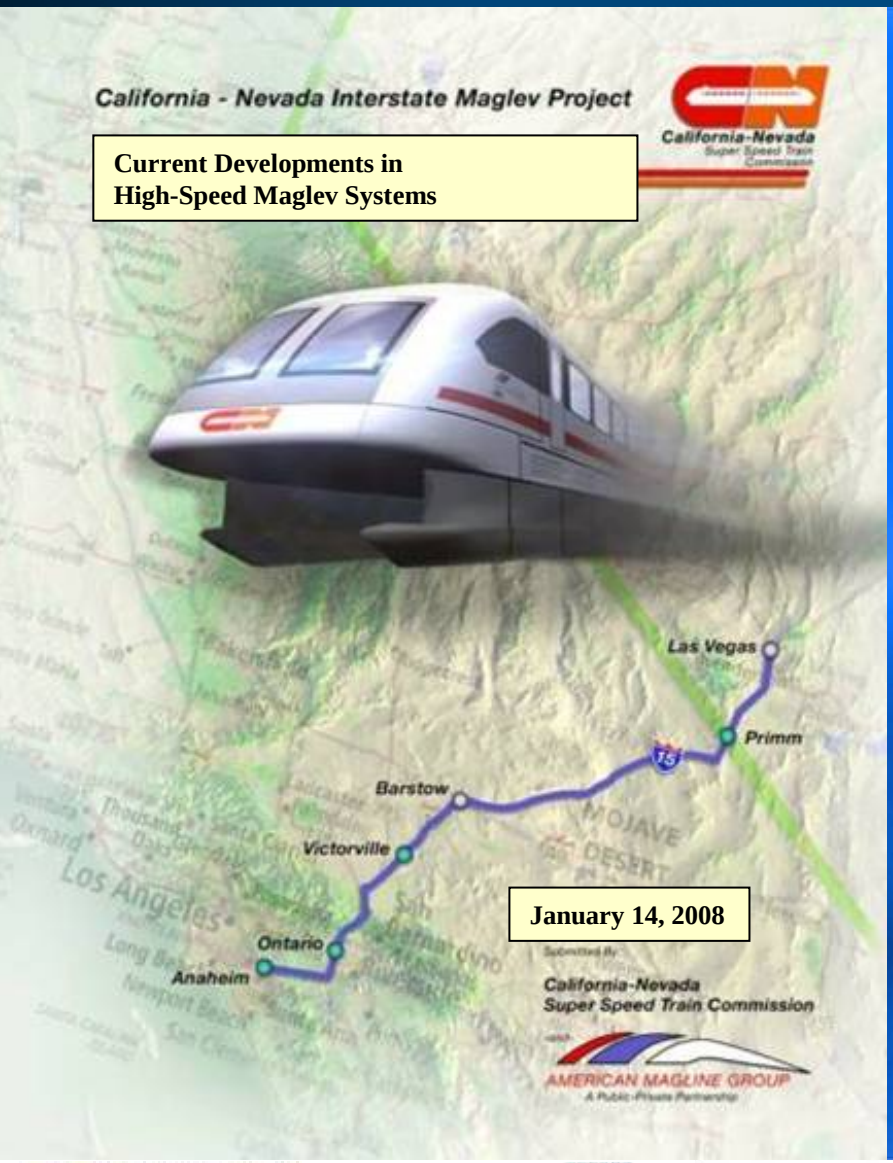
California-Nevada Interstate MaglevProject (CNIMP)



Presented to:

Nevada Legislative Commission: Transportation Subcommittee

Presented by:

Bruce Aguilera, Esq. Chairman

On behalf of

California-Nevada Super Speed Train Commission

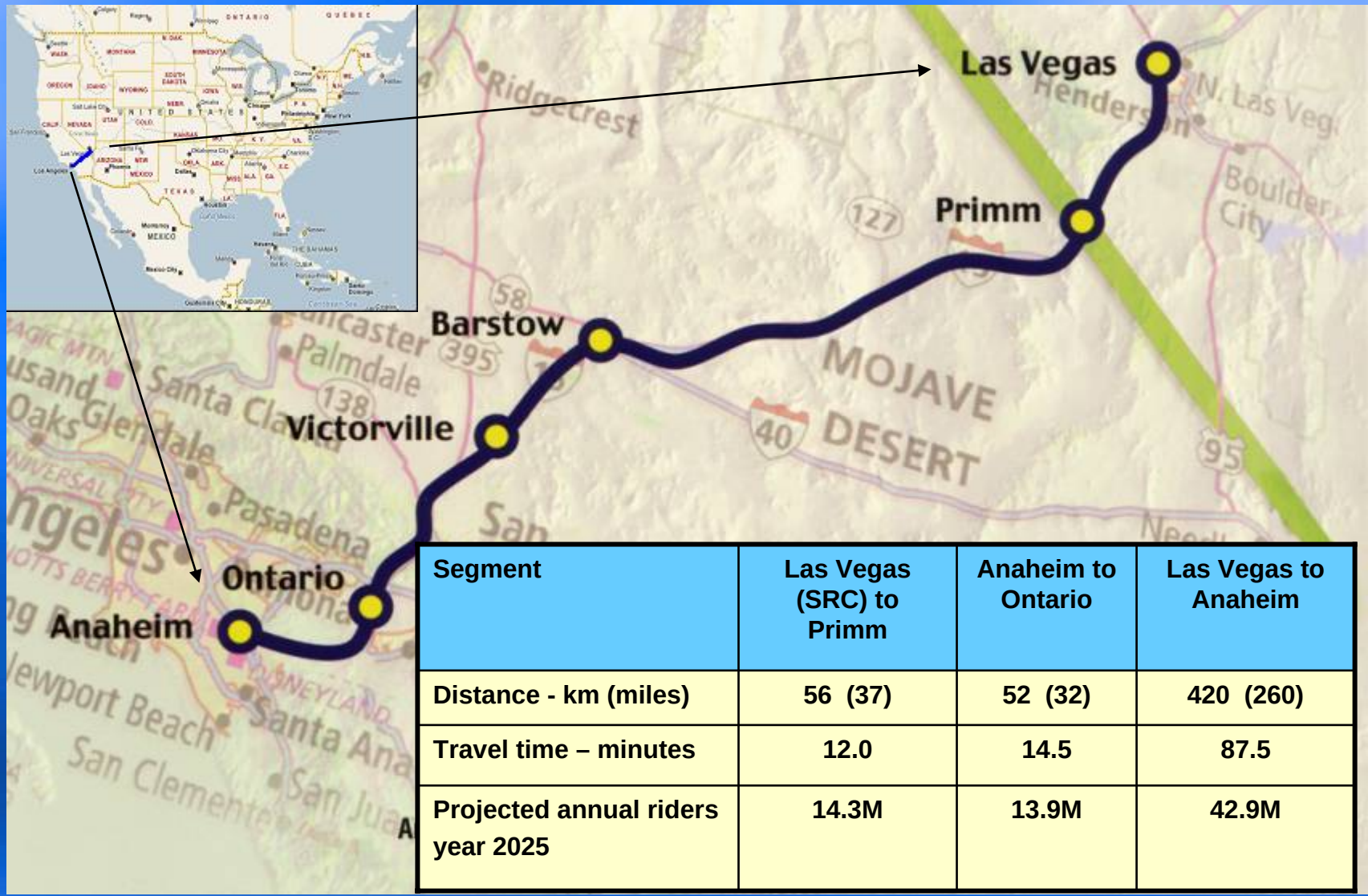
EXHIBIT D - Transportation Issues — Document consists of 17 pages.

☑ Entire document provided.

A copy of the complete document is available through the Research Library (775/684-6827) or e-mail library@lcb.state.nv.us).

Meeting Date: 1/23/08

Full Corridor - California Nevada Interstate Maglev



Segment	Las Vegas (SRC) to Primm	Anaheim to Ontario	Las Vegas to Anaheim
Distance - km (miles)	56 (37)	52 (32)	420 (260)
Travel time – minutes	12.0	14.5	87.5
Projected annual riders year 2025	14.3M	13.9M	42.9M

Federal Railroad Administration · Nevada DOT · Caltrans · Anaheim · Ontario · Victorville · California-Nevada Super Speed Train Commission · Barstow · Primm · Las Vegas · American Magline Group AMG

TRI High Speed Maglev Selected for CNIMP

Early studies selected Transrapid for CNIMP:

- **Shorter trip time compared to wheel-on-rail systems**
- **More profitable due to large volume of passenger throughput**
- **Greatest promise for commercialization over any other high speed Maglev system.**

CNIMP Team

- Hirschfeld Steel Company
- MNC & Associates
- Parsons Transportation Group
- General Atomics
- Citigroup
- Transrapid International-USA, Inc.

CNIMP - “The First 40 Miles”

Las Vegas to Primm (Initial Segment)

Route length	40 miles (64 km)
Trip time (est.)	12 minutes express
Top speed	500 km/h (311 mph)
Investment Cost	$1.3 billion (2000$)

Project Status (1999 – 2005)

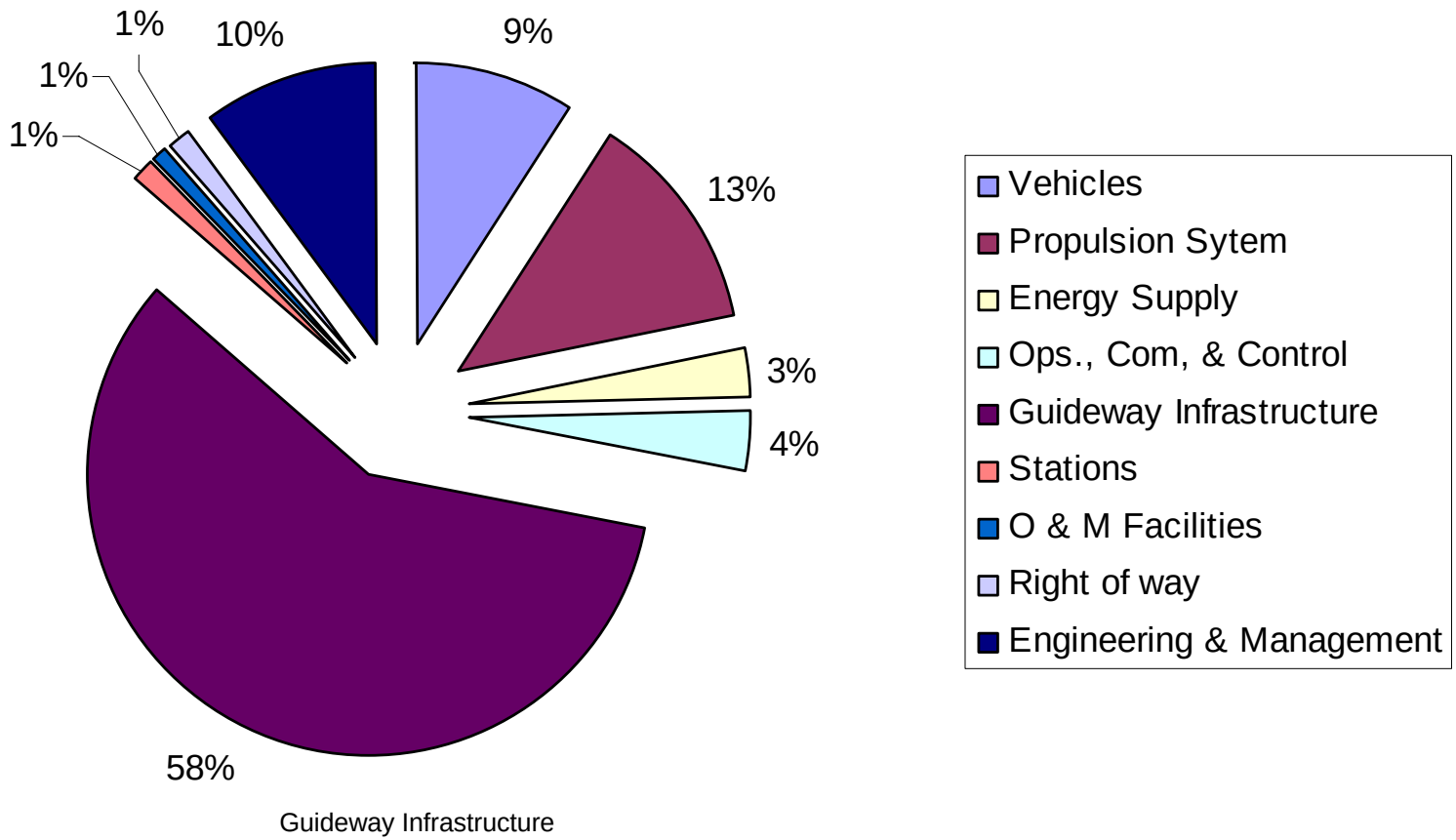
U.S. Congress Funding Bill – Transportation Equity Act 21st Century (TEA- 21), Magnetic Levitation Transportation Technology Deployment Program

- **Pre-construction Planning Studies (Feasibility, Major Investment, & Environmental Studies)**
  - **Las Vegas to Primm**
  - **Las Vegas to Barstow**
  - **Anaheim to Ontario**
  - **Ontario to Victorville to Barstow**
  - **Full Corridor (Anaheim to Las Vegas)**
- **Total funding for this study phase $19.85M**

Configuration & Operational Parameters

Operation *Route*	Local / Regional: *SRC – Primm*	Commuter / Regional: *Ontario - Anaheim*	Intercity: *SRC – Anaheim*
Revenue Guideway Single Track Double Track	(Initial Segment Service) 37.6 km (23.3 mi) 18.2 km (11.3 mi)	(Initial Segment Service) 0 km 51.6 km (32.0 mi)	(Full Corridor) 120 km (74.4 mi) 299.8 km (185.9 mi)
Trip Time	14.5 / 12 minutes	14.5 / 14.5 minutes	87.5 minutes express
Operating Headway	20 minutes	10 minutes	20 minutes
Operating Period	6:00 – 1:00 (19 hours)	6:00 – 1:00 (19 hours)	6:00 – 1:00 (19 hrs)
Trips per day	114 (one-way trips)	228 (one-way trips)	114 (one-way trips)
Vehicle Fleet	8-section trains 2 Trainsets + 1 Spare (initial operation)	4-section trains 5 Trainsets + 1 Spare (initial operation)	4- & 8-section trains 3 + 12 Trainsets + 3 Spares
Vehicle Capacity-Seated Seated/Standing	639 passengers 1101 passengers	305 passengers 535 passengers	305 & 639 passengers 535 & 1101 passengers
Transportation Capacity: Seated pphpd Seated/standing pphpd	 1917 3303	 1830 3210	 1917 3303
Maximum Future Capacity Seated pphpd Seated/Standing pphpd	 10608 17544	 10608 17544	 10608 17544

Capital Construction Costs (Full Corridor)



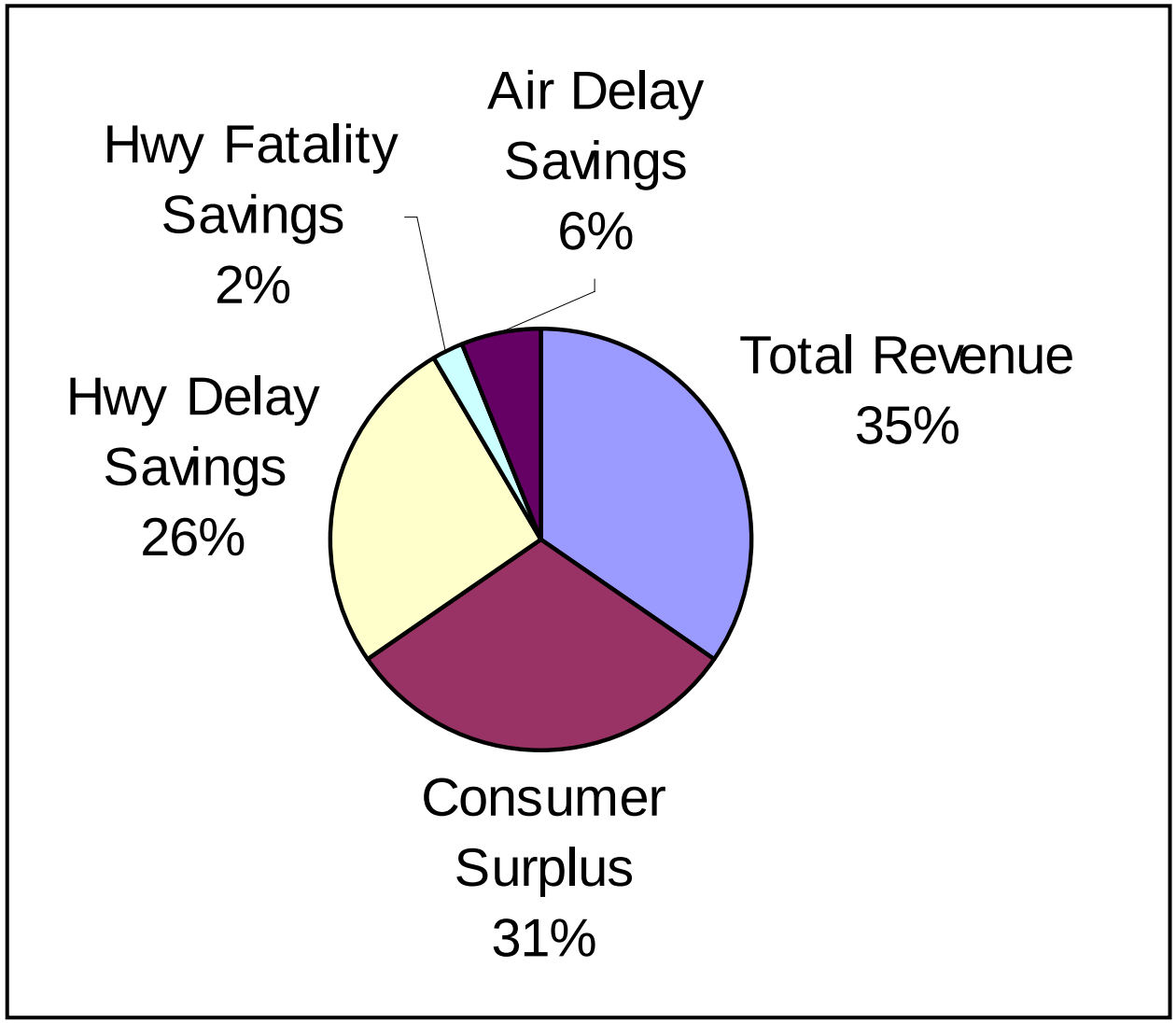
Total construction cost for Anaheim to Las Vegas: $12.1B (2000$);
Guideway Infrastructure is large fraction of capital cost of High Speed Maglev

Annual O & M Costs (Full Corridor)

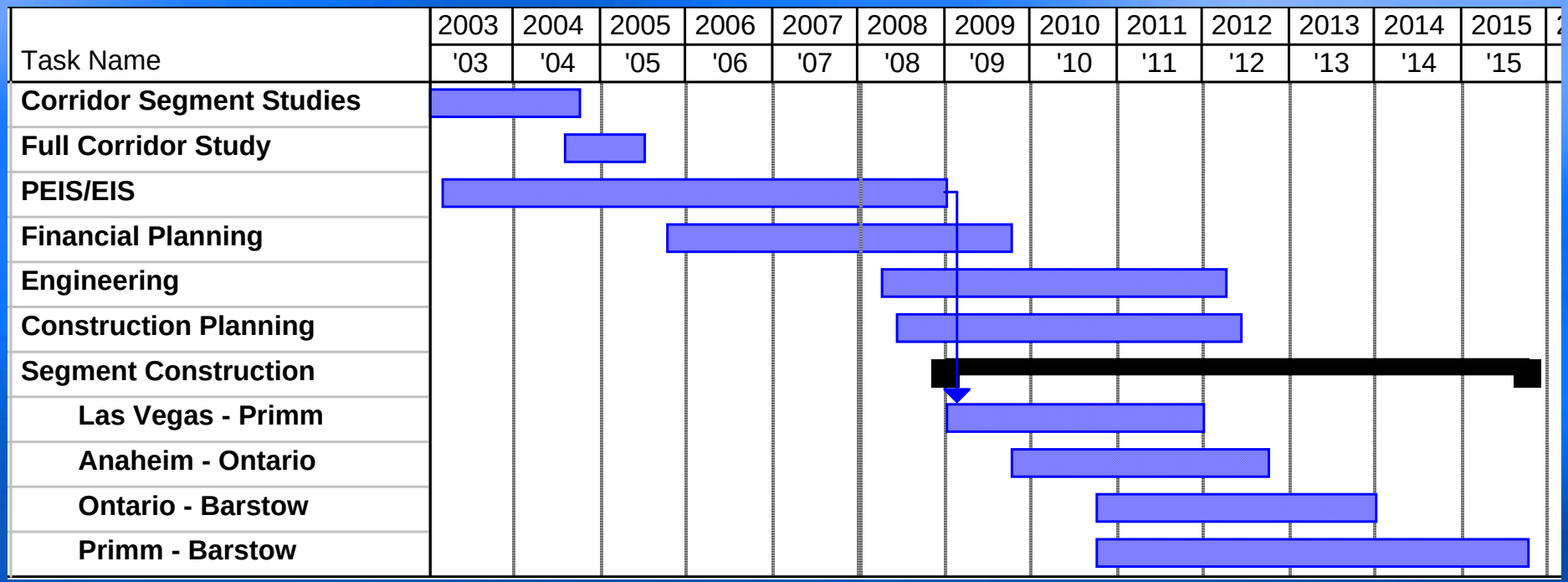
Category	$M (2000$)	% of Total
Maintenance of Way	39.6	14%
Maintenance of Equipment	32.5	12%
Transportation (Including cost of electricity)	120.2	43%
Passenger Traffic & Services	51.8	19%
General and Administrative	34.5	12%
Total	278.6	100%

Electricity for train movement (~$100M) is major component of O&M cost

Benefit to cost ratio is a favarable 1.8



Project/Construction Schedule



Present Status

U.S. Congress authorized new transportation-funding bill entitled, "Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users" (SAFE TEA-LU)

- **Federal funding for 2006 through 2009 includes:**
  - **$45 M for Las Vegas to Primm**
  - **$45 M for Maglev in Eastern U.S.**
- **Specific activities planned for CNIMP include:**
  - **Environmental Approval**
  - **Financial Plans**
  - **Finalize Alignment**
  - **Engineering/Procurement Planning**
  - **Capture Lessons Learned (Shanghai)**

- **FRA, NDOT, Caltrans & CNSSTC perform the studies in accordance with jointly developed, mutually agreed upon MOU.**

Key Elements of NEPA & Selected Impacts for CNIMP

- **Purpose & Need**
- **Alternatives Considered**
- **Public Involvement**
- **Corridor Overview**
- **Probable Impacts (Draft for Las Vegas – Primm)**
  - **Air Quality – Reduced automobile pollution**
  - **Noise & Vibration – Limited noise mitigation required**
  - **Ecology – Possible Mojave desert habitat loss**
  - **Endangered Species – Possible desert tortoises to be relocated**
  - **Energy – Reduced net emissions (electric power plant versus automobiles)**
  - **Visual Resources – Guideway may block signage**
  - **Transportation – Reduced traffic congestion/delay on I-15 Freeway**
  - **Land Use – Maglev passenger stations attract commercial businesses**
  - **Socioeconomic – Opportunity of employees to access work locations**

Commercialization Plan

- **CNSSTC Entity:**
  - **Jointly established by State of CA and NV**
  - **Non- profit, tax-exempt corporation**
- **CNSSTC Authority:**
  - **Conduct Studies***
  - **Perform Design, Construction, Operation, & Maintenance***
  - **Obtain Funding**
  - **Acquire Right-of-Way**
  - **Issue Debt**
  - **Select Route and Passenger Station Locations**
  - **Secure (Assist Franchise) Obtain Permits/Certifications**

*** CNSSTC awarded an exclusive franchise for CNIMP to AMG**

Conditions for Construction

- **Completion of Programmatic Environmental Impact Study (full corridor)**
- **Completion of Site-specific EIS (Las Vegas to Primm)**
- **Obtain Record of Decision (ROD)**
- **Funding authorized by U.S. Congress for construction**
- **Secure balance of Financing (tax-exempt bonds, loans, loan guarantees, local and private sources)**
- **Permit Approvals (examples):**

Agency	Sample Issues
Bureau of Land Management	Use of federally owned land
U.S. Army Corps of Engineers	Stream crossings
U.S. Fish & Wildlife Service	Endangered species
Environmental Protection Agency	National Environmental Policy Act (NEPA)
Surface Transportation Board	Certificate of Public Convenience (Passenger & freight on same route)
State of Nevada/Clark County	Construction and Operation Permits

The New Iron Horse

Just as the West needed the Transcontinental Railroad to encourage development of the western and mid-western states, and assisted the West in meeting the challenges of the 20th century, the building of the California-Nevada Maglev system will assist the West in meeting the economic, social, quality of life, and environmental challenges of the 21st century.

Contact Information - CNIMP

California-Nevada Super Speed Train Commission

Richann Bender, Director

(702) 229-6551

E-mail: rbender@lasvegasnevada.gov

American Magline Group

M. Neil Cummings, Esq., President

(310) 914-5033

E-mail: mncassoc@aol.com