, 2022). PeopleForBikes. "Crested Butte's Answer to Car Dependency." https://www.peopleforbikes.org/news/crested-buttes-answer-to-car-dependency-boots-bikes

[8] Note that currently, several resorts in Aspen operate their their own separate shuttle services. https://www.powderhounds.com/USA/Colorado/Aspen-Mountain/Getting-There.aspx#:~:text=Getting%20Around%20Aspen,and%20the%20nearby%20ski%20resorts.

[9] Foersterling, Jack. (June 29, 2022). PeopleForBikes. "Crested Butte's Answer to Car Dependency." https://www.peopleforbikes.org/news/crested-buttes-answer-to-car-dependency-boots-bikes

Demographics

The City of Boulder is the most populous city in Boulder County, Colorado, and serves as the county seat. Boulder is home to the University of Colorado. In 2021, Boulder had a population of 104,930. The city's median household income was $74,902 in 2021. In terms of race and ethnicity, the resident population is predominantly White (78%), with smaller Hispanic (11%) and Asian (6%) populations.

The City of Denver is the most populous city in Denver County, Colorado and serves as the county seat and the location of the state capitol. In 2021, the City of Denver had a population of 706,799. The city's median household income was $78,177 in 2021. The largest racial/ethnic groups are White (54%), Hispanic, (29%) and Black (9%).

Practice Description and Strategy Alignment

The curb is defined as the area where the street or roadway meets the sidewalk. In many cities in the United States, the curb is an underused and undervalued space prioritized for vehicle storage. The curb is a community resource that can be used more efficiently for a variety of transportation needs and a tool to achieve community goals. In Boulder and Denver, Colorado, curbside management plans are helping to improve multi-modal access and functionality of the curb while improving economic vitality. A summary of the two cities' approaches to curbside management is provided below.

The City of Boulder developed and implemented a curbside management pilot project to support its Vision Zero Action Plan, reduce congestion and emissions, enhance multimodal options, develop people-centered streets, and support economic vitality, especially during the COVID-19 pandemic when the primary location of downtown commerce was the curb. The pilot project implemented 6 flexible loading zones (FLZs) in the downtown core and 3 FLZs in University Hill. Flexible loading zone are zones with a 15-minute time limit, encouraging higher turnover, which benefits local businesses (compared to paid parking spaces with a time limit of 2 hours). The City of Boulder partnered with Transportation Network Companies (TNCs) to geofence the downtown and University Hill boundaries. When picking up and dropping off passengers, TNC drivers are directed to flexible loading zones through the Uber/Lyft mobile applications.

To support and implement the Denver Moves Everyone 2050, the City of Denver's comprehensive transportation plan, and the Denver Climate Action Plan, the City of Denver has developed an action plan for curbside activities called the Curbside Action Plan. The plan establishes priorities for different curb uses, including TNCs such as Uber and Lyft, mobile commerce (i.e. food trucks), commercial and home deliveries, outdoor dining space, protected bicycle lanes, e-scooter and bike docks, and expanded bus lanes.[10] The plan organizes curbside functions by street type, with curb functions that correspond to transportation needs in different zones (i.e. mixed use, commercial, and industrial). The plan also establishes goals for curb management and prioritization of curb functions, in the following order:

1) People
2) Transit, bike, and scooter users
3) Freight and goods delivery

[10] City and County of Denver. (2023). Citywide Curbside Action Plan. City and County of Denver. https://www.denvergov.org/Government/Agencies-Departments-Offices/Agencies-Departments-Offices-Directory/Parking-Division/Plans-and-Outreach/Citywide-Curbside-Action-Plan#section-1

4) Single occupancy vehicles

Curbside management supports the transportation goals of balanced mode share and sustainability by expanding public space and infrastructure for walking, biking, and transit to increase access to these modes.

Deliveries

Reducing delivery emissions—vehicle options (e.g., EVs, cargo bike delivery)

Neighborhood Delivery Hub

10. **Zero Emissions Commercial Loading Zones and E-Cargo Bicycle Pilot Project for Last Leg of Deliveries in Seattle, Washington** Demographics

The City of Seattle is a large urban coastal city in Washington. In 2021, Seattle had a population of 726,054. The city's median household income was $105,391 in 2021. The largest ethnic/racial groups in descending order are White (62%), Latino (7%), mixed-race (7%), and Black (7%).

Practice Description and Strategy Alignment

Freight and commercial goods are an important and growing part of the economy, but also a significant contributor to emissions and poor air quality. Seattle has implemented a pilot program to advance zero-emission freight and cargo delivery using electric trucks and cargo bicycles. Online shopping surged post-pandemic, increasing the emissions generated by the logistics industry. Consumer Reports, noting a 2020 study from Stand.earth, reported that the last leg of home deliveries "was responsible for more than 4.5 million tons of carbon dioxide emissions in 2020" alone.[11] Several cities across the U.S. have developed cargo bicycle delivery programs to simultaneously address traffic congestion and GHG emissions resulting from the recent surge in e-commerce demand from freight deliveries. The neighborhood and commercial e-bike delivery programs in the Cities of Seattle, Washington and Toronto, Canada are described below.

In support of the City's climate goals and Vision Zero goal, the City of Seattle conducted a Zero Emissions Freight study that outlines policy and program changes to prioritize and incentivize zero emissions (ZE) vehicles for commercial loading, with an e-cargo bicycle pilot program and zero emission neighborhood delivery hubs. The three policy steps involved in incentivizing commercial fleet electrification are to:

1) Prepare Commercial Delivery for ZE Loading Zones:
   Liaison with delivery companies to communicate the upcoming changes in routes, loading zones, and loading zone standards; implement a ZE loading zone pilot program.
2) Develop a Tiered Commercial Vehicle Loading Zone Permit Pricing Structure:

[11] Waddell, K. (2022, July 12). How Home Deliveries From Online Shopping Increase Air Pollution - Consumer Reports. Consumer Reports. https://www.consumerreports.org/environment-sustainability/home-deliveries-from-online-shopping-increase-air-pollution-a1594467530/#:~:text=The%20final%20leg%20of%20home,earth%2C%20an%20environmental%20advocacy%20nonprofit

Increase the commercial vehicle loading zone fee and develop a tiered commercial vehicle permit pricing structure by which Seattle Department of Transportation (SDOT) charges vehicles by emission type.

3) Enhance Enforcement Practices
Collaborate with City departments and Seattle Police Department to develop and implement education and enforcement strategies focusing on Seattle businesses.[12]

In addition to a ZE loading zone pilot program, Neighborhood Delivery Hubs will provide sites for centralized cargo drop-off to increase efficiency and minimize freight traffic in neighborhoods. In support of an economical and low-carbon transport option to complete the cargo delivery, the e-cargo bicycle pilot program will offer a cargo bike lending library to incentivize the adoption of cargo bicycles for last-mile connections from Neighborhood Delivery Hubs to clients' doorsteps. The planning process will involve robust community engagement to ensure that policies and programs are safe, equitable, and viable for residents, businesses, and community members.[13]

Commercial Delivery Hub

11. Cargo Bicycle Courier Service for Last Leg of Commercial and Residential Deliveries in Toronto, Canada

Demographics

The City of Toronto is the largest city in the province of Ontario, Canada and serves as the provincial capital. In 2021, Toronto had a population of 2,794,356. The city's median household income was $61,620 USD in 2021. In terms of race and ethnicity, the population is predominantly non-White, with the largest racial groups being Asian (including South, Southeast, and East Asian) (34%), Black (10%), and Middle Eastern (4%).

Practice Description and Strategy Alignment

In Canada, e-commerce sales increased by more than 350% between 2016 to 2020, and this surge in deliveries has put pressure on roadways while contributing to local air pollution and GHG emissions. Toronto has responded to these challenges by implementing cyclelogistics, or bicycle freight deliveries, for local packages in the downtown area. In 2021, the Province released Ordinance Reg 141/21 Pilot Project – Cargo Power-Assisted Bicycles under the Highway Traffic Act (HTA), which allowed municipalities to opt in by allowing cargo e-bikes weighing more than 55 kg (121 lbs) to use vehicle travel lanes, bicycle lanes, and cycletracks, as well as commercial loading and parking zones, for commercial deliveries.

[12] Seattle Department of Transportation. (2023). Zero-emissions freight study and recommendations report. https://www.seattle.gov/documents/Departments/SDOT/ParkingProgram/Curbside%20Climate/Seattle%20C40_ZEF_Final%20Report_Layout.pdf

[13] University of Washington Urban Freight Lab. (2023). The Seattle neighborhood delivery hub: A zero-emissions last-mile delivery pilot in Seattle's Uptown. Seattle Neighborhood Hub. https://www.seattleneighborhoodhub.com/

In 2022, the City launched the first e-bicycle cargo pilot project in Ontario through a partnership with logistics companies and the establishment of a local package delivery hub at the Toronto Parking Authority parking lot[14]. The pilot project has a fleet of 20-40 cargo e-bikes operating as part of the Freight and Goods Movement Strategy in the Transportation Services Division. This strategy explores the feasibility of expanding commercial vehicle parking and loading times, determines additional infrastructure needs for cargo bicycle deliveries, and develops parameters for a permit parking system for vehicle loading and unloading.[15]

Located in the mixed-use Annex neighborhood of downtown near the University of Toronto, the delivery hub supports local businesses by reducing operational costs, reducing required loading space, and improving roadway safety. In addition, cargo e-bicycle deliveries can help reduce traffic congestion and emissions from the transportation sector (which currently accounts for over one-third of GHG emissions in Toronto[16]) for the community at large, supporting the transportation goals of balanced mode share and sustainability.

Promoting electric cargo bicycle deliveries for neighborhoods and commercial districts supports the transportation goals of balanced mode share and sustainability through reduced GHG emissions and air pollution in the freight sector.

Transit and Active Transportation

12. Luxury Coach Service to Popular and Scenic Destinations in the Canadian Rockies of Alberta, Canada

Demographics

Alberta, Canada is the fourth most populous province in Canada, home to Banff National Park and many other scenic outdoor destinations of the Canadian Rockies. In 2021, the province had a population of 4,262,635. The city's median household income was $70,423 USD in 2020. In terms of race and ethnicity, the population is predominantly White, with the largest non-white racial groups being Asian (including South, Southeast, and East Asian) (18%), Black (4%), and Middle Eastern (3%).

Practice Description and Strategy Alignment

The Brewster Express, a historic and comfortable shared coach service, provides shared transportation services to some of the most popular and scenic destinations in the Canadian Rockies (serving Calgary, Banff, Canmore, Kananaskis, Lake Louise, and Jasper). This coach has luxury seating, large windows, restrooms, and complimentary Wi-Fi on-board[17]. Being able to sit back and enjoy the ride with these amenities makes a shared ride service more competitive to other options available, such as a private coach or car rental. A shared motorcoach serving popular

[14] Callan, Isaac. (July 11, 2022). Toronto greenlights pilot project to replace delivery trucks with e-bikes in the Annex. Global News Canada. https://globalnews.ca/news/8981569/toronto-parking-package-delivery-pilot-program/
[15] Gray, Barbara. (November 18, 2021). Cargo E-Bike Project Report for Action. City of Toronto. https://www.toronto.ca/legdocs/mmis/2021/ie/bgrd/backgroundfile-173616.pdf
[16] Callan, Isaac. (July 11, 2022). Toronto greenlights pilot project to replace delivery trucks with e-bikes in the Annex. Global News Canada. https://globalnews.ca/news/8981569/toronto-parking-package-delivery-pilot-program/
[17] Brewster Express. (2023). Schedule. Brewster Express. https://www.banffjaspercollection.com/brewster-express/

tourist destinations supports the transportation goals of balanced mode share and sustainability by encouraging mode shifts to transit.

13. **UTA's expansion of regional bus shelter infrastructure along high ridership corridors in Weber, Davis, and Salt Lake Counties, Utah.**

Demographics

Salt Lake County is the most populous county in Utah. In 2021, the County had a population of 1,173,331. Salt Lake County's median household income was $82,206 in 2021. In terms of race and ethnicity, the resident population is predominantly White (70%), with smaller Hispanic (19%) and Asian (4%) populations.

Practice Description and Strategy Alignment

In 2016, UTA Transit Authority added 200 bus shelters to its bus stop network along the regional Wasatch Front in Weber, Davis, and Salt Lake Counties as part of their commitment to improving regional transit service and infrastructure. The project was funded with revenue from Utah's Proposition 1.[18] High quality bus shelters protect riders from the elements, improving comfort and the transit experience. This practice may encourage higher ridership and reduced single occupancy vehicle (SOV) trips, especially during summer and winter, supporting the transportation goals of balanced mode share and sustainability.

14. **SFMTA's Commuter Shuttle Program for major employers in San Francisco, California.**

Demographics

The City of San Francisco is a large urban coastal city in northern California. In 2021, San Francisco had a population of 865,933. The city's median household income was $126,187 in 2021. The largest ethnic/racial groups in descending order are White (39%), Asian (34%), Latino (15%), mixed-race (5%) and Black (5%).

Practice Description and Strategy Alignment

San Francisco Municipal Transportation Agency (SFMTA), the managing body which oversees municipal railway and public transit services in San Francisco, established a Commuter Shuttle Program in 2017. The program is a public-private partnership that allows private commuter shuttles to use public transit infrastructure, such as municipal bus zones and stops, to transport employees from their places of residence to their workplaces. The program charges a fee for participating employers, such as Google, and requires shuttle operators to display a permit authorization plate with a unique six-digit identification number and adhere to the transportation agency's regulations.[19] For example, shuttle drivers must receive safety trainings, shuttle routes must avoid use of restricted streets to minimize disruption of public transit service, shuttles are required to comply with fleet GHG emissions standards, and shuttles are required to use real-time GPS tracking technology to inform riders and transit operators of estimated arrival times.[20]

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[18] Utah Transit Authority. (December 8, 2016). UTA Completes 200 Bus Shelters. Utah Transit Authority. https://www.rideuta.com/news/2016/12/UTA-Completes-200-Bus-Shelters
[19] SFMTA. (2023). Commuter Shuttle Program. SFMTA. https://www.sfmta.com/projects/commuter-shuttle-program
[20] SFMTA. (2023). Commuter Shuttle Program. SFMTA. https://www.sfmta.com/projects/commuter-shuttle-program

SFMTA benefits from the program because it generates revenue to support transit operations and services, while minimizing service disruptions and reducing traffic congestion during peak commute hours. The Commuter Shuttle Program encourages carpooling and reduced single occupancy vehicle (SOV) trips for employees, supporting the transportation goals of balanced mode share and sustainability. In addition, the program supports mobility for all by providing employees with direct transportation service to their place of employment, reducing their transportation costs and improving convenience and reliability of services in a manner that is consistent with work schedules.

15. Mobility Hub Network offering mobility options and amenities for transit riders in Fort Collins, CO

Demographics

The City of Fort Collins is the most populous city in Larimer County and serves as the county seat. Fort Collins is also the home of Colorado State University. In 2021, Fort Collins had a population of 166,788. The city's median household income was $72,932 in 2021. In terms of race and ethnicity, the resident population is predominantly White (78%), with smaller Hispanic (13%) and Asian (3%) populations.

Practice Description and Strategy Alignment

As part of the 2040 Transit Master Plan, the City of Fort Collins is planning a network of mobility hubs that offer mobility options and amenities for transit riders modeled off of an existing mobility hub in Hamburg, Germany. The mobility hubs are strategically located along high-frequency bus routes near major activity or employment centers. The mobility hub design includes car share vehicles, e-bikeshare and e-scootershare facilities, bicycle parking, trees, TNC pick-up and drop-off areas, bus shelters with benches, and free Wi-Fi. Mobility hubs support the transportation goal of mobility for all by providing transit riders with amenities that improve convenience and comfort of transit service.[21]

16. Haxton Way Trail Lighting in Whatcom County, Washington

Demographics

Whatcom County is a county located in the northwestern corner of Washington state, home to the Cascade Mountains of North Cascades National Park. In 2021, Whatcom County had a population of 224,533. The city's median household income was $70,011 in 2021. In terms of race and ethnicity, the resident population is predominantly White (78%), with smaller Hispanic (10%), mixed-race (5%) and Asian (4%) populations.

Practice Description and Strategy Alignment

Haxton Way is a major corridor connecting neighborhoods and employment centers in Whatcom County, and prior to the construction of the complementary trail, it was the corridor with the highest fatality rate in the County. Haxton Way historically lacked pedestrian and bicycle facilities until 2010, when the County constructed a dedicated multi-use trail that parallels the roadway. The trail was funded by grants from Washington State DOT, The American Recovery and Reinvestment Act, and FHWA's Federal Lands Highway Coordinated Technology

[21] City of Fort Collins. (2019). Draft Fort Collins 2040 Transit Master Plan. City of Fort Collins. http://ridetransfort.com/img/site_specific/uploads/Transit_Master_Plan_spreads_sm_compressed.pdf

Implementation Program.[22] The project included a solar-powered, LED lighting system equipped with motion-sensors and designed with the natural environment in mind. The solar lighting system did not require underground trenching, reducing construction costs and environmental impacts. The use of LED light bulbs makes the lighting system more energy efficient and longer lasting, producing the same amount of light with less electricity. In addition, the motion-sensor technology limits the impact of light pollution in the sensitive wildlife habitat surrounding the trail, including wetlands and forests.[23]

This lighting system makes it easier and safer for bicycle commuters and recreational riders to ride early in the morning and late in the evening, especially during winter when daylight is more limited. Lighted multi-use trails support the transportation goals of balanced mode share, mobility for all, and sustainability by improving facilities and encouraging bicyclists to commute to work, reducing vehicle trips and emissions.

17. Flexible pedestrian zones in Boston, Massachusetts; Washington, DC; and Paris, France

Demographics

The City of Boston is the most populous city in Massachusetts and is the location of the state capitol. In 2021, Boston had a population of 672,814. The city's median household income was $81,744 in 2021. The largest racial/ethnic groups in descending order are White (44%), Black (22%), Hispanic (20%), and Asian (10%).

Washington D.C. is the nation's capital district. In 2021, Washington D.C. had a population of 683,154. The District's median household income was $93,547 in 2021. The largest racial/ethnic groups in descending order are Black (44%), White (37%), Hispanic (11%) and Asian (4%).

Paris is the capital of France and had a population of 2,102,650 in 2023. The city's median household income was $67,164 in USD in 2019.

Practice Description and Strategy Alignment

In 2020, the Mayor of the City of Boston closed the 18th Street to vehicles during an initial pilot project. Businesses responded positively and strongly encouraged that the local government re-open the pedestrian zone to allow for economic recovery. In July 2023, the City of Boston relaunched Open Newbury Street for 16 consecutive Sundays as part of a car free corridor during the summer season. The corridor segment between Berkeley and Massachusetts Avenue is closed to cars and consists of eight blocks, measuring one mile long. Newbury Street is a popular tourist destination and features shops, restaurants, galleries in a walkable urban area. Vehicular traffic on crossing streets is closed at three intersections (Hereford, Gloucester, and Fairfield Streets) and is permitted at three intersections (Exeter, Dartmouth, and Carendon). Parking is prohibited on Newbury Street between 6:00 am and 8:00 pm. Blue e-bike stations are located at the beginning and end of the corridor segment closed to vehicles, as well as on Boylston Street, the adjacent street.[24]

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[22] Oregon Metro. (April 2016). Lighting Regional Trails. Oregon Metro. https://www.oregonmetro.gov/sites/default/files/2019/05/28/LightingRegionTrail_April2016_rev.pdf
[23] Oregon Metro. (April 2016). Lighting Regional Trails. Oregon Metro. https://www.oregonmetro.gov/sites/default/files/2019/05/28/LightingRegionTrail_April2016_rev.pdf
[24] City of Boston. (July 6, 2023). Open Newbury Street. City of Boston. https://www.boston.gov/departments/transportation/open-newbury-street

In August 2022, Washington DC launched a pedestrian zone pilot program on a segment of 18th Street in the Adams Morgan neighborhood. The street segment was closed to vehicles one Sunday per month between 12:00 noon and 10:00 pm as an effort to support economic recovery following the COVID-19 pandemic. The pedestrian zone includes pop-up entertainment, such as street performances and outdoor workshops, and mobile food "streateries." The idea is to create a safe environment for people to shop, dine, and explore the vibrant neighborhood. If successful, the Adams Morgan Business Improvement District hopes to make the pedestrian zone open more frequently and for longer periods of time, with the installation of permanent metal cables that close the streets to vehicle traffic when the zone is operating..[25]

In October 2018, the City of Paris implemented a citywide car free zone, including arrondissements 1, 2, 3, and 4 on one Sunday per month as part of the French capital's Paris Resipre (Breathe) initiative by Mayor Anne Hidalgo. The car free zone is an effort to improve air quality, reduce vehicle congestion, and share public spaces more fairly.[26] The car free zone is enforced from 10:00 am to 6:00 pm and bans all vehicles except public transit buses, delivery vehicles, taxis, religious vehicles, repair service vehicles, and residential vehicles. These vehicles will be permitted only at designated entrance and exit points with a speed limit of 20 km/hr (12 mph). The City first implemented a car free zone in 2003, and between 2017 and 2018 alone, the City observed a 6% decrease in vehicle congestion and a reduction in air pollution, and these benefits are expected to continue to grow[27].

Car free zones, as exemplified in Boston, Washington DC, and Paris, France support the transportation goals of balanced mode share, sustainability, and mobility for all by restricting vehicle use, reducing emissions, and making it safer for all people to walk, bike, and roll in downtown districts and neighborhoods.

18. Cashout parking program and EcoPasses for employees in Boulder, Colorado

Demographics

The City of Boulder is an urban city in Colorado, home to the University of Colorado. In 2021, Boulder had a population of 104,930. The city's median household income was $74,902 in 2021. In terms of race and ethnicity, the resident population is predominantly White (78%), with smaller Hispanic (11%) and Asian (6%) populations.

Practice Description and Strategy Alignment

Large employers in Boulder, Colorado, including the Rocky Mountain Institute (RMI) and Solid Fire, offer an employee benefit known as parking cashout. Parking cashout is a financial transportation incentive offered by employers to encourage workers to commute by foot, bike, or transit, which both reduces congestion and parking demand. Commuters can choose to use an employer-subsidized parking spot at their employment site or receive

[25] Hicks, Maggie. (August 9, 2022). Adams Morgan's 18th Street Will Become a Pedestrian Zone on Select Sundays. Washingtonian. https://www.washingtonian.com/2022/08/09/adams-morgan-18th-street-pedestrian-zone/
[26] Coffey, Helen. (October 3, 2018). Paris to ban cars in city center one Sunday a month. Independent. https://www.independent.co.uk/travel/news-and-advice/paris-car-free-sundays-city-centre-france-pedestrian-a8566991.html
[27] Coffey, Helen. (October 3, 2018). Paris to ban cars in city center one Sunday a month. Independent. https://www.independent.co.uk/travel/news-and-advice/paris-car-free-sundays-city-centre-france-pedestrian-a8566991.html

the cash equivalent of the cost of the parking space at work and use an alternative transportation option. Essentially, parking cash out programs pay employees to not drive and park at the workplace.[28]

SolidFire is a company with 262 employees that builds cloud-based, data storage systems for next-generation data servers. Located in Downtown Boulder, within the Central Area General Improvement District (CAGID), SolidFire has limited employee parking available on-site. SolidFire developed a parking cashout and mobility program, called the ATIP (Alternative Transportation Incentive Program), to encourage employees to walk, bike, carpool, or ride transit to work. The company pays each employee who foregoes a parking space on a monthly basis and provides participating employees with an RTD EcoPass, which is an unlimited-access annual transit pass.[29]

In 2017, 33 percent of SolidFire's workforce participate in the ATIP. The company estimates that the net savings of this program amounts to approximately $17,000 per month. Based on employee survey responses, employees like the program and consider it to be a fair, win-win parking and mobility solution. Moreover, SolidFire believes it strengthens employee recruitment and retention.[30]

After implementing the ATIP, SolidFire observed a reduction in parking demand and SOV commute trips. Another benefit of the program is that implementation and administration costs are low, and employers that lease parking spaces can even save money. Parking cashout programs support the transportation goals of mobility for all and sustainability by reducing commuting costs for employees and reducing SOV trips.

Affordable Housing

19. Santa Fe's excise tax on the sale of non-primary residences that are valued at over $1 million.

Demographics

The City of Santa Fe is the county seat of Santa Fe County, New Mexico, and the location of the state capital. In 2021, the City of Santa Fe had a population of 86,935. In terms of race and ethnicity, the city's median household income was $61,990 in 2021. The resident population is predominantly Hispanic (54%) and White (40%).

Practice Description and Strategy Alignment

In 2023, the City of Santa Fe passed a bill that imposes a 3% excise tax on the sale of homes valued at over $1 million. The tax is applied to the amount of the home price that exceeds $1 million, and this revenue will generate funds for the City's Affordable Housing Trust Fund. The fund provides rental assistance and funds for the construction of below market rate housing, but has received inconsistent and insufficient funding in the past. With the passage of this excise tax bill, the Fund will receive an additional $4.5 million per year from the excise tax alone. The City and community was motivated to pass this legislation as an anti-displacement measure to support

[28] City of Boulder. (June 3, 2017). Access Management and Parking Strategy (AMPS). City of Boulder. https://bouldercolorado.gov/media/1686/download?inline=
[29] City of Boulder. (June 3, 2017). Access Management and Parking Strategy (AMPS). City of Boulder. https://bouldercolorado.gov/media/1686/download?inline=
[3030] City of Boulder. (June 3, 2017). Access Management and Parking Strategy (AMPS). City of Boulder. https://bouldercolorado.gov/media/1686/download?inline=

workers in Santa Fe, who are being displaced by rising housing costs and limited housing supply due to vacation rentals and short-term rentals. An excise tax for high-end home sales supports the transportation goals of mobility for all and sustainability by increasing affordable housing options near employment centers and reducing commuting distances.

20. **Denver's development standards for Additional Dwelling Units (ADUs) and affordable housing developments.**

Demographics

The City of Denver is the most populous city in Denver County, Colorado and serves as the county seat and the location of the state capitol. In 2021, the City of Denver had a population of 706,799. The city's median household income was $78,177 in 2021. The largest racial/ethnic groups in descending order are White (54%), Hispanic, (29%) and Black (9%).

Practice Description and Strategy Alignment

The City of Denver does not require off-street parking for ADUs, following best practices from other cities (Seattle and Portland) that have streamlined and simplified ADU standards to encourage development of more ADUs as a more affordable housing option. This ADU development standard reduces the cost of building ADUs and increases the feasibility for older buildings with no off-street parking space, reducing the barriers to construction of ADUs.

Regarding affordable housing, in August 2020, the City passed an ordinance reducing the minimum required parking for affordable housing developments to a ratio of 0.1 parking spaces per unit (previously 0.25 spaces per unit). This ordinance was passed to reduce the construction costs for affordable housing. According to a study by RTD, Denver's regional transportation authority, the average parking space in the Denver metro area costs $25,000.[31] Based on a study of parking demand at subsidized affordable housing developments such as Section 8 housing, up to 50% of parking spaces are unused, according to the analysis.[32]

Elimination of parking requirements for ADUs and reduction of parking requirements for affordable housing supports Aspen's transportation goals of mobility for all and sustainability by encouraging production of affordable housing options near employment centers and reducing commuting distances.

21. **Sacramento's Community Benefits Ordinance with standards for large scale, public-private projects such as local business support, local hiring, and anti-displacement strategies.**

Demographics

The City of Sacramento is the most populous city in Sacramento County, California and serves as the county seat and the location of the state capitol. In 2021, Sacramento had a population of 518,605. The city's median

[31] RTD. (December 2020). Residential Parking in Station Areas: A Study of Metro Denver. RTD. https://wp-cpr.s3.amazonaws.com/uploads/2020/12/RTD-Residential-TOD-Parking-Study.pdf.
[32] Shopworks Architecture and Fox Tuttle. (2021). Parking and Affordable Housing Report. https://shopworksarc.com/wp-content/uploads/2021/02/2021_Parking_Study.pdf

household income was $71,074 in 2021. The resident population is ethnically diverse; the largest ethnic/racial groups in descending order are White (31%), Hispanic (29%), Asian (19%), Black (13%), and mixed race (6%).

Practice Description and Strategy Alignment

The City of Sacramento adopted a Community Benefits Ordinance in September 2022 in order to provide guidelines for the negotiation of benefits for large scale development projects as a condition of receiving public subsidies. The ordinance requires developers to enter into a Community Benefits Agreement with the City for public-private development projects receiving economic subsidies of more than $10 million. The ordinance has protections in place to lessen the impact of development on existing residents and businesses, including requirements to include small business protection measures, local hiring standards, and anti-displacement strategies.[33] Community Benefits Agreements can promote the development of privately funded affordable housing and lessen displacement resulting from gentrification, supporting the transportation goal of mobility for all by helping promote retention of the existing workforce near job centers.

22. Employee housing program for seasonal employees using converted hotel rooms at Steamboat Springs Resort, Colorado

Demographics

The City of Steamboat Springs is the most populous city in Routt County, Colorado and serves as the county seat. In 2021, Steamboat Springs had a population of 13,193. The city's median household income was $80,660 in 2021. The resident population is predominantly White (82%), with smaller Hispanic (9%) and mixed race (6%) populations.

Practice Description and Strategy Alignment

Steamboat Springs Resort in Steamboat Springs, Colorado offers its employees a unique option for affordable housing with numerous amenities, including location along a city bus route, recreation facilities, and access to the Yampa River and Core Trail. This employee housing option, called the Ponds Apartments, consists of fully furnished economy apartments equipped with full kitchens, appliances, and wireless internet. These units are well suited for families and allow pets for a $50 fee. Parking is sold for a fee of $75 per space on a first-come, first-served basis. For individuals, there are also shared one-bedroom apartments, offered on a limited basis. During the winter season, Steamboat Springs Resort also offers employee housing at local hotels that have been converted into residential studios. Each studio accommodates 2-3 employees per room. [34]

These employee housing options reduce housing costs significantly (no rental fee, only a refundable deposit of $500 and a non-refundable administrative fee of $50) while helping to increase employee recruitment and retention.[35] In addition, because the units are located on-site or nearby the resort, they reduce the cost and travel time associated with commuting to work, improving quality of life for employees. Employee housing

[33] City of Sacramento (2023). Community Benefits Ordinance. City of Sacramento. https://www.cityofsacramento.gov/city-manager/oied/priority-projects-investment/community-benefits-ordinance
[34] Steamboat Springs Resort. Employee Housing. https://www.steamboat.com/employment/housing
[35] Steamboat Springs Resort. Employee Housing. https://www.steamboat.com/employment/housing

supports the transportation goals of mobility for all and sustainability by providing affordable housing options near jobs and reducing commuting distances.

ATTACHMENT A

COUNCIL STRATEGY DIRECTION

Strategy	Review Further?	Notes
Transit Service Standards	**Yes.** Majority supportive of further review.	One member is not supportive and believes this is a Council function for decision making. Concerns about ensuring coverage to all neighborhoods and about community feedback process. Council directed staff to bring back examples of service standards used to make changes from other communities that would improve Aspen. Bring back examples of service standards tailored to different service types.
Partner for Car Share Expansion	**Yes.** Majority supportive of further review.	Concerns about financial, operational impacts to members. The direction is to bring back models that show a subsidized use rate and operator service standards. Interest in expanding the program if private/public model is utilized.
Downtowner Goal Setting/Expansion/Hubs	**Yes.** Majority supportive of further review.	Interest in first/last mile and gap filler service. Not interested in City-wide service, or service where transit service is accessible/high. A member is interested in allowing drivers to own their vehicles.
WE-cycle Electrification and First/Last mile Expansions	**Yes.** Majority supportive of further review.	
Employer Grants/Cargo Bikes	**Yes.** Majority supportive of further review.	
Return Angle Parking on Galena Street	**No.** Majority not supportive of further review.	Two members supportive of angle parking return and interested in one-way streets as an option. Majority of council would like to pursue safety through Safe Streets for All.
Increased Fines for Safety/Mobility Violations	**Yes.** Majority supportive of further review.	One member not in favor. Several Council members interested in a fine reduction for swift payment. Interest in requiring a court appearance to increase compliance. Two members interested in a exploring free parking during off-season, but majority do not want to continue this discussion. Majority of Council supportive in goals that increase compliance.
Align Parking with TDM Goals (reduce number of permits, digitization of permits, cap some permits, clearer rules around permits)	**Yes.** Majority supportive of further review.	All request much more information, data and examples and methods for providing balance to business needs.
Better Utilization of Parking Pricing (demand- based pricing tiers, market-based pricing, range of pricing in parking ordinance)	**Yes.** Majority supportive of further review.	One member not in favor; this is a Council function to protect staff. All request much more information, data and examples and discussion of balance for business needs.

Note: Comments from Councilman Guth provided post-meeting.