Traffic Operations

Traffic Volumes and Highway/Intersection Operations

Base 2014 and 2045 Conditions

AADT = Average Annual Daily Traffic Volume

LOS = Level of Service

Overall | Mainline / Side Road

= Stoughton Bypass

= Area Where Potential Corridors Considered for Stoughton Bypass

N

US 51 & Farwell Street (County MN)

Scenario	Base	No-Build	Alt A	Alt H
US 51 AADT (North of MN)	19,000 (2014)	23,400	23,300	23,300
Intersection Control Type	Signal	Signal	Signal	Signal
Overall LOS: AM Peak Hour	B (2.88)	C (3.05)	C (3.05)	C (3.02)
Overall LOS: PM Peak Hour	B (2.83)	B (2.78)	B (2.78)	C (3.26)

US 51 & Exchange Street

Scenario	Base	No-Build	Alt A	Alt H
US 51 AADT (South of Exch)	10,800 (2014)	13,600	13,600	13,600
Intersection Control Type	Stop	Stop	Roundabout	Roundabout
Overall LOS: AM Peak Hour	A (1.06)	A (1.10)	B (1.86)	A (1.86)
	E (5.40)	F (6+)		
Overall LOS: PM Peak Hour	A (1.05)	A (1.09)	A (1.88)	A (1.88)
	D (4.16)	E (5.76)		

US 51: Dyreson Road to Mahoney Road

Scenario	Base	No-Build	Alt A	Alt H	Alt B
US 51 AADT	10,800 (2014)	13,600	13,600	13,600	15,000
K30 Highway Operations	D (4.99)	E (5.35)	E (5.37)	E (5.37)	A (1.40)

US 51 & County B/AB

Scenario	Base	No-Build	Alt A	Alt H
US 51 AADT (North of AB)	10,500 (2014)	12,600	12,600	12,600
Intersection Control Type	Stop	Stop	Roundabout	Roundabout
Overall LOS: AM Peak Hour	A (1.89)	A (1.94)	A (1.85)	A (1.87)
	F (6+)	F (6+)		
Overall LOS: PM Peak Hour	A (1.92)	A (2.00)	B (2.11)	A (2.01)
	F (6+)	F (6+)		

US 51 & County B (East)

Scenario	Base	No-Build	Alt A	Alt H
US 51 AADT (North of B)	11,100 (2014)	14,400	14,400	14,400
Intersection Control Type	Stop	Stop	Roundabout	Roundabout
Overall LOS: AM Peak Hour	A (1.01)	A (1.01)	A (1.68)	A (1.68)
	C (3.59)	E (5.52)		
Overall LOS: PM Peak Hour	A (1.01)	A (1.01)	A (1.89)	A (1.89)
	F (6+)	F (6+)		

County N & County B

Scenario	Base	No-Build/Alt A/Alt H (No Improvements)
County B AADT (West of N)	4,400 (2014)	5,900
Intersection Control Type	All-Way Stop	All-Way Stop
Overall LOS: AM Peak Hour	C (3.19)	E (5.34)
Overall LOS: PM Peak Hour	B (2.71)	C (3.61)

Level Of Service (LOS) Values

LOS (Alpha Value)	LOS (Numeric Value)
A	1.01 to 2.00
B	2.01 to 3.00
C	3.01 to 4.00
D	4.01 to 5.00
E	5.01 to 6.00
F	> 6.00

US 51: County B to Lake Kegonsa Road

Scenario	Base	No-Build	Alt A	Alt H	Alt B
US 51 AADT	11,100 (2014)	14,400	14,400	14,400	15,100
K30 Highway Operations	E (5.11)	E (5.47)	E (5.51)	E (5.51)	A (1.41)

US 51 & Roby Road

Scenario	Base	No-Build	Alt A	Alt H
US 51 AADT (South of Roby)	8,700 (2014)	11,600	11,600	11,600
Intersection Control Type	Stop	Stop	Roundabout	Roundabout
Overall LOS: AM Peak Hour	A (1.84)	A (1.89)	A (1.66)	A (1.88)
	C (3.63)	E (5.56)		
Overall LOS: PM Peak Hour	A (1.89)	A (1.97)	A (1.79)	A (1.74)
	F (6+)	F (6+)		

US 51 & WIS 138 West

Scenario	Base	No-Build	Alt A	Alt H
US 51 AADT (East of 138)	14,900 (2014)	17,700	17,700	17,700
Intersection Control Type	Stop	Stop	Roundabout	Roundabout
Overall LOS: AM Peak Hour	A (1.01)	A (1.01)	A (1.81)	A (1.82)
	F (6+)	F (6+)		
Overall LOS: PM Peak Hour	A (1.01)	A (1.01)	B (2.37)	B (2.33)
	F (6+)	F (6+)		

US 51 & 4th Street

Scenario	Base	No-Build	Alt A	Alt H
US 51 AADT (West of Page)	15,100 (2014)	18,600	18,600	18,600
Intersection Control Type	Signal	Signal	Signal	Signal
Overall LOS: AM Peak Hour	E (5.60)	E (5.55)	E (5.55)	E (5.53)
Overall LOS: PM Peak Hour	D (4.70)	D (4.53)	D (4.53)	D (4.53)

US 51 & County N

Scenario	Base	No-Build	Alt A	Alt H
US 51 AADT (West of N)	10,100 (2014)	11,800	11,800	11,800
Intersection Control Type	Signal	Signal	Signal	Signal
Overall LOS: AM Peak Hour	B (2.38)	B (2.77)	B (2.77)	B (2.82)
Overall LOS: PM Peak Hour	B (2.32)	B (2.58)	B (2.58)	B (2.66)

US 51: Tower Drive to Washington Road

Scenario	Base	No-Build	Alt A	Alt H	Alt B
US 51 AADT	4,200 (2014)	6,000	6,000	6,000	6,700
K30 Highway Operations	C (3.69)	C (4.00)	C (4.00)	D (4.01)	D (4.52)

Multiple Potential Corridors Considered