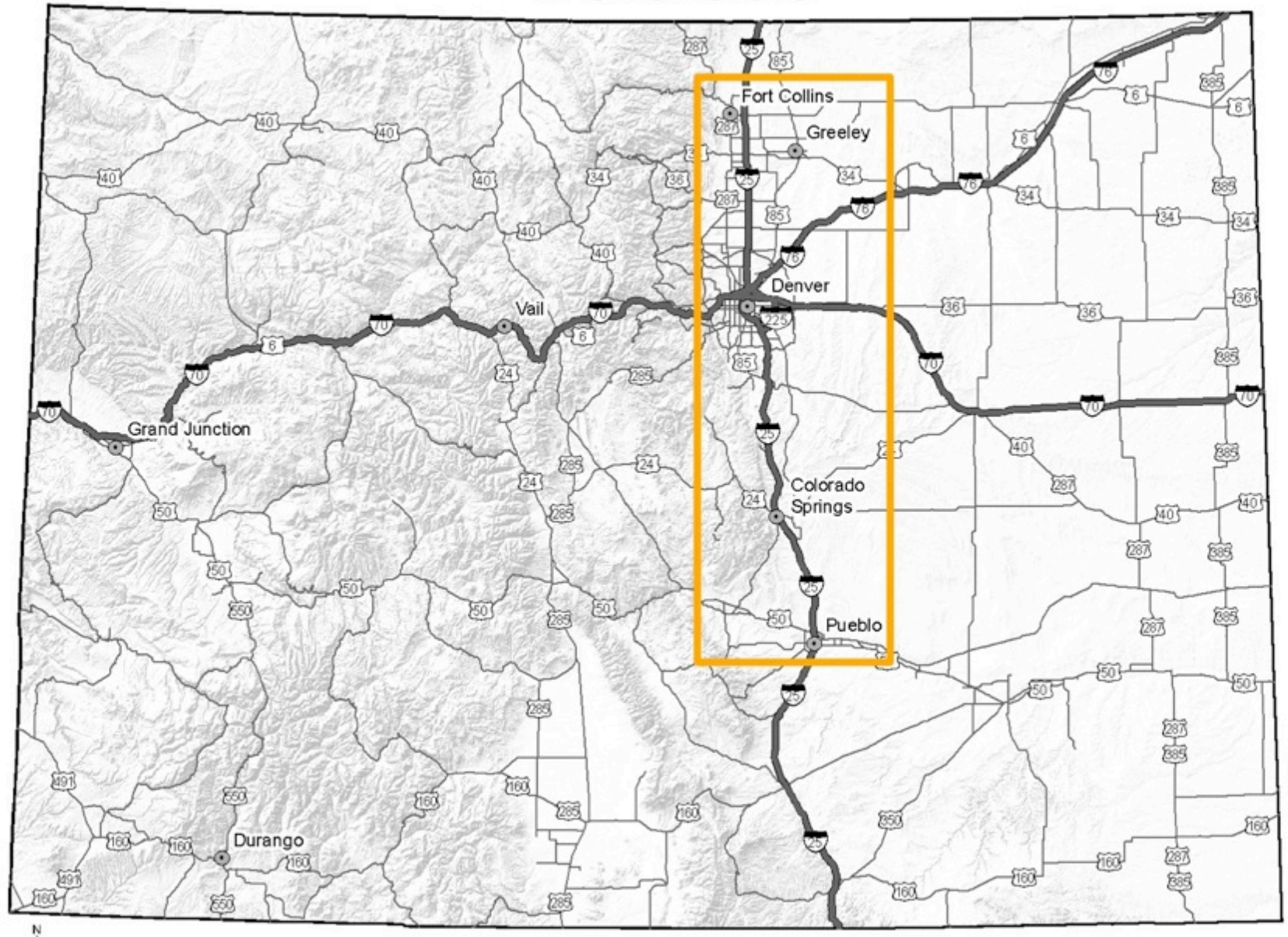
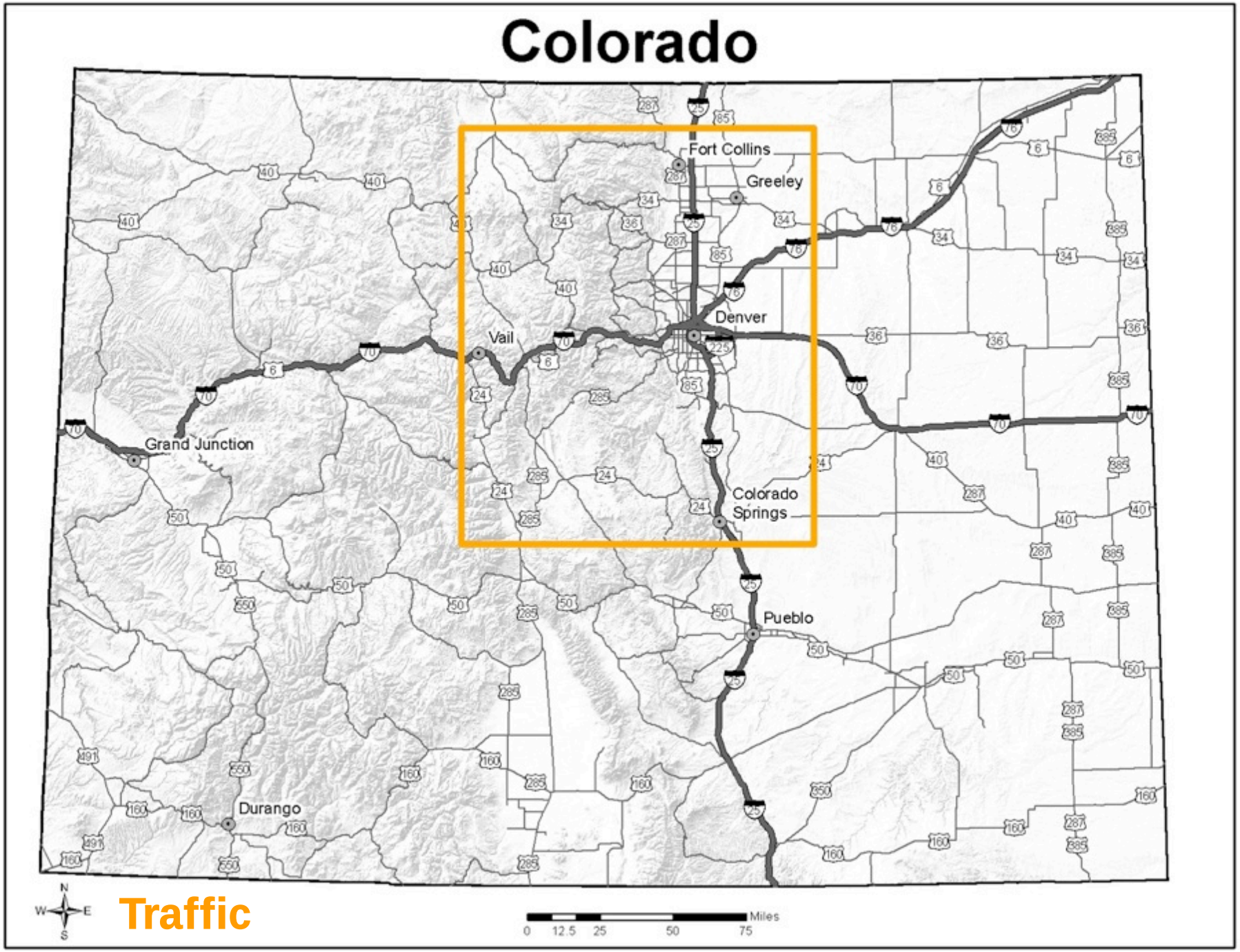
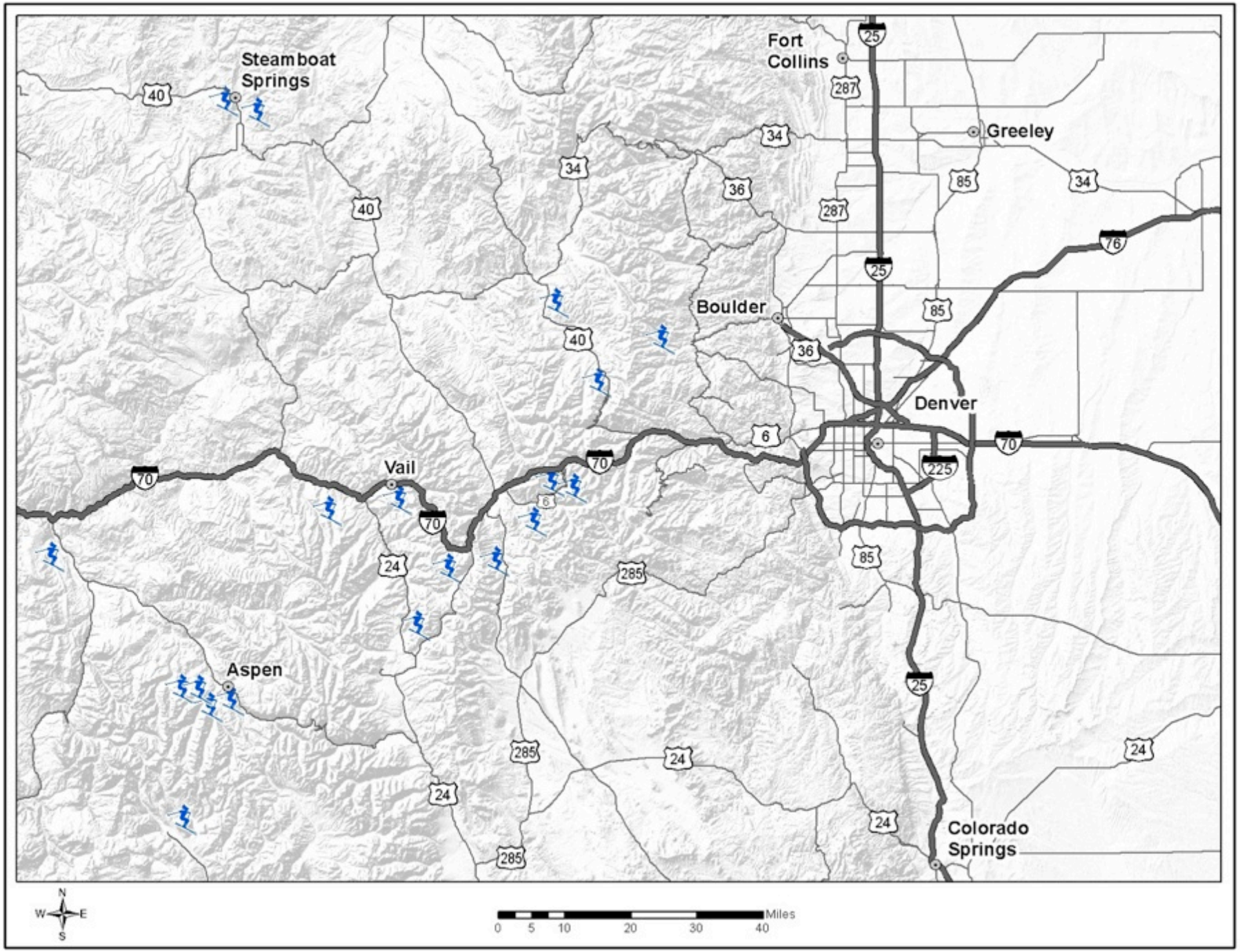
Colorado Congestion Management and “Big Data”

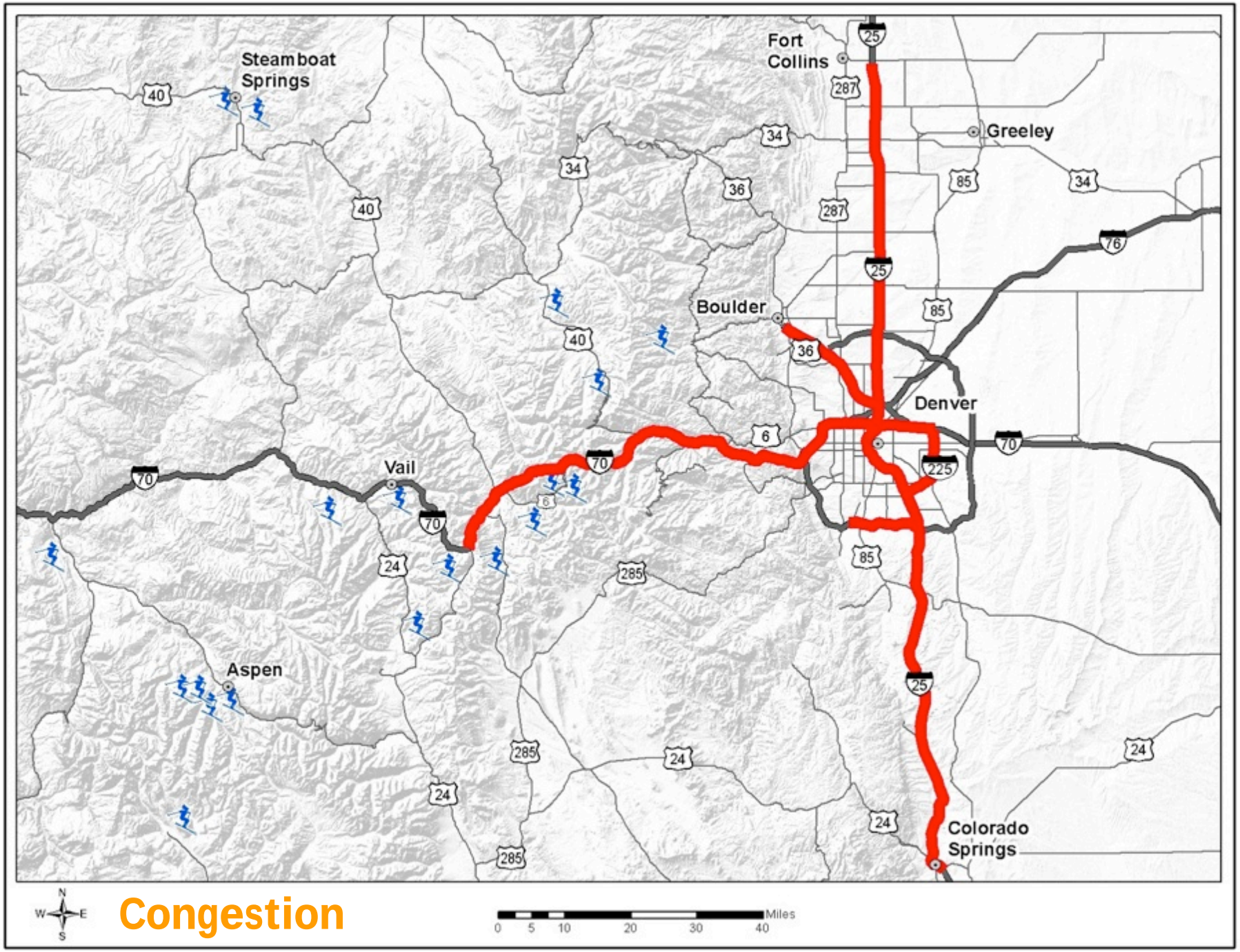
Colorado



Population

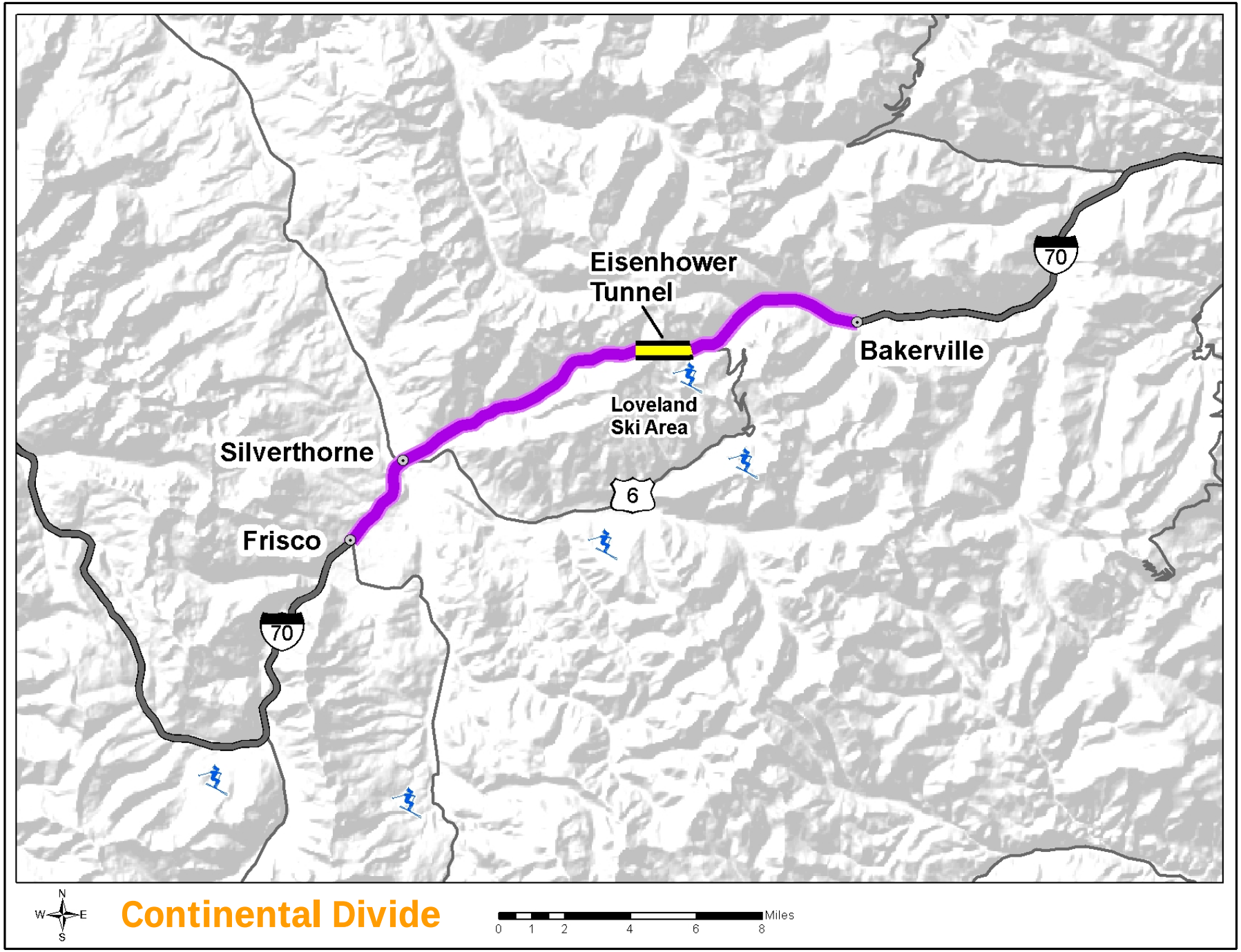

Colorado
Fort Collins
Greeley
Denver
Vail
Grand Junction
Colorado Springs
Pueblo
Durango
Traffic
N
W
E
S
0
12.5
25
50
75
Miles


Steamboat Springs
Fort Collins
Greeley
Boulder
Denver
Vail
Aspen
Colorado Springs
40
25
287
34
36
85
76
70
6
225
24
285
N
W
E
S
Miles
0 5 10 20 30 40

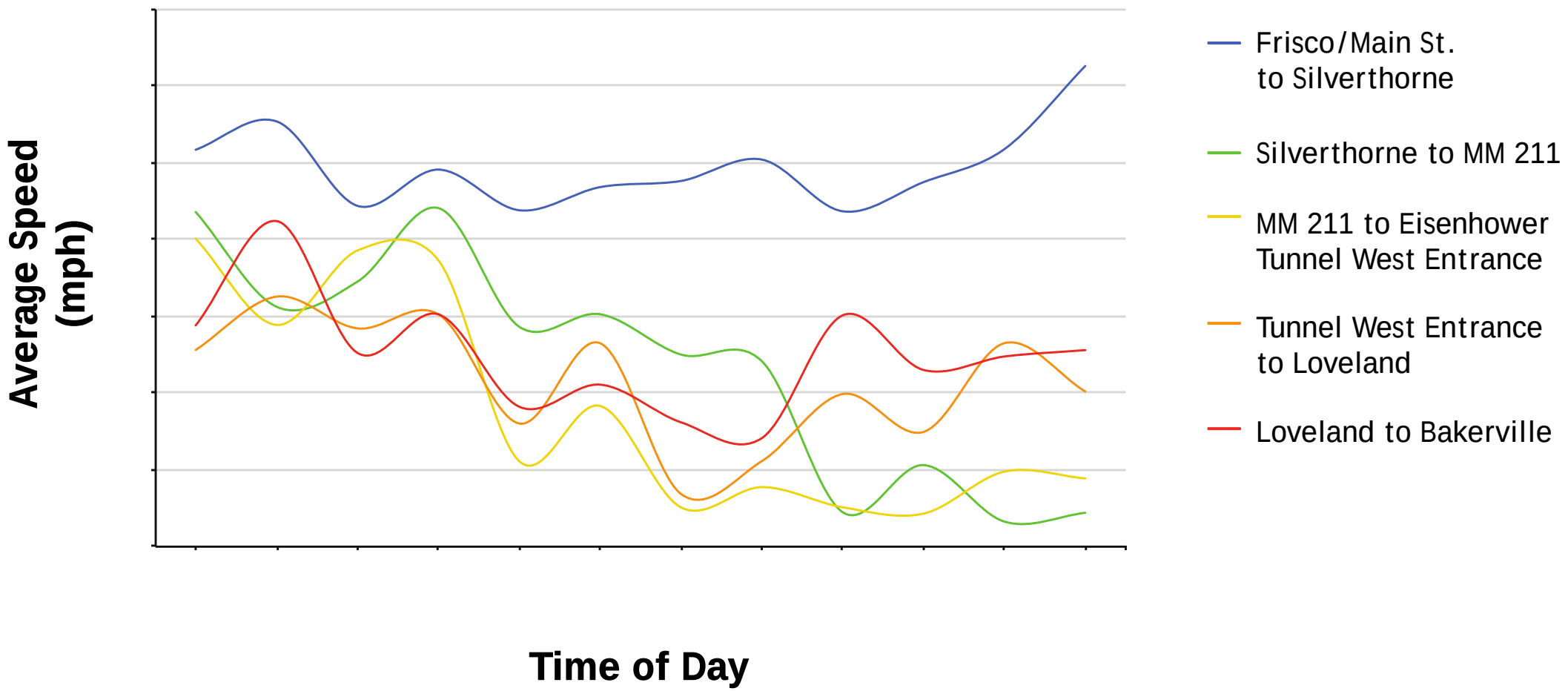

Steamboat Springs
Fort Collins
Greeley
Boulder
Denver
Vail
Aspen
Colorado Springs
Congestion
N
W
E
S
Miles
0 5 10 20 30 40

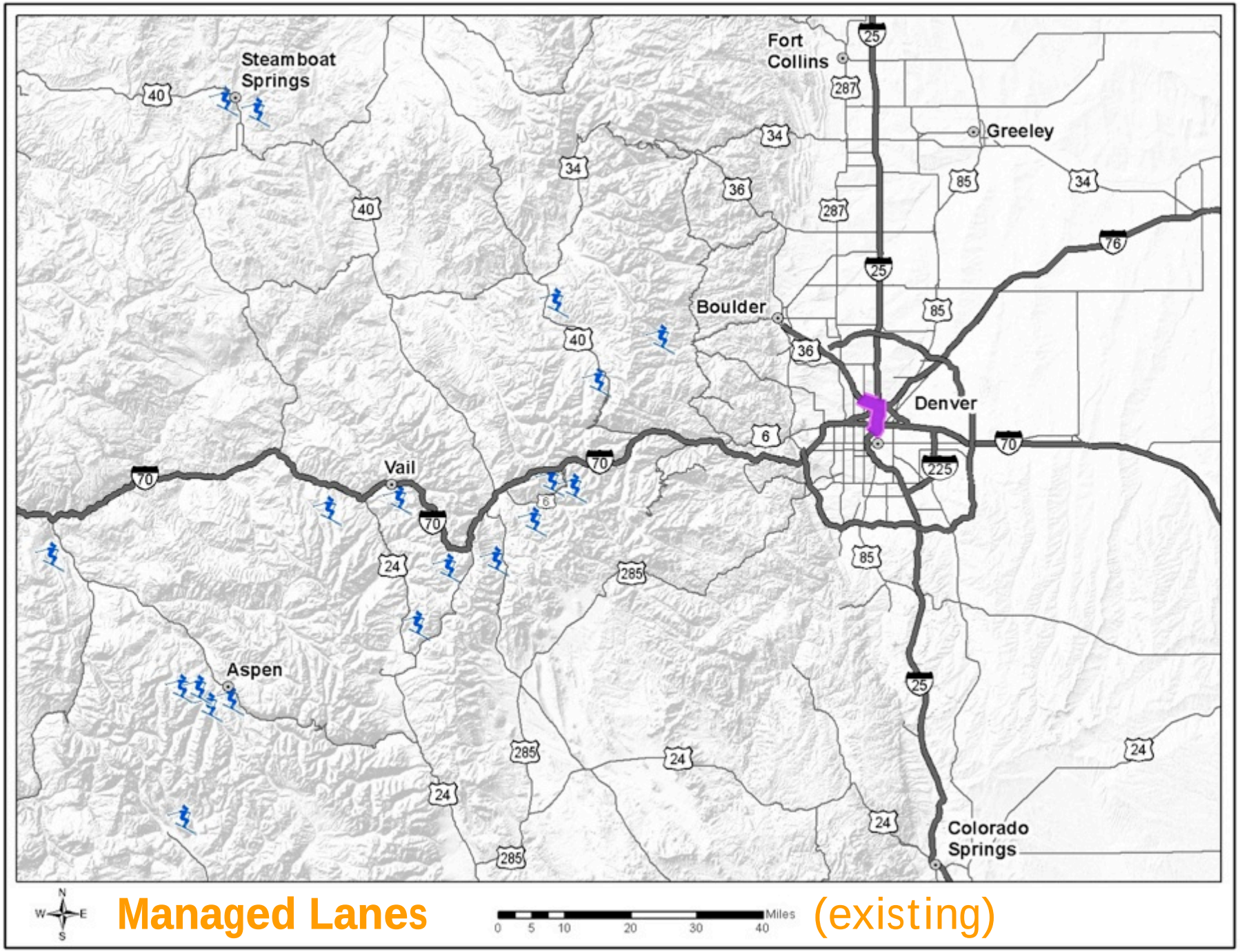
Congestion Mitigation Measures

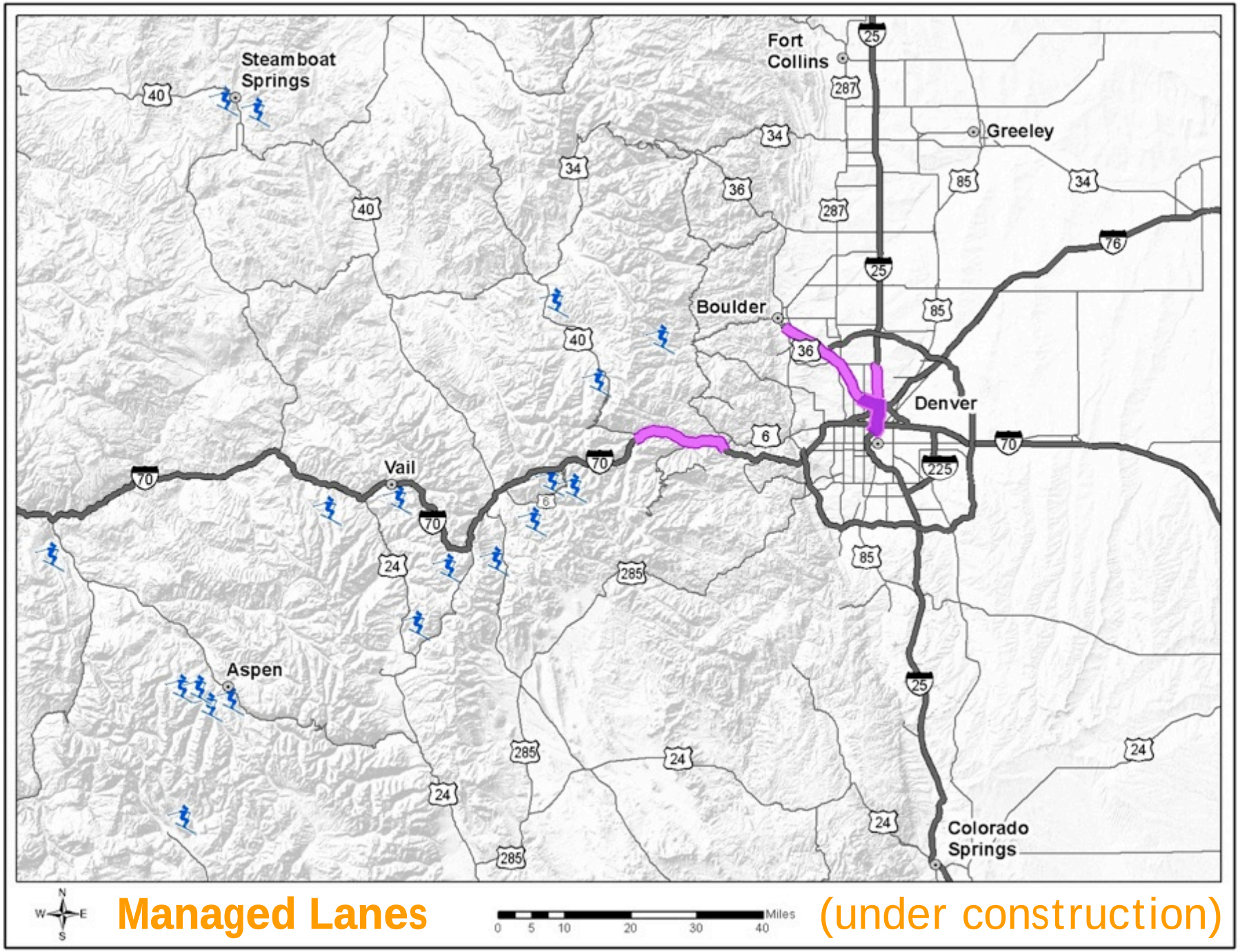
- Managed lanes
- Operations command center / situational awareness software
- Traveler information tools (URHub, VMS, website, etc.)
- Active corridor management efforts
- Enhanced analytical tools
  - statewide travel model
  - short-term prediction tools
  - use of GPS/cell data and analytics, etc.

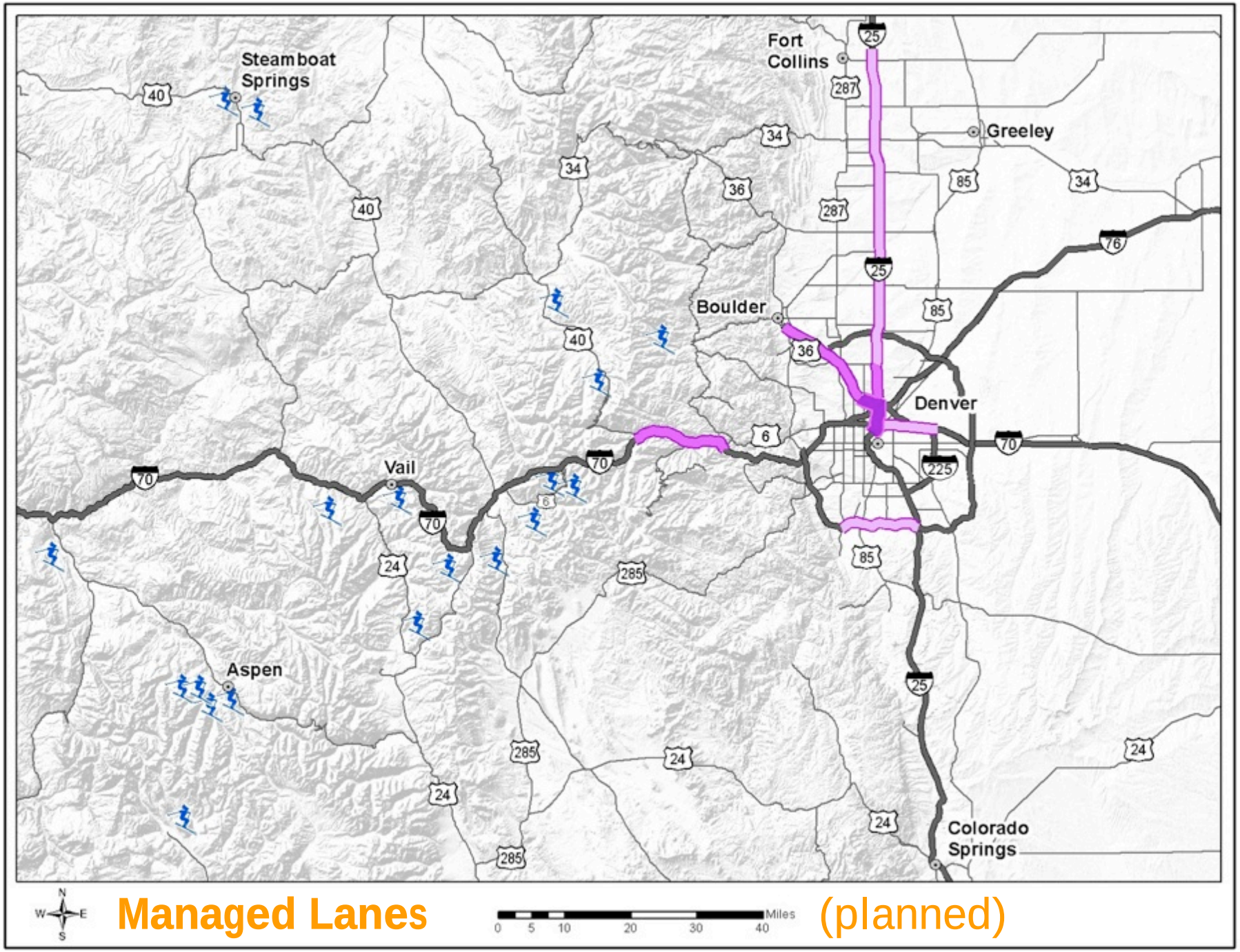

Eisenhower
Tunnel
Bakerville
70
Loveland
Ski Area
Silverthorne
6
Frisco
70
N
W
E
S
Continental Divide
Miles
0 1 2 4 6 8

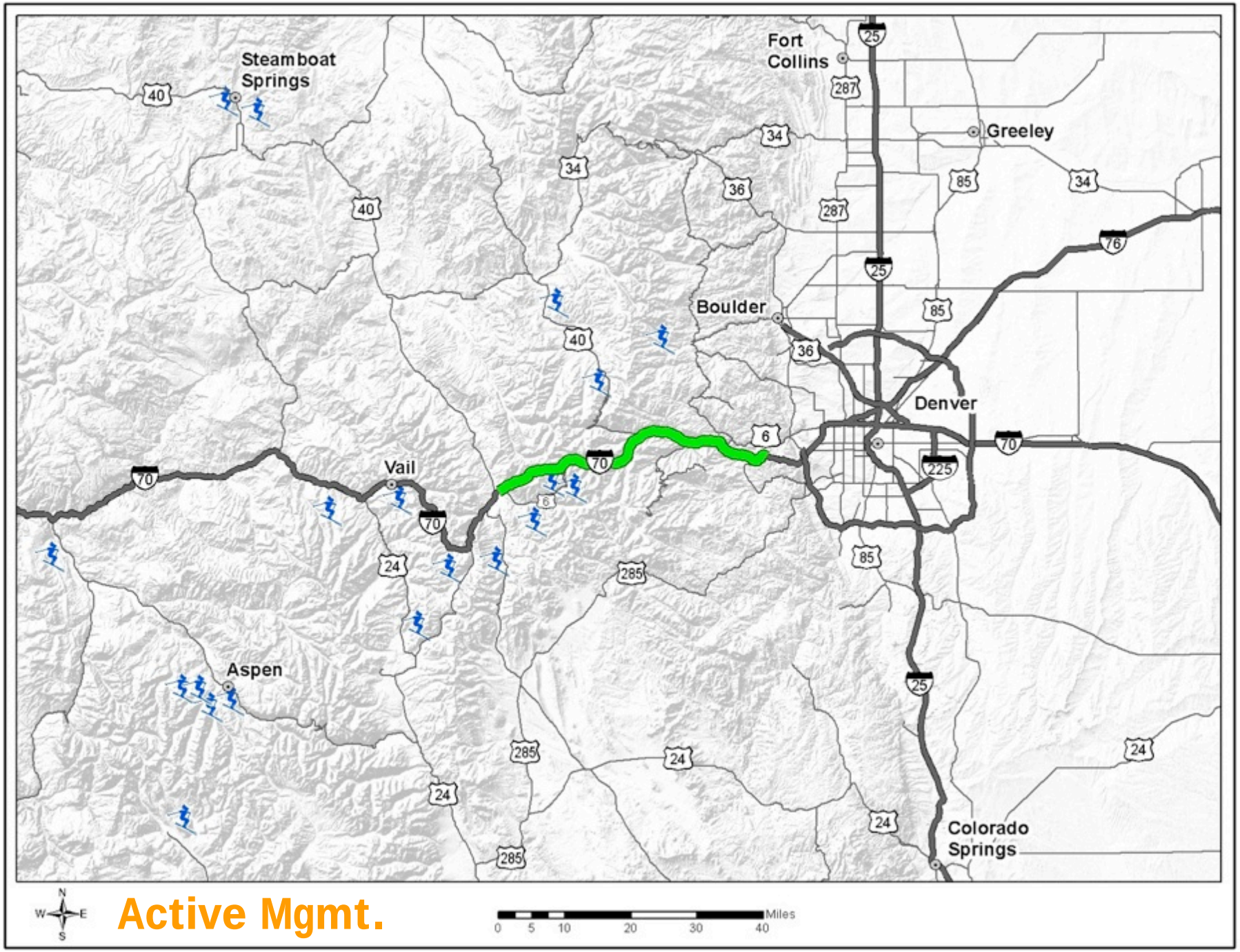
Speeds Crossing the Continental Divide

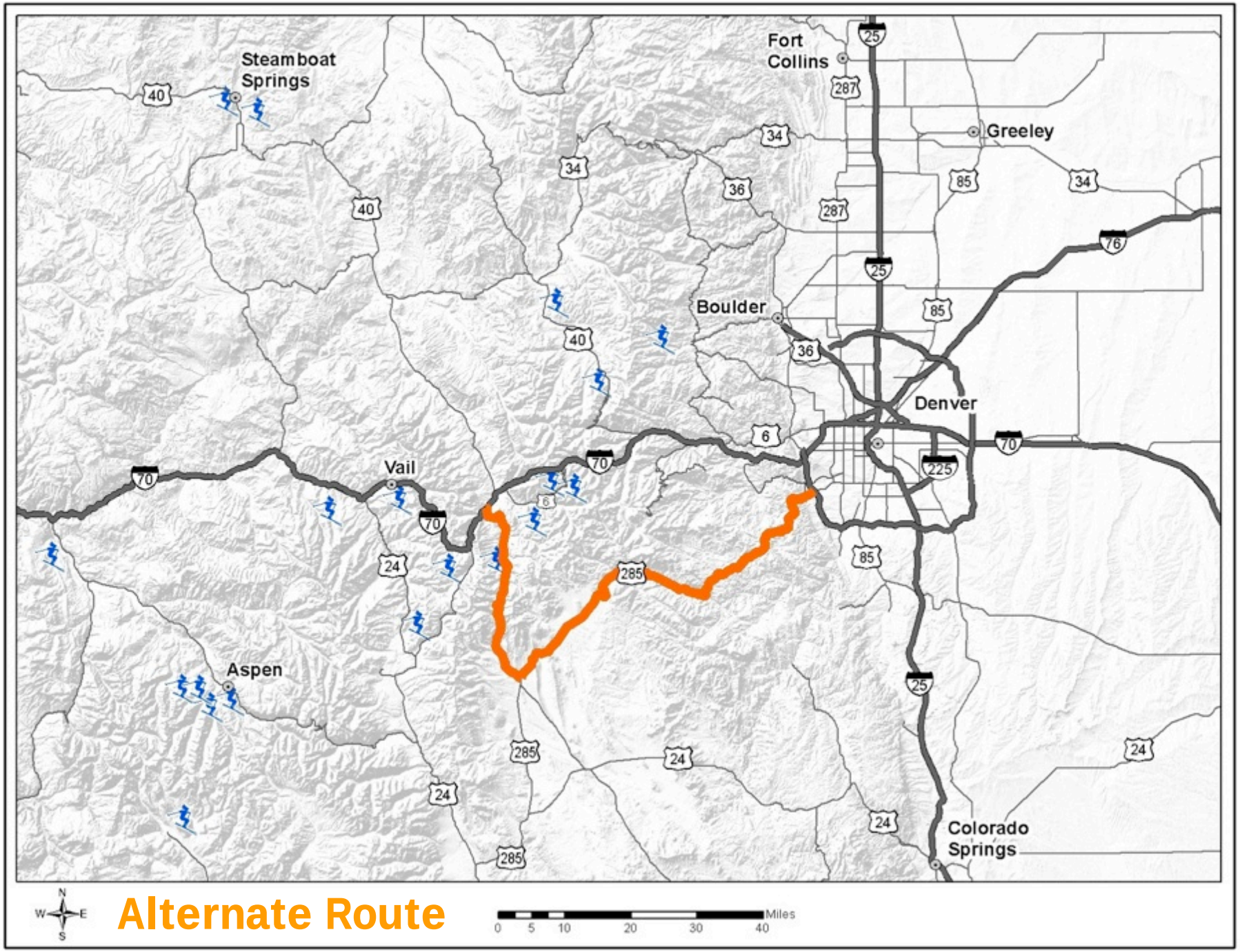


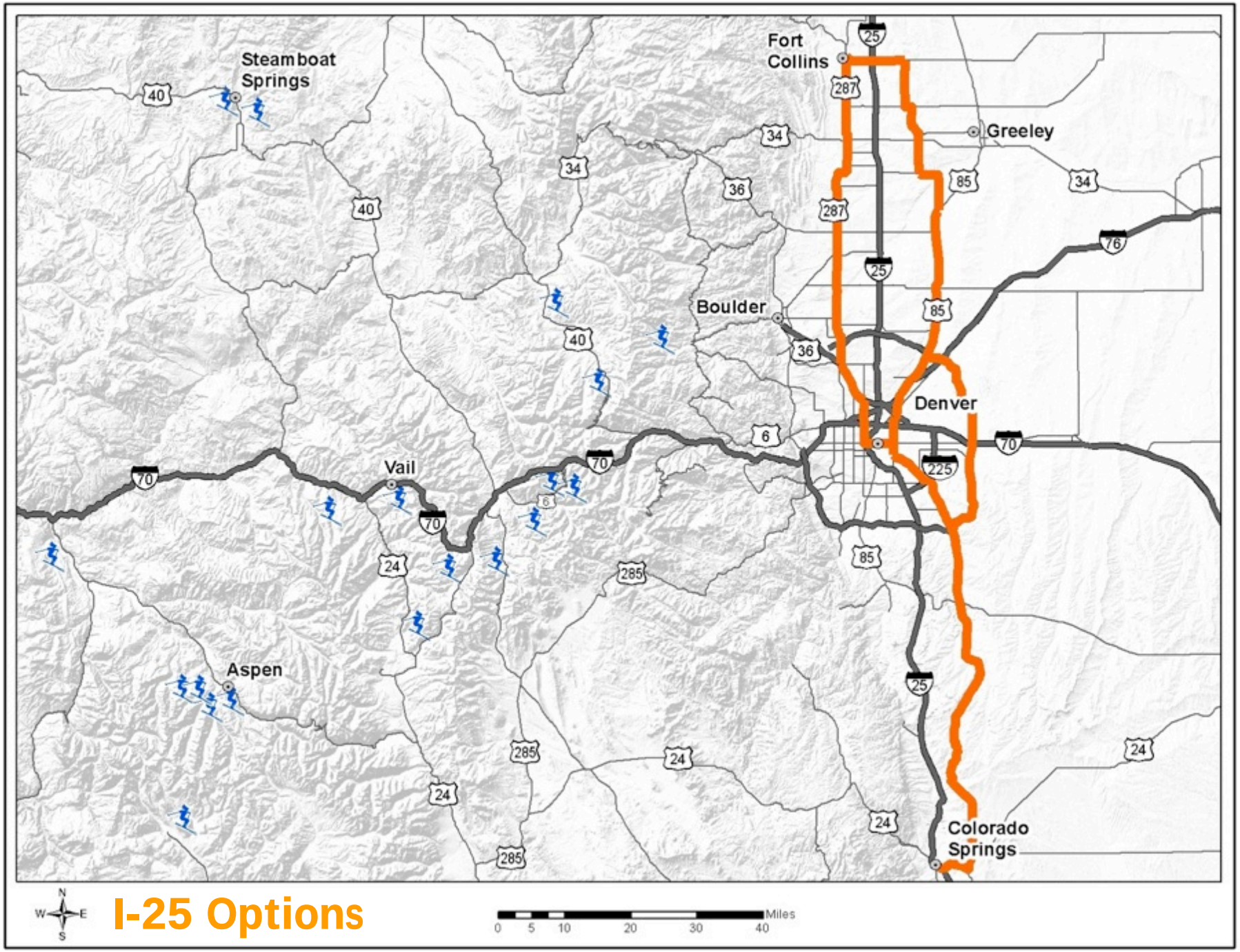

Steamboat Springs
Fort Collins
Greeley
Boulder
Denver
Vail
Aspen
Colorado Springs
Managed Lanes
(existing)
Miles
0 5 10 20 30 40
N
W E
S


Steamboat Springs
Fort Collins
Greeley
Boulder
Denver
Vail
Aspen
Colorado Springs
Managed Lanes
(under construction)
Miles
0 5 10 20 30 40


Steamboat Springs
Fort Collins
Greeley
Boulder
Denver
Vail
Aspen
Colorado Springs
Managed Lanes
(planned)
Miles
0 5 10 20 30 40
N
W E
S


Steamboat Springs
Fort Collins
Greeley
Boulder
Denver
Vail
Aspen
Colorado Springs
Active Mgmt.
Miles
0 5 10 20 30 40


Steamboat Springs
Fort Collins
Greeley
Boulder
Denver
Vail
Aspen
Colorado Springs
Alternate Route
N
W
E
S
0 5 10 20 30 40 Miles


Steamboat Springs
Fort Collins
Greeley
Boulder
Denver
Vail
Aspen
Colorado Springs
I-25 Options
N
W
E
S
Miles
0 5 10 20 30 40

Concluding Thoughts

- This project will teach us things we don't know right now
- The data we'll purchase for this effort will be widely used at CDOT
- We're sure we in an experimental phase
- We know the data vendors are in the same boat

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