

Presentation To

RMRA Feasibility Study Steering Committee

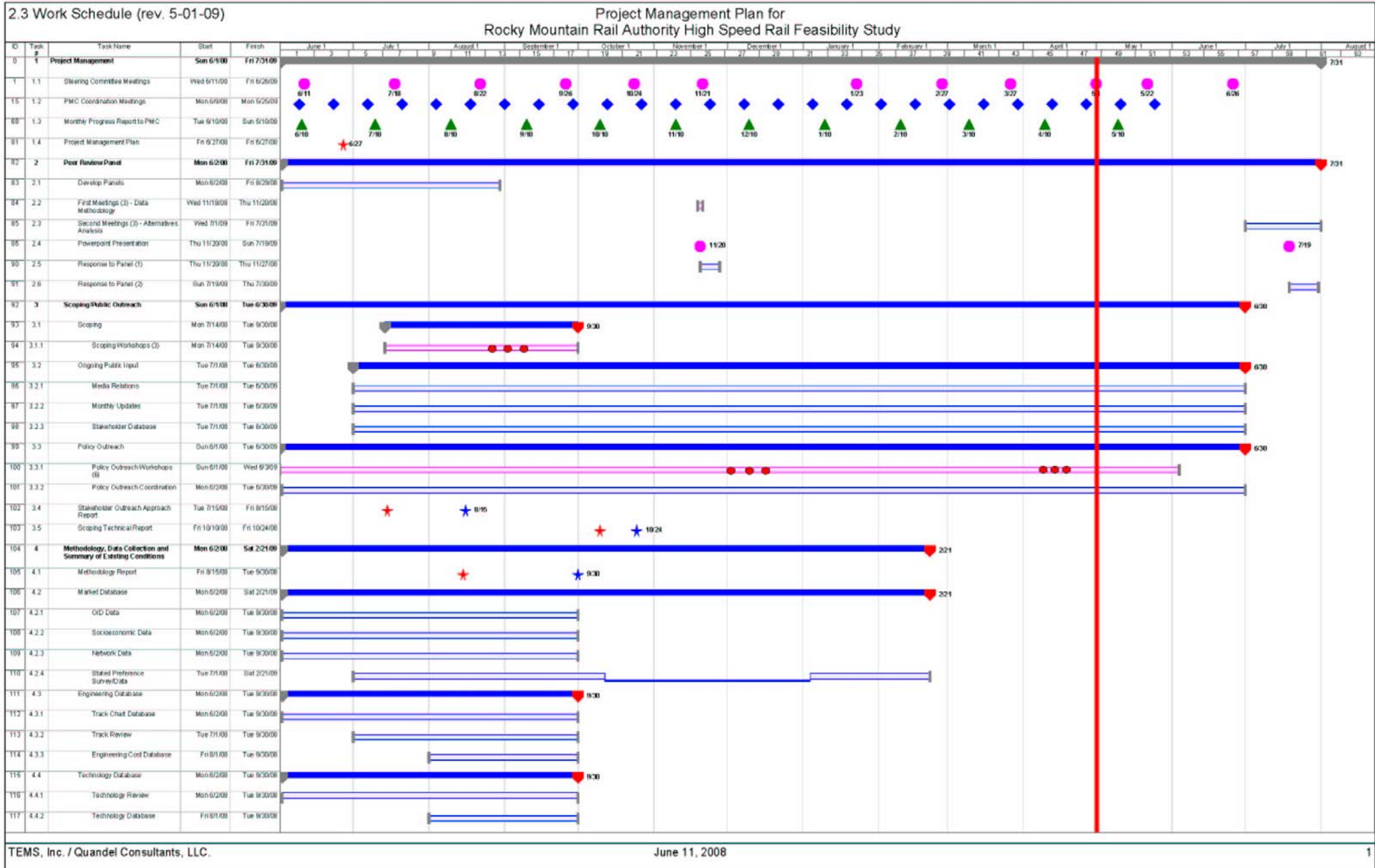
Feasibility Update

May 1, 2009

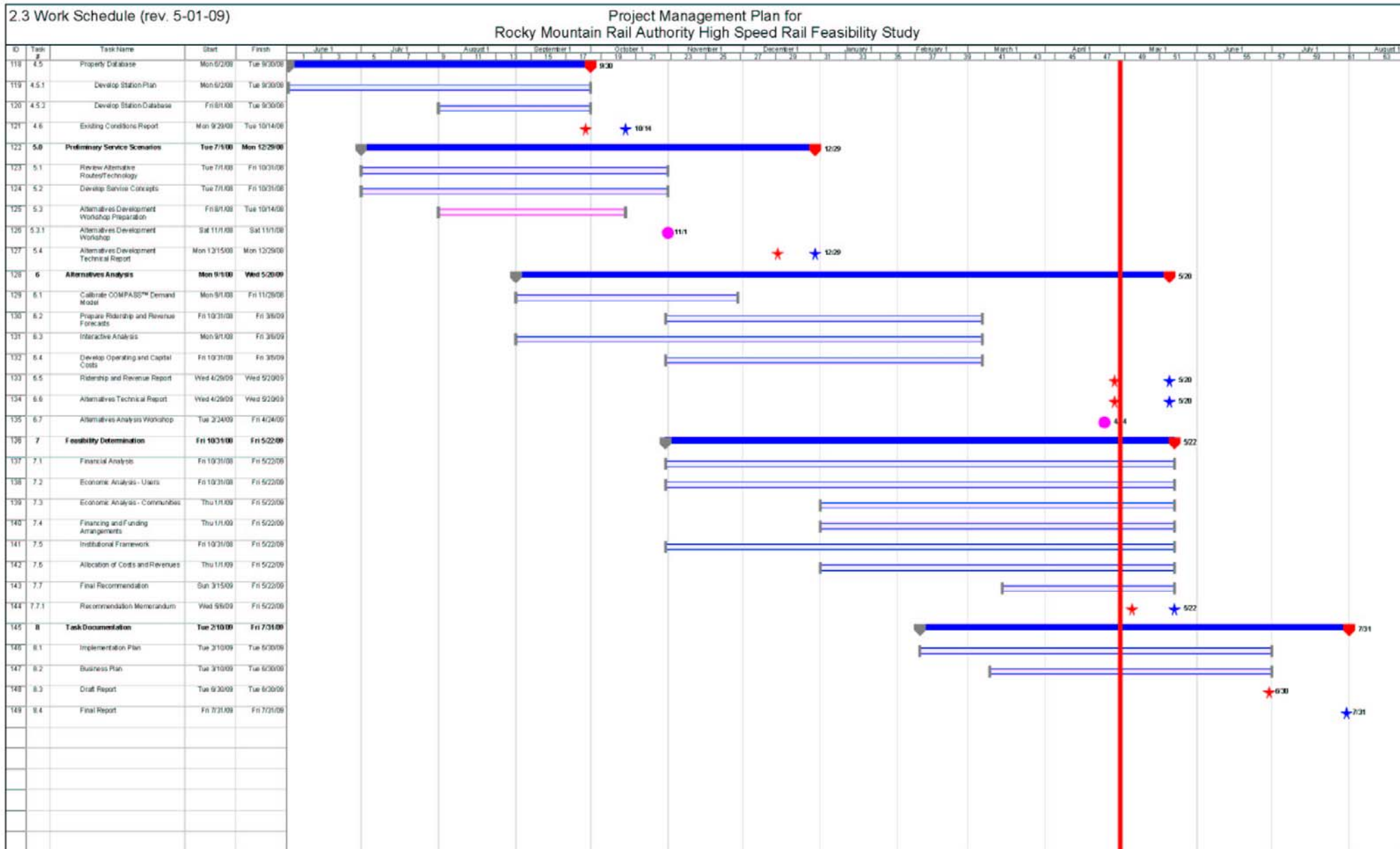
High Speed Rail Feasibility Study



Study Work Schedule: Tasks 1 thru 4.4.2



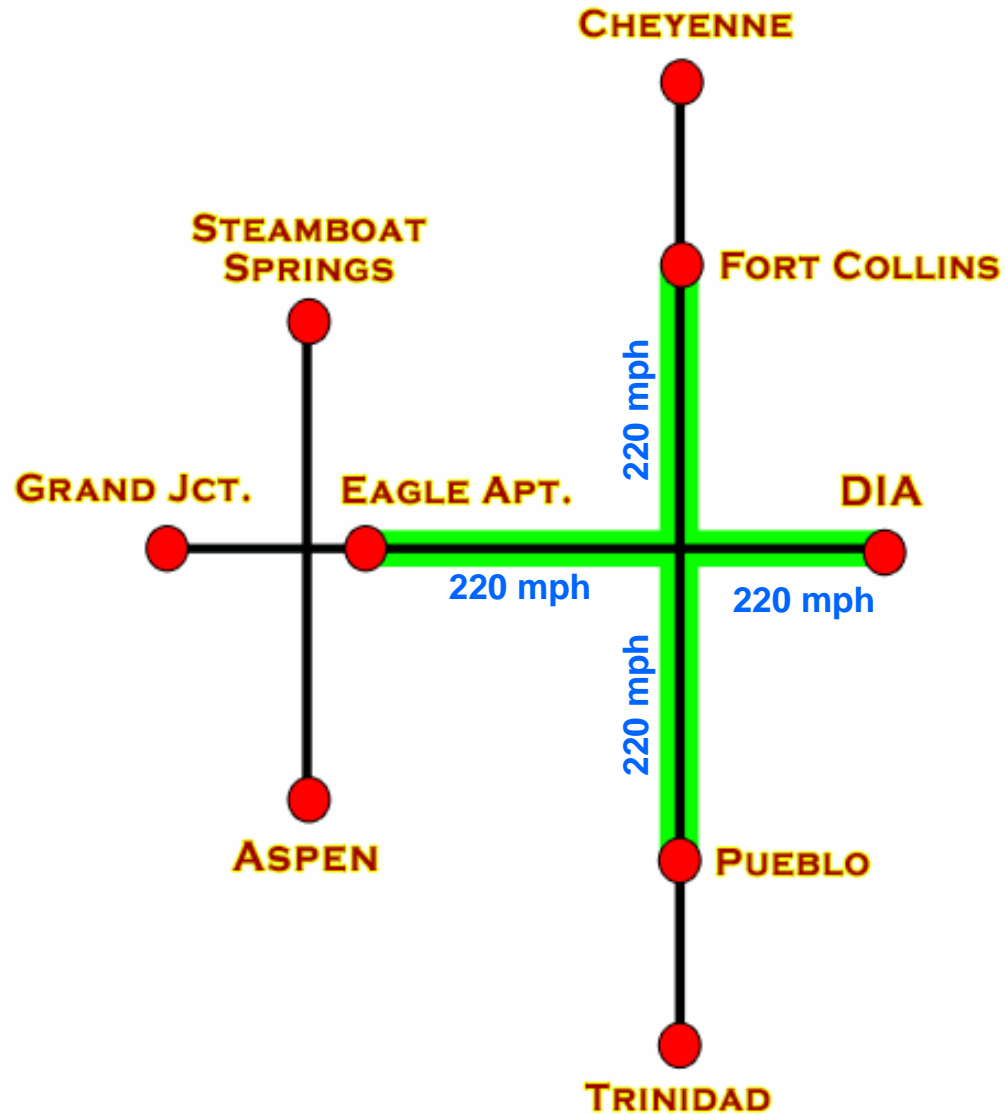
Study Work Schedule: Tasks 4.5 thru 8.4



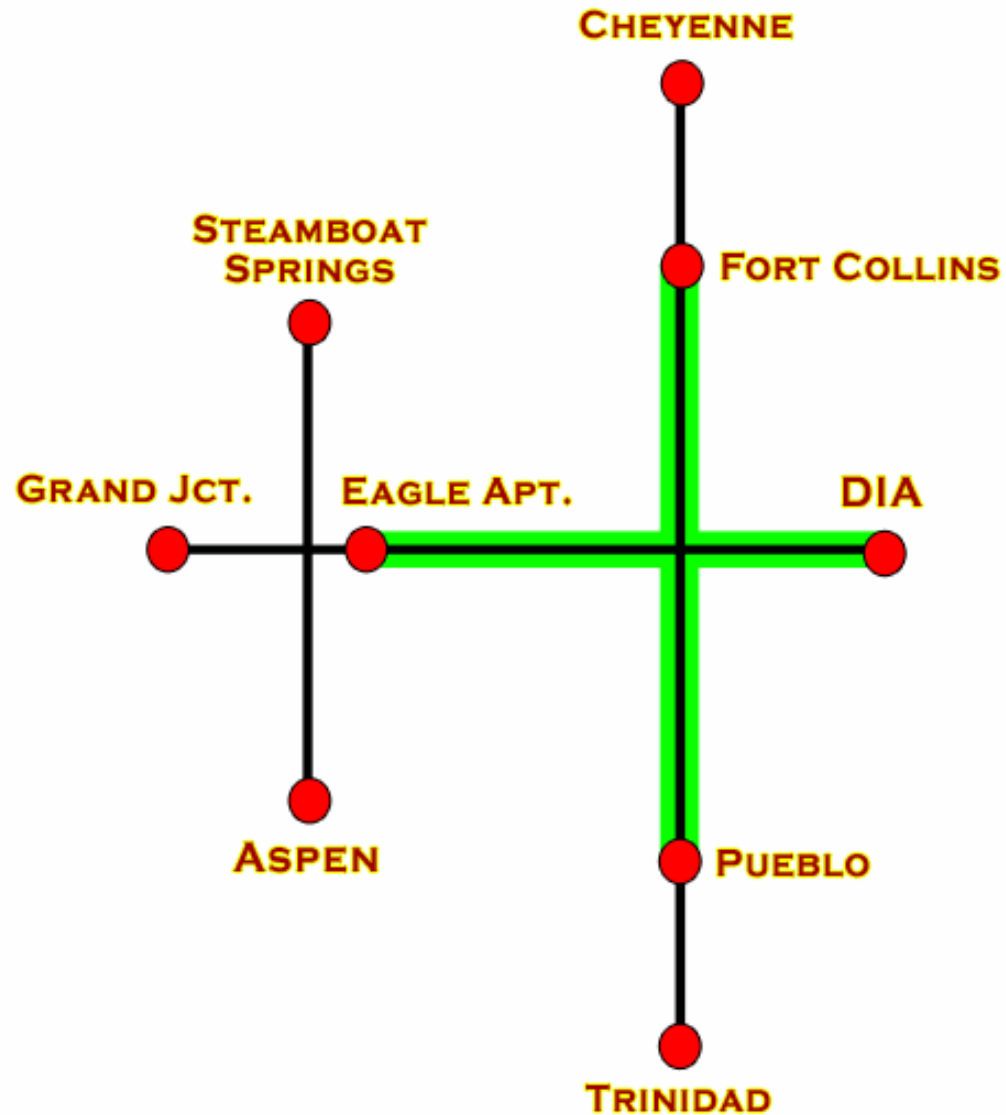
Key Workshop Results

- **The workshop found that all “Full System” alternatives failed the Cost Benefit test due to lightly-used segments**
 - Truncated Rail options were found viable on I-25 and I-70, but Maglev can be supported in I-70 only with connecting rail in I-25.
 - The cost for Maglev construction on I-25 is too high and pushes the Cost Benefit ratio for even a truncated Maglev solution into negative territory.
- **Recommended to Retain for Detailed Analysis:**
 - Best Option: An “Interoperable” 220-mph (5W) Electric on both I-25 and I-70 truncated, with potentially some 110-mph diesel Western Extensions.
 - **Meets all FRA Economic and Financial criteria.**
 - **Provides a single-seat ride between I-70 and I-25.**
- **I-25/I-70 Synergy**
 - The results confirm the findings of the I-70 PEIS that a standalone I-70 rail or maglev alternative is not viable.
 - However, it is the synergy of the I-25 and I-70 together that produces a viable solution for both corridors.

Recommended System: EMU 220mph Truncated



Possible Western Expansions



Workshop Request for Additional Alternatives Analysis

- **Requested Consulting team to develop analysis for an HSR alternative which would be:**
 - Completely separate from freight trains
 - Does not require R2C2 and
 - Could allow FRA Non-Compliant vehicles to run on the system
- **Would require examination of:**
 - Potential additional Infrastructure capital cost for full separation
 - Potential operating benefits from full separation, e.g. higher speed
 - Potential savings on Vehicle capital and operating cost
- **Additional analysis would have a time and budget impact**

Corridor Input Team Meeting Summary



Remaining Steps to Complete the Study

- **Feasible Alternative Selection by Steering Committee**
- **Business Plan Quantification**
 - Mix and Match Analysis
 - Implementation Phasing
- **Peer Panel Review**
- **Final Report**

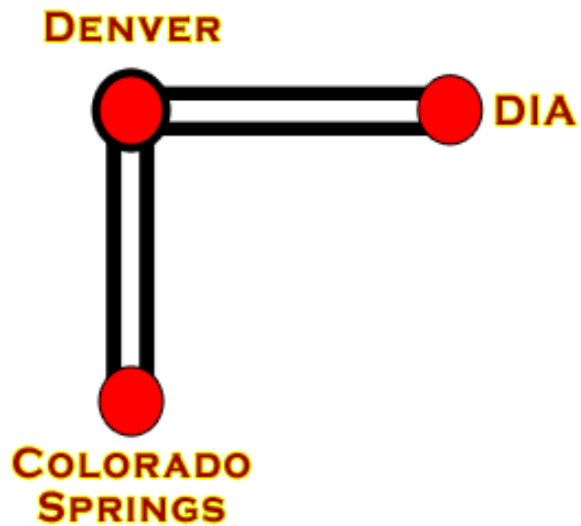
Criteria for Implementation Plan

- **Analysis to determine how to develop the system. Aim to achieve the following goals:**
 - Minimize operating cost losses.
 - Maximize geographic coverage.
 - Maximize economic and environmental benefits.
 - Develop system in line with reasonable financing capability.

A high-speed train (TGV) is shown at a station platform. The train is white with a red stripe and the DB logo. The text "First-Cut Implementation Plan" is overlaid in the center of the image.

First-Cut Implementation Plan

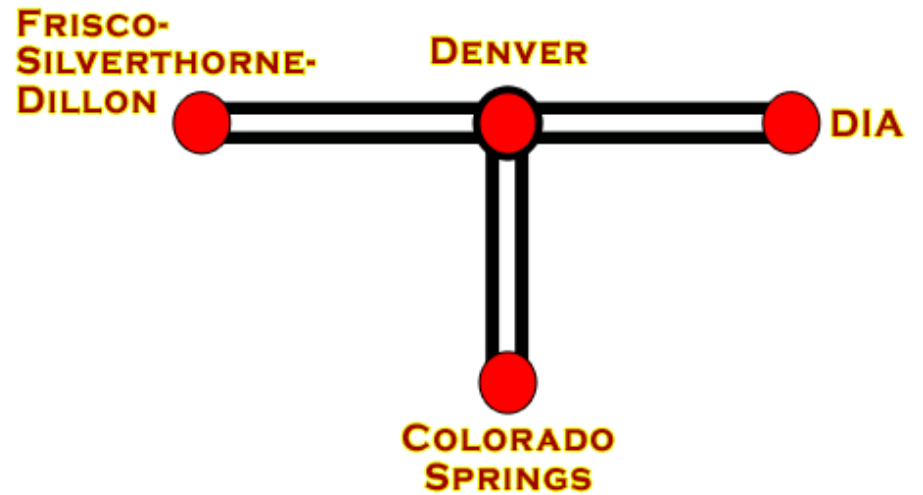
Phase 1



PHASE 1: Capital Costs		
I-25:	2.66	Billion
I-70:	.19	Billion
Vehicle:	.12	Billion
TOTAL:	2.96	Billion

Capital Needed for Phase 1:
\$2.96 Billion

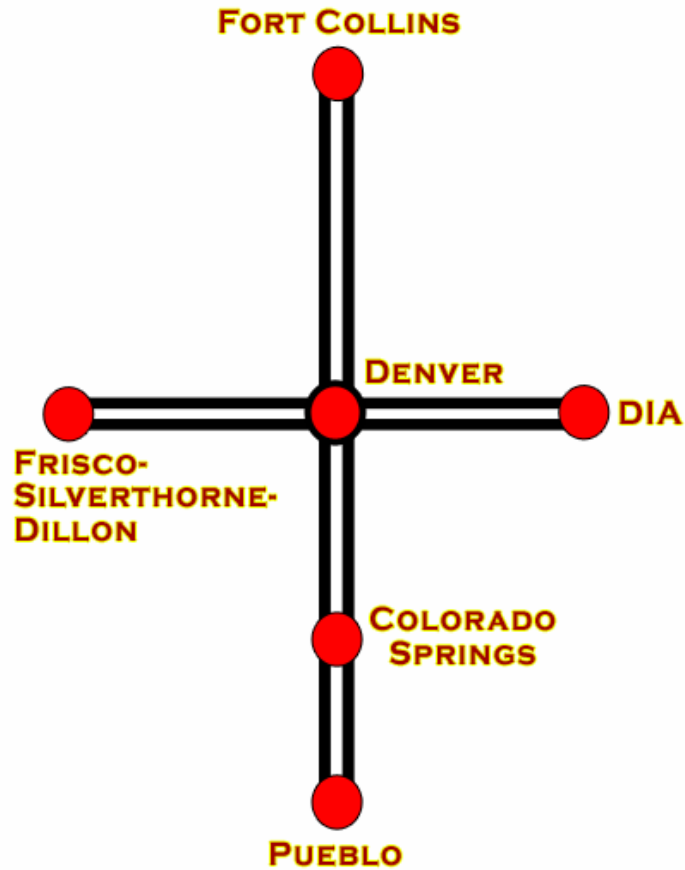
Phase 2



PHASE 2: Capital Costs		
I-25:	2.66	Billion
I-70:	8.98	Billion
Vehicle:	0.30	Billion
TOTAL:	11.94	Billion

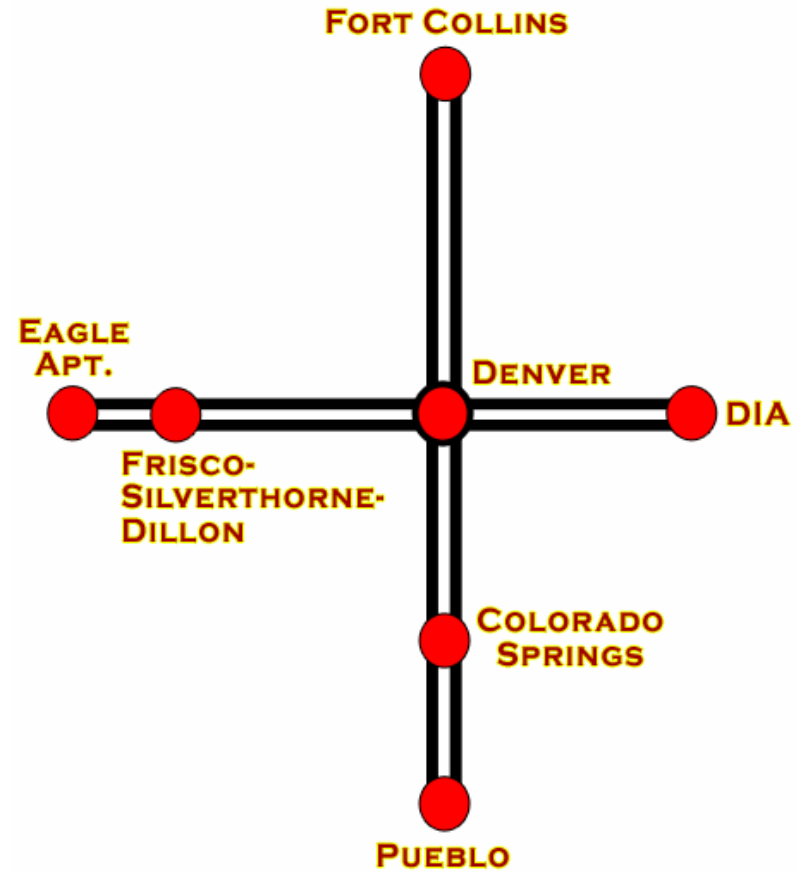
Capital Needed for Phase 2:
\$8.98 Billion

Phase 3



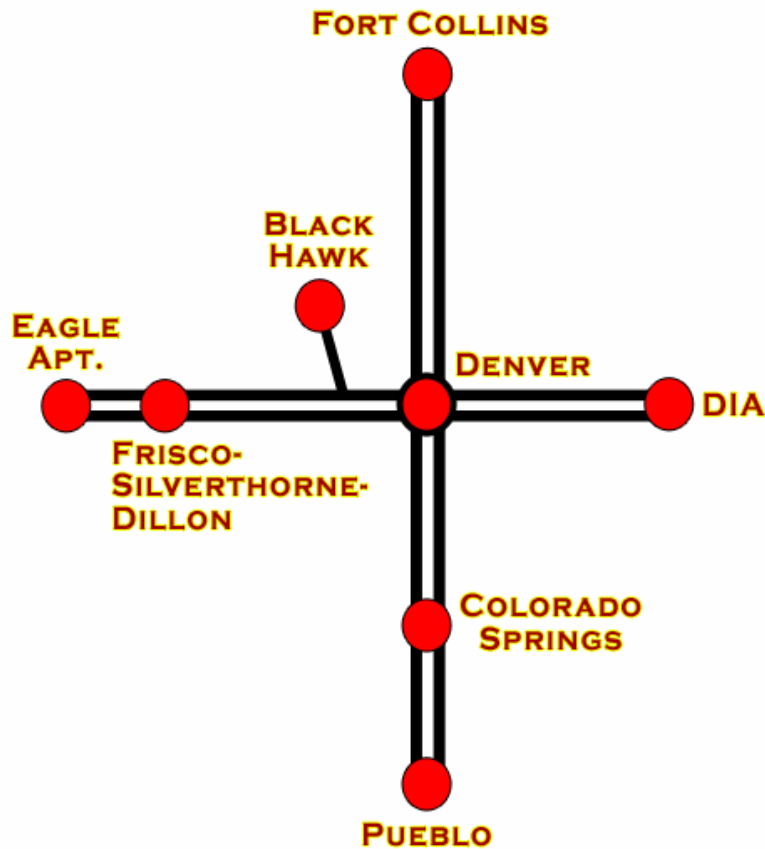
PHASE 3: Capital Costs		
I-25:	5.96	Billion
I-70:	8.98	Billion
Vehicle:	0.50	Billion
TOTAL:	15.44	Billion
Capital Needed for Phase 3:		
\$3.5 Billion		

Phase 4



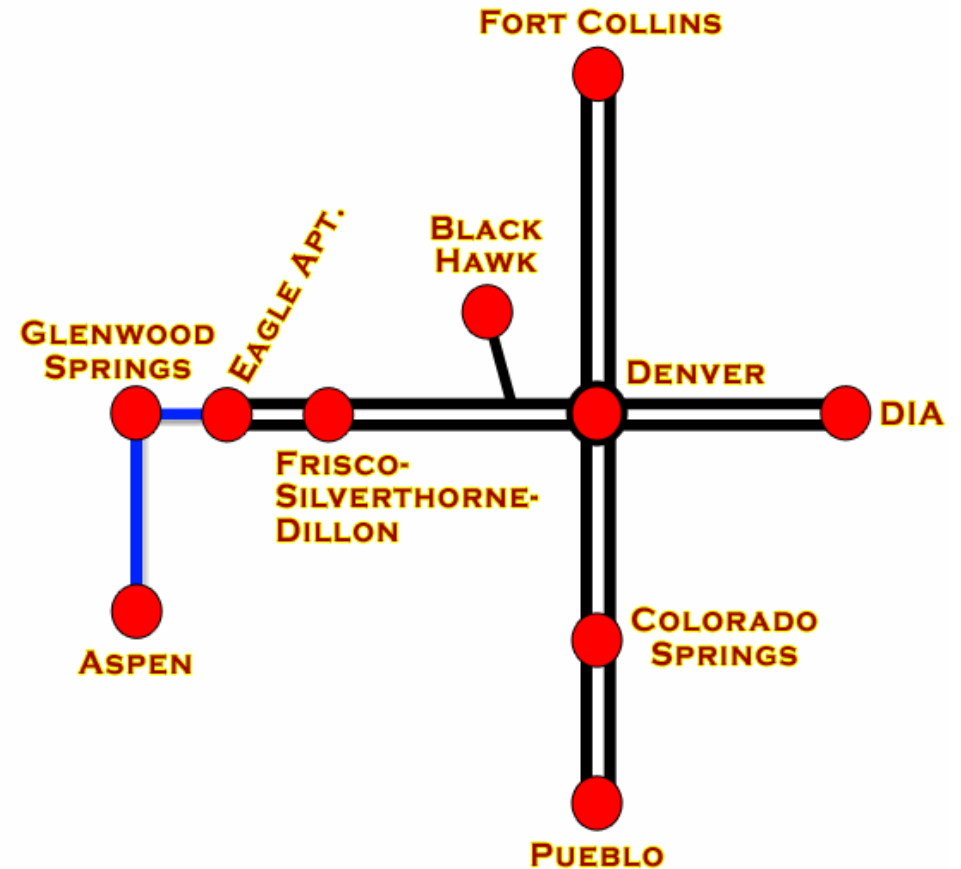
PHASE 4: Capital Costs		
I-25:	5.96	Billion
I-70:	12.47	Billion
Vehicle:	0.55	Billion
TOTAL:	18.98	Billion
Capital Needed for Phase 4:		
\$3.54 Billion		

Phase 5



PHASE 5: Capital Costs		
I-25:	5.96	Billion
I-70:	13.28	Billion
Vehicle:	0.60	Billion
TOTAL:	19.84	Billion
Capital Needed for Phase 5:		
\$0.86 Billion		

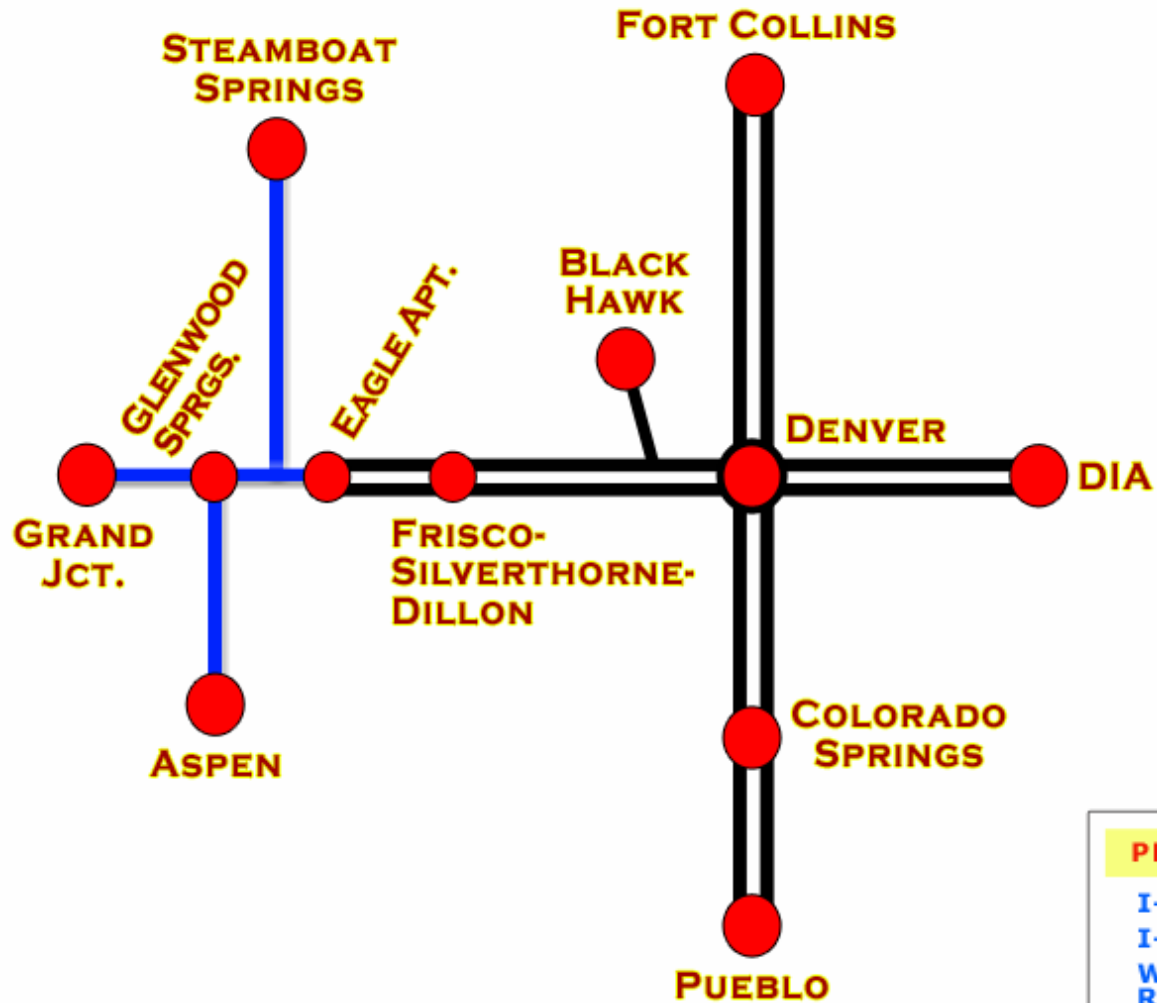
Phase 6



PHASE 6: Capital Costs		
I-25:	5.96	Billion
I-70:	13.28	Billion
Western* Routes:	0.88	Billion
Vehicle:	0.70	Billion
TOTAL:	20.82	Billion
Capital Needed for Phase 6:		
\$0.98 Billion		

** Preliminary estimate pending engineering cost re-evaluation.*

Phase 7



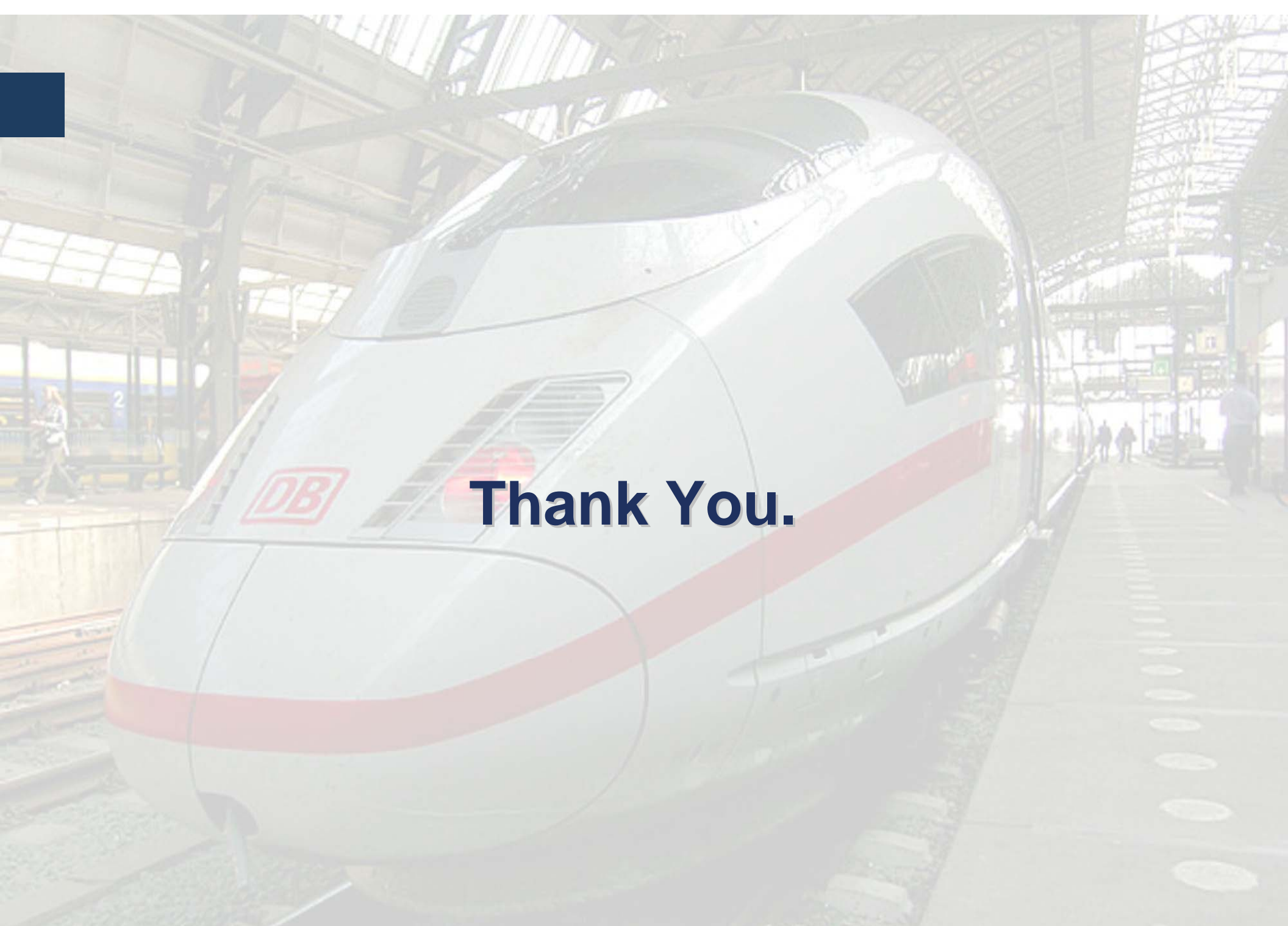
PHASE 7: Capital Costs		
I-25:	5.96	Billion
I-70:	13.28	Billion
Western* Routes:	1.81	Billion
Vehicle:	0.80	Billion
TOTAL:	21.85	Billion
Capital Needed for Phase 7:		
\$1.03 Billion		

* Preliminary estimate pending engineering cost re-evaluation.

Open Discussion

- **Alternative to carry forward into Business Planning**
 - Technology selection
 - Reasonableness of Implementation Phasing
 - Financing Capability
- **Peer Review Panel Update**
- **Other Events and Meetings**
- **Other Business**

***Next RMRA Steering Committee Meeting:
May 22, 9:00 AM, JeffCo Administration Building***



Thank You.