An Integrated System

- Our focus has been on passenger service.
- The freight container logistics opportunity is a significant source of revenue to support next generation transportation.
- This next generation system will carry both passengers and freight.

This presentation focuses on the freight opportunity only!
Operating Costs

- Half power, half people
- Cruise for 80KW ($9 / hour)
- Zero to 60MPH for a quarter net.
- Energy cost per month is $9000 per car based on 10 minute headways and 20 hour days.

Operating cost can be covered by the freight charges, which is unique!
Safety Standards

- **Safety Certification**
  - US Department of Transportation/Federal Transit Administration (USDOT/FTA) Standards

- **Standards**
  - American Society of Civil Engineers/Automated People Mover Standards (ASCE/APMS)
  - American Association of State Highway and Transportation Officials (AASTHO)
  - American National Standards Institute (ANSI)
  - Institute of Electrical (IEEE)
  - National Fire Protection Association (NFPA)
  - Americans with Disabilities Act (ADA)
The Need for Speed

- Technology is proven for passengers and freight in a 60MPH environment.
- May be too fast for freight service logistics.
- Technology components load designed to 150MPH. Systems simulated up to 300MPH.
- The American Maglev Technology Development Plan grows the technology competency and grows the system while we grow the Company.
- We have the financial and technical resources to support our TDP.

When there is a need for 200MPH speed, we will be there.
Environmental Mitigation and Mobility Initiative (EMMI)
Los Angeles EMMI Project

- Huge growth in containers at SPB Ports.
- 17M to 44M by 2030.
- Environmental Alarm has been sounded.
- Population growth of 6M during this time.

Sustainability is a HUGE challenge.
Sustainability is the Challenge

- Growth Sustainability.
- Health Sustainability.
- Economic Sustainability.
EMMI Cargo Routes
An Aggressive Development Plan

Phase A: SPB Ports to ICTF
- Ship/Maglev facilities at Port of LA/Long Beach
- 5 miles of elevated track from SPB Ports to ICTF
  - Top Speed: 60 mph
  - 26 Maglev vehicles
  - 12-minute round trip
- Process all near-dock & off-dock containers
  - In-Service Date: 7/1/09

Phase B: SPB Ports to Bell
- Ship/Truck/Maglev facilities at Port of LA/Long Beach
- 21 miles of elevated track from SPB Ports to Bell
  - Top Speed: 80 mph
  - 121 Maglev vehicles
  - 48-minute round trip
- Process all transloaded, intermodal & regional truck cargo
  - In-Service Date: 7/1/11

Phase C: SPB Ports to Inland Empire
- Truck/Maglev facilities at Inland Empire
- 71 miles of elevated track from SPB Ports to Inland Empire
  - Top Speed: 100 mph
  - 541 Maglev vehicles
  - 90-minute round trip
- Process all non-regional truck-based cargo, with incremental growth in regional truck-based cargo
  - In-Service Date: 7/1/13

Phase D: SPB Ports to High Desert
- Truck/Maglev facilities at Bell
- 105 miles of elevated track from SPB Ports to High Desert
  - Top Speed: 120 mph
  - 300 Maglev vehicles
  - 120-minute round trip
- Process incremental growth in near/dock-off-dock containers, transloaded intermodal and regional truck-based and non-regional cargo
  - In-Service Date: 1/1/13
## EMMI Initial Costs

<table>
<thead>
<tr>
<th>Capital Cost</th>
<th>Phase A</th>
<th>Phase B</th>
<th>Phase C</th>
<th>Phase D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guideway</td>
<td>$ 31,639,537</td>
<td>$ 138,932,989</td>
<td>$ 469,725,819</td>
<td>$ 297,713,547</td>
</tr>
<tr>
<td>G,S, &amp; C*</td>
<td>19,400,640</td>
<td>65,875,200</td>
<td>208,435,200</td>
<td>134,304,000</td>
</tr>
<tr>
<td>Facilities</td>
<td>20,000,000</td>
<td>84,000,000</td>
<td>284,000,000</td>
<td>180,000,000</td>
</tr>
<tr>
<td>Vehicles</td>
<td>65,000,000</td>
<td>302,500,000</td>
<td>1,352,500,000</td>
<td>92,500,000</td>
</tr>
<tr>
<td>Fees</td>
<td>25,167,433</td>
<td>109,392,015</td>
<td>428,212,289</td>
<td>130,335,746</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 161,207,610</strong></td>
<td><strong>$ 700,700,204</strong></td>
<td><strong>$ 2,742,873,308</strong></td>
<td><strong>$ 834,853,294</strong></td>
</tr>
</tbody>
</table>

**Project CAPEX - $ 4.4 Billion**
Intermodal Trains

Phase A
Phase B
Phase C
Phase D

100% of Port Traffic

TEUs by EMMI Phase

TEUs (Millions)


Intermodal Trains
EMMI Decongests the Ports

Trucks are still needed, but the trip efficiencies are enhanced.
## Pricing is Competitive

<table>
<thead>
<tr>
<th>Phase: Destination</th>
<th>2007 RT Price</th>
<th>2011 RT Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: ICTF</td>
<td>$150</td>
<td>$122</td>
</tr>
<tr>
<td>B: Bell</td>
<td>$225</td>
<td>$122</td>
</tr>
<tr>
<td>C: Inland Empire</td>
<td>$275</td>
<td>$197</td>
</tr>
<tr>
<td>D: High Desert</td>
<td>$300</td>
<td>$233</td>
</tr>
</tbody>
</table>
Phase A Benefits

- 1.7M containers off the roads! 17M less truck miles in a very heavily congested area.
- Saves $550M+ in tax dollars.
- 150,000 MT+ reduced emissions per year.
- 1.5M+ gallons of gasoline per year saved.
- 10+ lives lost to traffic accidents per year.
- Room for growth tomorrow.

Instant gratification.
Construction can start next year.
EMMI Phase A Summary

- Phase A Cost/Mile - $31,265,031
- Operations start in 2009.
- Minimum Program Debt Coverage is very attractive (2.6)
- Investment Rate of Return = 20%
- Cash Flow to Equity = 45%
EMMI Project Summary

- Fully Operational in 2013
- Total Build-Out is $4.4 Billion.
- Total System is 150 miles of double track.
- Cost/Mile is approximately $29 million.
- 1000 vehicles moving in an automated system.
Areas of Strategic Partnership

- Intermodal Rail “Just in time” System
- “Just in time” logistics system.
- Automated transloading system.
We have a shared vision.