



Meeting Type & Number: PLT Meeting 15  
 Meeting Date: December 13, 2013  
 Meeting Time: 10:00 AM to 1:00 PM  
 Location: CDOT HQ and Webinar  
 Prepared by: Beth Vogelsang/Mike Riggs  
 Date published: January 13, 2014

**Attendees:**

<b>Attendees ( * - PLT Member, ** - PLT Alternate)</b>		
David Krutsinger, CDOT DTR*	Mary Jane Loevlie, I-70 Coalition*	Terri Binder*
Mark Imhoff, CDOT DTR	Flo Raitano, Summit County*	Tom Breslin, Clear Creek County*
Tracey MacDonald, CDOT DTR	Wendy Wallach, Parsons	Pete Lombardi
Angie Drumm, CDOT*	Randy Jensen, FHWA*	Cindy Neely, Georgetown*
Nick Farber, CDOT	Jill Ryan, Eagle County	Andy Mountain, GBSM
David Singer, CDOT	Miller Hudson, CMG	Smith Myung, Cambridge Systematics
Dan Gibbs, Summit County Commissioner	Patrick Byrne, Colorado Ski Country USA	Mike Riggs, AZTEC/TYP SA*
Joe Mahoney	Gregg Hall, Town of Vail	Beth Vogelsang, OV Consulting
Eva Wilson, Eagle County*	Tim Mauk, I-70 Coalition*	Carol Kruse, USFS

**1. Introduction to the Meeting**

David Krutsinger opened the meeting and welcomed the PLT to the webinar meeting. All attendees introduced themselves.

David reviewed the meeting agenda that included:

- Modeling Update
- Summary of County Meeting Input
- Discussion of Implementation Next Steps
- AGS Study Finalization

**2. Public Comment**

There were no comments from the public.

**3. Modeling Update**

Smith Myung presented a more detailed explanation of several elements of the ridership model including the market for shuttle diversion, maglev ridership run results and AGS mode share.

Smith explained that the market for shuttles in the corridor today is about 323,000 trips per year, not including charter services. If you include bus trips, the overall market is

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roughly 465,000 – 665,000 annual trips by 2035. The assessment indicates that 11-14% or 64,000-110,000 trips would be diverted from bus/van/shuttle to AGS in 2035.

A PLT member asked whether those numbers accounted for winter and summer seasons? It was answered that yes, they did based on current scheduling of services. The PLT member explained that CME routing and service has been approved for more frequent service.

A PLT member asked if the model was truly capturing the full private market and Smith explained that he felt it was.

A PLT member commented that it seemed that diversion numbers would be higher when you extend the AGS to DIA because the travel cost would be \$0.26 per mile vs. \$0.70 cents or higher per mile.

Smith explained that modeling runs have been completed on High Speed (HS) Maglev, Medium Speed (MS) Maglev and High Speed Rail for segments and full scenarios now, including the full Denver Metro and I-25 system and DIA to ECRA. HS Maglev for DIA to ECRA stand alone is estimated to generate 3.58 million riders, but HS Maglev for the full Denver Metro and I-25 system combined with the line from Golden to ECRA is estimated at 4.64 million.

As a comparison, the HS Maglev from Breckenridge to DIA with the full ICS system in place generates 2.91 million riders and HS Rail from Breckenridge to DIA with the full ICS system in place generates only 2.68 million. An additional comparison was made then for a standalone HS Maglev from Breckenridge to DIA and ridership estimates were 1.78 million, a difference of 1.13 million riders.

Ridership results were also broken into peak weekend vs. off-peak weekday travel. For the HS Maglev hybrid alignment from ECRA to Golden coupled with HS Rail for the ICS system, total ridership is projected at 6.2 million with peak weekend day trips at 42,100. Comparatively, weekday trips are far fewer at 12,700 reflecting the resort related travel demand in the corridor.

Smith also explained that AGS Mode Share is derived from the 12.4 million vehicular trips estimated to travel through the EJMT tunnel in 2035. At 2.4 persons per vehicle and excluding truck traffic, there are a projected 24,000,000 eligible person trips through the EJMT tunnel in 2035. Depending on whether AGS is a HS or MS technology or a stand-alone system or working in conjunction with the full ICS Front Range system, the eligible person trips diverted from auto to AGS is between 6.4% and 26%. It is difficult to determine the correct diversion percentage because there is no observed data in the US to draw from and European and Asian HSR systems serve different markets. Currently, mode share capture rates in France are about 9%, Spain 38% and Great Britain and Germany 6-8%.

A PLT member asked whether an effort was made to determine what percent diversion is represented in the peak weekend day ridership projection of 42,000 riders. What

percent of the peak weekend day was the 42,000? The answer was not known based on the current assessment.

A PLT member asked whether there were examples of mode share splits in rural areas and it was answered that there were not and that most examples are from urban systems.

A PLT member asked why Spain's mode share split was so high and it was discussed that perhaps the service and culture of Spain contributed to higher rail ridership and mode share split.

#### **4. Summary of County Meeting Input**

Beth Vogelsang provided an overview of the third and final round of County Meetings held in November 2013. The purpose of the meetings was to highlight the overall study findings on technology, alignment, cost and ridership estimates and to define the preferred station locations for each county based on their input, criteria evaluation and related technical study findings.

Beth reviewed that the best performing alignment for the corridor was found to be the hybrid maglev alignment serving Summit County at Keystone, Breckenridge and Copper Mountain with an estimated cost of \$13.3 billion from Golden to ECRA.

Beth shared the findings of the ICS also near conclusion explaining that the full-vision scenario would run from Fort Collins south to Pueblo for roughly \$14 billion and 12.8 million riders and from DIA to ECRA for \$13.3 billion and about 4.6 million riders. This scenario would include a connection across I-76 from DIA to the West Suburban station in Golden making a one-seat ride possible from DIA to the mountains. Beth presented the alternative full-vision scenario that does not include the I-76 link but instead makes the east-west connection with an alignment along the E-470 right of way around the periphery of Denver to the south and back north to the West Suburban station in Golden. This scenario is anticipated to cost \$16.6 billion for the Denver metro and I-25 system and carry 12.8 million riders coupled with the mountain segment from Golden to ECRA for \$13.3 billion and 6.1 million riders. Ridership for the mountain corridor is actually anticipated to be higher with a southern connection for the ICS system.

A PLT member commented that the system would not see that high a ridership out of Douglas County as is being projected. Drivers from the south typically take Highway 9 over Hoosier Pass into Breckenridge.

Beth highlighted the key results from each of the County meetings:

Summit County – Generally accepted that resort demand is the primary ridership driver in Summit County and that Keystone, Breckenridge and Copper Mountain station locations support that. In order to divert traffic from I-70, these locations should be served. Silverthorne and Frisco present strong options for station locations because of their compatibility with increased land use densities and available acreage for development of mixed-uses.

Eagle County - The priority station locations in Eagle County of Vail, ECRA and the Traer Creek location in Avon were strongly supported as offering opportunity for development and serving transit needs well.

Jefferson County - The priority station for Jefferson County was defined at I-70 & 6<sup>th</sup> Avenue. The location presents the best opportunity for locating the station near the W Line station at the Jefferson County Building and for supporting development opportunities at the station.

Clear Creek County – The priority station location for Clear Creek County is defined as one of the three priority locations including Idaho Springs, Empire Junction and Georgetown. Each location offers opportunity and the County would prefer to retain all three at this phase of study.

Beth went on to highlight that potential development around the stations may prove to be an important element in future funding of the stations and that based on these priority locations, roughly 150 acres of land would be open to development or redevelopment with about 65% of that being “developable”. Based on a composite market value derived through the ICS and representative of a broad range of metro area developments, the estimated value of the potential square footage of development in the corridor would be over \$2 billion. Accommodating that potential growth should be considered in updates to local area transportation and land use plans, and the effects of a stronger local population base throughout the corridor should be considered.

## **5. Discussion of Implementation Next Steps**

David Krutsinger went on to highlight some of the current business/resort/tourism questions being considered by resort communities in the corridor today, including who is coming to the I-70 communities today and tomorrow? How to accommodate growth and expansion from today to tomorrow? And how to monitor the trends in visitation and use and adapt to change in the corridor communities?

A PLT member commented that the White River National Forest is one of the top three visited National Forests in the nation today. People are going to continue to come and would use AGS to access locations.

David explained an economics benefit comparison of the earlier Patty Silverstein report and the AGS B/C Analysis. The previous report identified the estimated cost of not acting to be a loss of \$839 million. The AGS report found the estimated benefit of carrying out the AGS system to be between \$1.2 and \$1.4 million. David asked that PLT members consider the role that transportation plays in competitiveness and growth and whether there is a clear preference for AGS and it's opportunity cost? Is there a business case for funding 5-10% of an AGS system through taxes and local fees?

A PLT member asked that perhaps the numbers in the table, loss vs. gain, be shown in different colors for easier interpretation.

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A PLT member commented that the ski industry currently sees \$3 billion/year in economic activity and more is being added.

A PLT member noted that CDOT asked for local contributions for the RAMP projects and received them. It is likely that with the level of anticipated benefit, local contributions would be made; perhaps property tax, sales tax or TIF.

## **6. AGS Study Finalization**

David Krutsinger reviewed the CDOT planning structure of which the AGS Study is a part. The AGS Study feeds the Statewide Transit Plan currently underway. The Traffic and Revenue Study will be completed and will provide insight as well as to the solutions to the corridor. These corridor studies will become part of the Statewide Transportation Plan scheduled to be completed in 2014.

## **7. Conclusion, Final Remarks & Next Steps**

The final AGS PLT meeting will be held in January 2014. Details of the meeting will be sent to the PLT.