

## APPENDIX J

### BREAKDOWN OF TRANSIT COSTS BY CATEGORY

The following charts show a breakdown of the assumed generic per mile capital costs and the per mile annual operating cost by transit project type. These generic costs were used for the new projects found in the 2015-2014 Regional Transportation Plan which had not been assigned a more specific cost through a more detailed study. Only the capital costs for transit categories for which there is a new project are shown.

#### Streetcar Capital Costs

<b>Street Car</b>			
Quantified Item	2012 Base Cost	Qty/Mi	Cost/Mi
Stations	\$473,400	4	\$1,893,600
Parking Lots	\$0	0	\$0
Vehicles (assumes 1 street car)	\$3,787,200	1	\$3,787,200
OCS / TPSS	\$6,312,000	1	\$6,312,000
Systems / Comms / Fare Coll	\$1,578,000	1	\$1,578,000
Utilities	\$420,800	1	\$420,800
Track Construction (Includes R/W Costs)	\$14,728,000	1	\$14,728,000
Structures	\$0	0	\$0
Maintenance Facility	\$3,156,000	0.1	\$315,600
Subtotal			\$29,035,200
PE/CE	25.00%		\$7,179,900
Contingency	30.00%		\$8,710,560
<b>Total (2015 dollars)</b>			<b>\$44,925,660</b>

#### Bus Rapid Transit Capital Costs

<b>BRT w/ Exclusive Lanes</b>			
Quantified Item	Base Cost	Qty/Mi	Cost/Mi
Stations	\$473,400	4	\$1,893,600
Parking Lots	-	-	\$0
Vehicles	\$1,115,120	0.5	\$557,560
TSP/Signals	\$189,360	3	\$568,080
Exclusive lanes (Includes R/W Costs) assumes 75% exclusive lanes	-	-	\$6,525,000



Maintenance Facility	\$263,000	0.5	\$131,500
Subtotal			\$9,675,740
PE/CE	25.00%		\$2,386,060
Contingency	30.00%		\$2,902,722
<b>Total (2015 dollars)</b>			<b>\$14,964,522</b>
Assumes 2 buses per 4 miles			

### Enhanced Bus (BRT1) Capital Costs

<b>Bus Plus/Enhanced Bus</b>			
Quantified Item	Base Cost	Qty/Mi	Cost/Mi
Stations	\$210,400	4	\$841,600
Parking Lots	-	-	\$0
Vehicles	\$557,560	0.5	\$278,780
TSP/Signals	\$52,600	3	\$157,800
Exclusive lanes	-	-	\$0
Maintenance Facility	\$263,000	0.5	\$131,500
Subtotal			\$1,409,680
PE/CE	25.00%		\$319,545
Contingency	30.00%		\$422,904
<b>Total (2015 dollars)</b>			<b>\$2,152,129</b>
Assumes 2 buses per 4 miles			

### Corridor Preservation Costs

<b>Corridor Preservation/ROW Preservation - Rural Locations</b>			
Quantified Item	Base Cost	Qty/Mi	Cost/Mi
ROW Acquisition (assuming 50ft R/W at \$4/sqft)	\$1,110,912	1	\$1,110,912
<b>Total (2015 dollars)</b>			<b>\$1,110,912</b>

### Transit Project Operating Cost Assumptions for New Projects

Mode	Operation Cost Assumptions Cost per Mile



	2012 cost per mile*	2012 to 2015 inflation adjustment	2015 cost per year / mile
Enhanced Bus	\$6.65	1.052	\$7.00
Full Guideway BRT	\$6.65	1.052	\$7.00
Streetcar	\$7.07	1.052	\$7.44
Light Rail	\$7.07	1.052	\$7.44
Commuter Rail	\$9.92	1.052	\$10.44
*Source: 2012 National Transit Database, UTA Report			

Mode	Operation Cost Assumptions			
	Weekday Service			
	Peak Service Frequency	Peak Service Hours	Off-Peak Service Frequency	Off-Peak Service Hours
Enhanced Bus	15 minutes	16 hrs/day	20 minutes	4 hrs/day
Full Guideway BRT	15 minutes	16 hrs/day	20 minutes	4 hrs/day
Streetcar	15 minutes	16 hrs/day	20 minutes	4 hrs/day
Light Rail	15 minutes	16 hrs/day	20 minutes	4 hrs/day
Commuter Rail	30 minutes	10 hrs/day	60 minutes	10 hrs/day

Mode	Weekend Operation Cost Assumptions			
	Saturday Service		Sunday Service	
	Service Frequency	Service Hours	Service Frequency	Service Hours
Enhanced Bus	20 minutes	20	20 hrs/day	11



		hrs/day		hrs/day
Full Guideway BRT	20 minutes	20 hrs/day	20 hrs/day	11 hrs/day
Streetcar	20 minutes	20 hrs/day	20 hrs/day	11 hrs/day
Light Rail	20 minutes	20 hrs/day	20 hrs/day	11 hrs/day
Commuter Rail	60 minutes	20 hrs/day	NONE	NONE

