

## Template 9: Cost-Effectiveness Worksheet – User Benefits

Line	Variable	Alternative		Change	Annual Factor	Annual Total	Source/Calculation
		New Starts Baseline	New Starts Build				
1	Annualized Capital Cost (Constant 2003 dollars)						Source: New Starts build and baseline capital cost estimates; annualized. Include documentation as shown on attached annualized cost worksheet).
2	Total Systemwide Annual Operating and Maintenance Cost (Constant 2003 dollars)						Source: System-wide operating and maintenance cost estimates for New Starts baseline and build alternatives (attach documentation).
3	Total Annualized Cost in Forecast Year (Constant 2003 dollars)						Calculation: Sum of annualized capital costs (Line 1) and annual O&M (Line 2).
4	Weekday User Expenditure Savings (hours)						Source: Weekday user expenditure savings from SUMMIT travel demand evaluation software. Multiplying the weekday estimate by the Annual factor produces the annual estimate.
5	User Benefits from Off-Model Trips (Identify Source)						Source: Calculate off-model user benefits. Attach documentation. Annual factor is based on number of events for this special trip generator.
6	User Benefits from Off-Model Trips (Identify Source)						Source: Calculate off-model user benefits. Attach documentation. Annual factor is based on number of events for this special trip generator.
7	User Benefits from Off-Model Trips (Identify Source)						Source: Calculate off-model user benefits. Attach documentation. Annual factor is based on number of events for this special trip generator.
8	Incremental User Benefits (hours)						Calculation: Sum annual user benefit estimates (sum Lines 4 thru 7)
9	Cost-Effectiveness - Incremental Cost (\$) / User Benefits (hours)						Calculation: Divide Incremental Annualized Cost (Line 3) by Incremental User Benefits (Line 8) for the New Starts build vs. New Starts baseline alternatives.

*Project sponsors are to submit the output file from the SUMMIT User Benefit calculation to FTA.*