

TRAFFIG ANALYSES FOR ALTERNATIVES RETAINED FOR DETAILED EVALUA

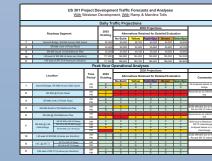
301

Comparison of Traffic Volumes and Analyses for Retained Alternatives

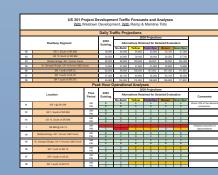


			Daily Tr	affic Proj	ections				
			2030 Projections						
Roadway Segment			2003 Existing	Alternatives Retained for Detailed Evaluation					
				No-Dulid	Yellow	Purple KSpur	Brown	Green ISpur	
1	US 301 at MDDE State Line	10,300	11,900	15,200	19,400	19,800	19,800		
24	US 201, North of Middetown		18,200	28,900	22,900	23,100	24,000	21,300	
25	Rypass, Noth of Middletown				37,600	\$3,700	\$6,000	\$6,700	
24	Boyds Comer Road, West of Cedar Lane		12,100	27,500	20,900	20,400	18,900	18,100	
¥	Rypass, West of Cedar Lane				23,400	31,200	34,000	42,200	
4	Cedar Lane, South of SR 896		4,500	9,700	6,100	5,600	5,500	4,500	
5	Choptank Road, North of Middletow	4	3,100	15,200	12,900	5,300	5,100	5,100	
6	SR 299, West of SR 1		17,200				15,600	13,600	
		Pea	ak Hour (Operation					
Time				2030 Projections					
Location Period			2003 Existing	Alternatives Retained for Detailed Evaluation				Comm	
1	US 301 at MD/DE State Line	AM PM	-	Â	Â	Â	Â	Â	2230 based o
٨	125 301 @ SR 299 (Middletown)	AM PM	c c	c c	c c	8	8	8	2230 includes 30 4-lane due 10
2a	US 301, North of Middletown	AM PM	5	-	5	5	5	5	
20	Bypass, North of Middletows	AM PM			8	C C	C C	C C	
	US 301 @ SR 896 - "Mount Pleasant"	AM PM	D D	D E	C D	c c	c c	B C	2010 based intersection im (2nd through 1
c	SR 896 @ SR 15 (south of Summit Bridge)	AM PM	8	8	C D	Intersections become Interchanges.			, and an adapt
2a	Royds Corner Road, West of Cedar Lane	AM FM	5	÷	5	5	5	5	
36	Bypass, West of Cedar Lane	ALL PM			8	8	8	8	
4	Cedar Lane, South of SR 899	AM PM	c	5	D D	D D	C	c	
				5		e	C.	e e	
5	Choptark Road, Noth of Middletown								



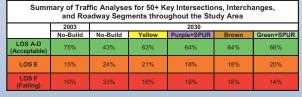






- 53 key intersections, interchanges and roadway segments (including the locations listed on the panel to the left) were analyzed in both the AM and PM peak hours to determine Level of Service (LOS)
- What is Level of Service (LOS)?
 - A grading system for evaluating traffic operations Grades range from LOS A (best)
 - to LOS F (worst) Influenced by traffic volumes,
- truck percentages, roadway characteristics, traffic signals,
- etc.





EXISTING CONDITIONS (2003)

- 75% of key locations operate "acceptably" (LOS A-D)
- 15% are approaching failure (LOS E)
- The remaining 10% are already failing (LOS F)

NO BUILD ALTERNATIVE (2030)

- Projected volumes will exceed the capacity of US 301, causing traffic to increase on several other nearby roads
- Twice as many locations will approach or exceed capacity: > 24% will be approaching failure (LOS E)
- 33% will fail (LOS F)

YELLOW ALDEBNATIVE (2030

- Operations are improved from the No-Build Alternative
- Does not reduce traffic volumes on the north-south roadways
- Similar level of traffic reduction as the other Retained Alternatives on the east-west roadways as well as other alternatives
- Carries the lowest volume on new US 301 north of Middletown

PURPLE, BROWN and GREEN ALTERNATIVES (2030





- All three alternatives have similar traffic volumes and similar operational results
- All three alternatives result in a substantial reduction of traffic on existing US 301 • Compared to the other Retained Alternatives, Green carries the highest volume of traffic on new US 301 between SR 896 and SR 1

- **US 301 SR 896**
 - SR 299 SR 15

- - traffic volumes
- similar facilities

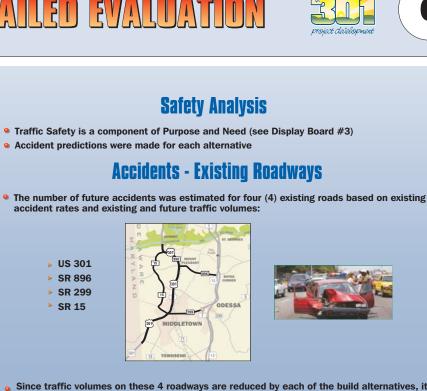
Results:

- **No-Build Alternative in 2030**
- than we are experiencing today (2003)



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Since traffic volumes on these 4 roadways are reduced by each of the build alternatives, it follows that each of the build alternatives would be expected to reduce the number of accidents on existing roads compared to the No-Build Alternative

• The Yellow Alternative is projected to have the least reduction in traffic volumes on these 4 roadways and, therefore, would be expected to result in a lower reduction in accidents than the other 3 build alternatives

Accident Rates - Entire Study Area

Accident rates were developed for each alternative, including the new roadway alignments:

Future accident rates for existing roads were based on existing accident rates and future

Future accident rates for the new alignments were based on statewide average rates for

• Since the statewide average accident rate for freeway-type facilities with interchanges (i.e., New US 301) is lower than the statewide average accident rate for neway-type rate for two lane arterials with intersections and traffic signals (existing 301), the Build Alternatives are all expected to reduce the overall accident rate in the study area compared to the No-Build Alternative

All of the build alternatives are expected to have lower overall accident rates than the

• All of the build alternatives are expected to have lower overall accident rates in 2030