

# Tools for Financing Emissions Reduction

Federal Highway Administration  
Resource Center Innovative  
Finance Team

Jennifer R. Mayer

[Jennifer.mayer@fhwa.dot.gov](mailto:Jennifer.mayer@fhwa.dot.gov)

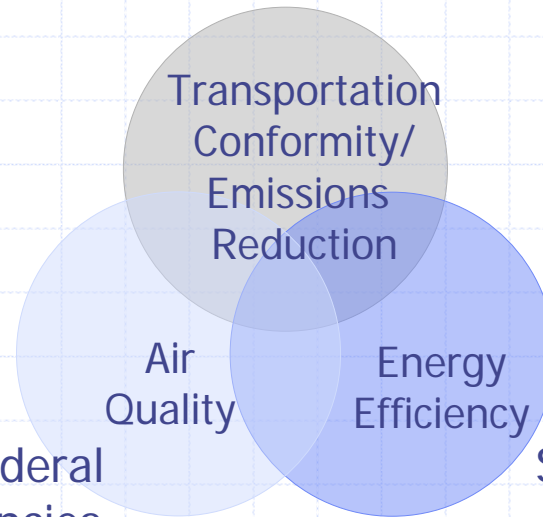
(415)744-2634

# You've Heard What and Why: Let's Talk about HOW

- ◆ The past presentations have talked about WHAT needs to be done to reduce emissions – the technological solutions
- ◆ Assuming you're convinced, how can you make it happen financially?

# Everyone's Got a Piece of this Problem...

Local, State, and Federal Transportation Agencies



Local, State and Federal  
Environmental Agencies

State and Federal  
Energy Agencies

# Everyone's Got a Piece of the Solution, Too....

## ◆ Federal, State, and Local Agencies offer:

- Direct grants (decreasing, given Federal and state budget situations)
- Low-interest loan and credit assistance (loan guarantees/lines of credit to make loans cheaper) – stretch funds
- Tax credits

# US Dept of Transportation (Federal Highway) Programs

## ◆ State-Based Tools

- Congestion Mitigation and Air Quality Improvement (CMAQ) grant funds
- State Infrastructure Banks (SIBs)

## Federal-Based Tools

Transportation Infrastructure Finance and Innovation Act (TIFIA)

Private Activity Bonds (PABs)

# Common Aspects of Tools

- ◆ Must be eligible for federal funds under Title 23 of the United States Code (typically CMAQ)
- ◆ Must follow federal requirements (although some flexibility for private projects)

# USDOT Federal/State Program: State Infrastructure Banks

- ◆ State DOTs often have these banks, which are a federally-capitalized fund source of low-cost financing for eligible projects
- ◆ Maximum loan term is 35 years; interest rate set by state
- ◆ Can make a large project affordable for a nonprofit or local community (i.e., \$200,000 over 30 years at 5% interest = about the size of an average mortgage payment).

# Revolving Loan Fund Model

- ◆ The SIB was used in Oregon; in CA, the enabling legislation impedes this use
- ◆ It may be possible to use other tools such as the Transportation Infrastructure Finance and Innovation Act (TIFIA) or PABs to create a revolving loan fund similar to a SIB

# How Would a Loan Work?

A revolving loan fund is “capitalized” with some source of funding that allows low-interest loans.



Owner operator or fleet owner applies to fund for emissions reduction project.



If the application is approved, the lender and the borrower negotiate terms such as interest rate, term of loan, and collateral, then the loan is made.



Trucker or fleet owner used loan proceeds to buy equipment, and use fuel savings to pay back loan.

# Advantage of Loans – To Private Borrowers and Public Lenders

## State or Local Agency

- ◆ Assist more than one project with the repaid funds (repayments go back in the program)
- ◆ Leverage – loans and credit enhancement go farther than direct grant aid
- ◆ Attract net new money to the program (repayments)

## Borrowers

- ◆ Low interest rate (zero to market)
- ◆ Flexible repayment terms
- ◆ “Patient” lender (can be subordinate)

# TIFIA (Direct Federal Credit)

- ◆ Transportation Infrastructure Finance and Innovation Act (TIFIA)
- ◆ Currently limited to \$50 million or greater size
- ◆ CMAQ-eligible projects can apply
- ◆ IDLE AIRE applied for diesel emissions reduction (stationary facility); also intermodal inland port has applied

# Advantage of TIFIA Loans – To Borrowers, and USDOT

## USDOT

- ◆ Leverage (can assist more projects with loans and credit enhancement)
- ◆ Attract net new money to the system
- ◆ Enable/facilitate public private partnerships

## Borrowers

- ◆ Low interest rate (Treasury)
- ◆ Flexible repayment
- ◆ Maximum 35 year term
- ◆ Repayments can be delayed up to five years after construction
- ◆ “Patient” lender (can be subordinate)

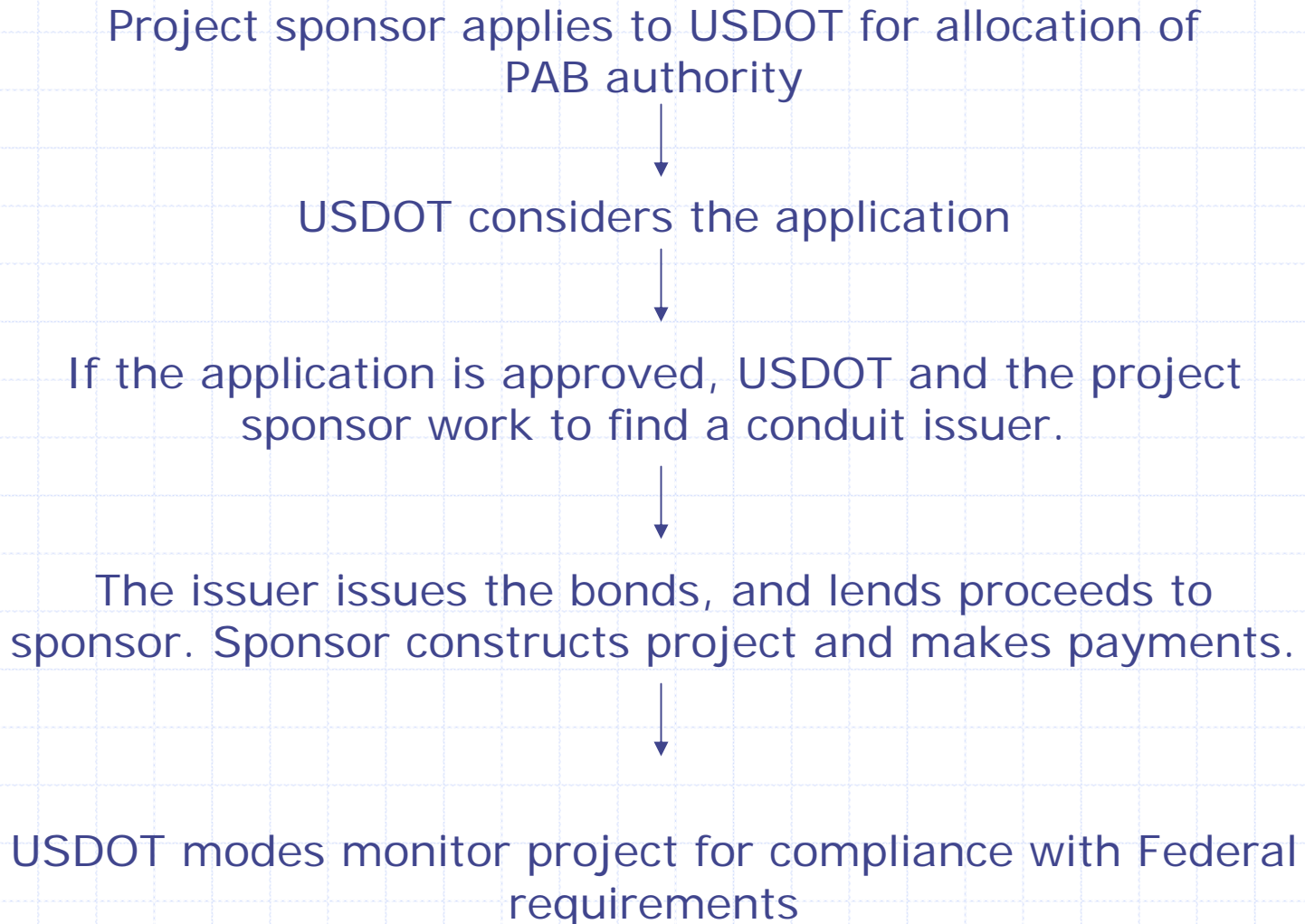
# Private Activity Bonds (PABs)

Allows tax-exempt bonds to be issued for projects with private involvement

Does not provide funds or loan; but allows sponsors to access capital market funds at cheaper interest rates

Apply directly to USDOT

# How Would a PAB Work?



# Advantage of PABs – To Sponsors and USDOT

## USDOT

- ◆ Attract net new money to the system
- ◆ Enable/facilitate public private partnerships

## Sponsors

- ◆ Cheaper financing (often 1-2 percentage points cheaper than taxable private finance)
- ◆ May facilitate financing packages

# Federal Alternative Motor Vehicle Credit

- ◆ Tax credit equal to 50% of the incremental cost of the vehicle, plus an additional 30% of the incremental cost for vehicles with near-zero emissions ([Current Tax Credits](#) table has information on certified vehicles and available credits)
- ◆ The credit is available on the purchase of light-, medium, and heavy-duty vehicles and fuel-cell, hybrid, and dedicated natural gas, propane, and hydrogen vehicles. Light-duty lean burn diesel vehicles are also eligible.
- ◆ Weight-based caps ranging from \$5,000 to \$40,000 (max)

# RC Innovative Finance Team Contacts For Specific Questions

|   |  |
|---|--|
| Thay Bishop<br>Ph: (404) 562-3695             | Team Leader<br>thay.bishop@fhwa.dot.gov  |
| <b>Keith Bishop</b><br>Ph: (410) 962-0634     | CT, DC, IL, IN, MA, MD, MI, NY, RI, VT<br><a href="mailto:keith.bishop@fhwa.dot.gov">keith.bishop@fhwa.dot.gov</a>             |
| <b>Prabhat Diksit</b><br>Ph: (720) 963-3202   | CO, KS, MT, ND, NE, OK, SD, WY<br><a href="mailto:prabhat.diksit@fhwa.dot.gov">prabhat.diksit@fhwa.dot.gov</a>                 |
| <b>Jim Hatter</b><br>Ph: (404) 562-3929       | AL, GA, FL, NC, SC, VA, WV<br><a href="mailto:jim.hatter@fhwa.dot.gov">jim.hatter@fhwa.dot.gov</a>                             |
| <b>Jennifer Mayer</b><br>Ph: (415) 744-2634   | AK, AZ, CA, HI, ID, NM, NV, OR, UT, WA<br><a href="mailto:jennifer.mayer@fhwa.dot.gov">jennifer.mayer@fhwa.dot.gov</a>         |
| <b>Frederick Werner</b><br>Ph: (404) 562-3680 | AR, IA, KY, LA, MO, MN, MS, TN, TX, WI, WY<br><a href="mailto:frederick.werner@fhwa.dot.gov">frederick.werner@fhwa.dot.gov</a> |