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

Presented by the Office of the Assistant Secretary for Transportation Policy
United States Department of Transportation

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$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 your 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