2014 UPDATE
Regional Travel Patterns Study

Regional Forum – October 17, 2014
Outline

• The Project
• Previous Surveys & Outcomes
• Results – Highlights & Forecasts
• Implications for this Region
2014 Update

THE PROJECT
Regional Travel Patterns Study Area
Two Rounds of Survey Research

1. “Winter” (March)
   - Paper + On-Line (web)
   - English + Spanish
   - Employer Survey
   - Employee Survey

2. “Summer” (July)
   - Paper + On-Line (web)
   - English + Spanish
   - Employer Survey
   - Resident Survey
Survey Data

• Where you live, where you work
• Mode of travel to work & other trips
• Employer policies
  – Bus passes, free parking
  – Telecommuting
• Local environment for walking & biking
• Transit use patterns, etc.
  – VelociRFTA use
  – First & last mile
  – Park ‘n ride use
• Demographic information
2014 Update

PREVIOUS SURVEYS & OUTCOMES
1998 – 1st Regional Travel Patterns Study

- Winter Only
- Healthy Mountain Communities

2004 – 2nd Regional Travel Patterns Study

- Winter Only
- Garfield County

2014 – 3rd Regional Travel Patterns Study

- Winter + Summer
- RFTA
1998 – 1st Regional Travel Patterns Study

- An interdependent region
- Upstream intercity commuter flows
- Long driving commutes
- Potential options for regional transit

one car / one job
2004 – 2\textsuperscript{nd} Regional Travel Patterns Study

- Effects of recession on transit
- Low levels of active transportation
- Declining % live & work in same place
- Potential role of transit passes

only 41\%
2014 Update

RESULTS: HIGHLIGHTS & FORECASTS
Mode Shift - Commuting
Regional – Winter (March)

2004
- 80% cars
- 8% active
- 12% bus

2014
- 74% cars
- 7% active
- 19% bus

+ 60%

Source: Project Data
2014 Commuting Mode Share
Regional – By Season

July:
- Cars: 67%
- Active: 17%
- Bus: 17%

March:
- Cars: 74%
- Active: 7%
- Bus: 19%

Source: Project Data
2014 Personal Trips* Mode Share
Regional – By Season

Source: Project Data

*all trips other than commuting and work trips

July
- 64% cars
- 27% active
- 9% bus

March
- 70% cars
- 23% active
- 8% bus
Travel Trends 2004 - 2014

RFTA Ridership
Regional – All Routes

July: + 53%
March: + 28%

SR 82 Traffic
Glenwood Springs

July: + 2%
March: + 0%

Source: RFTA and CDOT
2014 Update

LOCAL ACTIVE MODE SHARE
Winter Active Mode Share
(commute trips only)

- **Parachute/ Battlement Mesa**
  - Walk: <1%
  - Bike: <1%

- **Rifle**
  - Walk: 2%
  - Bike: 2%

- **Silt**
  - Walk: <1%
  - Bike: <1%

- **New Castle**
  - Walk: 1%
  - Bike: <1%

- **Glenwood Springs**
  - Walk: 7%
  - Bike: 7%

- **Basalt**
  - Walk: <1%
  - Bike: 1%

- **Carbondale**
  - Walk: 2%
  - Bike: 5%

- **Aspen**
  - Walk: 20%
  - Bike: 1%

- **Snowmass Village**
  - Walk: 5%
  - Bike: 1%
Summer Active Mode Share
(commute trips only)

- Parachute/Battlement Mesa:
  - Walk: 3%
  - Bike: 5%

- Rifle:
  - Walk: 8%
  - Bike: <1%

- Silt:
  - INSUFFICIENT DATA

- New Castle:
  - Walk: <1%
  - Bike: <1%

- Glenwood Springs:
  - Walk: 11%
  - Bike: 8%

- Carbondale:
  - Walk: 3%
  - Bike: 17%

- Basalt:
  - Walk: <1%
  - Bike: <1%

- Snowmass Village:
  - Walk: 6%
  - Bike: 11%

- Aspen:
  - Walk: 27%
  - Bike: 17%
Summer Active Mode Share
(all trips)

Parachute/ Battlement Mesa
Walk 3%  Bike 4%

Rifle
Walk 12%  Bike 1%

Silt
INSUFFICIENT DATA

New Castle
Walk <1%  Bike <1%

Glenwood Springs
Walk 15%  Bike 7%

Carbondale
Walk 9%  Bike 23%

Basalt
Walk 22%  Bike 4%

Snowmass Village
Walk 8%  Bike 13%

Aspen
Walk 23%  Bike 16%
2014 Update

BUS MODE SHARE
What Drives Bus Mode Share?

• Service levels
• Bus passes
• Parking costs
Mode Share by Bus Pass Ownership
(Regional Commuting – March)
Mode Share By Employer-Provided Pass
Regional Commuting – March

- Drive Alone
- Carpool
- Bus
- Walk
- Bike

Legend:
- No Employer Provided Pass
- Employer Provided Bus Pass (partial or full cost)
2014 Bus Pass Ownership

- No Bus Pass, 72%
- Bus Pass, 28%
- Purchased by Employer, 18% (all or part)
Bus Pass or Stored Value Card Ownership

- Percent of employees with a bus pass dropped slightly since 2004
- Percent of employer-provided bus passes increased slightly since 2004
Employees who must park in paid lots are 4 times as likely to take the bus to work than those who can park for free at work.
91% of employees in the region can park for free at work
Update

VEHICLE MILES OF TRAVEL & TRAFFIC
March Traffic Count Trends Since 2004

Traffic volumes in the Valley have changed very little since 2004
- -3% at Silt (I-70)
- 0% at Glenwood (Hwy 82)
- +4% near Snowmass (Hwy 82)
Traffic volumes in the Valley have changed very little since 2004
- 1% at Silt (I-70)
- +2% at Glenwood (Hwy 82)
- +11% near Snowmass (Hwy 82)
VMT – Vehicle Miles of Travel

- Travel Demand
- Person Trips
- Travel Behavior
- Trip Lengths
- Vehicle Miles of Travel
- Traffic
VMT – Vehicle Miles of Travel

- Travel Demand
  - Person Trips
    - Travel Behavior
    - Trip Lengths
    - Vehicle Miles of Travel
    - Traffic

Population, jobs, economy
VMT – Vehicle Miles of Travel

- Travel Demand
- Person Trips
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  - Trip Lengths
  - Vehicle Miles of Travel
  - Traffic

mode share
VMT – Vehicle Miles of Travel

- Travel Demand
- Person Trips
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land development patterns, live/work
Daily VMT – Western States

2000 - 2012

US: +8%
CO: +12%
ID: +21%
MT: +20%
WY: +15%

2006 - 2012

US: -2%
CO: -4%
ID: +7%
MT: +6%
WY: -2%

Source: FHWA and US Census Bureau
Daily Per Capita VMT – Western States

2000 - 2012

US  CO  ID  MT  WY

-3%  -7%  -2%  +8%  -2%

2006 - 2012

US  CO  ID  MT  WY

-6%  -6%  -1%  -1%  -8%

Source: FHWA and US Census Bureau
Daily VMT – Colorado

2000 - 2013

- Colorado: +13%
- Eagle: +13%
- Pitkin: +13%
- Garfield: +32%

2006 - 2013

- Colorado: -1%
- Eagle: -3%
- Pitkin: +8%
- Garfield: -8%

Source: Colorado DOT
Daily Per Capita VMT – Colorado

2000 - 2013

- Colorado: -6%
- Eagle: -6%
- Pitkin: +2%
- Garfield: +4%

2006 - 2013

- Colorado: -11%
- Eagle: -11%
- Pitkin: +2%
- Garfield: -19%

Source: Colorado DOT & DOLA
What Drives VMT

Demographics & Economics

- Labor Force Participation Rate
- Household Income
- Driver License Rate
- Vehicle Ownership
- Population

Traffic Enablers

- New Road Capacity
- Energy Subsidies
- Road Subsidies
- Sprawl
- Auto-Oriented Community Design
Employment
(thousands)

Eagle County

2004: 39.1
2008: 46.1
2012: 42.8

Pitkin County

2004: 21.6
2008: 23.9
2012: 22.3

Garfield County

2004: 31.8
2008: 41.4
2012: 37.7

[Oil and gas + construction]

Source: Bureau of Economic Analysis
Per Capita VMT Trends - Conclusions

• Per capita VMT has declined in this region
  – About 10% from 2004 – 2014
  – But, economics has been the major factor
Per Capita VMT Trends - Conclusions

• Will per capita VMT decline in future?
• Yes: mode shift + improved live/work ratios
  – But a growing economy will cancel this out for a decade or so
  – And lower fuel costs may encourage driving in the short term
Project Estimates

• Per Capita VMT in 2020: no change from 2013
• Per Capita VMT in 2035: 10% less than in 2013
VMT = Per Capita VMT \times \text{Population}
2035 Population Forecast

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado (millions)</td>
<td>5.187</td>
<td>7.364</td>
</tr>
<tr>
<td>Eagle Co (thousands)</td>
<td>51.9</td>
<td>90.3</td>
</tr>
<tr>
<td>Pitkin Co (thousands)</td>
<td>17.2</td>
<td>27.7</td>
</tr>
<tr>
<td>Garfield (thousands)</td>
<td>56.2</td>
<td>100.7</td>
</tr>
</tbody>
</table>

Source: Colorado DOLA
Daily Traffic – SR 82
Potential Demand in 2035

<table>
<thead>
<tr>
<th>Location</th>
<th>2013</th>
<th>2035</th>
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</thead>
<tbody>
<tr>
<td>Glenwood Springs</td>
<td>28,000</td>
<td>42,000</td>
</tr>
<tr>
<td>Carbondale</td>
<td>18,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Basalt</td>
<td>19,000</td>
<td>27,600</td>
</tr>
<tr>
<td>Aspen</td>
<td>25,000</td>
<td>35,300</td>
</tr>
</tbody>
</table>

Source: Project Estimates
Update

IMPLICATIONS FOR THE REGION
Regional Employment Centers

% of workforce living in town

- 62%
- 39%
- 30%
- 37%
Regional Employment Centers

% of residents who work in hometown:
- 37%
- 63%
- 68%
- 86%
Local Priorities

- Walk / bike facilities & active environments
  - local circulation – economic vitality
  - active living / public health
  - BRT access

- Local / circulation transit
  - local circulation
  - BRT access

- Local street networks
Transit System Development

• First and last mile (access to transit)
  – Park ‘n ride capacity & parking costs
  – Active transportation facilities & settings
  – Local bus circulation

• Demand will be driven by population & employment growth more than by mode shift

• However, there will be continued mode shift

• When should there be BRT service between Glenwood and Rifle?
Challenges

• Corridor transit demand could outpace RFTA revenue growth
• Traffic growth will be more local than regional
• Better local street networks/connectivity needed but little or no $$ available for that
• “State-of-good-repair” projects will be critically important but attract little support
• Further decentralization of development would be expensive
Community Profiles

CARBONDALE
Travel Patterns Community Profile

COMMUNITY GEOGRAPHY
The Carbondale community profile includes data collected for the following transportation analysis zones (TAZs) mapped at right:
- Carbondale

The "Region" encompasses all 33 TAZs in the region, including all of Garfield and Pitkin Counties and the portion of Eagle County within the Roaring Fork Valley. Data presented was collected from the 2010 Census and 2011-2015 American Community Survey (ACS) 5-Year Estimates.

HOUSING/DEMOGRAPHIC DATA

<table>
<thead>
<tr>
<th>Carbondale</th>
<th>Region</th>
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<tbody>
<tr>
<td>Median Income</td>
<td>$42,400</td>
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<tr>
<td>Population 5 years or older</td>
<td>89%</td>
</tr>
<tr>
<td>Households with children under 18</td>
<td>27%</td>
</tr>
<tr>
<td>Median household income</td>
<td>$50,000</td>
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NEW CASTLE
Travel Patterns Community Profile

COMMUNITY GEOGRAPHY
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- New Castle

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SNOWMASS VILLAGE
Travel Patterns Community Profile

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COMMUTING DATA OF RESIDENTS

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<th>Glenwood Springs</th>
<th>Carbondale</th>
<th>Snowmass Village</th>
<th>Rural Eagle County</th>
</tr>
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<tbody>
<tr>
<td>Aspen</td>
<td>4%</td>
<td>23%</td>
<td>3%</td>
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<td>Glenwood Springs</td>
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2014 Update

THANK YOU