Making Conformity NOACA's Experience

NARC Workshop #6

Data Needed for Transportation & Air Quality Models

Sunday, June 22, 2003

NOACA

- NOACA is the Metropolitan Planning Organization for Five Counties in Northeast Ohio.
- The area's population is little over 2.1 million according to the 2000 Census.
- Includes 172 units of local, general purpose government, including the Cities of Cleveland, Lorain and Elyria.

Air Quality Planning

- 1990 Clean Air Act Amendments designated an eight county area in Northeast Ohio nonattainment.
- This area includes NOACA, part of another MPO area, and one county that is not part of an MPO.

Air Quality Planning (cont.)

- NOACA aided in the preparation of the 15% Rate of Progress Plan, the Redesignation Request, the Maintenance Plan and all associated Mobile Source inventories.
- NOACA compiles the transportation conformity documentation for the eight county planning area.

Highlight

- Because NOACA prepares both SIP and Conformity documentation for Mobile Sources, the emission results from these processes are consistent with each other.

Highlight (cont.)

- In some other areas, two different agencies prepare the SIP and conformity documents utilizing different planning assumptions or methods.
- This requires factoring efforts to make the two emission outputs consistent with each other for conformity test purposes.

Highlight (cont.)

- As new nonattainment areas begin their planning efforts, they may want to consider ensuring that the same assumptions and methods will be used for both SIP and conformity work. That way they won't have to add factoring to the mix.

Coordination

- Air Quality Planning requires a large amount of coordination.
- Multiple layers of government and government agencies participate in the process.
- These participants are not always used to working together.

Coordination (cont.)

- For example, a conformity document requires:
  - Local approval
  - State Environmental Agency approval
  - State Transportation Agency approval
  - USEPA approval
  - FHWA approval

Coordination (cont.)

- In Northeast Ohio, it also requires the cooperation of two independent MPOs.
  - Horizon Years
  - Planning Assumptions
  - Submittal Dates

Coordination (cont.)

- The needs of these participants related to the conformity process are all different.
- It makes sense to share planning assumptions, concerns, etc. with them early.

Coordination (cont.)

- If they have signed off on your planning assumptions before you submit your conformity document, you can be fairly certain it will be approved.

- If they have not, and ask for changes, you may miss your conformity deadline.

Ongoing Coordination

- Generally, conformity is not at the forefront of local governments and many transportation planners minds.

- Therefore, stay aware of what is going on in the transportation planning efforts in your area.

Ongoing Coordination

- Frequently, efforts will be made to amend TIPs and Plans to incorporate new capacity projects between normal TIP or Plan Update rounds.

- These additions would equate to the need for new conformity documents.

Ongoing Coordination

- Generally you, and the state and federal agencies involved do not want to update conformity regularly.

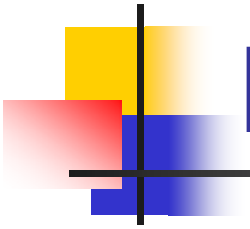
Build – No Build

- In theory - a useful means of ensuring that transportation plans are not adding to the air quality problem while SIP budgets are established.
- In practice – pretty close to a nightmare.
- Why?

Build No-Build (cont.)

- Transportation networks for modeling purposes are huge.
- All new projects combined are a small fraction of existing network mileage.
- The result is very small differences between build and no-build emissions.

Build No-Build (cont.)



- This means that passing or failing conformity can hinge on fractions of a ton.
- These differences are almost certainly smaller than the range of error expected from the models themselves.

Build No-Build (cont.)

- What if you don’t pass?
  - Resort networks
  - Remove projects
  - Off-model Credits
    - CNG Bus Replacements
    - Signalization Projects

Build No-Build (cont.)

- Best course of action is to minimize the length of time you are under this requirement. Work quickly to establish emission budgets under the new standard.

Budget Test

- Does your Plan or TIP generate emissions less than the emissions budget?
- What if it doesn't?
  - Off-Model Credits
  - Safety Margins
  - New Measures
  - Status Quo

Safety Margin

- When SIP budgets are prepared, attempt to leave some future year allowable emissions unaccounted for.
- These become a safety margin.
- The safety margin can be reallocated at a later date to a source sector that is not meeting its budget.

New Measures

- An I/M Program could be implemented or made more stringent.
- New fuel formulations could be required.
- Speed limits could be changed.
- Attempting any of these options would likely result in a significant period of conformity lapse.

Status Quo

- Renew the existing previously conformed TIP or Plan without any changes.
- An unpleasant option, but one that would allow existing programmed projects to move forward.

Off-Model Projects

- The entire area you need to conform may not be covered by a transportation model.
- This requires obtaining traffic counts, developing VMT, and estimating speeds using off-model techniques.

Conclusion

- Coordinate early and often.
- Expect that you will experience hurdles.
- Plan ahead for how you will address an analysis that does not conform.