



# **U.S. Maglev Coalition**

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# Outline

- " U.S. Maglev Coalition
- " Maglev Characteristics
  - " Performance
  - " Environment
  - " Safety
- " Summary



# **U.S. Maglev Coalition Mission**

- “ Support development/deployment of high-speed intercity maglev systems in the U.S.A.
- “ Educate the public to maglev's attributes
- “ Introduce U.S. industry to global maglev leaders, promoting understanding, partnering and cooperation



# **Selected Coalition Members**

- ” Chattanooga Enterprise Center
- ” Greater Baltimore Committee
- ” Arcadis-U.S.
- ” EarthTech
- ” Parsons Brinckerhoff
- ” I.M.P.A.C.T. (Ironworkers)
- ” Portland Cement Association
- ” Central Japan Railway Company

# Our Message

- “ Intercity maglev systems: Good for the USA
- “ Other transportation modes are at capacity
- “ Maglev is environmentally friendly, utility emissions are easier to control than tailpipes
- “ Maglev is critical to implementing clean, livable communities in the future

# Maglev in the USA

- “ Transportation is **POLITICAL**
  - Station locations, systems, funding
- “ Political will and leadership are required
  - Strong enough to compete with status quo
- “ U.S. Maglev Coalition is trying to help
  - Shanghai is a great project and example
- “ We must **MEASURE** Maglev vs. Others
  - Performance, environment, safety

# Maglev = High-Performance



- “ Operating speed: 250-310 mph, 60% higher than HSR
- “ Time/distance-to-speed: 4X faster than HSR
- “ Fast acceleration and braking in light vehicles
- “ Banking up to 12 degrees (3X HSR)
- “ Climbing up to 10 degrees (5X HSR)

# Maglev is Environmentally Friendly

- “ Noise levels *always* less at HSR speeds
- “ Vibration insignificant
- “ Electromagnetic fields are no health concern
- “ Small ROW footprints
- “ Elevated guideways
- “ Good fit for developed areas and rural routes



# Maglev is a Safe Technology



“ Maglev uses wrap-around vehicles and U-shaped channels, minimizing potential for derailments



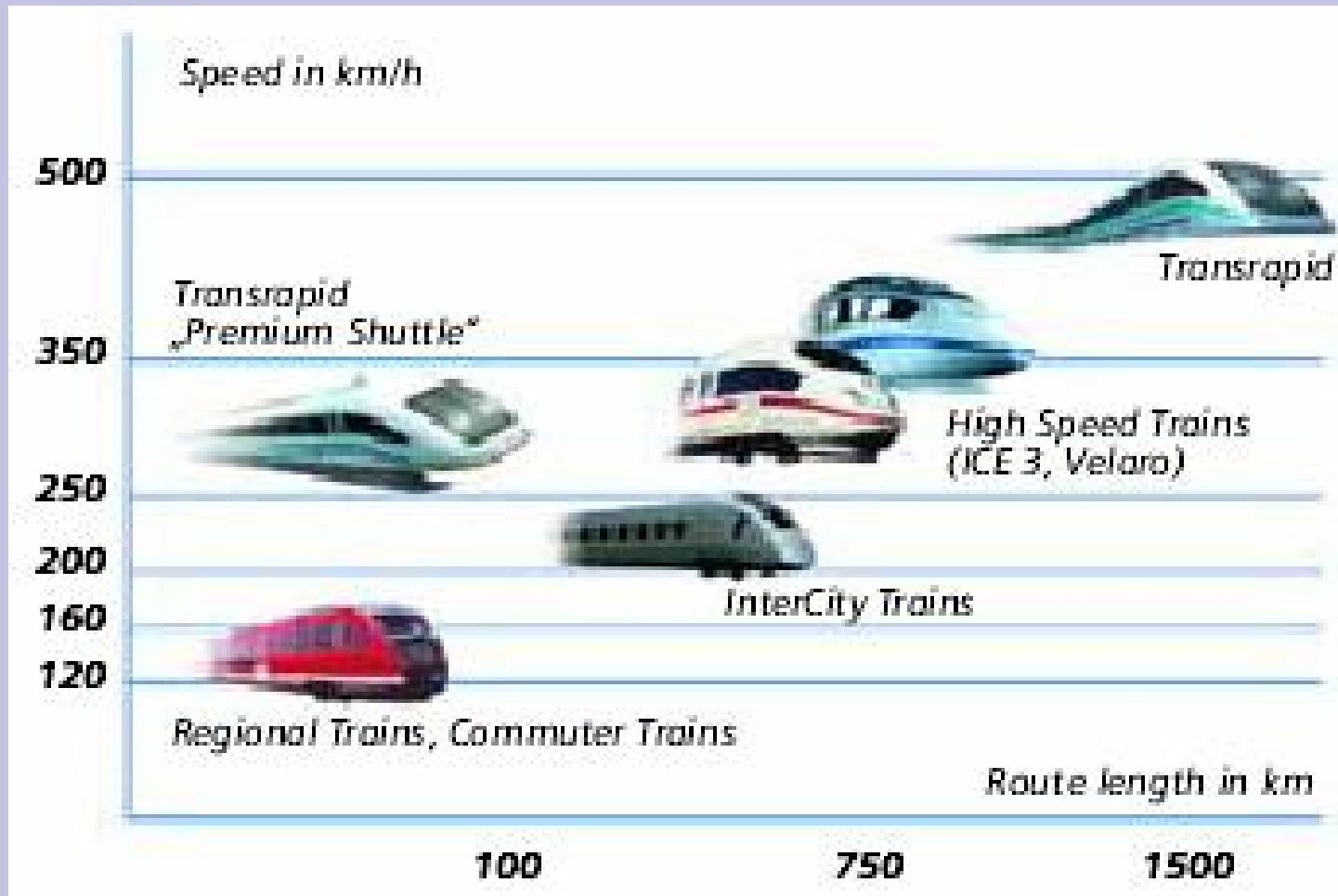
## Summary

- “ U.S. Maglev Coalition is in place
- “ Public and private officials support maglev
- “ USMC members help spread the word
- “ We invite you to join us
- “ Visit us at: [www.usmaglevcoalition.com](http://www.usmaglevcoalition.com)



Back-up slides

# Performance Comparison: Rail and Maglev



(Source: Siemens Transportation Systems company brochure)

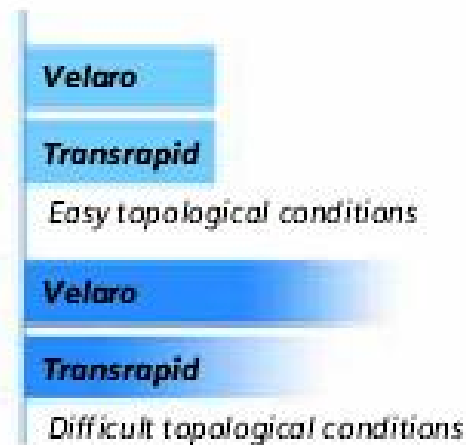
# Cost Comparison: High-Speed Rail and Maglev

## German Velaro/ICE and Transrapid: Investment & Life-Cycle Costs



### Comparison of investment: Vehicles

Considering the investment for vehicles, the wheel-on-rail system provides advantages owing to the economy of scale and a production that has been optimized over many years.



### Comparison of investment: Track/Guideway

For normal route topologies, the investments for the track/guideway are almost equal. Magnetic levitation provides advantages in more demanding terrain.



### Comparison of cost: Life cycle

With regard to life cycle costs, the magnetic levitation system offers advantages which are essentially due to the absence of mechanical wear (running gear, brakes).

(Source: Siemens Transportation Systems company brochure)