

Gerald Desmond Bridge Replacement: *Lessons Learned and Challenges Ahead*



**Western Association of State Highway Transportation Officials
(WASHTO) Conference, Seattle**

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The Port Complex



- 3,500 acres of land
- 4,600 acres of water
- 80 berths
- 7 container terminals
- 71 ship-to-shore cranes
- 76-foot-deep main channel

Port's Economic Impact



- \$140 billion in goods in 2007
- \$47 billion a year in business sales
- \$14.5 billion in wages
- 30,000 local jobs
- 316,000 regional jobs

Challenges Facing the Port



- Environmental Issues
- Political/Community
- Infrastructure Needs
- Security

It's not easy to go Green!

Our Core Business – Maintaining Global Competitiveness



Capital Improvement Program



- 10 Year Program
- Total \$3.6 billion
- Navigation
- Bridge & Roadway
- Rail
- Terminal Optimization
- Security



The Gerald Desmond Bridge Replacement Project

“A Bridge to Everywhere”



- Carries approximately 15% of all U.S. waterborne container volume
- Included in the “Projects of National & Regional Significance” and “High-Priority Project” programs of SAFETEA-LU (\$100 million)
- A high priority project in the State of California *Goods Movement Action Plan*
- Designated as a National Highway System Intermodal Connector Route

Project Purpose



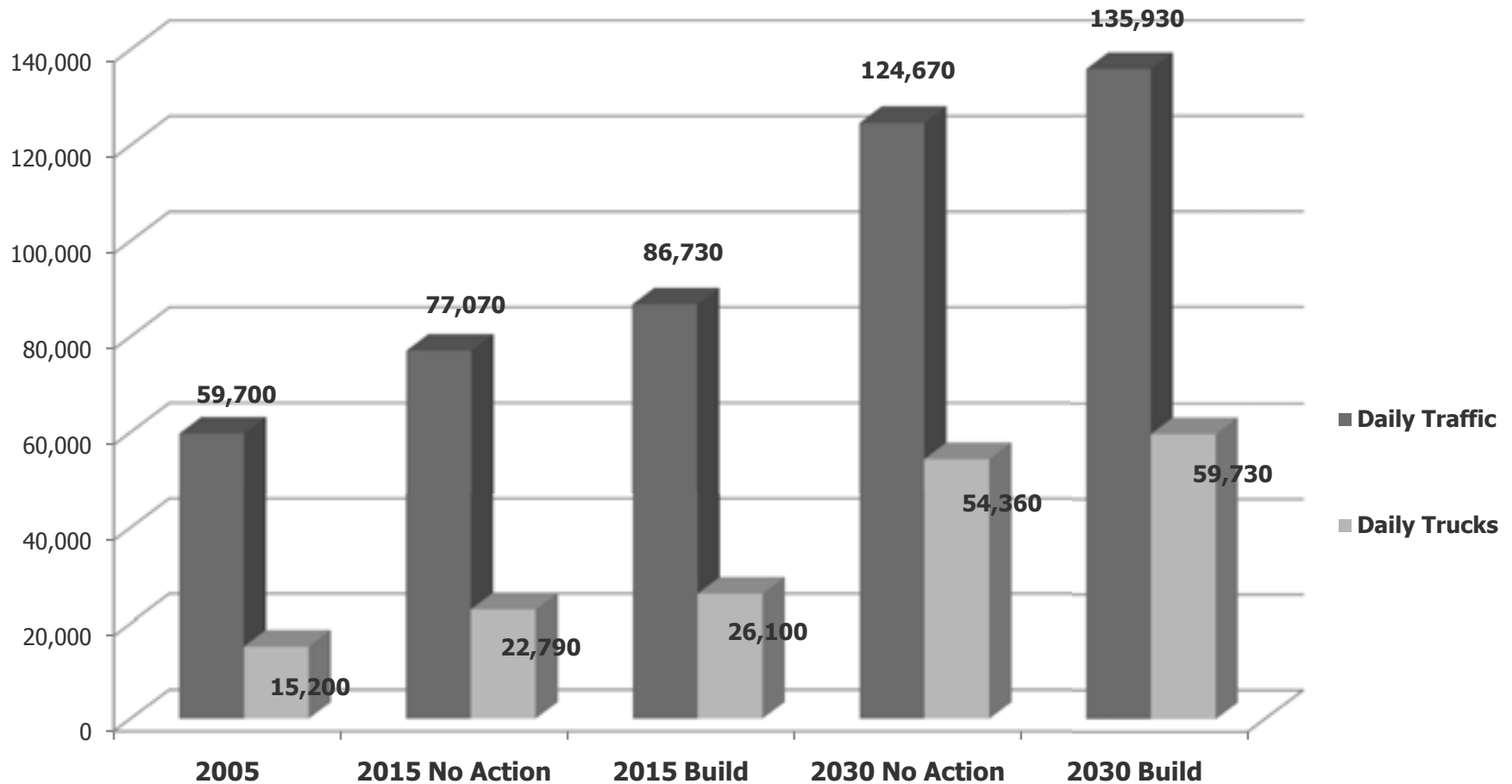
- Meets modern structural & seismic standards
- Reduces traffic hazards by reducing grades
- Improves traffic flow by adding additional lanes
- Improve vessel passage under the bridge by increasing vertical clearance

- Part of the overall USDOT Highway Bridge Program
 - Determined by the following factors: traffic volumes/operating conditions, geometric design, and structural integrity.
 - Replacement is warranted when a bridge has a 50-point “Sufficiency Rating.”
- GDB’s rating in 2007 was 43. Such a low rating was determined even after the bridge was seismically retrofitted in 1998



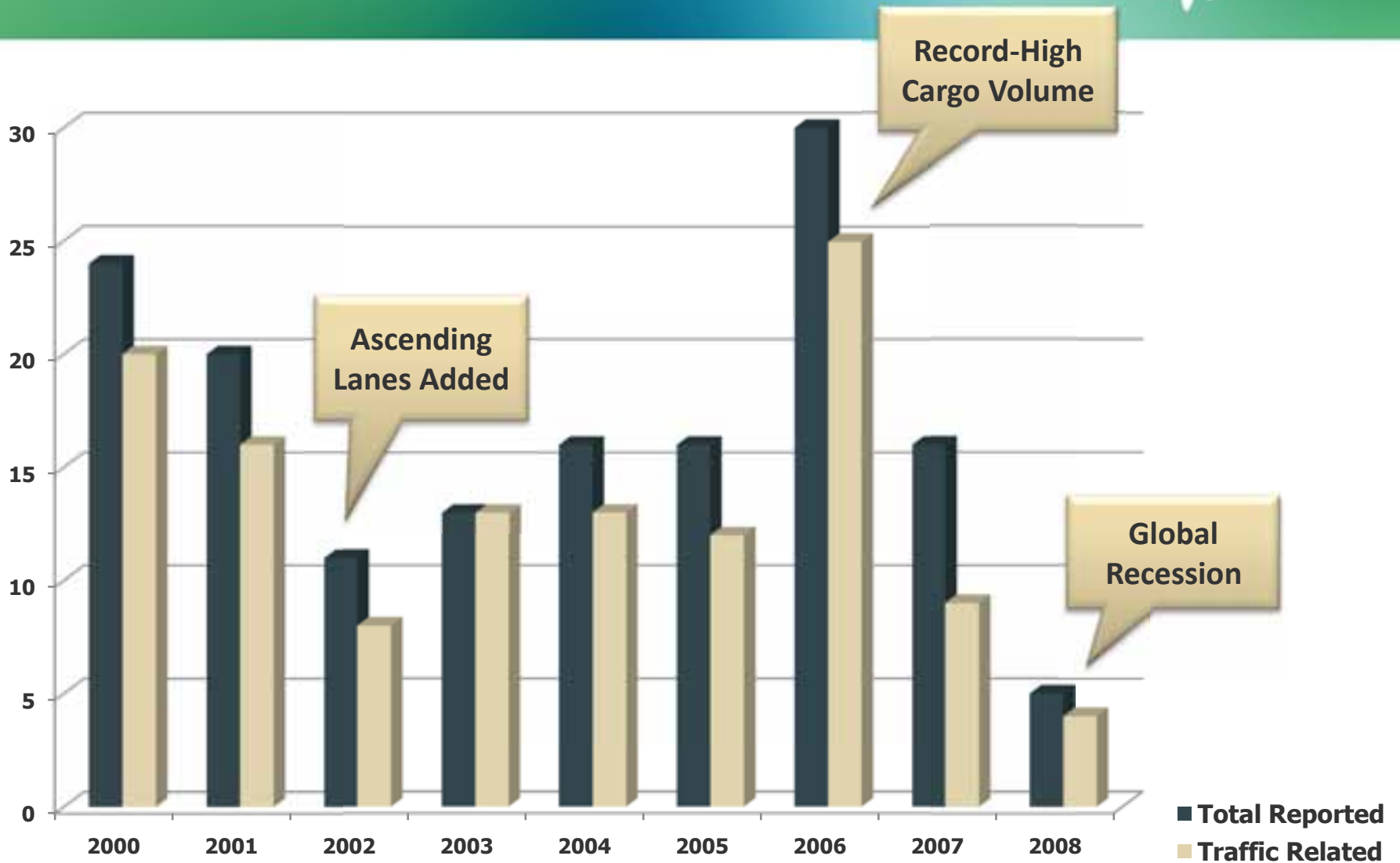


Traffic Volume on GDB



- *In 2005, 38% all traffic on the bridge was either destined to or originated in the ports.*
- *The bridge also carries a significant amount (40%) of non-port, regional through traffic.*

Traffic Accidents on GDB





Key Project Components



- New Bridge with Expanded Traffic Capacity
- Expand from present 4 through-lanes to 6 lanes
- Reduce approach grades to 5 percent
- 200' Vertical Clearance
- New Terminal Island and Route 710 Interchanges
- \$1.125 Billion



Pacific Coast Hwy
1 SOUTH
EXIT ONLY

Pacific Coast Hwy
NORTH SOUTH
EXIT ONLY

30

EXIT ONLY
Long Beach
Free

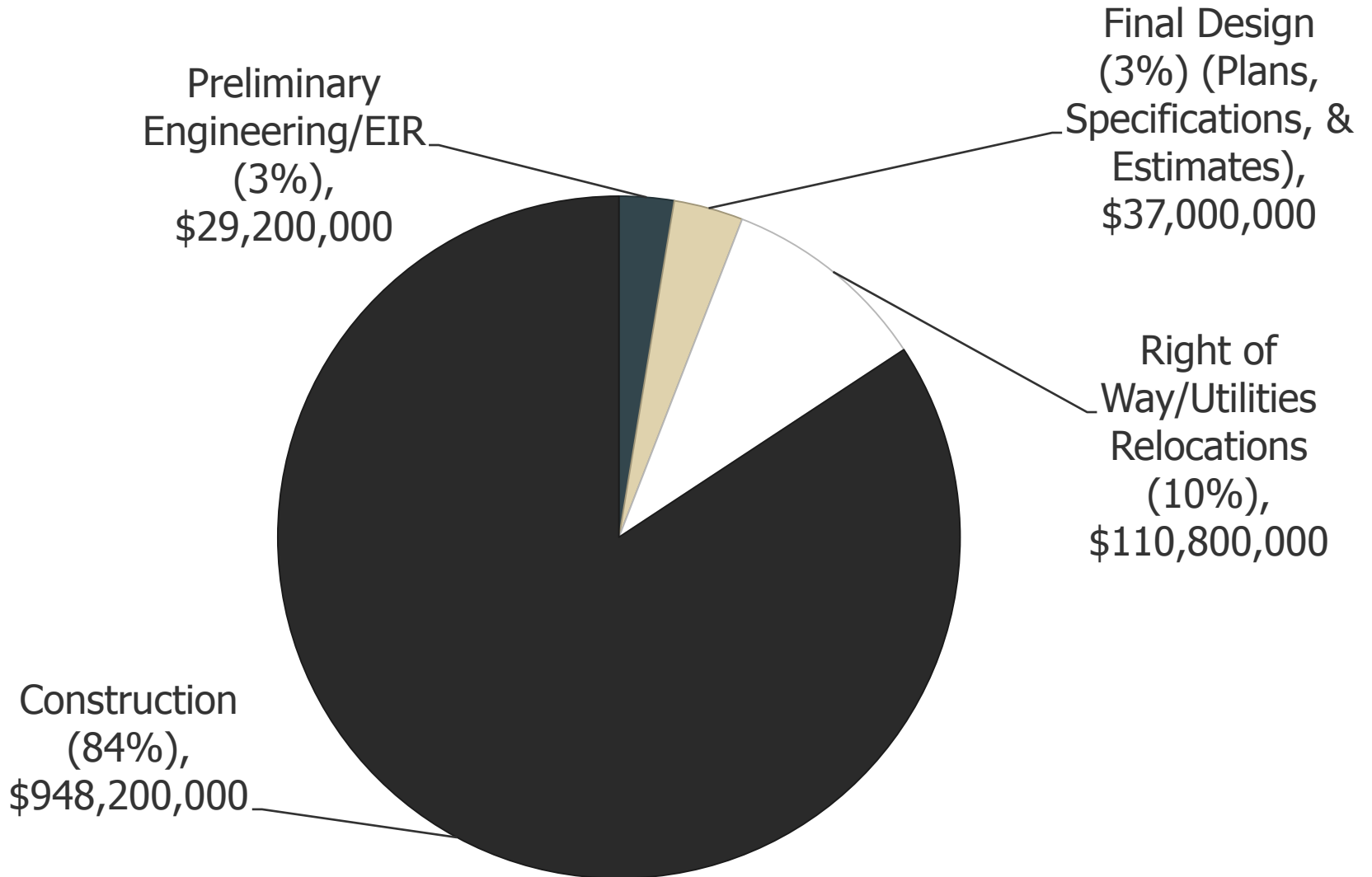
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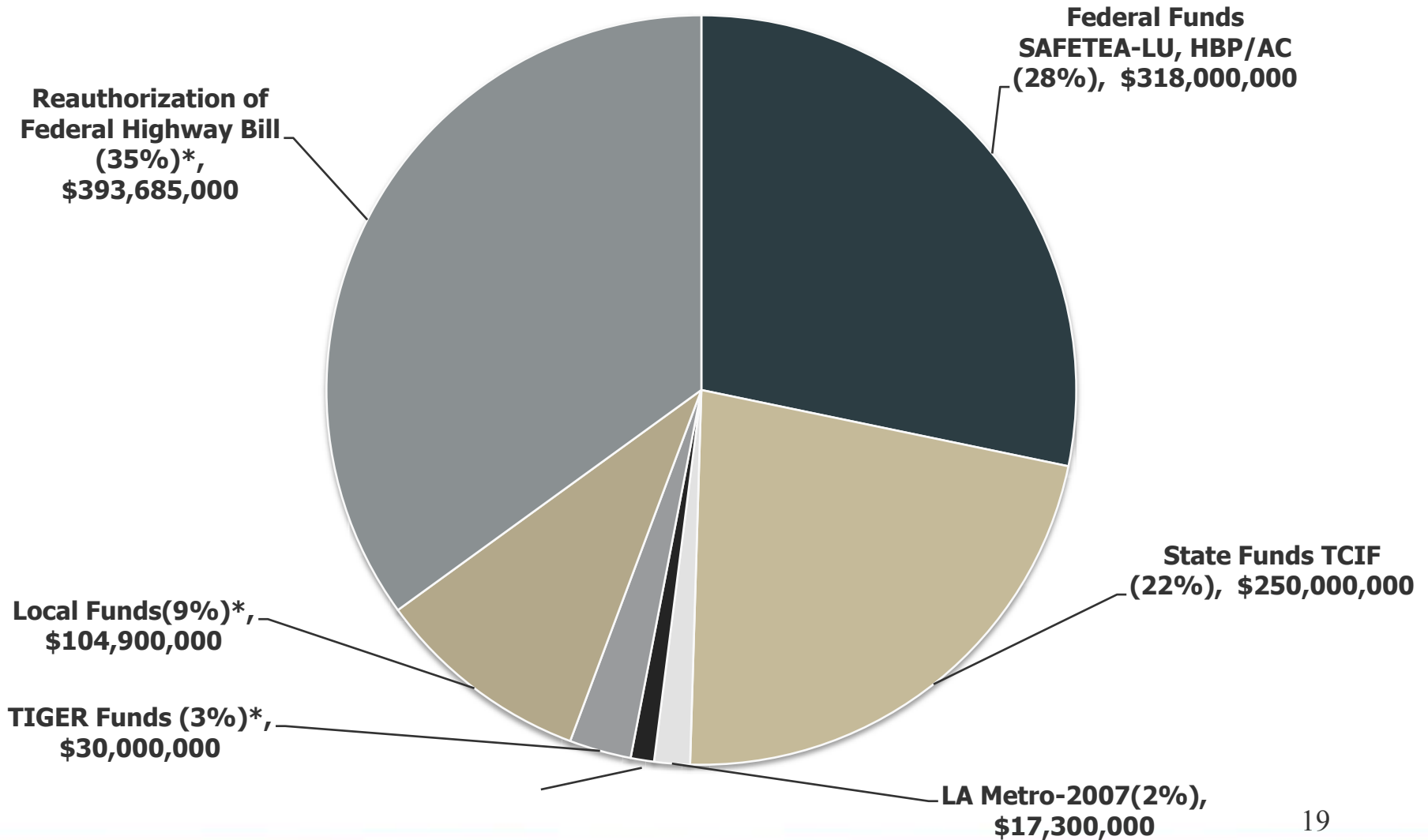
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Project Costs by Phase



Project Funding Plan



- Traffic Impact
- Air Pollution/Health Risk Assessment – Sensitive Receptors
- Climate Change
- Growth Inducement
 - Landside Direct vs. Indirect Induced Growth
 - Maritime Growth Potential

Many Challenges Ahead

- Environmental Review and Approval Process
- Permit Issues
- Complex Utilities Relocations
- Coordination with other on-going major roadway projects
- Timely use of secured funds
- How does one local entity find additional \$300+ million for a Project with National Significance?

Southern California National Freight Gateway Cooperation Agreement



Plan of Cooperation

With the mutual understanding that this is a flexible agreement for cooperation among our respective agencies, we agree to do the following:

- Cooperate to improve sustainable and efficient freight transportation operations in the Area, while protecting and enhancing the natural and human environment;
- Use this forum as a means to create better understanding among all stakeholders of underlying considerations and potential impacts and alternatives for proposed Southern California transportation projects related to goods movement;
- Cooperate regarding the development of a Strategic Framework for achieving sustainable and efficient freight transportation operations in the Area in harmony with California's Goods Movement Action Plan (<http://www.bth.ca.gov/pdf/qmap-1-11-07.pdf>) (although this does not signify endorsement of any specific project);
- Consider improvements to the transportation decision-making and environmental review processes to expeditiously advance the objective of the Strategic Framework;
- Take into account the existing environmental programs of ports and their tenants in order to work cooperatively to reduce air quality-related freight movement emissions consistent with the Area's air quality implementation plan;

Will We Overcome These Challenges?

Certainly!



Questions?



Please Contact

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