

FY 2011 TPB TIGER Grant Application



Benefit-Cost Analysis (BCA) Discussion Meeting

August 31, 2011

Benefit Cost Analysis

- Projects submitted require detailed Benefit-Cost Analysis (BCA), with all benefits and costs quantified.
 - Quarterly for construction, Annual for long-term.
 - Project Selection Criteria:
 - A. Long-Term Outcomes
 1. State of Good Repair,
 2. Economic Competitiveness,
 3. Livability,
 4. Environmental Sustainability,
 5. Safety.
 - B. Job Creation and Near-Term Economic Activity.
- Secondary criteria:* Innovation, Partnership.

1. State of Good Repair (SGR)

- i. Consistent with SGR plans
- ii. Rehab/upgrade assets that – unimproved – threaten mobility, economy, efficiency
- iii. Optimize long-term / life-cycle costs
- iv. Sustainable revenue for O & M

Metric	Bowie	Twinbrook	Forest Glen	Hyattsville / Ager	New Carrollton	Army-Navy	VRE
Reduced Operating & Maintenance Costs and Delays	?	??	?	Yes	?	??	?

- Refurbishment of existing sidewalks / crossings?
- Reduced use of other infrastructure?

2. Economic Competitiveness

- i. Improve efficiency, reliability, cost-competitiveness (long-term)
- ii. Increase economic productivity of land, capital, or labor

Metric	Bowie	Twinbrook	Forest Glen	Hyattsville / Ager	New Carrollton	Army-Navy	VRE
Congestion Savings (Users)		??	?			??	
Operating Cost Savings							
Transit-Oriented Development		?		?	?	?	

- Integration / better use of existing infrastructure
- Land use info: number of parcels, value, % change in number/value, zoning changes

3. Livability

- i. Enhance / reduce cost of user mobility through more options
- ii. Improve choices through connectivity, reduced congestion
- iii. Accessibility and service for special populations
- iv. Result of coordinated T-LU planning process with community participation

Metric	Bowie	Twinbrook	Forest Glen	Hyattsville / Ager	New Carrollton	Army-Navy	VRE
Time Savings users and non-users (Travel times, reduced congestion)	?	??	?	?	?	??	
Travel Cost Savings (affordable mobility)						?	?

- Community involvement?
- Special populations benefitting?

4. Environmental Sustainability

- i. Improve energy efficiency, reduce oil use and/or GHG emissions
- ii. Protect or enhance environment: air, water quality

Metric	Bowie	Twinbrook	Forest Glen	Hyattsville / Ager	New Carrollton	Army-Navy	VRE
Emissions reductions	?		?			??	??

- Change in access mode (drive to walk/bike)

5. Safety

- i. Reduce number, rate, and severity of crashes and injuries
- ii. Elimination of highway grade crossings

Metric	Bowie	Twinbrook	Forest Glen	Hyattsville / Ager	New Carrollton	Army-Navy	VRE
Accident reductions	?		Yes			?	

- Local safety data
- Shift in mode of access -> accident rates

Job Creation and Near-Term Economic Activity

- i. Short or long-term creation of jobs
- ii. New, expanded, or benefitting business

Metric	Bowie	Twinbrook	Forest Glen	Hyattsville / Ager	New Carrollton	Army-Navy	VRE
Short-term employment	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Long-term employment							
Business impacts			?				

- Low-income jobs
- DBE firms
- Community-based organizations connecting workers and jobs
- Good labor practices, civil rights businesses

Secondary: Innovation

- i. Innovative technology
- ii. New approach to project delivery
- iii. Multi-modal -> difficult to fund

Metric	Bowie	Twinbrook	Forest Glen	Hyattsville / Ager	New Carrollton	Army-Navy	VRE
Innovative technology						?	
New approach to project delivery							
Multi-modal -> difficult to fund	??	?		?	?	?	?

Secondary: Partnership

- i. Jurisdictional & Stakeholder Collaboration
- ii. Disciplinary Integration

Metric	Bowie	Twinbrook	Forest Glen	Hyattsville / Ager	New Carrollton	Army-Navy	VRE
Jurisdictional & Stakeholder Collaboration	?	?	?	?	?	?	??
Disciplinary Integration			?				

- Why is Federal assistance necessary?
- Why are other Federal funds are not available?
- Involvement of private sector
- Involvement of non-transportation entities: government, non-profit

Benefit Cost Analysis – Data Needed

- TPB staff, with consultant assistance, will perform the benefit cost analysis.
- Data is needed from project sponsors, including:

Benefits		Costs
<u>Base (No-Build)</u>	<u>Build</u>	<i>by quarter</i>
Users (riders) by mode		Capital Costs
Travel time / Congestion		O & M Costs
Accidents		
Emissions		
Land Use (value, parcels)		

- Qualitative information - including project descriptions, changes in zoning, affected populations (i.e., characteristics), and any special factors

Timeline for BCA

- Milestones:
 - August 19: Project Cost Information Memo
 - *TBD* *Benefit and Impact Cost Memo / Form*
 - September 16: Benefit and Impact Cost Data