



# 2011 APTA Sustainability & Public Transportation Workshop



## TIGGER Program Peer Exchange

August 2, 2011

Omni Hotel – Los Angeles, CA



# Welcome & Program Overview

***Walter Kulyk, P.E.***

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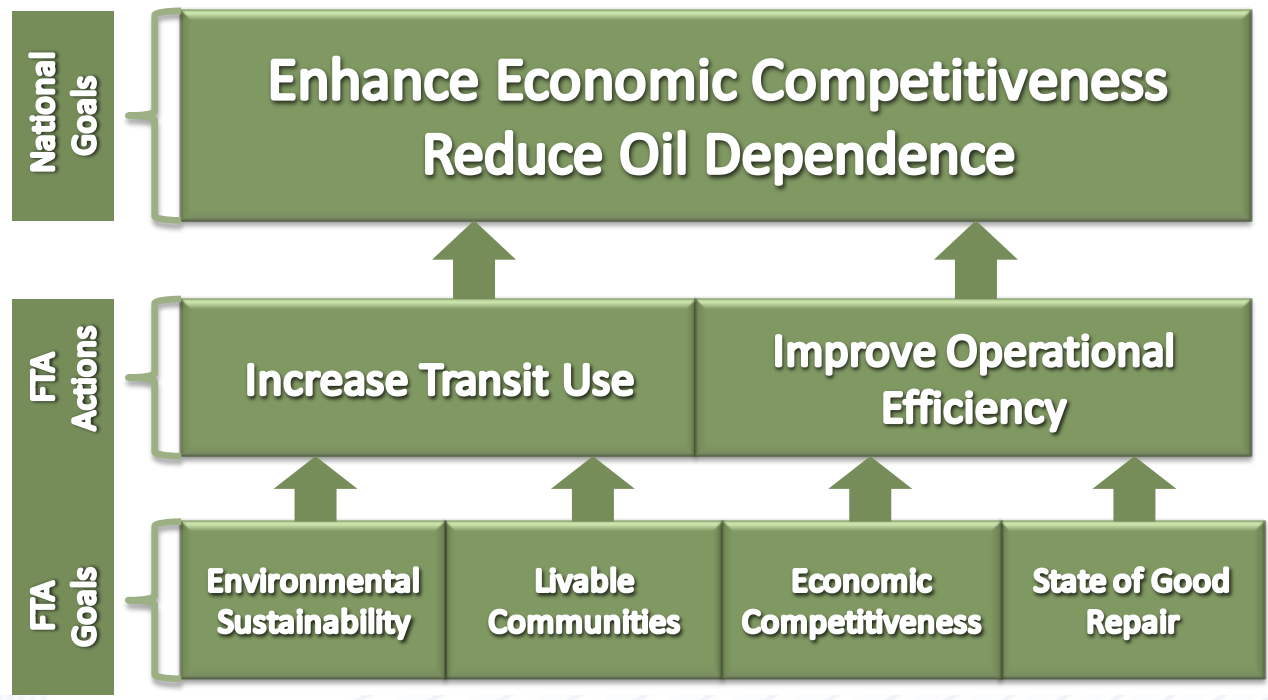


# Agenda & Speakers

- ***Welcome & Program Overview***  
Walter Kulyk, P.E.; Director, Office of Mobility Innovation
- ***Program Management***  
Matthew Lesh, Transportation Program Specialist, FTA
- ***TIGGER Assessment Program***  
Leslie Eudy; Senior Program Manager, National Renewable Energy Lab
- ***Wayside Energy Storage – New York, NY***  
Dana Coyle; Research Analyst, Metropolitan Transportation Authority
- ***Energy Efficiency Improvements –Seattle, WA***  
Trevina Wang; King Street Station Program Manager, Seattle DOT
- ***Wind Energy – Boston, MA***  
Andrew Brennan; Director of Environmental Affairs, MBTA
- ***Renewable Energy Procurement – San Jose, CA***  
Thomas Fitzwater, AICP; Manager, Environmental Programs & Resources Management, SCVTA
- ***Open Discussion***

# Sustainability Initiative & Agency Goals

## FTA Energy Framework





# TIGGER Program History

- Not to be confused with DOT's TIGER Program (*Transportation Investment Generating Economic Recovery*)
- FY09 TIGGER Program Initiated within the American Recovery & Reinvestment Act (ARRA) of 2009. (*\$100 million & 43 project*)
- FY10 TIGGER II Program continued through the Transportation, Housing and Urban Development, and Related Agencies Appropriations Act 2010 (Pub. L. 111-68). (*\$75 million and 27 projects*)
- FY11 TIGGER III Program continued through The Department of Defense and Full-Year Continuing Appropriations Act, 2011 (Pub. L. 112-10). (***\$49.9 million available for FY2011***)



# Project Distribution

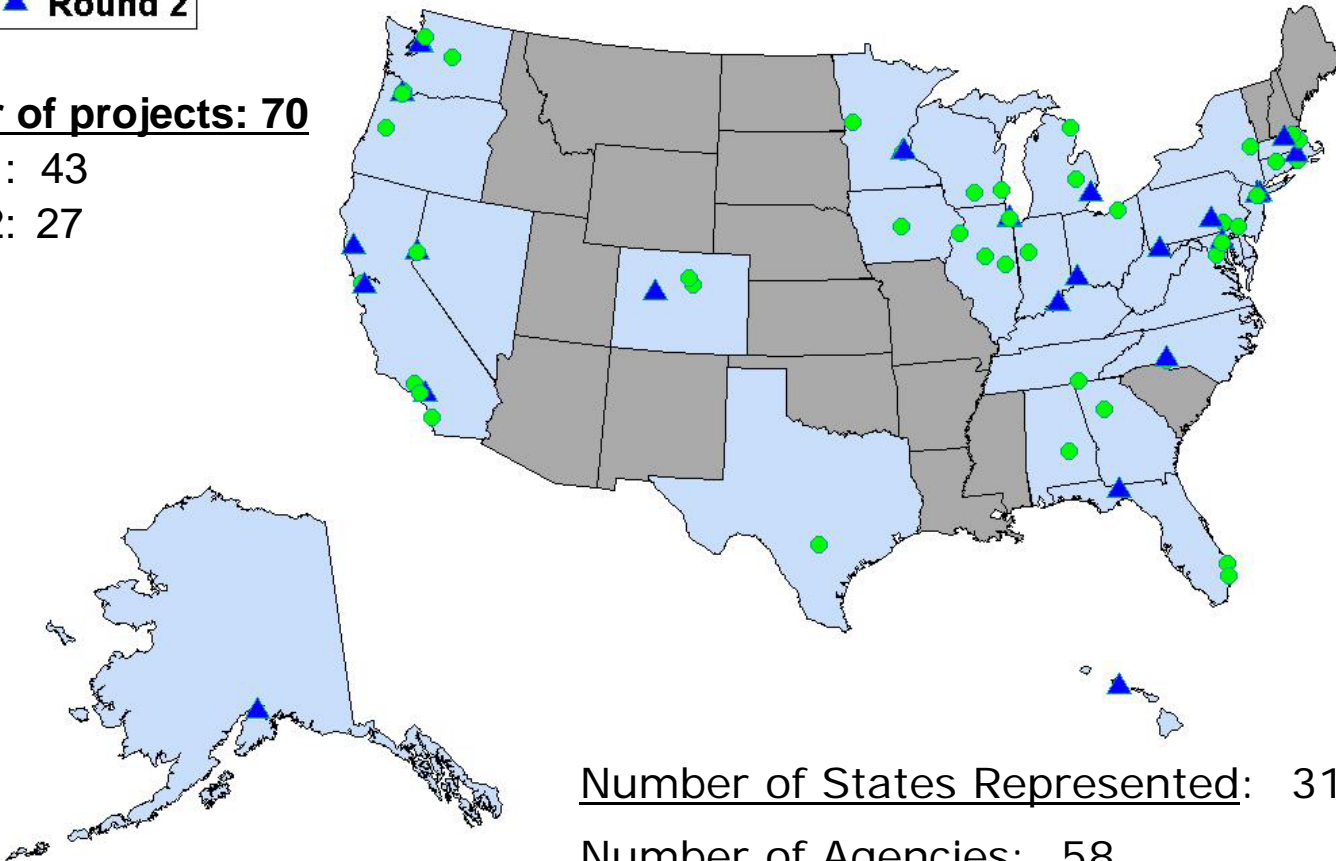
## TIGGER Site Locations

- Round 1
- ▲ Round 2

**Number of projects: 70**

Round 1: 43

Round 2: 27



**Number of States Represented: 31**

**Number of Agencies: 58**

# Program Purpose

- Provide funding for capital investments that:
  - Reducing the energy consumption of a public transportation system and/or;
  - Reduce greenhouse gas (GHG) emissions of a public transportation system.



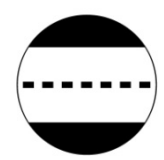
# Implementation Strategies

Breakdown of technology types:

Technology Type	Number of Projects
Building Efficiency Improvements	16
Bus Efficiency Projects	31
Rail Technology Projects	7
Renewable Power	23



Building



Bus



Rail



Solar



Wind



Geothermal





# 2011 Notice of Funding Availability

**Published: June 24, 2011**

- TIGGER & Clean Fuels Program Opportunities under Sustainability Initiative
- Authorizing Legislation
- Proposal Requirements
- Eligible Recipients/Applicants
- Eligible Expenses
- Evaluation Criteria
- Review & Selection
- Reporting Requirements
- **Proposals Due August 23, 2011**



# TIGGER III Objectives

- Reduce GHG & Energy Consumption
- **Transit Innovation & National Applicability**
- Operational Efficiency in Public Transportation
- Leverage Existing DOT/FTA Strategic Initiatives & Research
- Identify Research Gaps
- Add to existing body of knowledge





## Program Details

- **Eligible Recipients** - Public Transportation Agencies
- **Applicants**
  - Public Transportation Agencies
  - State Departments of Transportation
  - Federally-Recognized Indian Tribes
- **Grants for Capital Projects that:**
  - Reduce energy consumption, *of the transit agency*, or
  - Reduce greenhouse gas emissions *of the transit agency*, or
  - Reduce both energy consumption and emissions
- **Focus on Transit Innovation**
  - Given the availability of other FTA discretionary programs in FY 2011, FTA will more favorably rate innovative technologies or methodologies of national significance.
- **Federal share**
  - The Federal Share for TIGGER grants is **90%**
  - Applicants may propose a Federal share less than 90%, or up to 100%.
  - Local Share contributions assist in ROI evaluation.
- **Proposal Requests** - minimum threshold of \$1 million and a maximum of \$15 million.





# Energy Consumption & GHG

- Energy purchased directly by a public transportation system. (diesel fuel, CNG, electricity, etc. purchased from power plants).
- TIGGER Program focuses on **direct emissions** from public transportation systems (system vehicles, operations, etc.).
- Program does not account for:
  - Indirect Emissions (third-party power plants)
  - Displaced Emissions (emissions from manufacturing transit equipment, waste disposal, etc.).
- The TIGGER Program focuses on the total energy savings and/or GHG emission reduction claims of a project expected over its useful life.



# Specific Program Evaluation Criteria



- Energy Consumption
  - Total energy savings resulting from the project (million BTU)
  - Total energy savings of project as a percentage of the total energy usage of the public transit agency (%)
- Greenhouse Gas Emissions
  - Total greenhouse gas reductions from the project (tons CO<sub>2e</sub>)\*

\*CO<sub>2</sub> equivalent in short tons (2,000 pounds)

# General Program Evaluation Criteria

- Project Innovation
- National Applicability
- Project Readiness
- Project Management
- Return on Investment
- Geographic Diversity





# TIGGER III Proposal Submission

- Project proposals must follow submission guidelines provided in the *Federal Register* and on grants.gov.
- Attachment of FTA **Supplemental Form** for TIGGER to grants.gov **mandatory SF424** form is essential for processing.
- Grants.gov process can take several days – **Do not wait** for last minute to submit completed proposals
- Additional information and instructions can be found on FTA's public website at: ***<http://www.fta.dot.gov/tigger>***
- Applications must be submitted by deadline: **August 23, 2011**
- **Technical Issues?** Email: FTA-TIGGER@dot.gov



# Program Management

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Transportation Program Specialist

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Federal Transit Administration

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# Program Management

- Managed by FTA's Office of Research, Demonstration and Innovation in coordination with the Office of Program Management and FTA Regional Offices.
- Aligns with FTA strategic initiatives and research goals.
- FTA Working Group:
  - Planners
  - Engineers
  - Policy Analysts



# Program Support



# Program Design

- Consistent with legislative intent
- Publically documented applicant eligibility, criteria & request for proposals (*NOFA*)
- Development of a fair, consistent & transparent application process (*grants.gov*)
- Development of a consistent & documented evaluation process (*DGS*)
- Project recommendations provided to FTA Administrator (*working group*)
- Final selections made by FTA Administrator
- Performance monitoring & evaluation (*FTA & NREL*)

# Performance Management

- Constrained funding environment - *each dollar needs to go as far as it can*
- Must demonstrate industry and national applicability
- **Competitive Program:**
  - Need for due diligence: demonstrate fidelity to law and intent of program
  - Fund **most meritorious** projects, which will best accomplish legislative and policy goals
  - Performance-based approach particularly important: general movement in this direction

# Responsive Management

“Competitive Grant Programs Could Benefit from Increased Performance Focus and Better Documentation of Key Decisions”

*March 30, 2011 (GAO report; GAO-11-234)*

- **Transparency** is critical!
  - Clarity, consistency & documentation of process
  - Effective communications
  - Clarity & consistency in proposal evaluation
  - fair and defensible
  - Evaluation and validation



# TIGGER Approach

- Key principles:
  - Clear communication internally (with program managers, working group & evaluators)
  - Clearly articulating program purpose and goals, and alignment with legislative and agency requirements
  - Constructing a fair, transparent application and evaluation process
  - Clear communication with applicants
  - Thorough documentation of recommendations to FTA Administrator
  - Program Assessment and Report to Congress

# Internal Communication & Coordination

- FTA Management
  - Participation from FTA HQ, Regional Staff
  - Different offices within HQ
- Evaluators drawn from various FTA offices to ensure broad subject-matter expertise
- National Renewable Energy Laboratory (NREL) participation
- U.S. DOT Volpe Center support
- Regular meetings, conference calls; documentation distributed via e-mail



# External Communications

- Web site: [www.fta.dot.gov/tigger](http://www.fta.dot.gov/tigger)
  - *New proposal guidance available soon!*
- HQ & Regional contact info published in NOFA
- Outreach to professional associations (APTA, T4A, & others)
- Online webinar
  - Presentation available for download
  - Audio recording available for download
  - Question-and-answer documentation
- Email: [FTA-TIGGER@dot.gov](mailto:FTA-TIGGER@dot.gov)





# Evaluation & Selection Process

- Energy & GHG claims are verified and analyzed
- Projects are evaluated against criterion listed in NOFA
- Comments & scores provided by evaluators are aggregated
- Working group meets to select final recommendations
- Under law, FTA Administrator makes final project selections, taking into account other considerations and programs

# TIGGER Evaluation Process

- Designed to be fair and transparent
- Applications assessed simultaneously by multiple evaluators
  - Initial check for eligibility
  - Initial check of claimed energy/GHG savings
- Creation of internal evaluator guidance based on evaluation criteria
  - Internal review and discussion of guidance
  - Internal evaluator training conducted
  - Increased consistency

# Discretionary Grant System

- Proposals are electronically collected from grants.gov
- Proposals are made available electronically for internal evaluation
  - “TIGGER Collector” → Discretionary Grant System (DGS)
  - Allows web-based, online assignment of proposals
  - Tracks of evaluator progress
  - Documents review findings
  - Promotes greater consistency
  - Archives information for future reference and reporting
  - Way forward for other FTA grant programs (Clean Fuels, Bus Livability & State of Good Repair)



[www.fta.dot.gov/TIGGER](http://www.fta.dot.gov/TIGGER)

[FTA-TIGGER@dot.gov](mailto:FTA-TIGGER@dot.gov)

**TIGGER III Announcements in Fall  
2011!**



# TIGGER Validation & Assessment Program

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## Questions & Discussion

- Based on your experiences, what are top 3 challenges of implementing TIGGER?
- In your opinion, what are top 3 innovations of national applicability with the greatest return on investment?
- What is the key to successful teaming and/or partnering?
- What are suggestions to improve and/or streamline future aspects of TIGGER?
- What are strategies which could accelerate the deployment of innovative transit technologies?
- What innovative strategies are you pursuing in regards of local match?