COMPARISON OF ALTERNATIVES

Concept Development Study for CR 537 Corridor Improvements

Township of Freehold, Monmouth County, NJ

Comparison Category / Issue			No Build			Concept 1			Concept 2			Concept 3		
Meets Project Purpose and Need			No			Yes			Yes			Yes		
Maintenance and Protection of Traffic														
Number of lanes provided during construction			N/A			All lanes maintained at intersections; one lane in each direction at Rt 33 and Rt 9 bridges.			All lanes maintained at intersections; one lane in each direction at Rt 33 and Rt 9 bridges.			All lanes maintained at intersections; one lane in each direction at Rt 33 and Rt 9 bridges.		
Detour Required / Length			N/A			None			None			None		
Construction Duration														
Duration (months)			N/A			18			20			22		
Substandard Geometric Design Elements Corrected														
CR 537	1. Vertical Stopping Sight Distance (Sag Curve west of Redwood Lane)		No			Yes			Yes			Yes		
	2. Vertical Stopping Sight Distance (Crest Curve on bridge over Route 33)		No			No			No			No		
	3. Acceleration Lane Length (EB, on bridge over Route 33)		No			No			No			No		
	4. Deceleration Lane Length (WB, on bridge over Route 33)		No			No			No			No		
	5. Through Lane Drop Transition Length (WB, east of bridge over Route 33)		No			Yes			Yes			Yes		
	6. Intersection Sight Distance (NB Enright Avenue approach)		No			No			No			No		
Traffic Congestion Reduction Impacts														
Proposed ITS Improvements (Traffic signal efficiency improved to reduce congestion along Corridor)			No			Yes			Yes			Yes		
			AM	PM	SAT	AM	PM	SAT	AM	PM	SAT	AM	PM	SAT
CR 537 Corridor Signalized Intersection Future Level of Service (LOS)	1. Iron Bridge Road/ CentraState Hospital Drive	Overal LOS (delay, sec)	C (31s)	F (82s)	C (23s)	C (29s)	C (33s)	C (21s)	C (20s)	C (32s)	B (18s)	N/A		
		# of LOS 'E' movements	1	0	0	0	1	0	0	0	0			
		# of LOS 'F' movements	0	1	0	0	0	0	0	0	0			
	2. Redwood Lane / Village Center Drive	Overal LOS (delay, sec)	C (28s)	D (36s)	E (60s)	C (27s)	C (33s)	D (43s)	B (19s)	C (25s)	C (33s)	N/A		
		# of LOS 'E' movements	0	0	2	0	0	1	0	0	0			
		# of LOS 'F' movements	0	0	1	0	0	0	0	0	0			
	3. Stillwells Corner Road /Wemrock Road	Overal LOS (delay, sec)	C (29s)	F (149s)	F (117s)	C (32s)	F (86s)	E (79s)	C (25s)	D (45s)	D (39s)	C (25s)	D (38s)	D (46s)
		# of LOS 'E' movements	0	2	1	4	0	3	1	1	4	0	0	0
		# of LOS 'F' movements	0	4	6	0	5	4	0	0	0	0	0	0
	4. Walmart Drive / Castronova Way	Overal LOS (delay, sec)	E (59s)	E (71s)	F (108s)	C (34s)	C (27s)	E (71s)	C (34s)	C (27s)	E (71s)	B (19s)	C (28s)	C (32s)
		# of LOS 'E' movements	1	0	1	0	1	3	0	1	3	0	0	0
		# of LOS 'F' movements	1	1	1	0	0	1	0	0	1	0	0	0
	5. NJ Route 33 Interchange		Covered by Problem Statement											
	6. Trotters Way (Freehold Mall)	Overal LOS (delay, sec)	B (11s)	C (34s)	D (46s)	A (8s)	C (30s)	D (51s)	N/A			N/A		
		# of LOS 'E' movements	0	0	0	0	0	0						
		# of LOS 'F' movements	0	1	1	0	0	1						
	7. US Route 9 Interchange		Covered by Problem Statement											
	8. Route 33 Business (Park Avenue)	Overal LOS (delay, sec)	C(30s)	F(84s)	F(170s)	N/A			N/A			N/A		
		# of LOS 'E' movements	0	0	0									
		# of LOS 'F' movements	0	2	2									
Crash Reduction Impacts														
Anticipated overal crash reduction along CR 537 corridor			No			Yes			Yes			Yes		
Anticipated crash reduction on WB CR 537, between Route 33 Interchange and Trotters Way			No			Yes			Yes			Yes		
Anticipated crash reduction on NB Route 9 Ramp at Barkalow Avenue			No			No			No			No		
Driver Expectation Impacts														
Improved driver expectation on WB CR 537 over Route 33 bridge			No			Yes			Yes			Yes		
Improved driver expectation on WB CR 537 between Route 33 Interchange and Trotters Way			No			Yes			Yes			Yes		
Improved driver expectation on EB/WB CR 537 inside (left) lane at Maplewood Cemetery Driveways			No			No			No			No		
Improved driver expectation on EB/WB CR 537 inside (left) lane at Route 9 Interchange			No			No			No			No		
Improved driver expectation at NB Route 9 Ramps and Barkalow Avenue			No			No			No			No		
Improved driver expectation on EB/WB CR 537 inside (left) lane at Route 33 Business (Park Avenue)			No			No			No			No		
Complete Streets Impacts														
Continuous sidewalks and pedestrian connectivity provided			No			Yes			Yes			Yes		
Bicycle compatible outside travel lanes along CR 537 provided			No			Yes			Yes			Yes		
Opportunity to enhance public transportation provided			No			Yes			Yes			Yes		
Right of Way Impacts														
Required ROW (Acres)			0			5.157			6.189			6.835		
Number of Temporary Construction Easements						35			37			41		
Number of Partial Residential Property Acquisitions			0			2			3			4		
Number of Entire Residential Property Acquisitions			0			6			6			7		
Number of Partial Commercial Property Acquisitions			0			33			34			37		
Number of Entire Commercial Property Acquisitions			0			1			2			2		
Number of Business Relocations			0			2 (block 69, lot 37)			13 (2 -block 69, lot 37, 11-block 70, lot 25)			13 (2 -block 69, lot 37, 11-block 70, lot 25)		
Access Impacts														
Proposed Access Management Strategies			No			Yes			Yes			Yes		
Environmental Impacts														
Floodplain (acres)			0			0			0			0		
Riparian Zone (acres)			0			0.113			0.113			0.113		
Wetlands (acres)			0			0.011			0.011			0.011		
State Open Waters (acres)			0			0			0			0		
Total Wetland and State Open Water Permanent Impacts (acres)			0			0.011			0.011			0.011		
Wetland Transition Area (acres)			0			0.38			0.38			0.38		
Historic Resources (#)			0			8-13 & 16-17			8-13 & 16-17			8-14 & 16-17		
Contaminated Sites (#)			0			1, 2, & 3			1, 2, & 3			1, 2, & 3		
Threatened and Endangered Species Habitat (Y/N)			0			No			No			No		
Public Transportation Enhancements Provided														
Bus Stops			No			Yes			Yes			Yes		
Right of Way Cost			$0			$3,615,500			$5,117,400			$5,761,600		
Total Cost			$0			$15,100,000			$17,500,000			$18,500,000		