BROADWAY BOULEVARD
EUCLID to COUNTRY CLUB

RTA Regional Transportation Authority

To: Broadway Citizens Task Force
From: Broadway Project Team
Date: July 10, 2014
RE: CTF Member's Question about Street Design Alternatives and Funding

"What are the final costs and funding sources for the "sidewalks and pavement only", 4+2T, and 6-Lane?"

	Sidewalk, Pavement only	4+2T [Fully Dedicated] Lanes	6-[Mixed Flow] Lanes	NEW Potential Hybrid: 6/4+2T [Shared Priority]
Description	If no RTA Project built, roadway asphalt between existing curbs would be rehabilitated, restriping of existing lane configurations, and install of ADA-compliant paths (sidewalks assumed) and curb ramps	Operating from Day 1 as 4 mixed flow lanes for cars, 2 fully dedicated transit lanes, bike lanes, and sidewalks	Operating from Day 1 with 6 mixed flow lanes for cars and buses, bike lanes, and sidewalks	Goal: To find the balance between the 4+2T [Fully Dedicated] Lanes operations and the 6-[Mixed Flow] Lanes operations that emphasizes transit improvements, but still improves all 4 modes of transport (including car)
Traffic Modeling Performance *(Goal: Show improvement to all 4 modes of transport, as good or better than the 6+2T or better)*	*Not modeled; would perform worse than 4-Lane, which modeled improvements to intersections*	Ped: Better Bike: Better Bus: Better Auto: Worse	Ped: Better Bike: Better Bus: Better Auto: Better	(Goal: 'Better' for all) Ped: *not modeled yet* Bike: *not modeled yet* Bus: *not modeled yet* Auto: *not modeled yet*
Funding Source	None – City would be responsible when near-term roadway maintenance	As is, none; If car perf. Increased, eligible for RTA & Pima Co. funding *(see Hybrid 6/4+2T)*	RTA & Pima Co. Project funding	If all 4 modes improved, RTA & Pima Co. Project funding
Construction	$5.7 M	$25-$30 M		
Acquisition	$17-$24 M (does not include relocation costs)	$48-$66 M (includes all possible relocation, environmental, demolition costs)		
Potential Costs Recaptured	[1]	$12-$17 M		
NET PROJECT TOTAL[2]	**$23-$30 M**	**$59-$72 M**		

Notes:

1. Potential to recapture acquisition costs through sale of remnant properties has not been estimated for this alternative.
2. Handouts distributed at the 6/12/14 Open House provide detailed performance for key areas. A copy of this sheet can be found online at: http://www.tucsonaz.gov/files/projects/broadway/2014_06-12_PerfDetail_RefAlts.pdf

Detailed Performance Assessments on Key Considerations (June 12, 2014)

Topic	Factors		Revised Street Design Alternatives						
			Refined 4-Lane		Refined 4+2T/6-Lane Base				
			Base	Variation A	Base	Variation A	Variation B	Variation C	Variation D
Community Character and Economic Performance									
Historic/Significant Buildings Directly Impacts	- Width of right of way (minimizing can negatively or positively affect other performance measures) - Alignment of street: Choice/balancing of potential impacts to different sides of the street - Design of parking impact avoidance or replacement		12 buildings	17 buildings	22 buildings	34 buildings	34 buildings	19 buildings	13 buildings
Potential Historic/Significant Building Acquisition			48 parcels	40 parcels	58 parcels	65 parcels	63 parcels	56 parcels	62 parcels
Business Impacts (Total Buildings Directly Impacted % Probably Acquisitions)			19 bldgs. 71 properties	27 bldgs. 59 properties	35 bldgs. 86 properties	53 bldgs. 93 properties	52 bldgs. 92 properties	33 bldgs. 89 properties	25 bldgs. 91 properties
Transportation Performance									
Pedestrian	- Width of sidewalk - Separation from moving traffic - Places to walk to	- Shade - Width and design of street crossings - Universal Design and ADA	++		+				
Bicycle	- Travel time (existing and future conditions: ~13.5 minutes) - Consider bicycle network access		+1/2		+				
Transit	- Travel time (existing: 13.9 min. @ 8.9 mph during peak hour) - Potential for high capacity transit (i.e.; light rail, street car, or bus rapid transit) – space within right of way (i.e.; lanes can be converted to transit only or right of way width available for future transit lanes)		18.8 min. @ 6.6 mph HCT: –		4+2T: 13.7 min. @ 9.0 mph HCT: ++ 6-Lane: 13.8 min. @ 9.0 mph HCT: o				
Vehicular	- Travel time (existing condition: 7.1 min. @ avg. 17.4 mph during peak hour)		10.4 min. @ 11.9 mph		4+2T: 15.8 min. @ 7.8 mph 6-Lane: 7.0 min. @ 17.6 mph				
Funding Viability and Project Functionality									
Construction Cost	- $29.3 budgeted per RTA 2005 Plan		$20-25m		$25-30m				
Acquisition Cost Gross and (net after estimated remnant parcel sales)	- $44.0 budgeted per RTA 2005 Plan - Costs shown here are approximate, based on preliminary analyses to provide a basis for comparing alternatives and variations		$40 m ($32 m)	$36 m ($29 m)	$54 m ($40 m)	$46 m ($34 m)	$49 m ($37 m)	$66 m ($49 m)	$56 m ($42 m)
County Funding	- Bond ordinance is for a 6- or 8-lane project		No		4+2T: unknown 6-Lane: Yes				
RTA Funding	- Must achieve a level of transportation functionality comparable to the voter-approved project (6+2 Transit Lanes) with no reduction of functionality for all modes (vehicles, transit, bicycles, and pedestrians)		No		4+2T: No 6-Lane: Likely				
Tucson Mayor & Council	- Maintain county and RTA funding - Achieve balanced range of functionality (transportation + other)		Likely No		4+2T: Possibly 6-Lane: Likely				
Sustainability Performance									
Relationship to Transportation Performance	- Provide high-quality options to reduce solo vehicle driving - Air quality impacts		– –		4+2T: + 6-Lane: +				
Water Harvesting and Green Streets	- Meet or exceed City's Green Streets Active Practice Guidelines		+		+				
Reduce Heat Island	- Use of shade and other features of the improvements to Broadway that can reduce the heat created by the sun shining on Broadways road pavement and sidewalks.		++		+				
Manageable Operations and Maintenance Costs	- The operations and maintenance costs for pavement, signals, transit, and landscape are yet to be determined		The ability of the city and SunTran to maintain and operate improvements will be a considered in the design and construction of any alternative.						