Preparing a Benefit-Cost Analysis for a Rural TIGER Grant Application

Presented by the Office of the Assistant Secretary for Transportation Policy

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TIGER 3

- $527 million multimodal, merit-based competitive grant program
- $140 million for rural areas
- Up to $150 million for TIFIA payments
- Last round the average award was $13.25 million
- Geographic diversity requirement

Why Benefit-Cost Analysis (BCA)?

- President's commitment to data-driven decision-making
- Requirement from TIGER I and II
  - No funding for projects for which C > B
- Value of BCA in project selection
  - BCA quality matters more than size of the B/C ratio
  - Focus your analysis on how it demonstrates need for your project

BCAs for Rural Projects

- Rural projects are usually smaller
  - Sophisticated statistical analysis and ridership forecasts may not be cost-effective
- A transparent, reproducible, thoughtful and reasonable BCA is possible for **all** projects
- No Applicant is exempt from BCA requirement
- General and more detailed BCA webinars are available

EIA vs BCA

- Economic Impact Analysis (EIA) focuses on local benefits – **this is not a BCA**
  - Ignores costs to other localities
  - Includes transfer payments as “impacts”
    - Payrolls, tax revenues, real estate investments
- BCA focuses on national benefits (including local)
  - Nets out costs to other areas
  - Includes only productivity increases resulting from job creation, increases in property values

Basic Requirements

- Project Summary
- Monetized estimates of benefits & costs
  - Year-by-year stream of benefits and costs
  - Discounted to present value (3% & 7%)
- Replicable methodology
- Demonstrate Independent Utility
- Appendix A of 8/12/11 Federal Register NOFA provides guidance

Rural Ridership

- Most benefits for any project are driven by ridership ("usership") estimates
  - Provide reasonable, multi-year forecast estimates
- Rural projects generally have lower ridership
  - Emphasize commitments by industry to expand operations if transportation facilities are improved
- Sophisticated forecasts may not be possible
  - Do what you can (e.g. sample count of usership at peak/off-peak hours with reasonably projected growth)
  - Emphasize recent increases in traffic (or increases in traffic that can confidently be forecast) that current facilities cannot accommodate.

Benefits

- Livability
- Economic Competitiveness
- Safety
- State of Good Repair
- Sustainability

Which benefits apply to <u>your</u> project?

Costs

- Provide costs from all sources (local, State, other Federal grants, private)
- Direct capital costs: construction, design, land acquisition
- Beyond capital costs
  - O&M, rehabilitation, life-cycle costs
  - External costs: noise, congestion, pollutants
  - Cost to users during project construction: increased delay, vehicle operating costs
- **Costs of whole project should be compared with benefits of whole project (no "leveraging")**
  - Or, if TIGER funds only a part of a project, you can compare costs and benefits for TIGER-funded portion only
  - But only if that portion has independent utility

BCA Ratings

- BCAs are reviewed and rated by BCA Review team for **quality**:
  - Very Useful
  - Useful
  - Marginally Useful
  - Not Useful
- …and for **net benefits**
  - Benefits > Costs
  - Benefits < Costs
  - Uncertain

Lessons Learned

- ***ALWAYS*** document and provide reliable sources for data and calculations
  - If a number does not have a source or reproducible calculation, explain how you got it
- Be **realistic** in assumptions and estimates
- **Quantify** where you can, **Qualify** where you can't
  - Every project has difficult-to-measure benefits & costs
  - A good qualitative analysis helps supplement understanding of the project BCA

Lessons Learned (cont'd)

- Emphasize what your area lacks and is taken for granted in more urban areas
  - e.g. sidewalks, shoulders, pavement, basic transit service
- **Prioritize** your projects
  - Focus on one or two projects where benefit/cost arguments are most compelling
- Consider the viewpoint of objective reviewers
  - Are estimates plausible and reasonable?
- Focus on overall evaluative process, ***not*** just B/C ratio

Notable TIGER Rural BCAs

- Staples North/South Corridor with Railroad Overpass Project (Staples, MN)
- East Foster Wells Road Extension – Phase 2 (Franklin County, WA)
- Woodside Boulevard Complete Streets Initiative (Hailey, ID)
- Southwest Oregon Freight Rail Revitalization Project – Rail Line Rehabilitation (Coos Bay, OR)

BCA Resources

- August 12, 2011: Federal Register NOFA – *Appendix A: Additional Information on Benefit-Cost Analysis*
- August 17, 2011: TIGER Benefit/Cost Analysis Special Topics Webinar
- 2010 archived webcast for *Benefit/Cost Analysis for Transportation Infrastructure: A Practitioner's Workshop*
- General inquiries about BCA to TIGERGrants@dot.gov before October 31, 2011

Additional Application Help

TIGER Website: www.dot.gov/tiger/

Special Topics Webinars

August 22nd	Project Readiness/NEPA
August 24th	Public Private Partnerships & TIFIA
August 30th	MARAD Port Outreach

Archived Webinars

July 18th	How to Compete for TIGER
July 27th	"Talking Freight"

Parting Words…

- BCA is an opportunity to objectively demonstrate the need for your project
  - Highlight benefits that are well-documented and align well with program's selection criteria
- Document, document, document
- Be realistic in your assumptions and estimates
  - Don't forget about true costs of the project
- It is possible to produce a quality BCA no matter what the size of your project