Promoting Railway and Public Transportation Safety in the United States

27th International Railway Safety Council

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American Public Transportation Association
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Session Overview

- State of United States Public Transportation

- United States Safety Regulatory Overview

- APTA Safety Management Audit Program Update

- APTA Peer Review Program Update

- Standards Development

- APTA Study Mission to Asia

- APTA High Speed Rail Return on Investment Study

- Questions & Answers

APTA

- Established in 1882

- 90 full-time employees

- Represents all modes of public transit

- More than 1,500 members, US, Canada and International

- Annual Meeting and EXPO in Atlanta attracted 14,000 people

Public Transportation in the U.S.

- 35 million boardings every weekday.

- 10.8 billion annual boardings in 2014.

- Approximately 7,700 transit providers in U.S.

- 50% of trips on Bus; 50% taken on Rail.

- 46% of U.S. households have no access.

- $66 billion/ yr. industry; directly employs 400,000 and supports 1.9 million jobs.

Ridership Growth v Population Growth

Transit Ridership Has Grown Faster Than Population
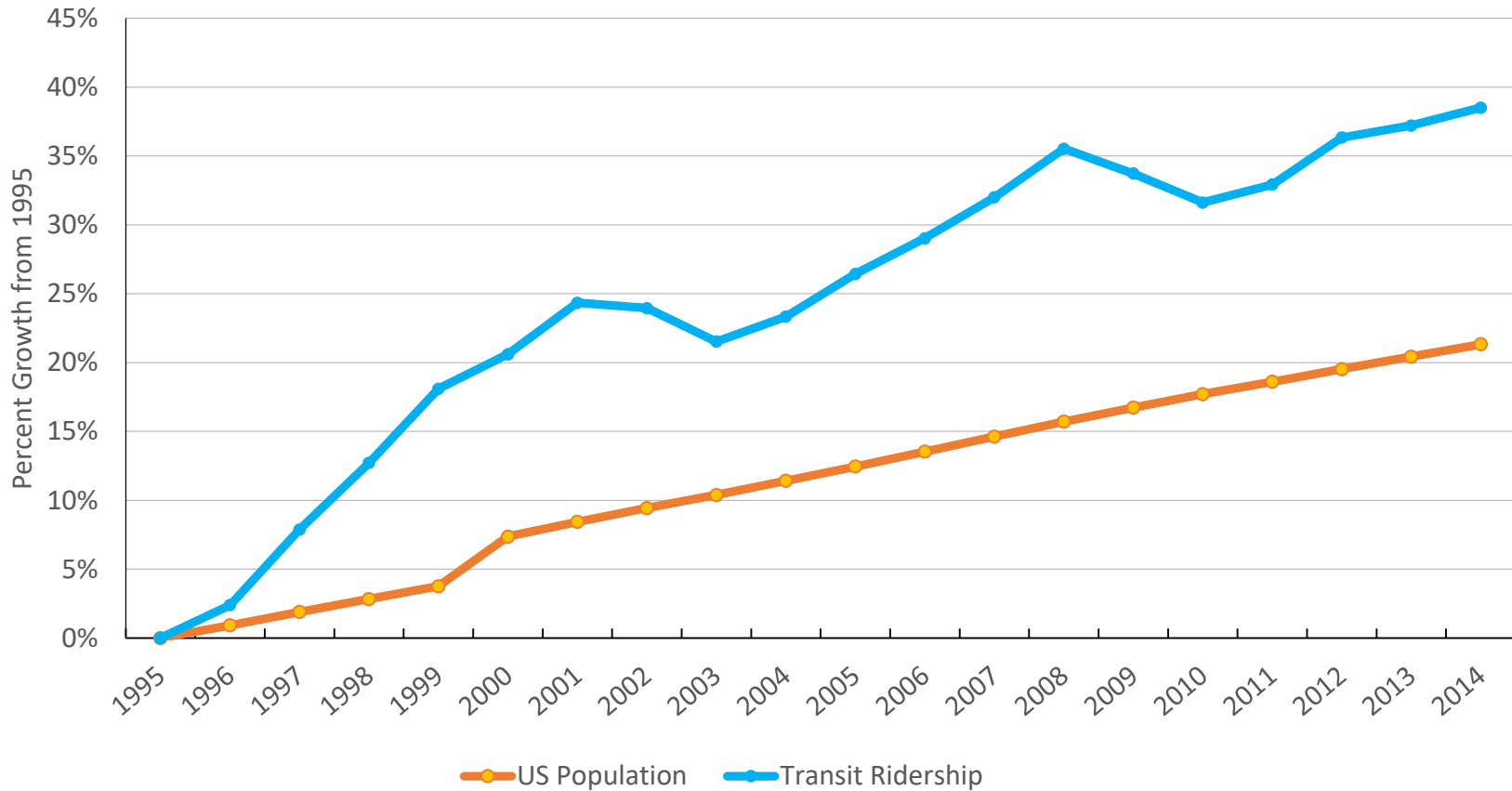
Key Challenges and Opportunities

➢ State of good repair vs. new capacity

➢ 55 projects worth $60B USD in the federal government funding pipeline

➢ Advancement of Autonomous Vehicle technology and ridesharing

SGR Backlog: Funding Gap

Impact of Preservation Investment on 2032 Transit SGR Backlog in All Areas

Annual Expenditures for Preservation (Billions of 2012 Dollars)

FTA

4
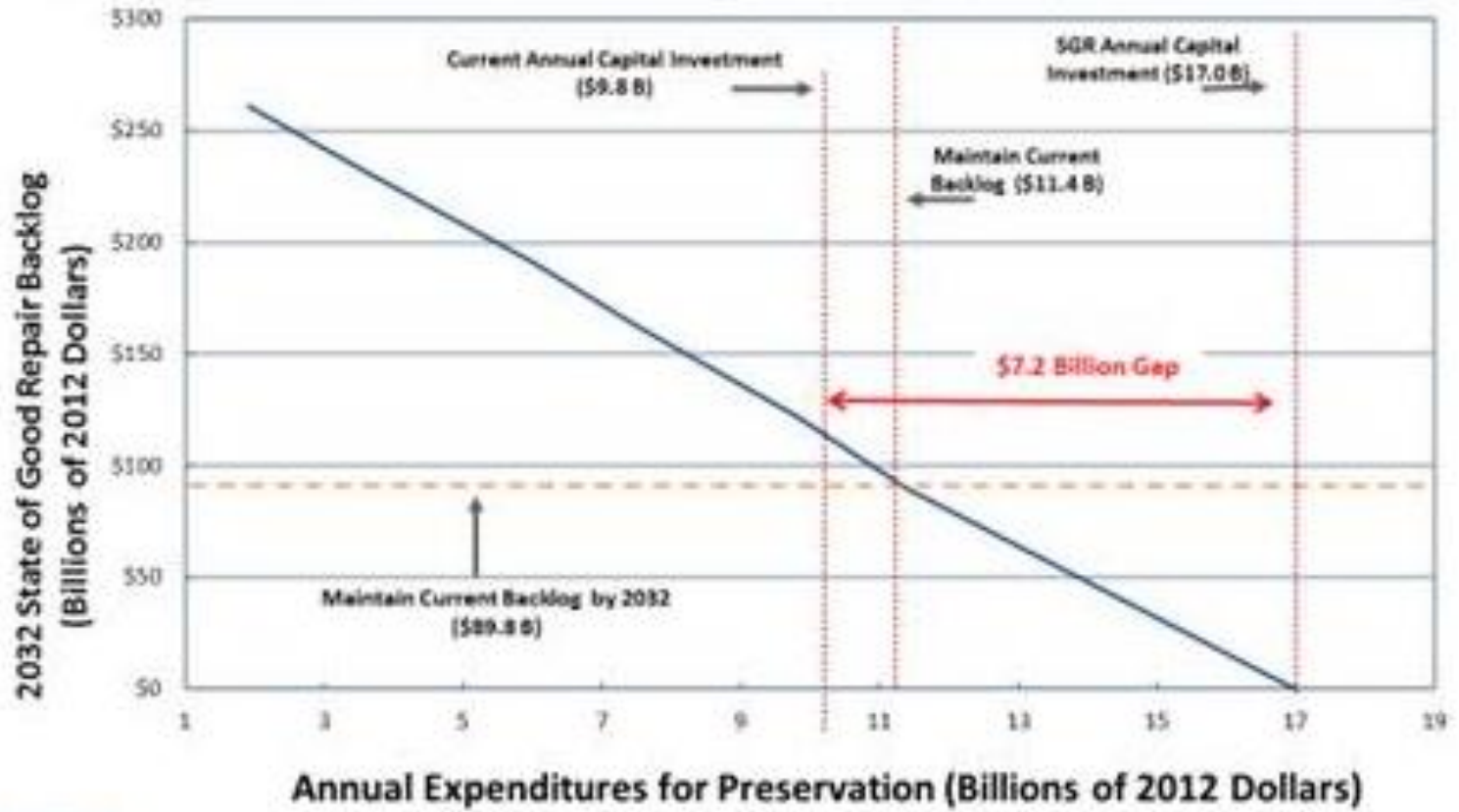
New Projects Pipeline

- Los Angeles, Regional Connector **($120B USD)**
- Los Angeles, Westside Subway Section 1
- Los Angeles, Westside Purple Line Extension, Section 2
- San Jose, BART Extension
- Boston, Green Line Extension
- Charlotte, LYNX Blue Line Extension - Northeast Corridor
- Portland, Portland-Milwaukie Light Rail Project Tempe, Tempe Streetcar
- Seattle, Lynnwood Link Extension
- FL Jacksonville, First Coast Flyer East Corridor BRT
- Indianapolis, Red Line All-Electric BRT
- Seattle, Seattle Streetcar Center City Connector **($54B USD)**
- Dallas, DART Red and Blue Lines Platform Extension

Autonomous, Connect and Electric Vehicles and Ridesharing

- Regulatory responsibilities between Federal, State and Local governments

- On demand society vs. regulatory environment and lack of flexibility of public transportation

- Rapid advancement of EV technology, inexpensive, flexible and sustainable

- Private rideshare fleets are impacting ridership

- How will these concepts influence use, development and safety of public transportation?

Federal Railroad Administration

- Historically a compliance driven culture and process

- Passenger railroads must conduct risk-based hazard analysis and work to mitigate hazards

- Railroads must implement a defined and measurable safety culture

- Document how they will achieve compliance

Federal Transit Administration

- Historically a funding and policy agency with safety de-centralized

- Formally establishes FTA's safety policy - Safety Management Systems (SMS)

- Safety performance measures for Agency Safety Plan

- Oversight of rail systems by State Regulators

- State Regulators must be certified by April, 2019

APTA Safety Management Audit Program Update

- Safety Management audit program is aligned with Safety Management Systems (SMS), and in U.S. is aligned with the requirements from FTA and FRA

- Program has a direct connection to Transit Asset Management (TAM)

- Not only for rules compliance, but also continuous improvement of the safety of transit systems

- APTA has long term relationship with MTR to conduct audits/reviews

APTA Peer Review Program Update

- Independent Peer Reviews are conducted in the U.S. and Canada to help agencies address issues through Subject Matter Experts (SMEs) from within the transit industry

- Types of Peer Reviews:
    - Safety & Security
    - Bus Maintenance
    - Information Technology (IT)
    - Human Resources (HR)
    - Technology
    - Operations

Standards Development Program

- APTA Standards Program is partially funded by FTA and FRA grants

- Industry sharing and supporting development without further regulations

- APTA Standards cover the following are
  - Bus & Rail
  - Safety & Security
  - Sustainability and Urban Design
  - Technology

Safety and Security Standards

- APTA is engaged in Standards Development for Safety and Security for rail and bus

    - Safety: Currently working on developing a Standard for the "Fingering Procedure"
    - Security: The U.S. Transportation Security Administration (TSA) has issued APTA a grant to develop security standards

- APTA develops and maintains Passenger Rail Equipment Safety Standards (PRESS)
    - PRESS is a collection of standards which apply to Commuter and Intercity Passenger Equipment (Rolling Stock and Operations)

APTA Study Mission to Asia

- 26 member delegation: two-thirds public sector, one-third private sector

- Ten–day mission to Hong Kong, Singapore and Tokyo

- Focus on safety culture, state of good repair and innovative operations

- Final report published September 2017 and available at http://www.apta.com

APTA WELCOME RECEPTION
5 April 2017 Tokyo, Japan

Mr. Garrome 'Jerry' Franklin
Vice President Chief Safety Officer
Dallas Area Rapid Transit (DART)

Concluding TAKE-AWAYS

1. Holistic, risk-based business model based on predictable, long term funding for operations and capital

2. Spirit of continuous improvement

3. Service excellence based on an ingrained focus on safety and good performing assets

4. Significant investment in human capital/professionalization of the workforce

5. Collective mindfulness and sense of ownership instilled in workforce

6. Extensive use of technology and data to achieve efficiencies

APTA High Speed Rail Return on Investment Study

- Report reviewed 47 prior studies that assessed benefits, costs, and economic impacts of High Speed Rail and Intercity Passenger Rail proposals

Conclusions:
- Traditional Return on Investment (ROI) measurements capture a narrow range of benefits
- It is necessary to include social, environmental, and desirable economic outcomes (beyond traditional ROI) when looking at High Speed Rail proposals and investment

THANK YOU