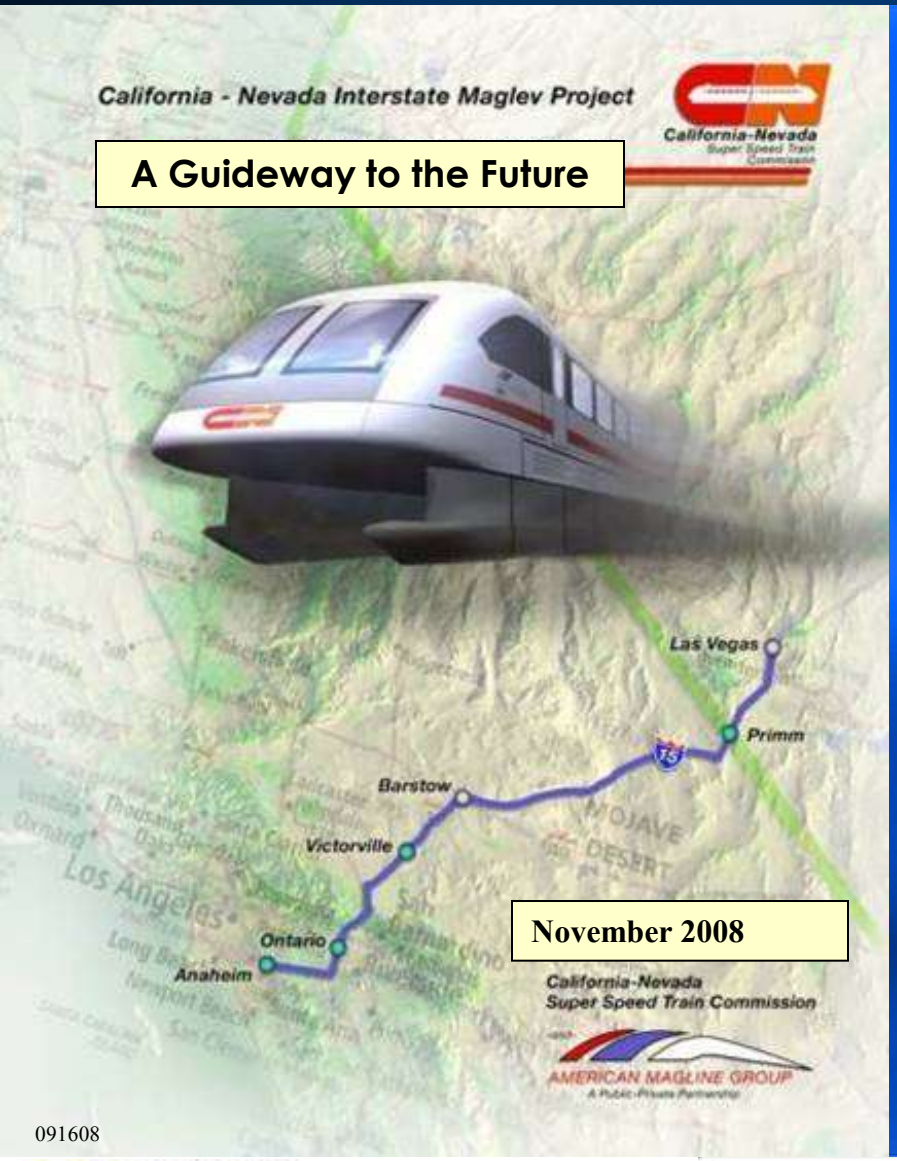
California-Nevada Interstate Maglev Project (CNIMP)



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Presented by:

California-Nevada Super Speed Train Commission (CNSSTC)

and

American Magline Group (AMG)

A Public-Private Partnership

OVERVIEW

- **California-Nevada Project**
  - **History and Commission**
  - **Public-Private Partnership in Place**
  - **Shanghai Maglev - Proven System**
- **Las Vegas-Anaheim System (100% Local Support)**
- **I-15/Airports in Crisis**
  - **McCarran Airport**
  - **I-15**
  - **New Hotel Rooms**
- **Maglev Technology Offers a Solution**
- **Federal Funding and Local Match**

California-Nevada Project

History of California-Nevada Super Speed Train Commission (CNSSTC)

- **1988** - State of NV and CA approved legislation to form CNSSTC.
- **1988-1991** – CNSSTC initiates studies on ridership, technology assessment, socio-economic impacts, organizational and financial planning.
- **1991** - CNSSTC formally selects the German developed 300+ mph Transrapid® Maglev technology for the California-Nevada Interstate Maglev Project (CNIMP)
- **1996** - CNSSTC and American Magline Group (AMG) form a public-private partnership (PPP) to promote, design, finance, build, operate and maintain an "Americanized" Transrapid® maglev system for CNIMP.
- **1998-2003** – CNSSTC/AMG awarded federal funds by USDOT (under TEA-21) to conduct preliminary environmental, design and engineering studies for CNIMP.
- **2004** - CNSSTC enters into agreement with FRA, NDOT and Caltrans to commence Programmatic Environmental Impact Study (PEIS) for the corridor between Las Vegas and Anaheim, including the starter segment in Nevada. NDOT is designated as the lead state agency.
- **2004-2007** - Funding for Phases I and II of the EIS is made available by Congress. NDOT selects URS as its environmental consultant.

History of California-Nevada Super Speed Train Commission (CNSSTC) - Continued

- **2005** - Congress includes $45M in the SAFETEA-LU authorization bill to advance "deployment" of CNIMP (only maglev project named in SAFETEA-LU).
- **2008** - Congress passes the SAFETEA-LU Technical Corrections Bill correcting a drafting error made in 2005, thereby guaranteeing the previously authorized $45M for CNIMP. Another $45M is guaranteed to project(s) "East of the Mississippi" (to be named later by the USDOT).
- **2009-2011** - CNSSTC expects to complete the EIS and raise construction funding through the combination of a federal TIFIA loan, tax exempt bonds (issued by CNSSTC) and private equity investment .

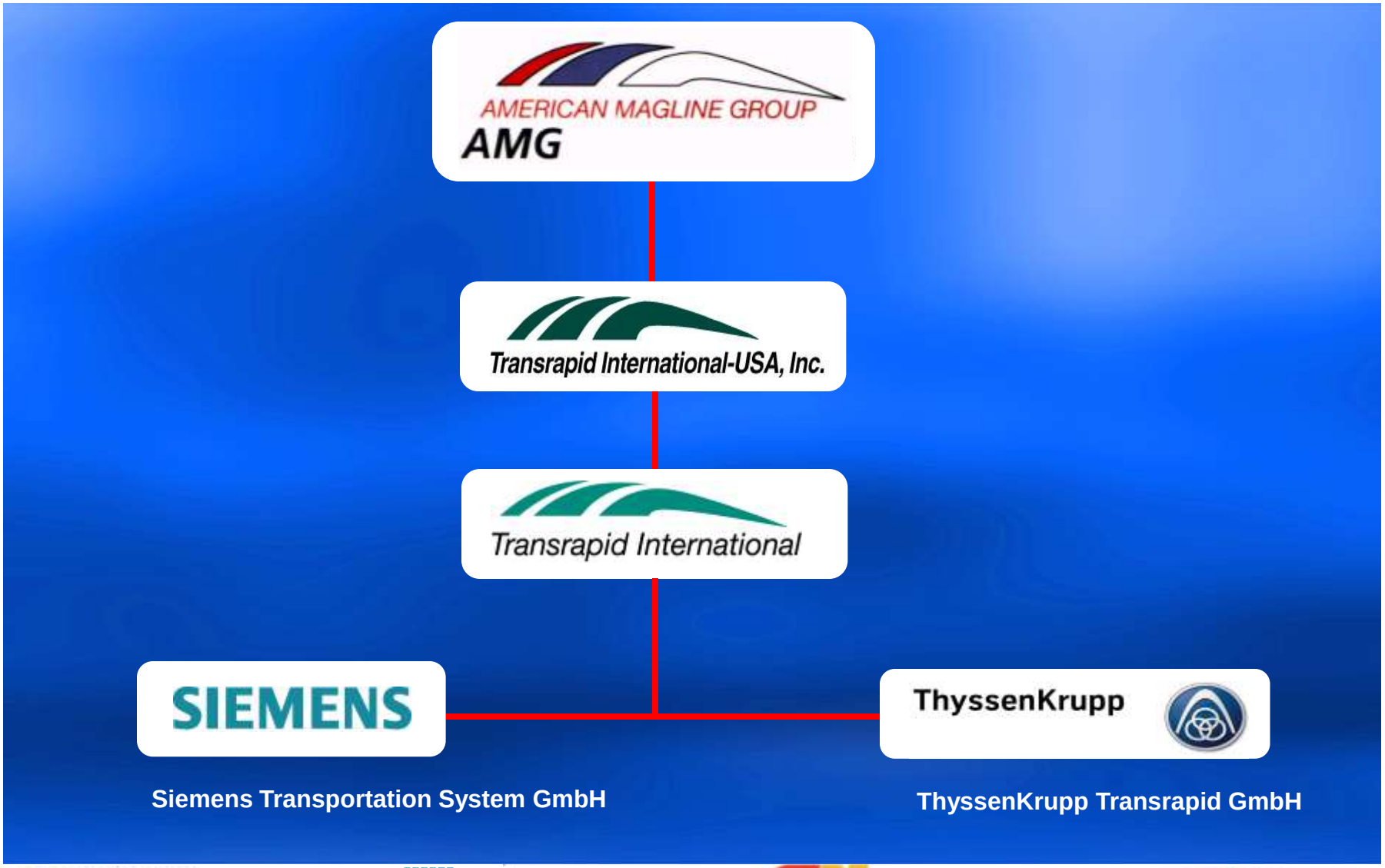
California-Nevada Super Speed Train Commissioners

Nevada	California
Bruce Aguilera, CNSSTC Chairman - ***Vice President and General Counsel, Bellagio & City Center***	Ken Kevorkian, CNSSTC Vice-Chairman ***- Former California Transportation Commissioner***
James Bilbray ***- Attorney, Kummer, Kaempher, Bonner, Renshaw & Ferrario, Former U.S. Congressman***	Sarah Catz ***- Director, Center for Urban Infrastructure Institute of Transportation Studies, University of California , Irvine***
Larry Brown ***- Councilman, City of Las Vegas***	Lawrence Dale, Mayor ***- City of Barstow***
Marykaye Cashman ***- Chairman of the Board & CEO, Cashman Equipment Company***	Gary C. Ovitt ***- Supervisor, San Bernardino County***
Susan Martinovich ***- Director, Nevada Department of Transportation (NDOT)***	Angie Papadakis ***- Business Owner***
Chip Maxfield ***- Commissioner, Clark County***	Curt Pringle ***- Mayor, City of Anaheim***
Danny Thompson ***- Executive Secretary/Treasurer, Nevada State AFL-CIO***	Joe Stein ***- Former Member of Board of Directors, Niagara Frontier Transit Systems; Former President and Member of California State Board of Education***
Dina Titus ***– U.S. Congresswoman (Former Nevada Senate Minority Leader)***	Alan Wapner ***- Councilman, City of Ontario***

California-Nevada Maglev Project Team

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

Project Technology Supplier



Roles & Responsibilities

Participant	Responsibilities
FRA	Administration. Sponsor for PEIS/EIS and safety certification (Rule of Particular Applicability).
NDOT	State Agency; lead agency for PEIS/EIS
CNSSTC	State Agency. Public Partner. Local coordination and public outreach.
American Magline Group	CNSSTC Private Partner. Prime contractor. Technology transferee. Project Management. Support local coordination and public outreach.
Transrapid-USA	Technology provider. Technology transferor. Systems architecture and analysis. Vehicle propulsion and control system engineering.
General Atomics	Adapt energy supply and propulsion system to U.S. electrical standards.
Hirschfeld Steel	Adapt guideway to U. S. construction standards.
Parsons	Project planning, civil engineering, and benefits analysis. Seed alignment and right-of-way. Civil structures and passenger stations.
Citigroup	Financial Plans.

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.**

Shanghai Maglev Update

Shanghai Project Video

Shanghai Maglev Update

- 1st High Speed Maglev Commercial System
- Successful Revenue Service Since 2004
- Operational Parameters
  - Double-track: 30 km (19-Mile) Long
  - Max Speed: 450 km/hr (275 mph)
  - Travel Time: 7.5 minute
- Carried Over 10.4 Million Passengers
- Traveled Over 2.2 Million Miles
- On-Time Reliability 99.98%

Shanghai to Hangzhou Maglev Update

- August 2008 -- Chinese Government Announced Decision To Extend High Speed Maglev From Shanghai To Hangzhou
- System Length 199 Km (124 Miles) Including Link Between Two Shanghai International Airports
- Construction Period: 2009 To 2013
- Max Speed: 450 km/hr (275 mph)
- Trip Time: 30 Minute Versus 90 Minute For Bullet Train
- Projected Construction Cost: $3.2B (US$)

California-Nevada Interstate Maglev Project (CNIMP)

Las Vegas-Anaheim System

(100% Local Support)

Las Vegas to Anaheim System

Las Vegas to Anaheim

Route length	268.4 miles (432 km)
Trip time (est.)	80.5 minutes express
Top speed	500 km/h (311 mph)
Investment Cost	$12.1 billion (2000$)
Annual Operating Profit	$519 million (2000$)
New Jobs	50,000 (construction) 2,900 (operation)
Benefit/Cost Ratio	1.8

100% Local Project Support

Along the entire 269-mile alignment, the Project has the strong support of the States of California (Caltrans) and Nevada (NDOT), as well as:

- Affected Cities
  - **Las Vegas**
  - **Barstow**
  - **Victorville**
  - **Ontario**
  - **Anaheim**
- Regional Transportation Organizations
  - **Clark County Regional Transportation Commission**
  - **San Bernardino Association of Governments (SANBAG)**
  - **Orange County Transportation Authority (OCTA)**
  - **Southern California Associated Governments (SCAG)**

Las Vegas to Primm/Ivanpah Airport

Las Vegas to Primm (East Starter Segment)

Route length	40 miles (64 km)
Trip time (est.)	12 minutes express
Top speed	500 km/h (311 mph)
Investment Cost	$1.3 billion (2000$)
Annual Operating Profit	$49.2 million (2000$)
New Jobs	4,600 (construction) 500 (operation)
Benefit/Cost Ratio	1.5

Anaheim to Ontario International Airport

Anaheim to Ontario International Airport (West Starter Segment)

Route length	31.4 miles (50.5 km)
Trip time (est.)	14.5 minutes
Top speed	320 km/h (220 mph)
Investment Cost	$2.62 billion
Annual Operating Profit	$88.2 million (year 2000 dollars)
New Jobs	11,000 (construction) 500 (operation)
Benefit/Cost Ratio	1.7

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	80.5 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

SRC – Denotes South Resort Corridor included in prior studies

Projected Ridership, Costs, & Benefits

Operation *Route*	Local / Regional: *SRC – Primm*	Commuter / Regional: *Ontario - Anaheim*	Intercity: *SRC – Anaheim*
Projected Annual Ridership in 2025	(Initial Segment Service) 14.3 million	(Initial Segment Service) 13.9 million	(Full Corridor) 42.9 million
Fares (2000$)	$4 to $6	$9	$55 intercity $4 - $6 local NV $9-$12 local CA
Average Annual Net Operating Revenue (2000$)	$49.2 million	$86.6 million	$517.4 million
Capital Cost (2000$)	$1.3 billion	$2.6 billion	$12.1 billion
Benefit/Cost Ratio	1.5	1.7	1.8

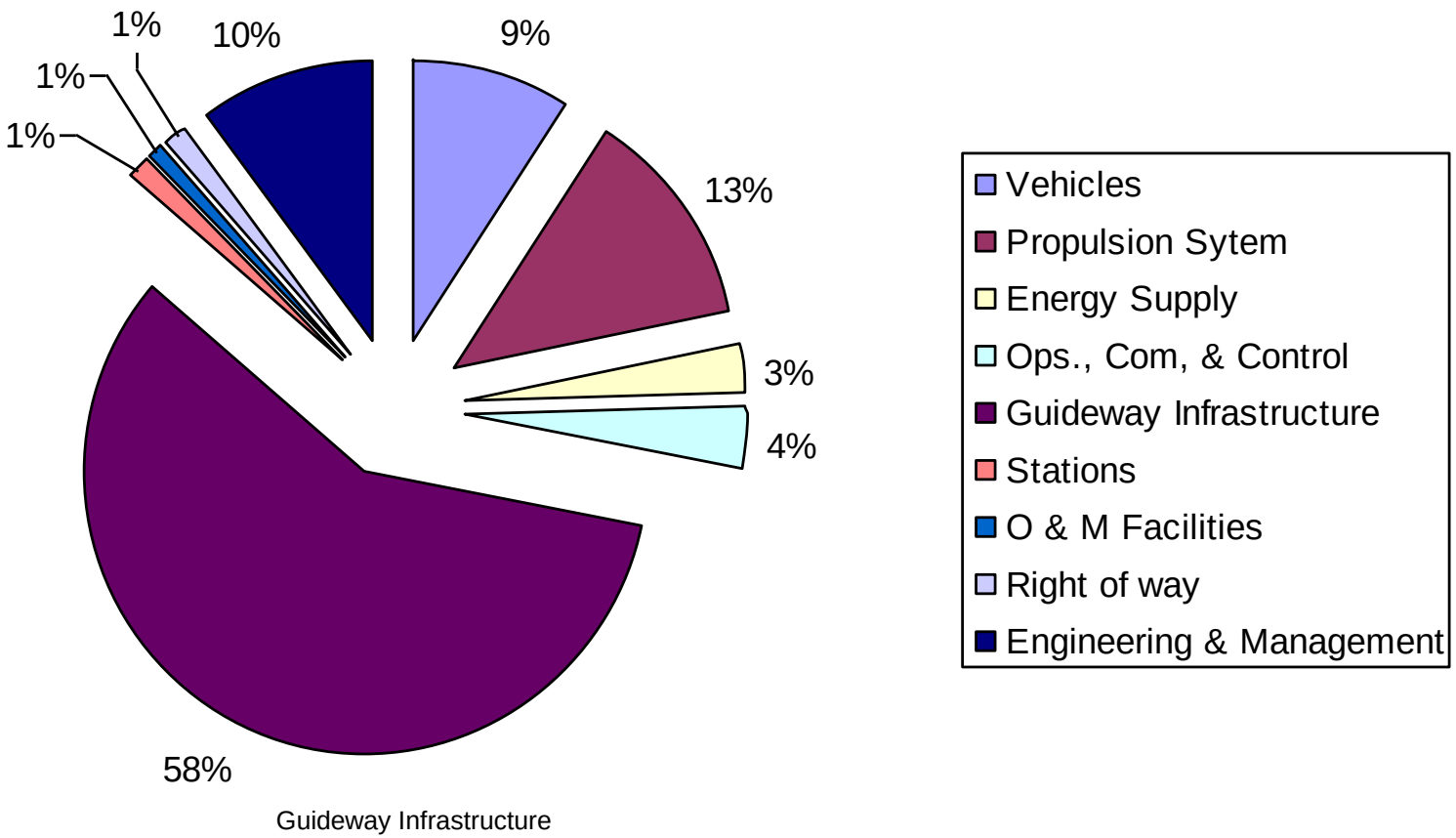
SRC – Denotes South Resort Corridor included in prior studies

Build Everything Now

Construct Las Vegas to Anaheim Today

$12-15 Billion

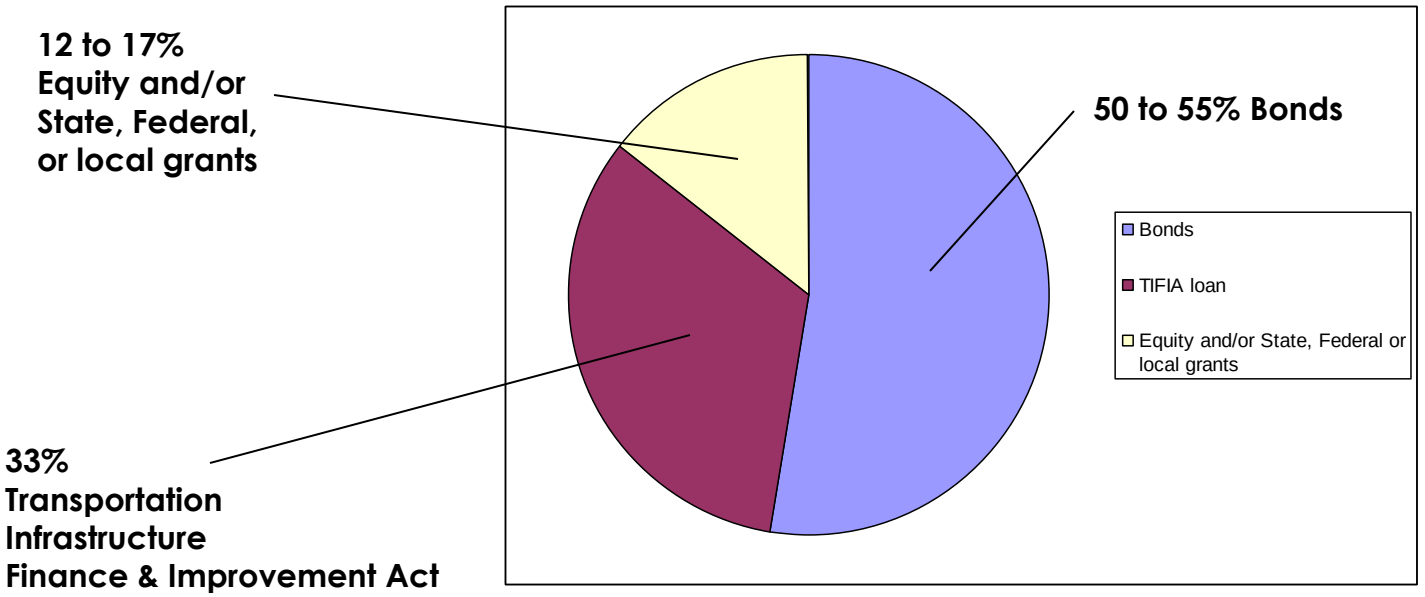
Capital Construction Costs (Full Corridor)



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

Proposed 'Project' Financing

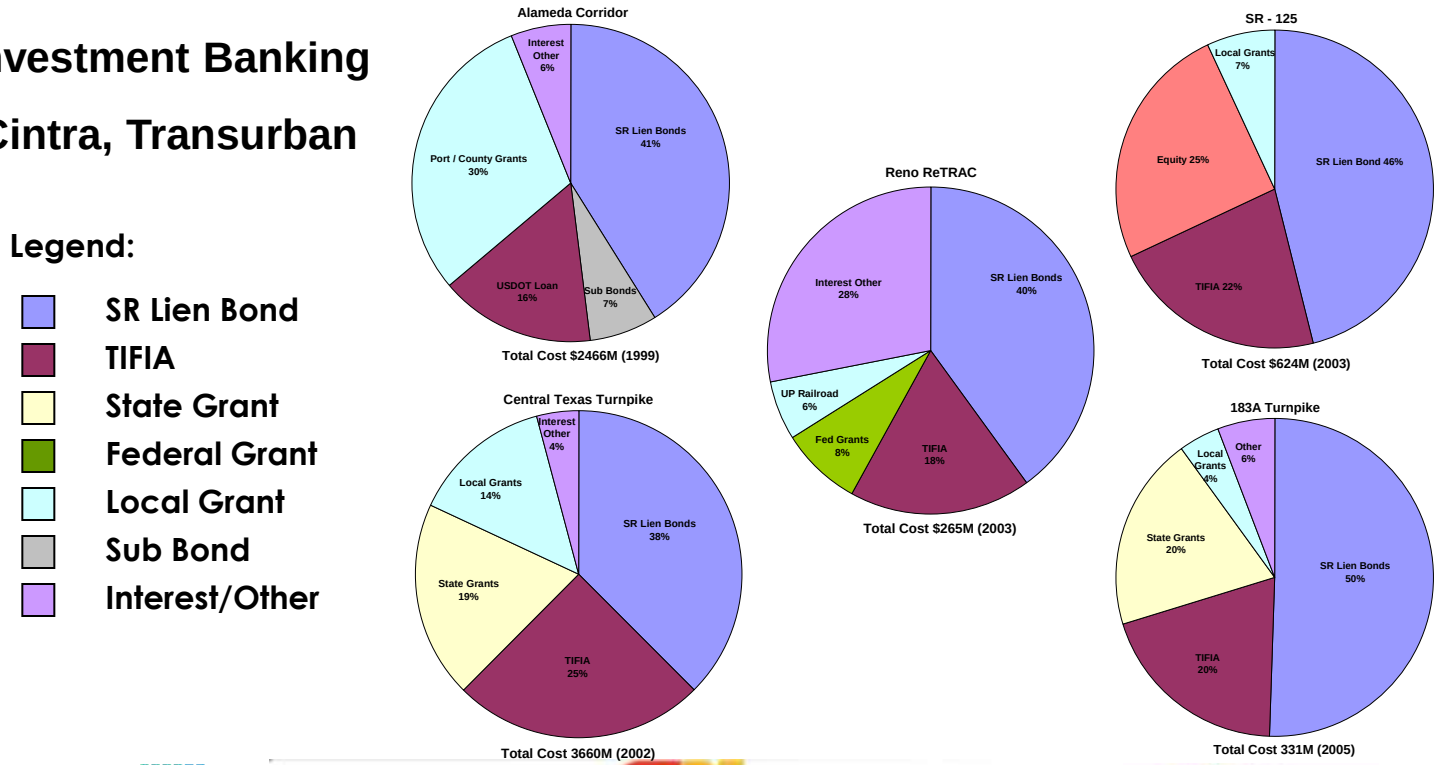
- **Anticipated funding structure:**



Recent Transportation Project Financings

Recent trends indicate that large Federal Grants are no longer necessary

- **Pie charts show funding sources for 5 recently completed major transportation projects**
- **All projects involved large fractions of bond financing.**
  - **SAFETEA-LU (section 1143) expanded exempt facility bonds**
  - **SAFETEA-LU also enhanced features of TIFIA**
- **Notable trend in investment Banking**
  - **Macquarie, Cintra, Transurban**



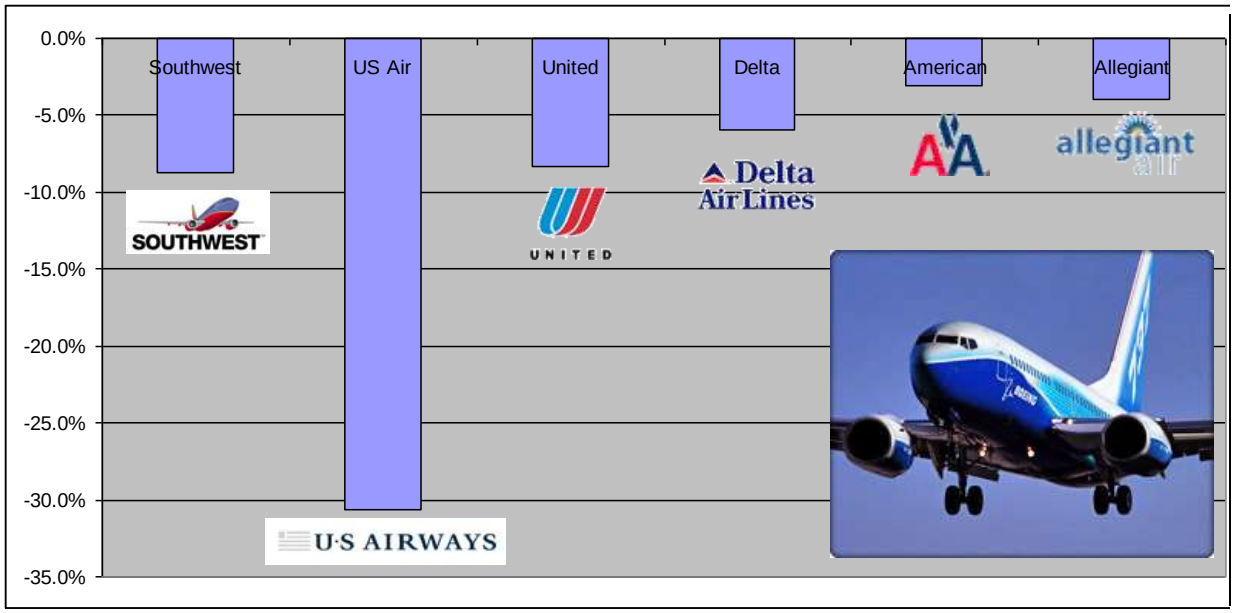
California-Nevada Interstate Maglev Project (CNIMP)

I-15/Airports in Crisis

All Airlines are Cutting Back on Flights to McCarran

- "The number of people flying to and from Las Vegas fell 13.2% in September to 3.37 million, the largest year-over-year decline since September 11, 2001"*

% Decline by Airline



- "For the year, traffic at McCarran slipped further behind last year's pace and now stands at 34.1 million, down 5% from the same point last year"*

* Las Vegas Review-Journal, Tuesday, October 28, 2008

I-15 Traffic Congestion

376% increase near Sloan

240% increase north of Tropicana Avenue

164% increase in San Bernardino County

Maglev Technology

Offers a Solution

High Speed Maglev Passenger Transport Capacity is Huge

- **A 10-section high speed Maglev train operating on 5-minute headway transports 10,608 seated passengers per hour per direction:**

  - **Equivalent to the maximum capacity of a free flowing 8-lane freeway (4 lanes in each direction)**

  - **Equivalent to combined passenger carrying capacity of 55 fully loaded 747 aircraft landing every hour**

… and Maglev reduces dependence on foreign oil!

Travel Time Comparison

ANAHEIM

TOTAL TRAVEL TIME BY PLANE:

Taxi to John Wayne Airport	Minimum time at airport	Flight	Baggage Claim	Taxi
35 min	1 hour	1 hour 8 min	30 min	10 min

ANAHEIM

TOTAL TRAVEL TIME BY MAGLEV:

Taxi to station	At station	Maglev Train	Taxi
10 min	15 min	1 hour 30 min	10 min

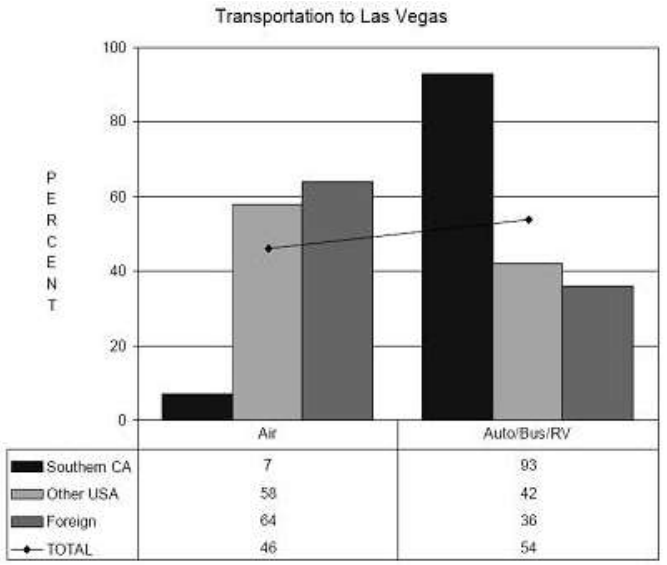
Almost 80 minutes reduced travel time*

*** Published in "Portfolio" magazine (Conde Nast), October 2008…"Disney's Magnetic Attraction"**

Federal Railroad Administration · NEVADA DOT · Caltrans · California-Nevada Super Speed Train Commission · AMERICAN MAGLINE GROUP AMG

Maglev Leverages Increasing Number of Visitors to LV

- Over 40 million people visit Las Vegas annually
- 28% come from Southern California
- 93% of Southern CA visitors travel by ground transportation (auto, bus, etc.) as opposed to 7% by air
- In Sept. 2008, air travel was down 13.2% (largest year-over-year monthly decline since Sept. 11, 2001)



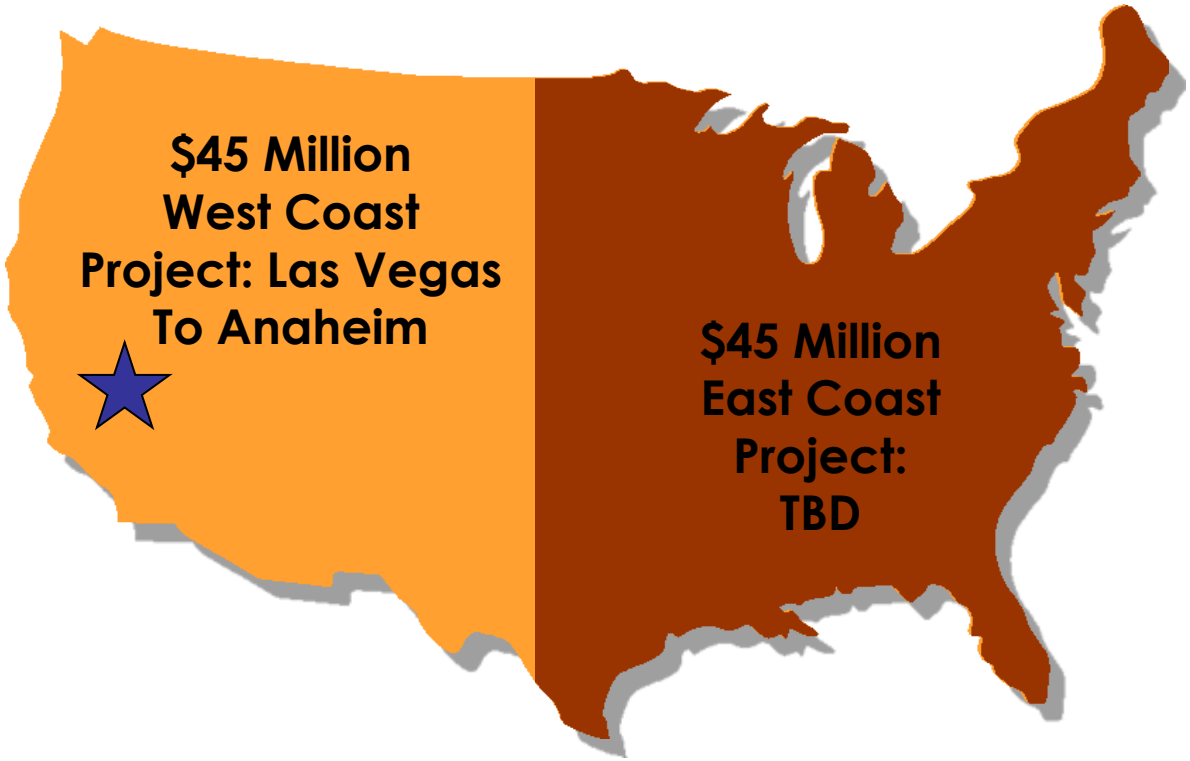
Source: LAS VEGAS VISITOR PROFILE Calendar Year 2007 Southern California and International Visitors Version Prepared by GLS Research, 2007 (for LVCVA)

Deploying CNIMP provides significantly more leverage than air travel for increasing number of visitors from Southern CA to Las Vegas!

Federal Funding & Local Match

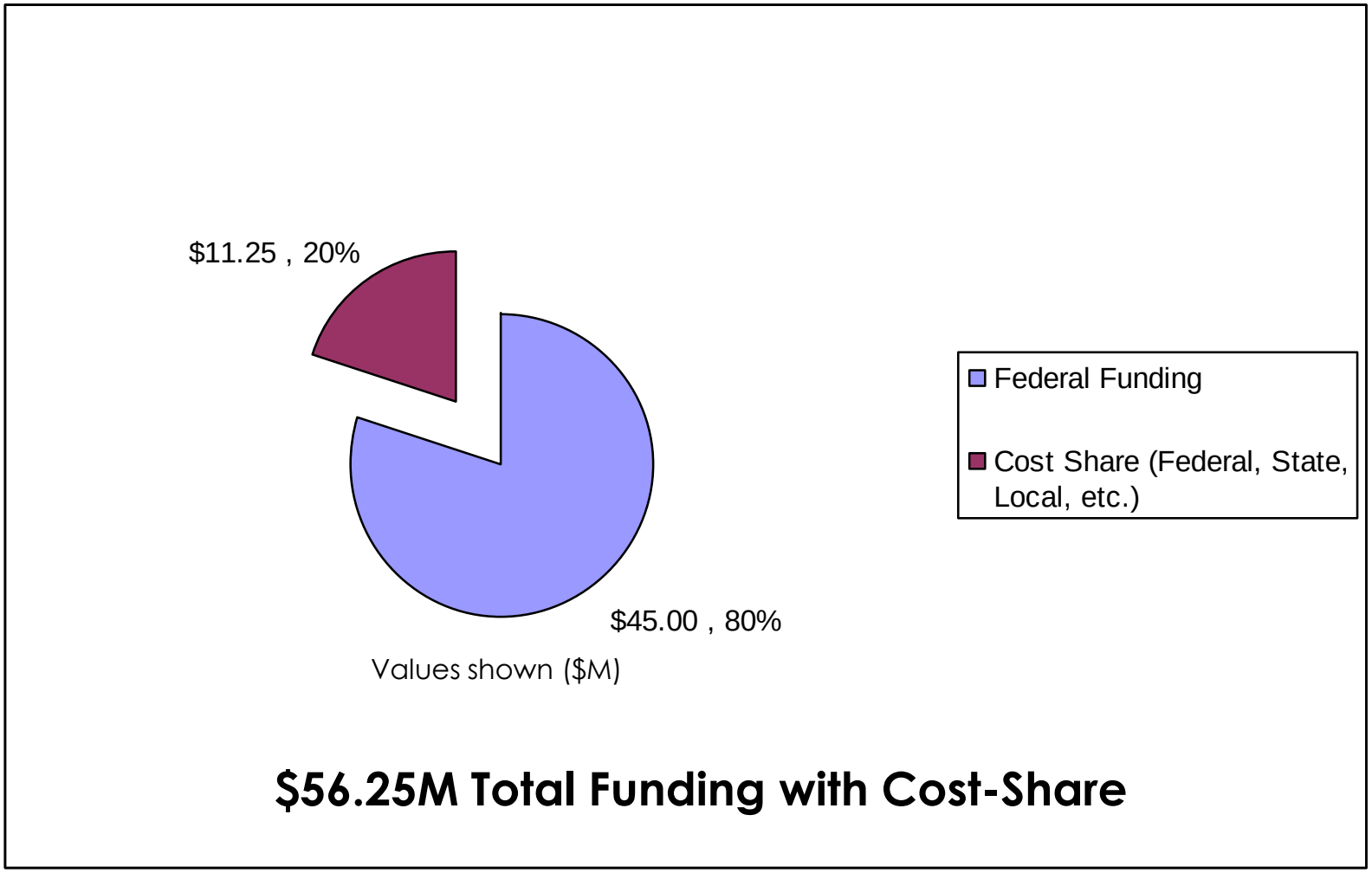
Federal Funding Awarded to Maglev Projects

The California-Nevada Project is the only project named and approved



Funding Guaranteed by Law (23 U.S.C. Section 1307, as Amended): June 2008

Total Funding based on 80%/20% Cost Share



$56.25M Total Funding with Cost-Share

Next Steps

Brings the project to construction

Task	Federal Funding ($M)	NV Matching Funds ($M)	CA Matching Funds ($M)	Total Matching Funds ($M)	Total Project Funding ($M)
PEIS/EIS, & Ridership	**13.6**	**2.38**	**1.02**	**3.4**	**17.0**
Anaheim-Ontario (Airport Connector)	**4.0**	**0.0**	**1.0**	**1**	**5.0**
•Make Project "Bankable" • Raise Construction Funding	**27.4**	**6.85**	**0.0**	**6.85**	**34.25**
Totals	**45.0**	**9.23**	**2.02**	**11.25**	**56.25**

*** (H.R.1195, SEC. 102. MAGLEV)**

Making a Revenue Project "Bankable"

Activity	Revenue Bond	TIFIA	Equity
Environmental Approvals (Record of Decision) and Permits	X	X	X
"Investment Grade" Ridership & Revenue Study (including Peer Review)	X	X	X
3rd Party Consultant Reviews of Design/Construction Budget & Schedule including O&M and Rehabilitation and Repair Cost	X	X	X
Committed External Funding (i.e., Federal State, and Local)	X	X	X
Committed Equity Funding	X	X	
Rating Agency Preliminary Opinion Letter that Senior Debt is Investment Grade		X	
Application Approved by USDOT	X (If Private Activity Bonds)	X	
Investment Grade Ratings on Senior Debt	X	X	
Project Consistent with State Transportation Plan and included in Metropolitan Transportation Plan		X	
Committed Credit Enhancement (If Economically Beneficial)	X		
Executed Guaranteed Maximum Price Design/Build or EPC Contract	X	X	X
Executed Operation Contract	X	X	X

Shanghai Invested In Their Future

It’s Time to Invest in Ours

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

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