CITY OF ASPEN

# SH 82-Aspen West Transportation Needs Study

Council Update
April 21, 2025
COA: Jenn Ooton, Carly McGowan, PE, Lynn Rumbaugh
Jacobs Engineering: Jim Clarke, AICP; Doug Stremel, PE

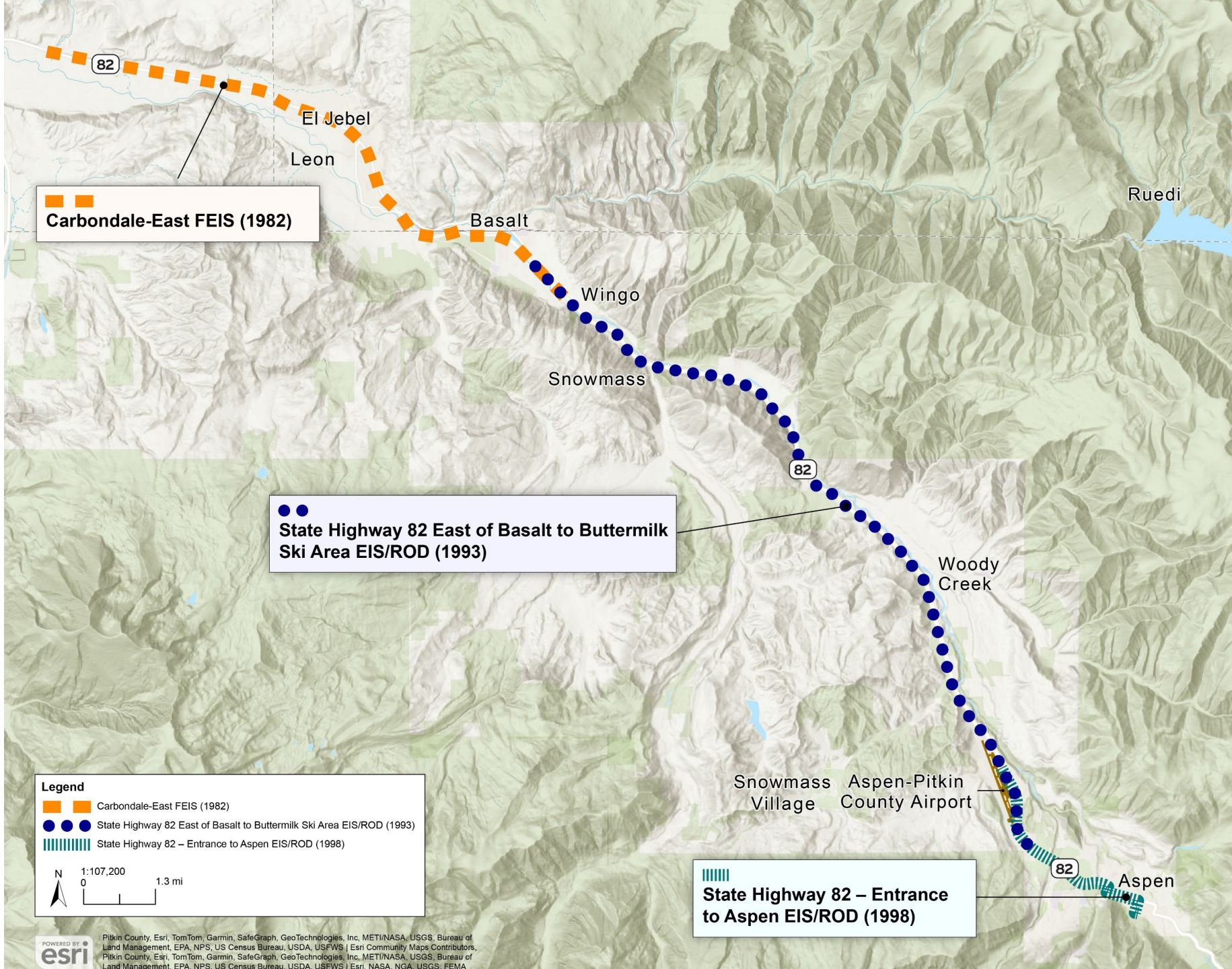
# Agenda

- Background and History
- CDOT/FHWA Coordination
- Purpose and Need
- Available Data on Transportation Needs
  - Traffic and Transit
  - System Redundancy, Emergency Response and Evacuation
  - Safety
  - Infrastructure
- Stakeholder Workshop
- Project Limits
- Next Steps

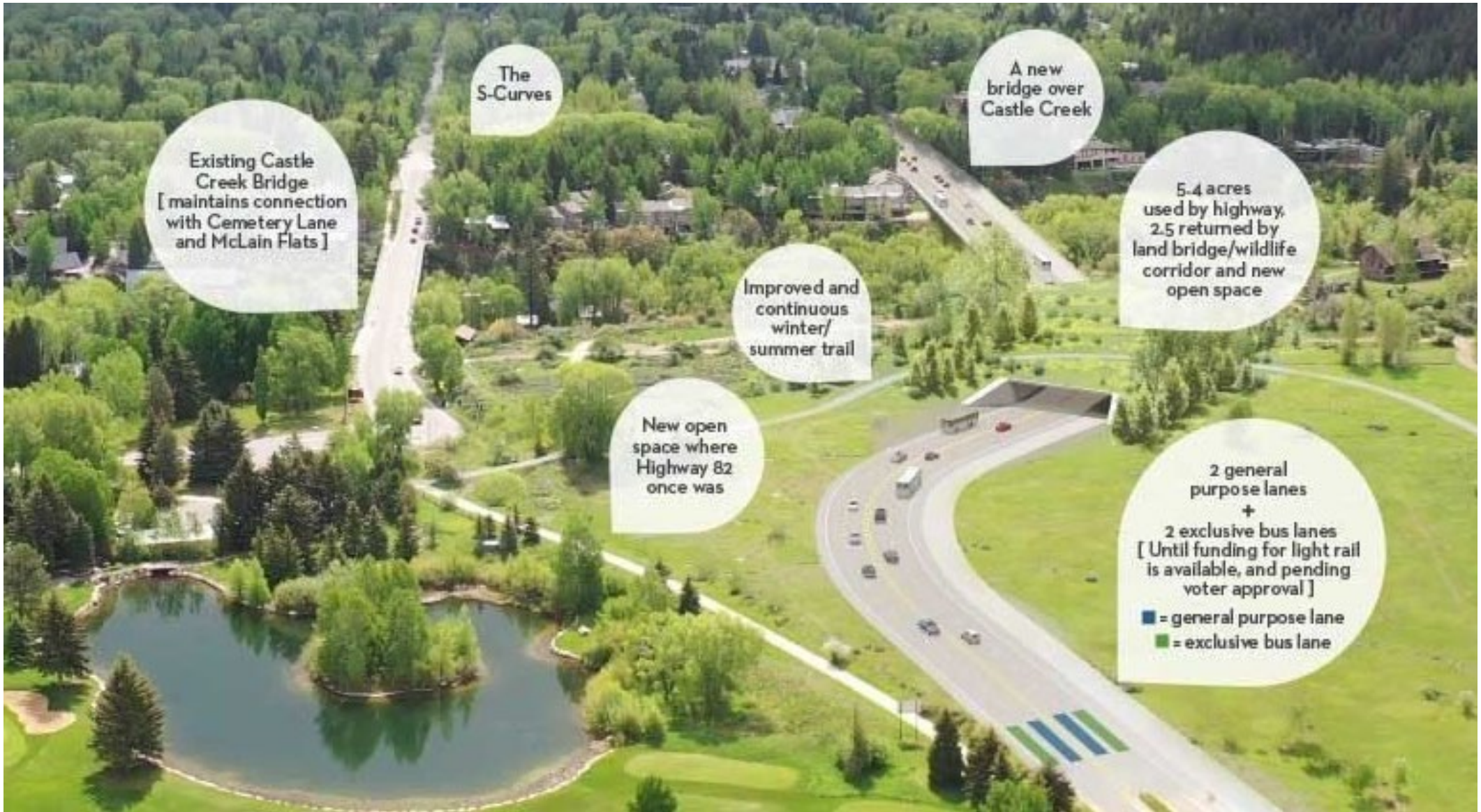
CITY OF ASPEN

# Background and History

# Background and History – Prior SH 82 Studies



# **Background and History** – ETA Preferred Alternative: Uncompleted Improvements



# **Background and History** – Castle Creek Bridge Studies (2024)

## Spring 2024

- Bridge Feasibility Report
  - Rehab Existing Bridge
  - 2-Lane Replace
  - 3-Lane Bridge Options
- S-Curves widening memo
  - 2 to 4 lanes (dedicated transit)
- NEPA Processes

## Summer 2024

- Traffic Memo/Alts
- S-Curve refinements
- CCB Sidewalk removal
- Alternatives Sensitivity Analysis
- Funding Options
- Economic Impact Analysis

# **Background and History** – CCB Inspection

## CCB Reinspected – Fall 2024

- Fair Condition
  - Deck, Substructure and Superstructure
  - Fair Condition means *structural elements are sound*
  - Preventative maintenance measures may be needed
- No Safety Concerns
- Next inspection 2026

# FHWA/CDOT Coordination

- CDOT/FHWA September 2024 Response Letter
  - Reaffirmed new EIS required for 3-Lane Shifted or Split Shot Alternatives IF intended to replace ETA Preferred Alternative
- Resolution 2024-113
  - Directed staff to begin work on new EIS or SEIS

# **FHWA/CDOT Coordination** – November Meeting

## Purpose

- Get aligned on process IF COA proposes new EIS
- Establish EIS Ground Rules

## Concerns

- Divided community sentiment
- FHWA staffing constraints

## Stakeholder and Public Outreach

- Downvalley participation expected

**Key Messages**

- FHWA/CDOT agreement on new EIS will require a strong, data-driven Purpose and Need.
- FHWA/CDOT are ultimate decision makers

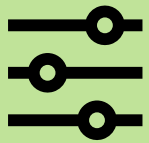
CITY OF ASPEN

# Purpose and Need

# **Purpose and Need** – What is a “Purpose and Need” Statement?

Foundation of Project

Establishes what the agency is proposing and why the project is needed.

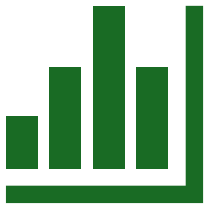


Basis for developing the range of reasonable alternatives required in an EIS

Alternatives are measured by their ability to address the purpose and need

# **Purpose and Need** – Guidance for Developing Purpose and Need

Purpose identifies what the project is intended to achieve but does not specify the solution



Needs clearly define the transportation problems and are supported by data

May also identify other objectives related to the primary transportation purpose

Should be concise and understandable for the general public

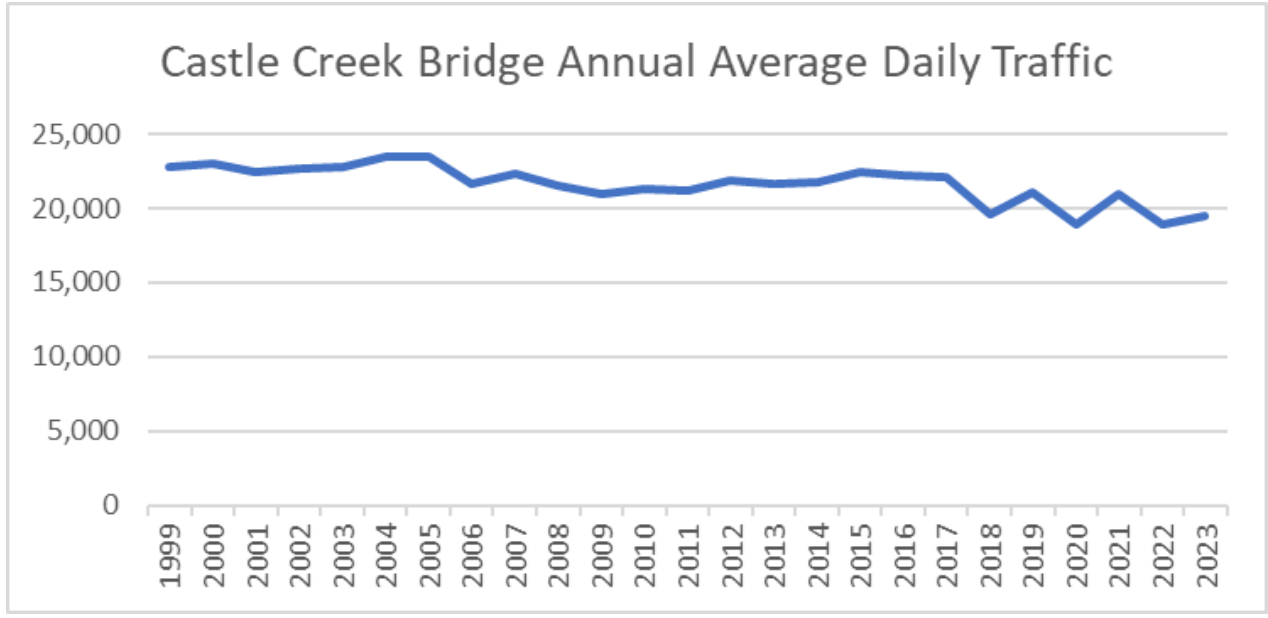
CITY OF ASPEN

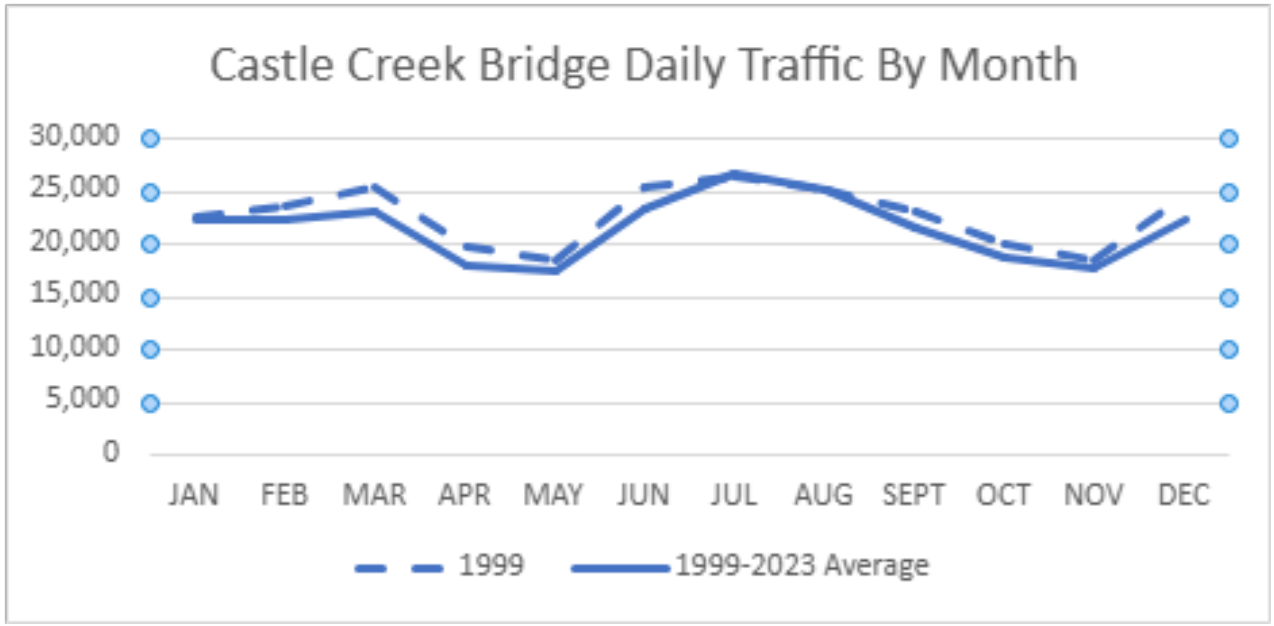
# Available Data on Transportation Needs

# Traffic and Transit

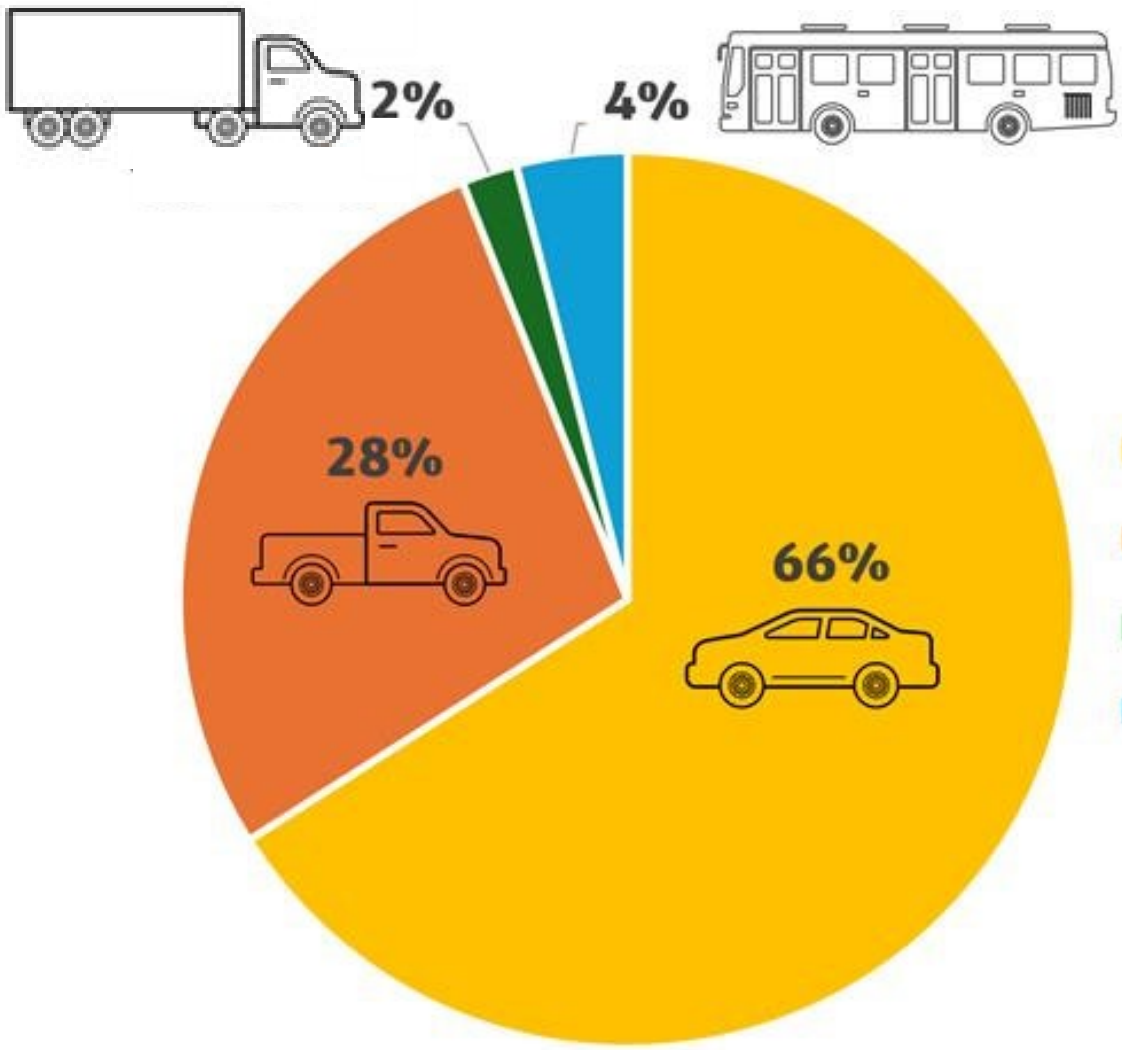
# **Traffic and Transit** – CCB Traffic Volumes

- Key Observations
  - Annual bridge traffic has slightly decreased over the last 25 years
  - July is historically the peak traffic month, which has remained steady over the last 25 years



# **Traffic and Transit** – Vehicle Types



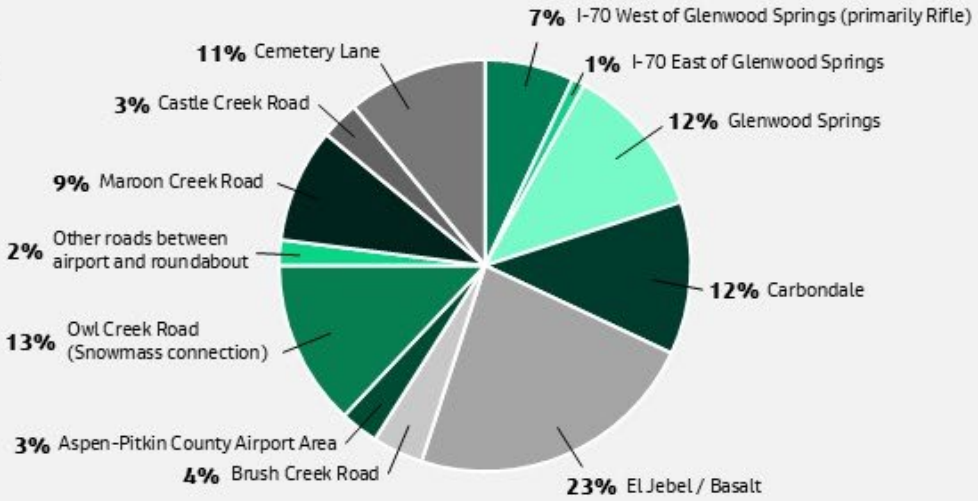

- 66% - Light (passenger cars and motorcycles)
- 28% - Medium (pick-up trucks and vans)
- 2% - Heavy (single unit trucks and trailers)
- 4% - Buses

*Source: continuous counts collected December 2024 to February 2025 on SH 82 and Power Plant Road

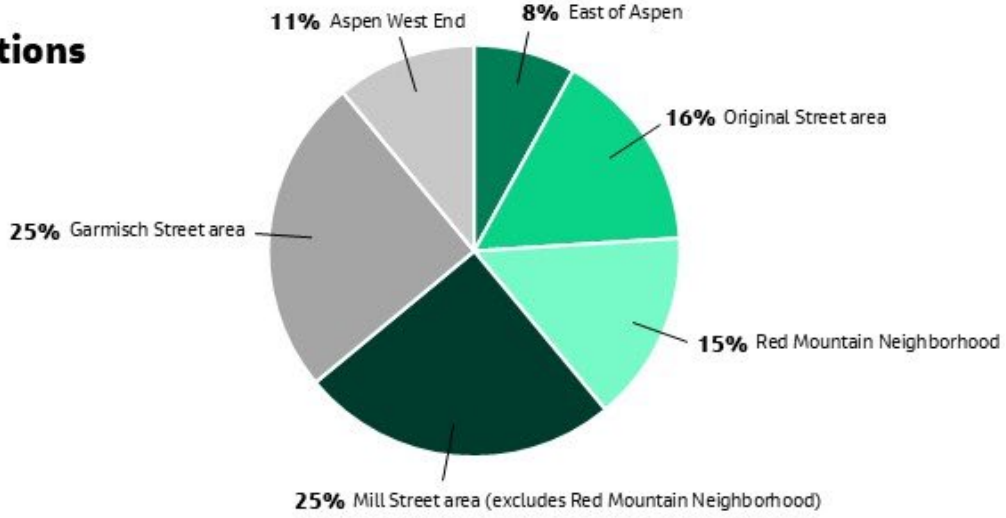
# **Traffic and Transit** – Origin-Destination Study (AM Inbound)

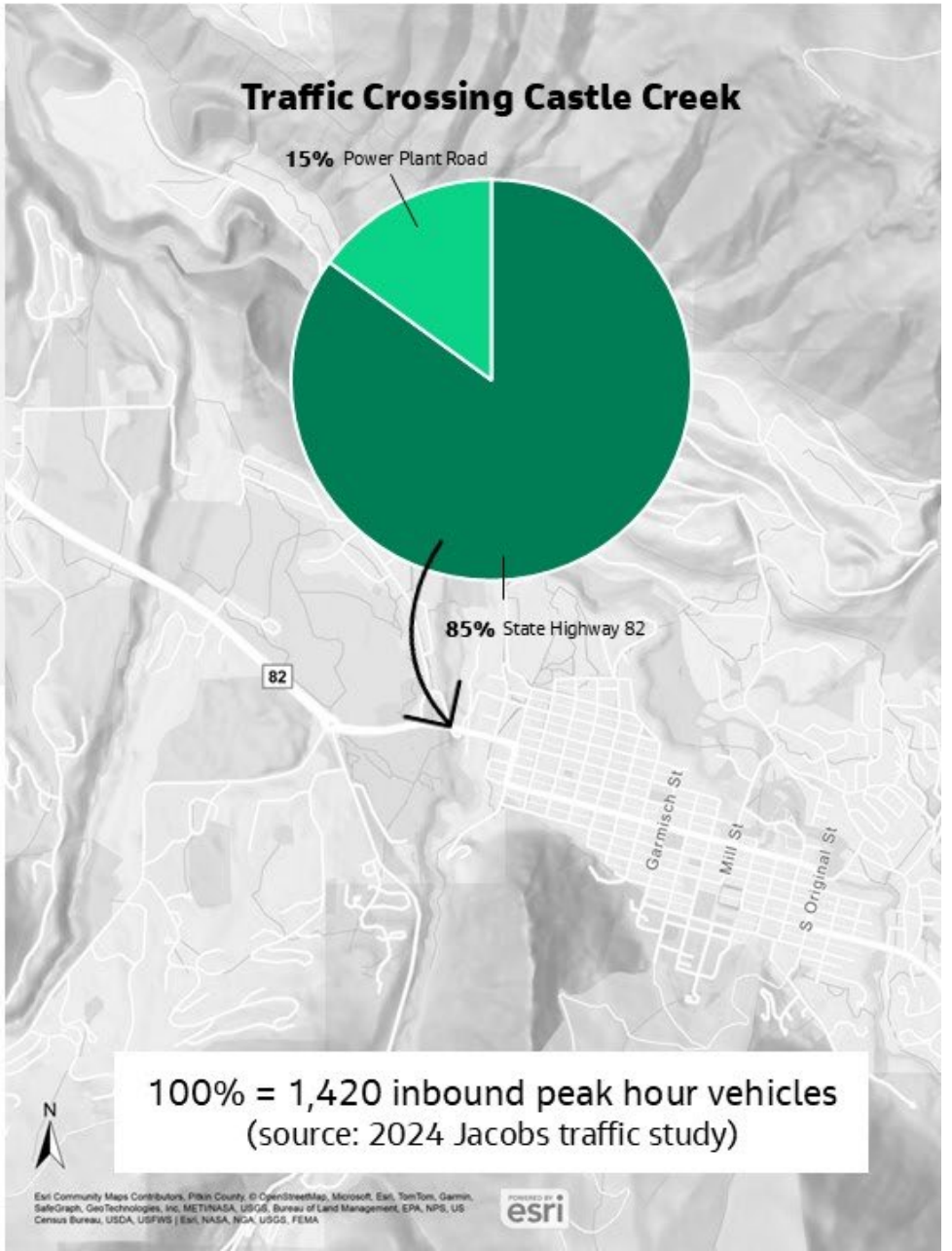
## AM Inbound Traffic Crossing Castle Creek

### Origins




### Destinations

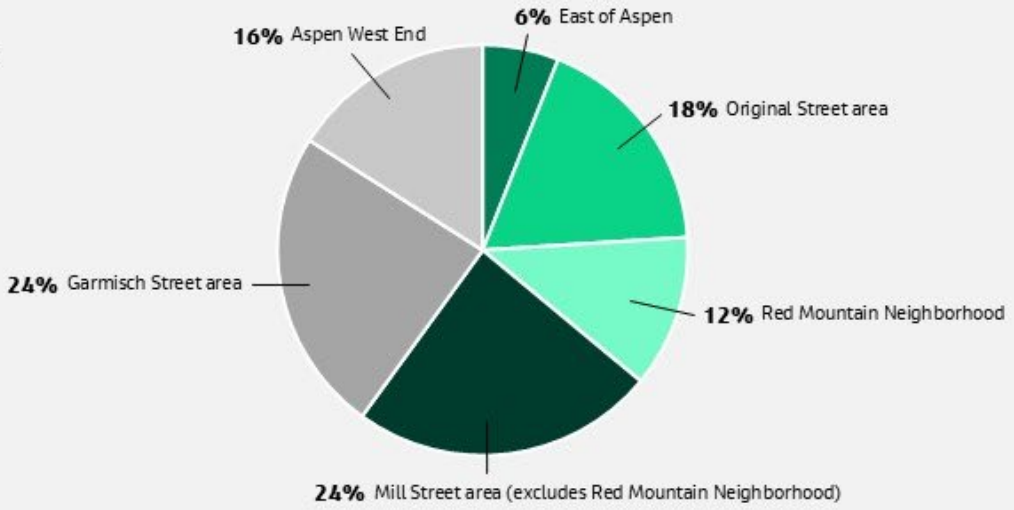


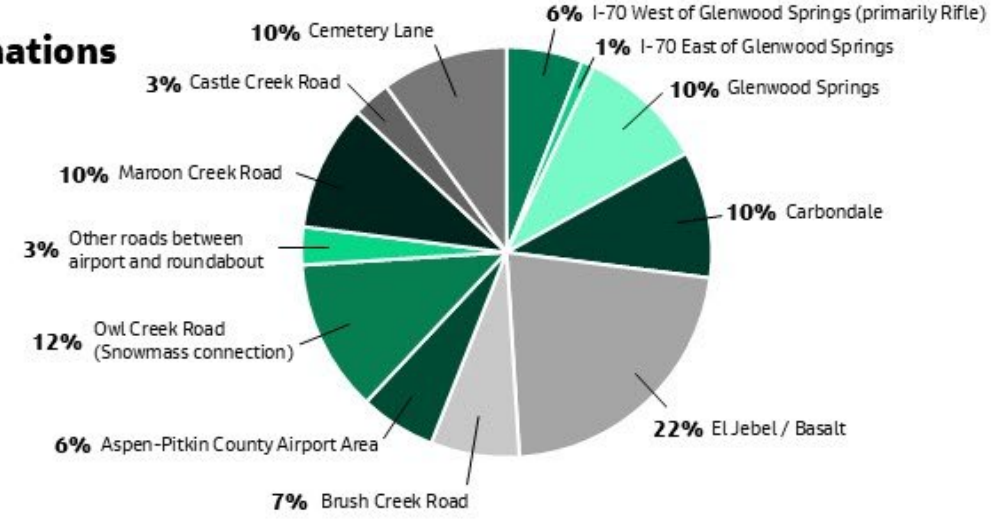
# **Traffic and Transit** – Origin-Destination Study (PM Outbound)

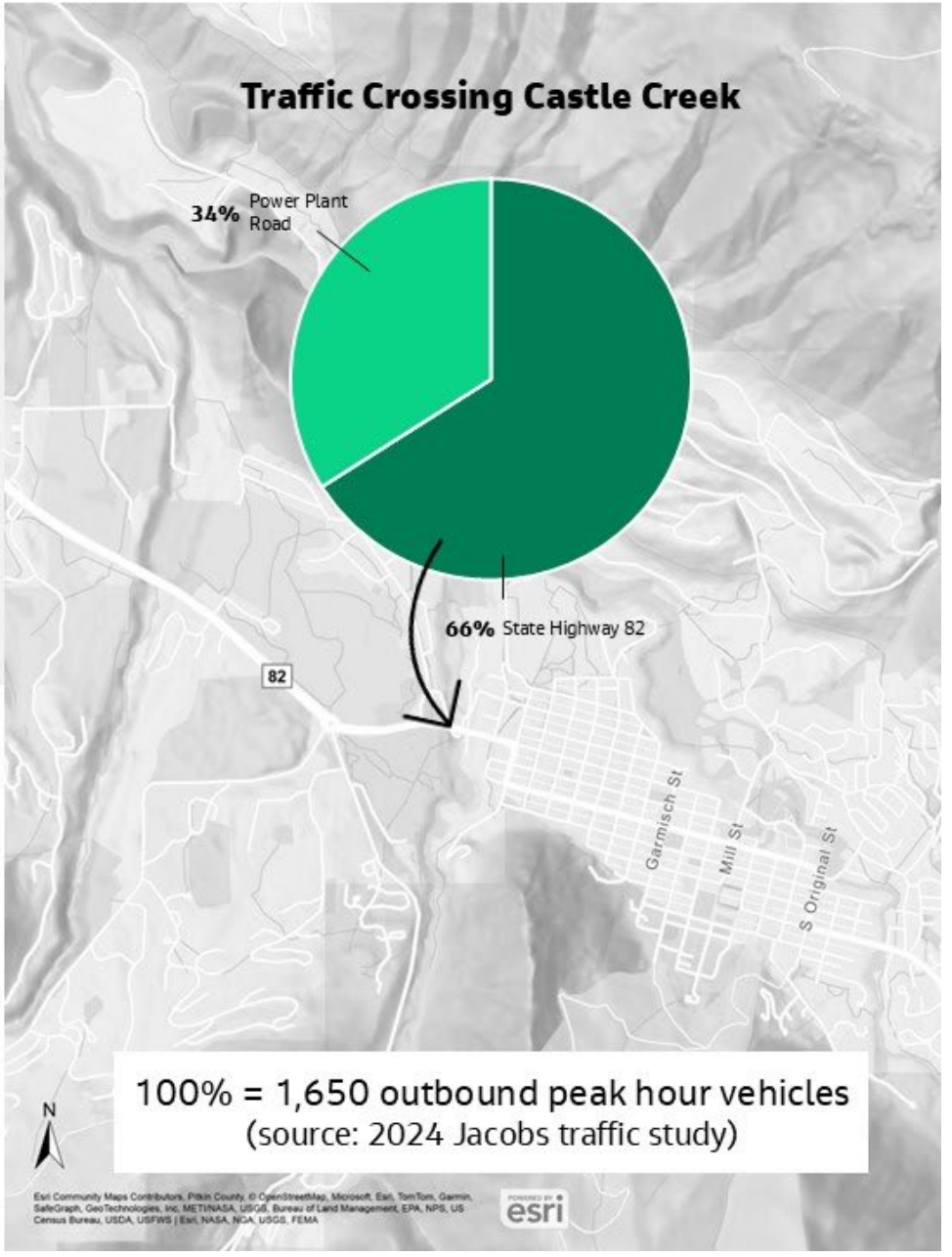
## PM Outbound Traffic Crossing Castle Creek

### Origins

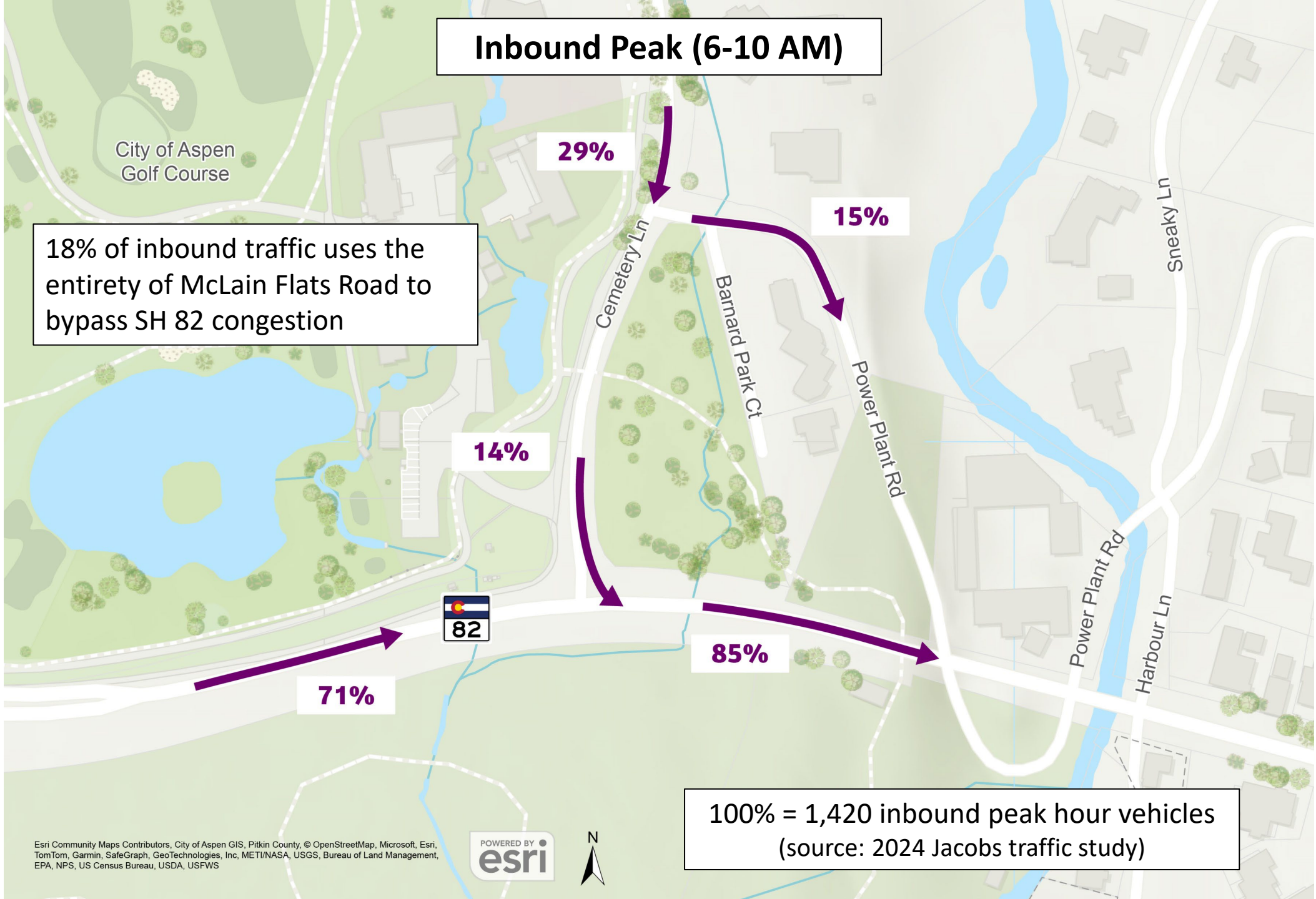



### Destinations

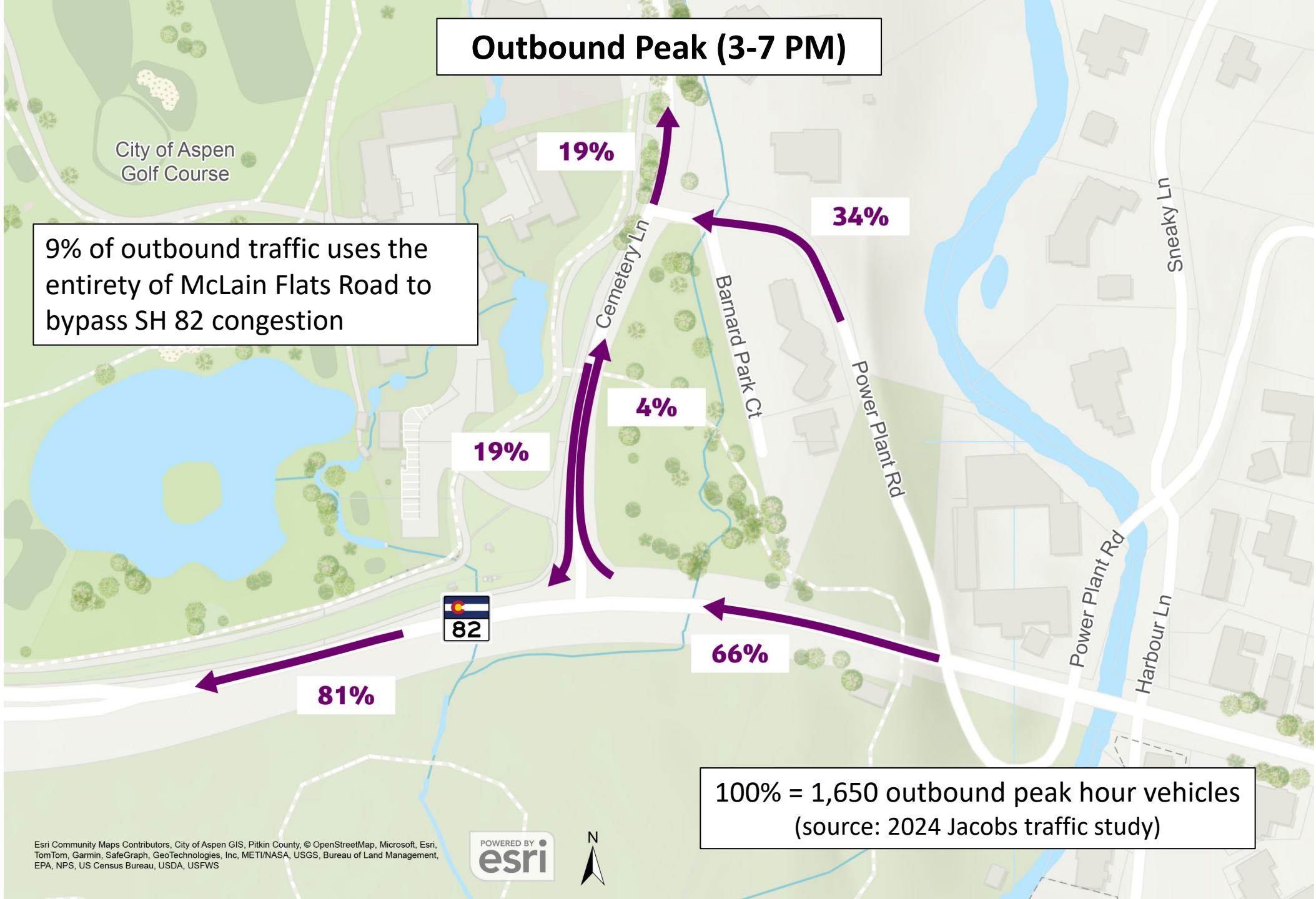


# Traffic and Transit – Inbound Cemetery Lane Area



# Traffic and Transit – Outbound Cemetery Lane Area

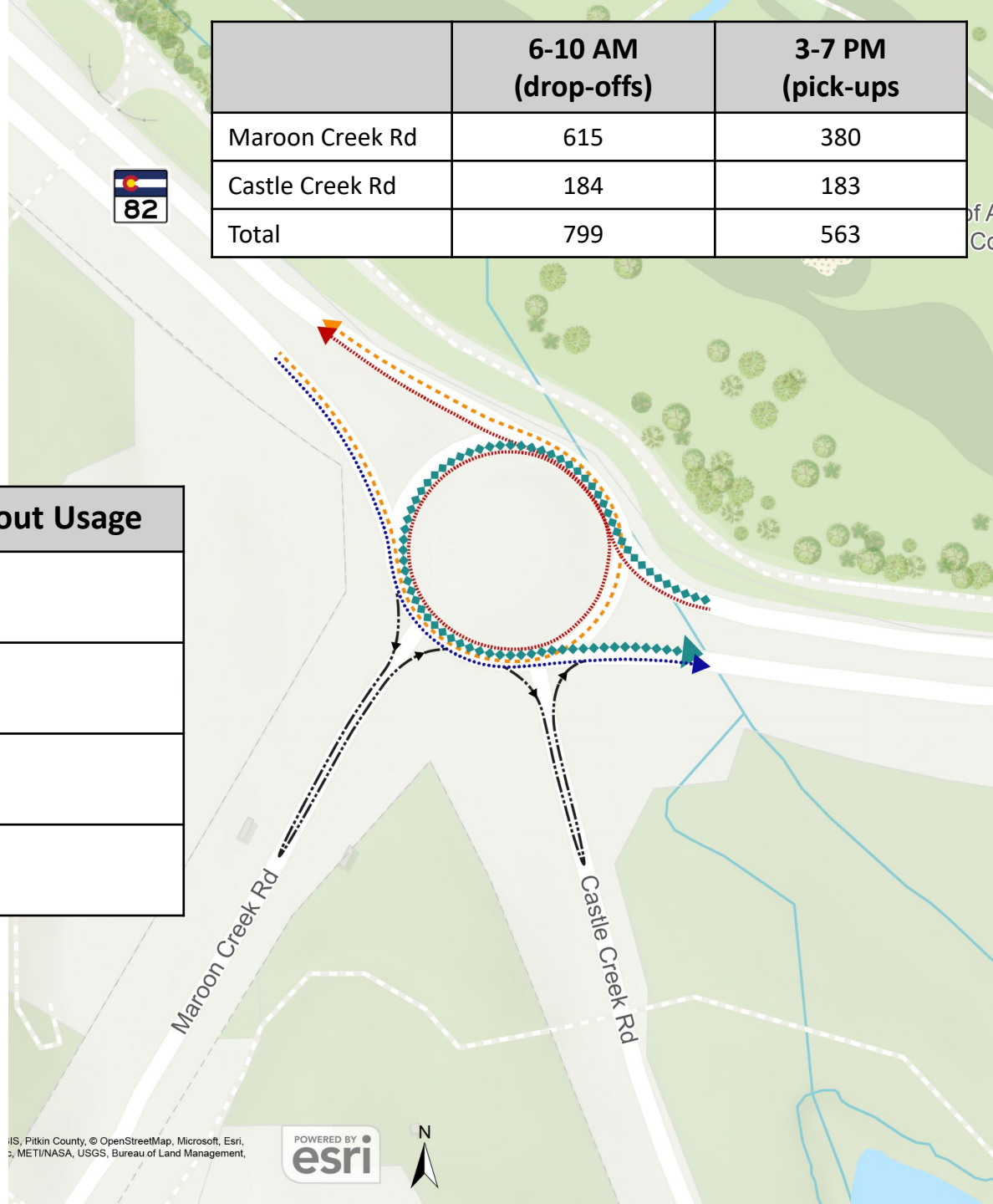


# **Traffic and Transit** – Maroon Creek Roundabout

**Note:** All vehicle trips in this slide use Maroon Creek Road or Castle Creek Road for a pick-up or drop-off (data from February 2024)

| Line Color | Primary Trip Purpose | Percent of Total | Roundabout Usage |
|---|---|---|---|
| | People who live around Downtown Aspen, returning home | 43% | 1 loop |
| | People who live around Downtown Aspen, going to work downvalley | 21% | 1.5 loops |
| | People who live downvalley, going to work around Downtown Aspen | 20% | 0.5 loops |
| | People who live downvalley, returning home | 16% | 1 loop |

| | 6-10 AM (drop-offs) | 3-7 PM (pick-ups |
|---|---|---|
| Maroon Creek Rd | 615 | 380 |
| Castle Creek Rd | 184 | 183 |
| Total | 799 | 563 |



# **Traffic and Transit** – Key Findings

- Transit:
  - Transit is heavily used to get into and out of Aspen – but not always convenient
  - Non-continuous bus lanes lead to transit delay in mixed traffic
- General Traffic:
  - Bottlenecks contribute to large queues and travel delays
  - Congestion encourages queue jumpers
    - Inbound and outbound commuters use McLain Flats Road - not intended for heavy traffic.
    - Outbound queue jumpers cause congestion in West End neighborhoods (via Power Plant Road).
  - Seasonal traffic mixes with commuter traffic at Maroon Creek roundabout:
    - School traffic (single bell schedule)
    - Winter ski traffic
    - Summer visitor/residential traffic

# System Redundancy – Emergency Response and Evacuation

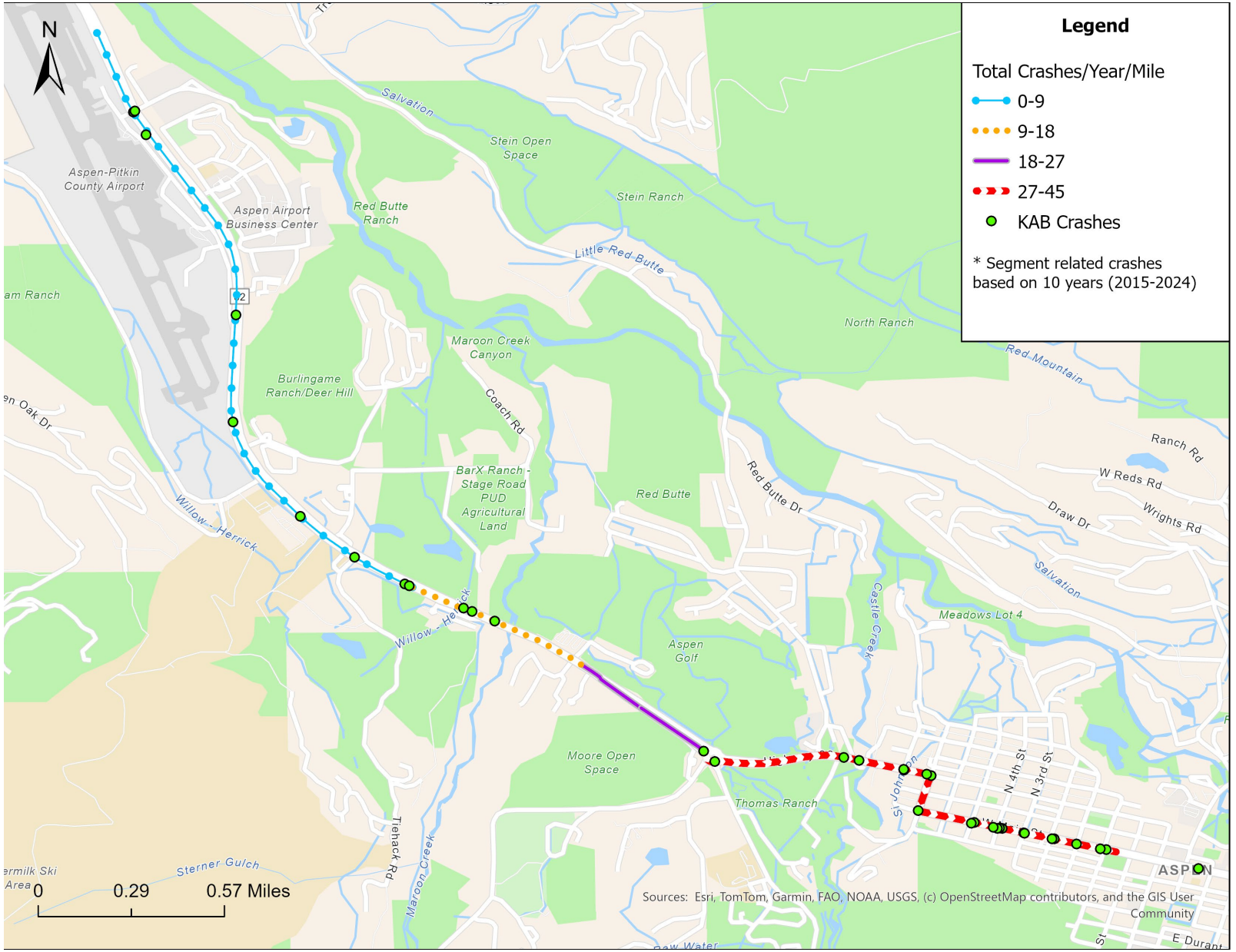
# **System Redundancy/Emergency Response and Evacuation** – Key Findings

- Congestion on SH 82 and lack of redundancy results in:
  - Delayed emergency response times
  - Long evacuation times
- Problems will worsen with new development, traffic increases and climate change

# Safety

# **Safety** – CDOT Data – SH 82 Total Crashes per Mile

- 760 Segment Crashes
  - 31 KAB (injury/fatal)
- Crash Types
  - Rear-ends
  - Sideswipes
  - VRU (ped/bikes)
- Crash Times
  - During the Day

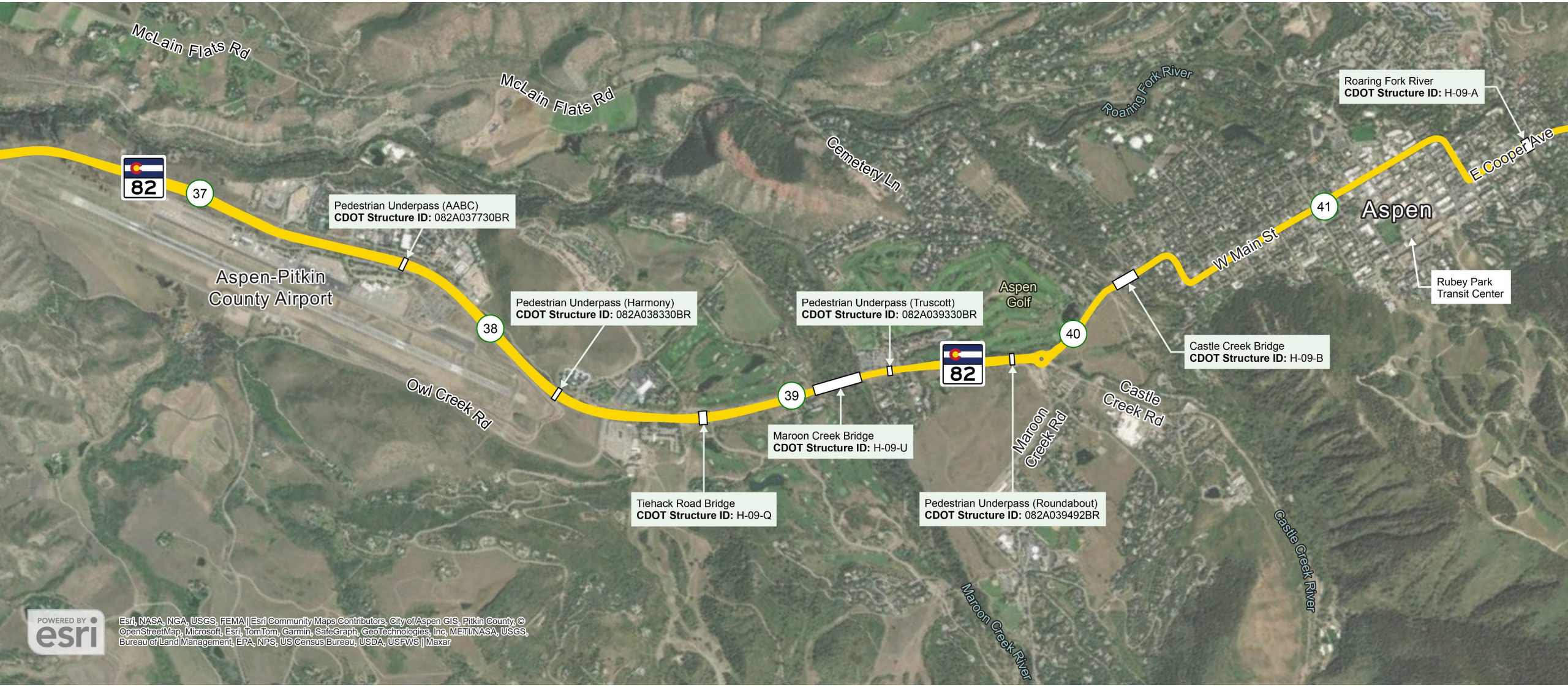


# **Safety** – Key Findings

- SH 82
  - Traffic crashes progressively worsen as you get into Aspen
  - Crash rates higher than similar highways
  - Congestion is primary cause
- Intersections
  - High intersection crash rates in town and near Rubey Park Transit center –higher crash and injury rates with pedestrians
- McLain Flats Road Diversion
  - Road not designed for heavy commuter traffic volumes
  - SH 82 congestion causing diversion—results in high number of crashes

# Infrastructure Condition

# Infrastructure Condition – Study Area

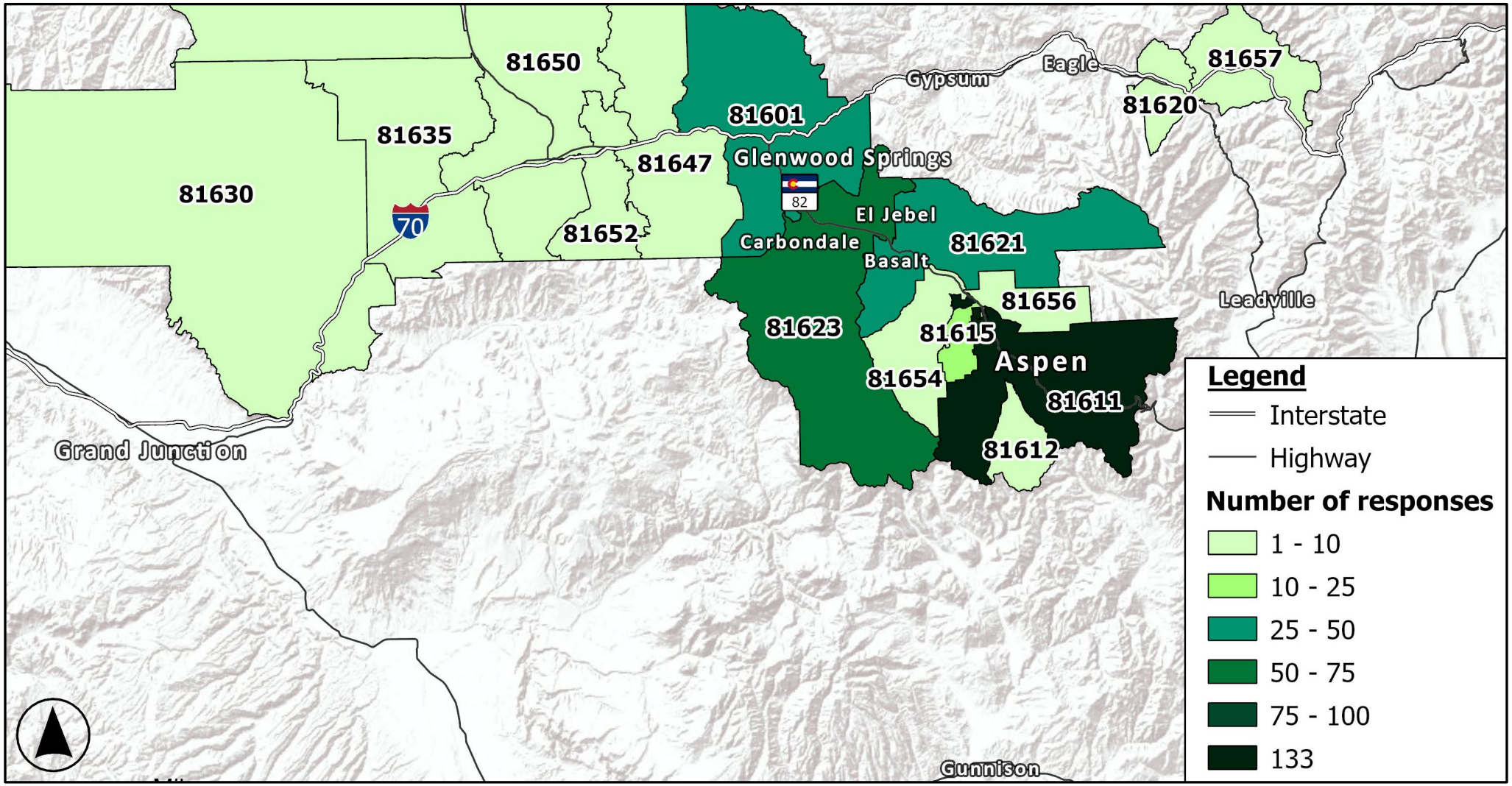


# **Infrastructure Condition** – Key Findings

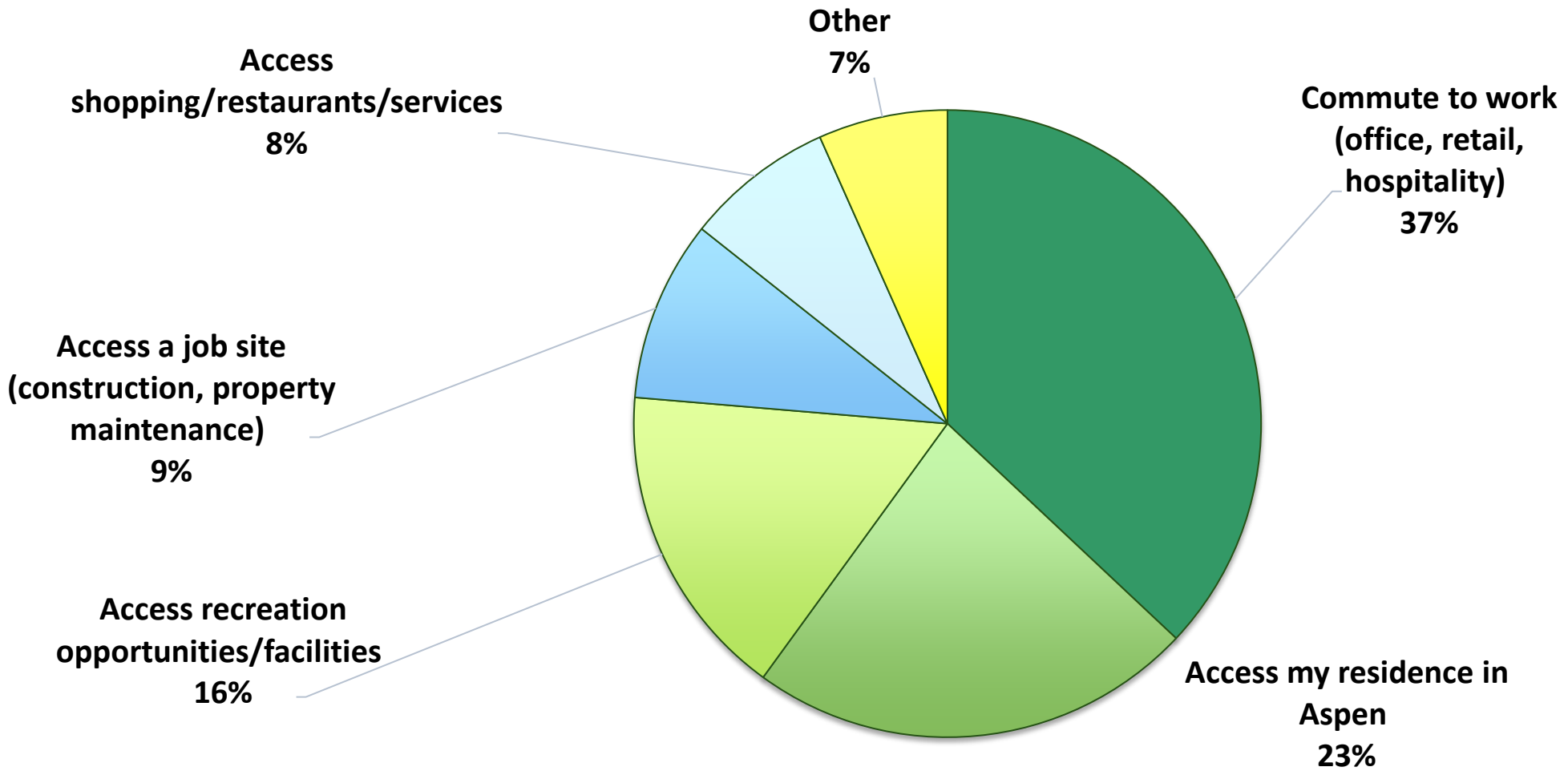
- Structures/Pavements
  - Aging pavement/structures require more maintenance costs
- Shoulder Widths
  - Standardized shoulder widths to facilitate emergencies
- Bike/Ped Facilities
  - Safe crossings, connectivity and passage (ADA)
- Roundabout is a clog to the SH 82 system
  - Geometry is contributing to delays and conflict points
- Inefficient Transit lanes and facilities
  - Bus lane discontinuity
  - Inadequate staging space and out of direction staging

# Public Input on SH 82

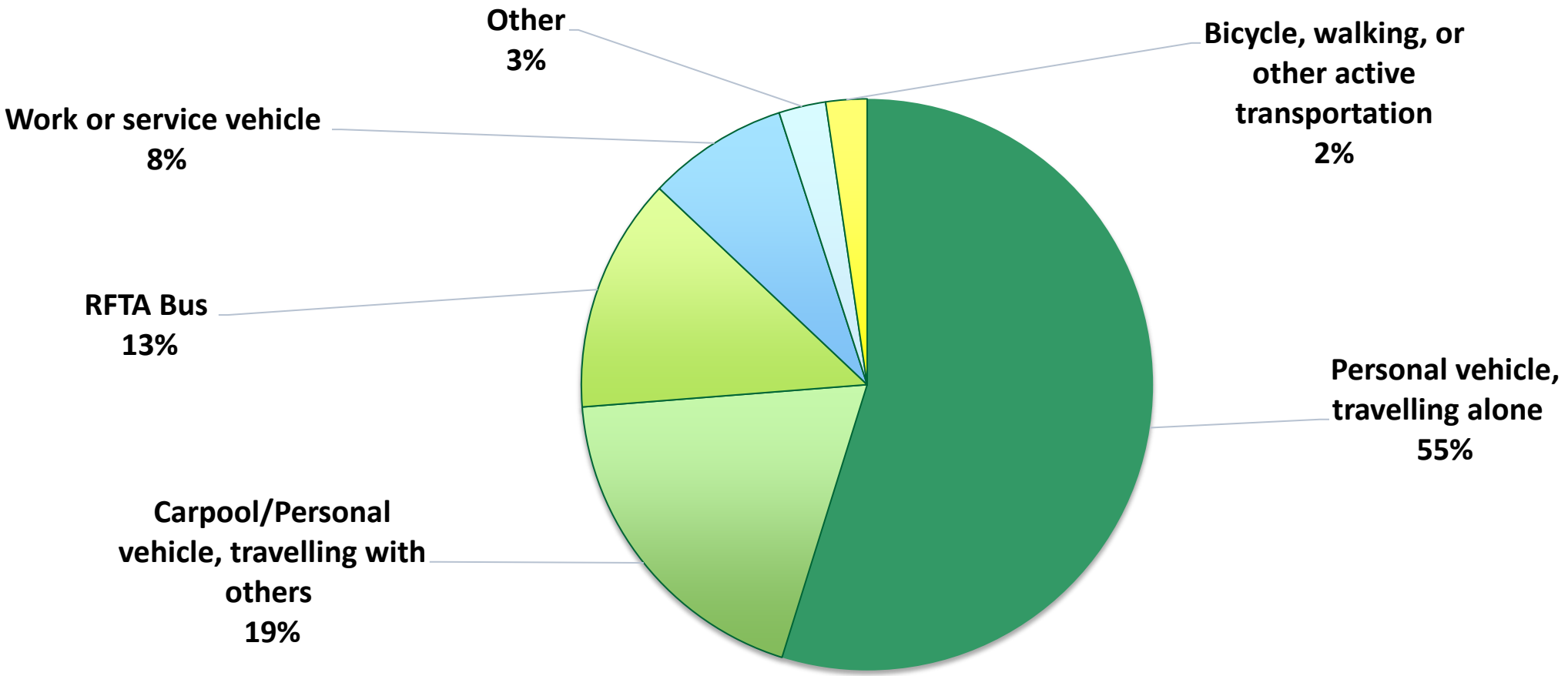
# **Public Input on SH 82** – Responses by Zip Code



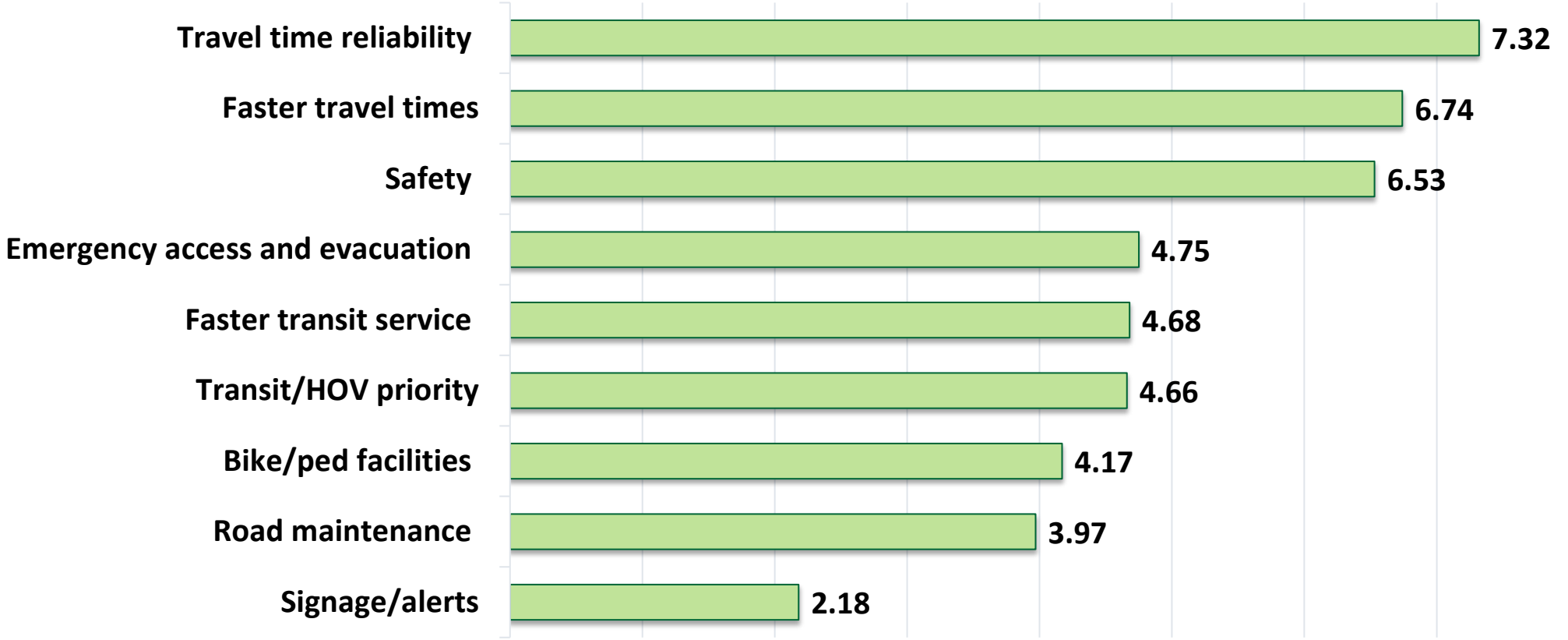
# **Public Input on SH 82** – Which Statement Best Describes Why You Travel to Aspen?



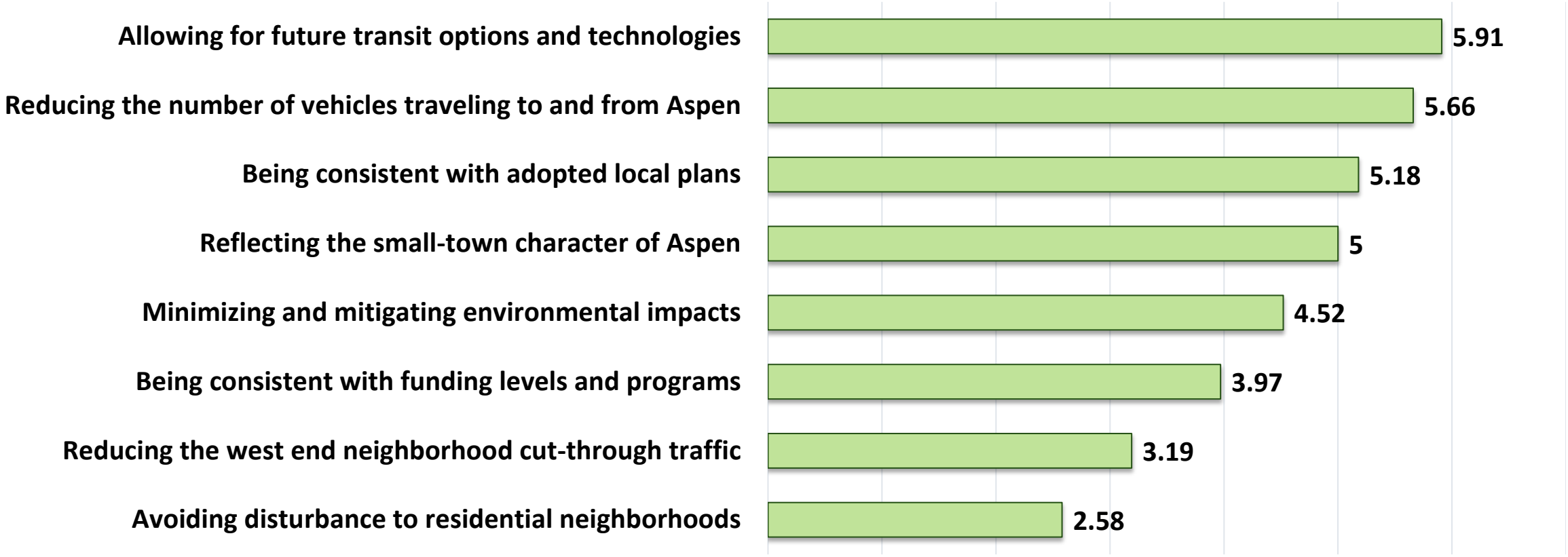
# **Public Input on SH 82** – What Mode of Travel Do You Use When for Travel to/from Aspen?



# **Public Input on SH 82** – What is Most Important to You When You Travel to/from Aspen?



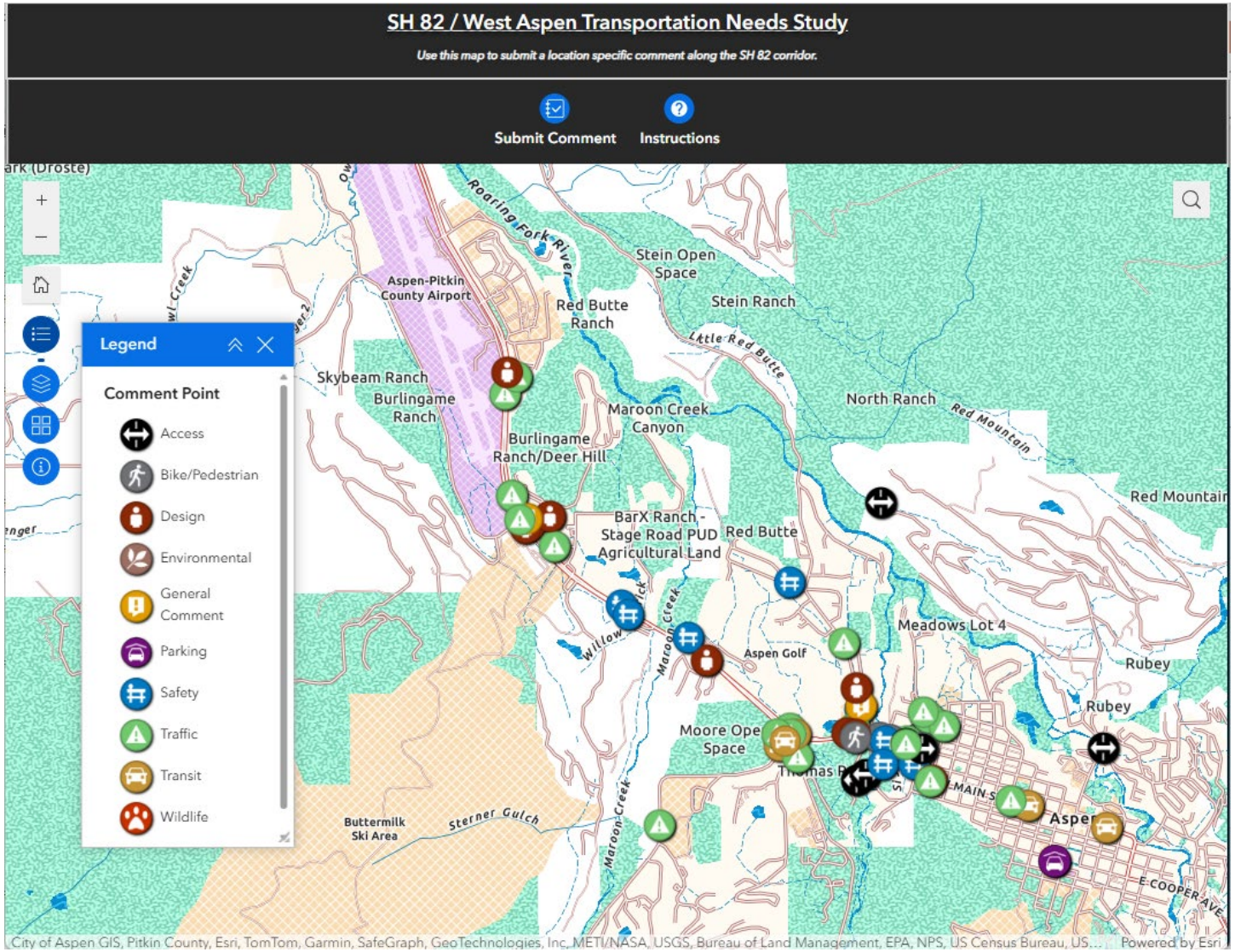
# **Public Input on SH 82** – What other Considerations are Important for Improving SH 82 to/from Aspen



# Public Input on SH 82 – Interactive Map

## Top Comment Categories

- Traffic
- Safety
- Bike/Ped




https://experience.arcgis.com/experience/fe2fb1a983d84c549128b57c0cffae30?draft=true

CITY OF ASPEN

# Stakeholder Workshop

# **Stakeholder Workshop** – Stakeholder Input on Transportation Needs

## Study Team

- City of Aspen
- Jacobs Engineering

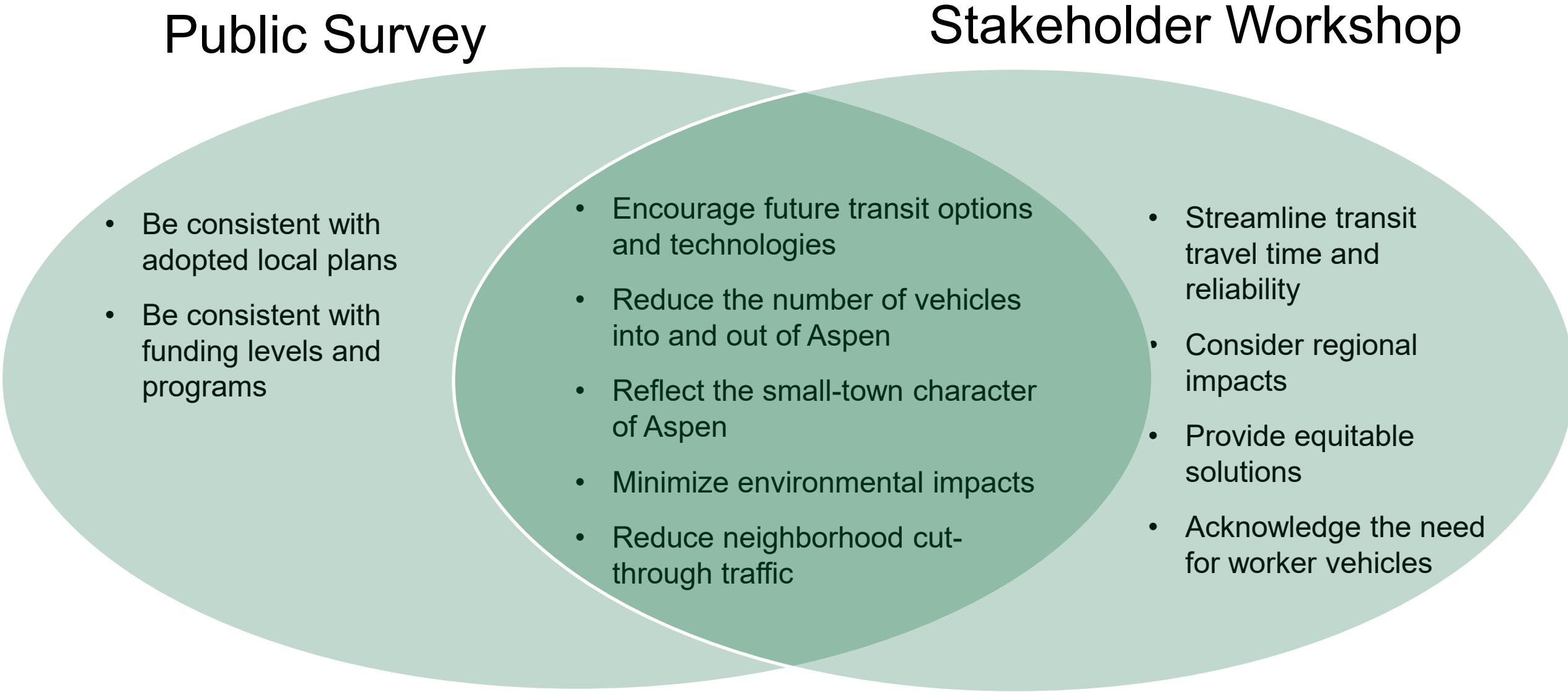
## Stakeholder Organizations

- CDOT
- EOTC
- RFTA
- Aspen School District
- Aspen Country Day School
- Town of Carbondale
- Town of Basalt
- Town of Snowmass
- Pitkin County
- City of Aspen – Engineering, Transportation, Parks, Parking
- Aspen Institute
- Aspen Ski Co
- Aspen Fire
- Aspen Police
- Aspen Ambulance District
- Pitkin County Sheriff
- Colorado State Patrol
- Pitkin County Emergency Management

# **Stakeholder Workshop** – Prioritization of Needs

| Votes | Needs |
|---|---|
| 13 | Improve Transit Efficiency and Travel Times |
| 11 | Reduce Single Occupancy Vehicles Use/Improve Multimodal Options (Pedestrian, Bicycle, Transit) |
| 9 | Improve Emergency Access and Response Times |
| 9 | Reduce Community Evacuation Time |
| 8 | Improve Safety/Reduce Crashes |
| 8 | Improve Infrastructure Condition (Roads, Bridges) |
| 6 | Provide Faster Travel Times/Improve Bottleneck Operations |
| 5 | Provide Travel Time Reliability |
| 2 | Improve Park-n-Ride Parking Capacity (Regionally) |
| 0 | Improve Signage and Accident/Travel Delay Notifications |

# **Stakeholder Workshop** – Stakeholder Input on Community Goals



CITY OF ASPEN

# Project Limits

# Project Limits

CITY OF ASPEN

# Next Steps

# **Next Steps** – Meetings

- EOTC Briefing (5/15)
  - Report out on Pre-NEPA tasks and activities
  - Listening session regarding project limits, needs and goals
- Transportation Coalition Presentation (5/1)
  - Present transportation needs information
- CDOT/FHWA Coordination Meeting (TBD)
- City Council Meeting (6/24)
  - Present draft Purpose and Need Statement
  - Request Council direction on next steps

# **Next Steps** – EIS for New Alternative(s)

Draft purpose and need for City/CDOT/FHWA review

City funding authorization

Initiate NEPA

# **Next Steps** – Preferred Alternative Reevaluation

City funding authorization

Consult with CDOT/FHWA on PA modifications (i.e. platform width, new technology)

Initiate Re-evaluation