



Data Collection for TIGGER Assessment and Validation Program



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**APTA Sustainability
Workshop – TIGGER
Peer Exchange**

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Overview

- Summary of NREL Role
- Project Fact Sheets, Data Needs, & Status
- FTA TIGGER Reporting Requirements
- Annual Assessment Reports & Data Needs
- Case Studies
- NREL Contacts

Summary of NREL Role

The National Renewable Energy Laboratory is a Department of Energy Laboratory focused on renewable energy and energy efficiency.

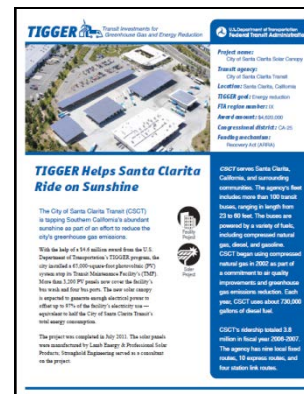
NREL will provide third-party assessment and validation of TIGGER Program

- Project Fact Sheets
- Annual Assessment Reports
- Case Studies for selection of projects



Project Fact Sheets

- High-level informative overview of project
 - Description of TIGGER program
 - Details on the project and technologies implemented
 - Description of transit agency
- Two-page consistent format
- Available as a download on the TIGGER website



Data Needs for Fact Sheets:

- Name of contact person for each project
- Review draft project details for accuracy
- Provide corrections/additional info as needed
- Provide pictures (with photo release)
- Review of final Fact Sheet in lay-out form



Status of Fact Sheets:

- Overview of TIGGER Program – complete
- TIGGER Round 1 projects:
 - Complete: 19
 - In review process: 18
 - Remaining fact sheets will be completed by the end of August
- TIGGER Round 2 project fact sheet completion target: October (provided grants are in place)



FTA Reporting Requirements for TIGGER

Special reporting requirements for TIGGER grants:

- Energy Reduction – amount of energy savings attributed to project
- Greenhouse Gas (GHG) Reduction – amount of GHG emission savings attributable to project
- Operating costs – total cost to operate project (positive or negative)

NREL will collect these data for the TIGGER
Program assessment

Annual Assessment Reports

- Description of projects and technologies
- Assessment of GHG and energy savings
- Status of project accomplishments and progress
- Impacts of program and each project's contribution to meeting goals
- National applicability of projects
- First report scheduled for November 2011



Data Needs for Annual Assessment Reports

Specific data depends on the type of technology

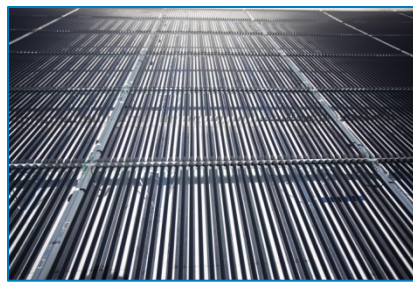
- Bus projects (new purchases or technology retrofits)
 - Fueling records (to determine fuel economy)
 - Fuel cost
 - Maintenance cost for the new technology
 - Baseline bus data to determine fuel/energy savings
- Building efficiency projects
 - Power consumption – either by metering or utility bills
 - Maintenance costs for new technology
- Renewable power projects (solar, wind, fuel cell)
 - Power production
 - Power consumption – either by metering or utility bills
 - Maintenance costs for new technology

Must have before and after data for at least one year

Data Needs for Annual Assessment Reports

- NREL will work with each grantee to collect the data
 - Ensure data collection and analysis is conducted in a consistent format for all projects
 - Data analysis/results can be used by each grantee to meet their TIGGER reporting requirements

Participation from each project team is essential to make this a successful effort

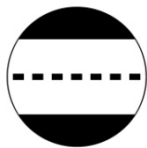


Case Studies

- Detailed assessment of a selection of projects or specific technology
 - Case studies will include various technology and project types
- FTA has selected seven projects from a variety of technologies for more in depth study
- NREL will work with each team to collect additional data and experience
- A separate project report will be produced that includes additional information and data analysis



Building



Bus



Rail



Solar



Wind



Geothermal



Fuel Cell

NREL Contacts

Team Members

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