



## 2011 FTA Sustainability Program

Transit Investments for Greenhouse Gas and Energy Reduction (TIGGER III) & Clean Fuels Grant Programs



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#### **Presenters**

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## **Agenda**

- Quick Facts
- Sustainability Program Overview
- TIGGER III Program
- Clean Fuels Program
- Application Instructions
- Question & Answers





#### **Quick Facts**

- NOFA published on June 24, 2011
- Sustainability Initiative Includes
   TIGGER, Clean Fuels, and perhaps Bus
   and Bus Facilities Program Funds
- Separate application required for each program
- At least \$101.4 million available
- Proposals due August 23, 2011
- All proposals submitted through www.grants.gov





#### FTA Sustainability Initiative

- Align Performance Plan and FTA Programs to meet President's Environmental & Energy Policies:
  - Breaking Dependence on Oil
  - Producing More Energy at Home
  - Promoting Energy Efficiency







#### **Internal Analysis**

#### FTA Energy Framework National Goals **Enhance Economic Competitiveness** Reduce Oil Dependence FTA Actions Improve Operational **Increase Transit Use Efficiency** FTA Goals Livable **State of Good Environmental Economic** Sustainability Communities Repair Competitiveness





# Increase Ridership & Operational Efficiency

- Increased transit ridership creates greater efficiencies and sustainability
- Operational efficiencies and system reliability drive transit ridership
- New drive technologies reduce petroleum consumption
- Energy Management Systems maximize operational efficiencies
- Operational efficiencies and increased ridership supports National Goals





## Pursuing Vehicle Efficiency

- Triple fuel efficiency of 40-foot transit bus and rail transit systems
- Decrease transit vehicle tailpipe emissions
- Achieve superior performance of new transit vehicles
  - Durability
  - Noise Reduction
  - Minimum 12-Year Bus Life
  - Zero safety incidents due to propulsion/energy systems







#### Advancing ITS

- Integrated, interoperable, customer-driven transit infrastructure and operations
- Connected and Integrated Systems
- Effective and Efficient Operations
- Increased Traveler Information
- Increased Service Reliability and Safety
- Increased Ridership for Greater Sustainability





#### **Transit Advances Sustainability**

- Enhance the Quality of Public Transportation Increased Ridership
- Assist locales with meeting National Ambient Air Quality Standards
- Support Emerging Technologies in propulsion and operations
- Reduce Greenhouse Gas Emissions in Transit Operations
- FTA Program Goals





# TIGGER III







#### Transit Investments for Greenhouse Gas & Energy Reduction

- Not to be confused with DOT's <u>TIGER</u> Program (Transportation Investment Generating Economic Recovery)
- FY11 TIGGER Program
  - Continued through through The Department of Defense and Full-Year Continuing Appropriations Act, 2011 (Pub. L. 112-10) - \$49.9 million.

#### **History**

- FY09 TIGGER Program Initiated within the American Recovery & Reinvestment Act (ARRA) of 2009 - \$100 million.
- FY10 TIGGER Program continued through the Transportation, Housing and Urban Development, and Related Agencies Appropriations Act 2010 - \$75 million.





## **Purpose**

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









#### **Notice of Funding Availability**

Published: June 24, 2011

#### Specified:

- Authorizing Legislation
- **Proposal Requirements**
- Eligible Recipients/Applicants
- Eligible Expenses
- **Evaluation Criteria**
- **Review & Selection**
- Reporting Requirements







#### **Program Details**

- Grants to transit agencies for Capital Projects that:
  - Reduce energy consumption, of the transit agency, or
  - Reduce greenhouse gas emissions of the transit agency, or
  - Reduce <u>both</u> energy consumption and emissions
- Given the availability of other FTA discretionary programs in FY 2011, FTA will rate more favorably innovative technologies or methodologies of national significance.
- The expected **Federal share** for TIGGER grants is **90%**, although applicants may propose a Federal share less than 90%, or up to 100%.
- Proposal requests must meet the minimum threshold of \$1 million and not exceed a maximum of \$15 million.





# **TIGGER III Objectives**

- Reduce GHG & Energy Consumption
- Innovation and National Applicability
- Operational Efficiency in Public Transportation
- Leveraging Existing DOT/FTA
   Strategic Initiatives & Research
- Identifying Research Gaps
- Adding to existing body of knowledge









# **Energy Consumption**

- Energy purchased directly by a public transportation system.
- Examples include: diesel fuel, compressed natural gas, and electricity purchased from power plants.
- The TIGGER Program focuses on the total energy savings of a project expected over its useful life.





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# Greenhouse Gases (GHG)

- Gases that trap heat in the atmosphere expressed in short tons of CO2 equivalent.
- TIGGER Program focuses on direct emissions from public transportation systems (e.g., systems vehicles)
- Program does not include indirect emissions (e.g., third-party power plants) or displaced emissions (e.g., emissions from manufacturing transit equipment, waste disposal, etc.).
- TIGGER program focuses on the total greenhouse gas emission reductions of a project expected over its useful life.





#### **Eligible Projects**

- Capital Expenses as defined in 49 U.S.C 5302(a)(1) and (2)
- Projects that will assist in the reduction of current agency energy use or GHG emissions
- <u>Excludes</u> fleet expansions and fixed guideway extensions









#### **Examples Projects**

- Innovative Intelligent Transportation Systems (ITS) involving bus or rail operations
- Transit signal prioritization installations
- Replacing or repowering existing transit vehicles with more energy efficient technologies
- Energy Management System Implementation
- Facility Enhancements which Improve Energy Efficiency
- Solar & Wind Installations
- Other Innovative couplings of technologies or operations











#### **Proposal Requirements**

#### **Eligible Recipients**

Public transportation agencies

#### **Applicants**

- **Public Transportation Agencies**
- State Departments of Transportation
- Federally-Recognized Indian Tribes



#### **Proposal Amounts**

- Minimum \$1M request per project proposal
- Maximum grant amount of \$15M
  - Consolidated proposals to meet minimum threshold accepted from State DOTs or a consortium of smaller agencies working in tangent (projects evaluated separately)
- Individual projects may receive less than \$1M





#### **Proposal Submission**

- Project proposals must follow submission guidelines provided in the Federal Register and on www.grants.gov.
- Attachment of FTA Supplemental Form for TIGGER to grants.gov mandatory SF424 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





#### **General Program Evaluation Criteria**

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











#### **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>)\*

\*CO2 equivalent in short tons (2,000 pounds)





#### **General Reporting Requirements**

- Standard requirements identified in FTA Circular 5010.1D; Grant Management Requirements
- Requirements under the FTA Master Agreement
- Special TIGGER Reporting Requirements









#### **Special TIGGER Reporting Requirements**

#### Recipients of TIGGER funds must report on annual basis:

- Actual annual energy consumed within the project scope attributable to the investment for energy consumption reduction projects; and/or
- Actual greenhouse gas emissions within the project scope attributable to the investment for greenhouse gas reduction projects; and/or
- Actual annual reductions or increases in operating costs attributable to the investment for each TIGGER project.





# TIGGER Questions? www.fta.dot.gov/TIGGER FTA-TIGGER@dot.gov











# Clean Fuels





## **Program Purpose**

- Assist nonattainment and maintenance areas in achieving or maintaining the National Ambient Air Quality Standards for ozone and CO
- Support emerging clean fuel and advanced propulsion technologies for transit buses and markets for those technologies.









#### **Definition of Clean Fuels**

#### A vehicle is considered a clean fuel vehicle if powered by:

- Compressed Natural Gas (CNG);
- Liquefied Natural Gas (LNG);
- Biodiesel (and biodiesel blends);
- Batteries;
- Alcohol based fuels;
- Hybrid electric;
- Fuel cells; and
- Diesel electric
- Other fuels as certified by EPA www.epa.gov





# **Eligible Applicants**

- In non-attainment areas, eligible applicants are designated recipients, which are entities designated to receive Federal urbanized formula funds under 49 U.S.C. 5307.
   Applicants must be in areas that are maintenance or non-attainment for ozone or CO.
- In attainment areas, eligible applicants are direct recipients, tribes, and State Departments of Transportation.





# **Funding**

- The Clean Fuels Program provides \$51.5 million for areas in maintenance or nonattainment for ozone or CO.
- Additionally, the Clean Fuels portion may be supplemented with Section 5309 Bus and Bus Facilities Program funds in attainment areas.
- Funds under the Sustainability program will be distributed in accordance with the mission of each program.





#### **Eligible Activities**

- Purchasing or leasing clean fuel buses, buses that employ lightweight composite primary structures and vans for use in revenue service.
- Construction or leasing of clean fuel bus facilities (including electrical recharging facilities and related equipment).
- Projects relating to clean fuel, biodiesel, hybrid electric, or zero emissions technology buses.
- The purchase or lease of non-revenue vehicles is not an eligible project.





#### **Expenses Covered and Not Covered**

#### Covered:

- Facilities
- Vehicles



#### Not Covered:

- > Fuel
- Non-Revenue vehicles







## **Cost Sharing or Matching**

- Vehicles 90% FTA/10% local contribution for the <u>net incremental</u> cost of the <u>clean fuels</u> component (<u>not the whole vehicle</u>). Grantees can use an FTA administrative blended share of 83% for the whole vehicle.
- Facilities The 83 % Federal share does <u>not</u> apply to facilities, for which costs are more variable. The Federal share is 90% of the cost of Clean Air Act (CAA) elements of the facility.





#### Clean Fuels Questions?

#### www.fta.dot.gov/cleanfuels



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#### **Application Instructions**

- All FTA discretionary opportunities must be apply to via www.grants.gov
- Utilize standard Mandatory SF424 form provided by grants.gov
- Utilize FTA Supplemental Form and attach to SF424 form
- Grants.gov requires:
  - Central Contractor Registry (CCR)
  - Valid DUNS # (Data Universal Numbering System)
- Allow at least 72 hours for processing!

# Questions & Answers





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