

# INTER-OFFICE MEMORANDUM

STATE OF WISCONSIN

DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION  
Agricultural Resource Management Division

**DATE:** October 6, 2005  
**TO:** Rob Wagner, Project Manager  
WisDOT Transportation District 3  
944 Vanderperren Way  
P.O. Box 28080  
Green Bay, WI 54324-0080  
**FROM:** Mike Wyatt, Agricultural Impact Program  
Wisconsin Department of Agriculture, Trade and Consumer Protection

**Subject: Comments on Purpose and Need Statement for Environmental Impacts Study of STH 15 Project from Greenville to New London, Outagamie County**

## Introduction

Thank you for the opportunity to comment on the draft Purpose and Need statement and project route options for the STH 15 project, from Greenville to New London in Outagamie County. Our comments on direct project impacts must be tentative in the absence of parcel-specific data on agricultural landowners along the project corridor. A more detailed assessment of the direct impacts will be included in the Agricultural Impact Statement (AIS). In addition, the AIS will address the issue of potential secondary impacts on agriculture resulting from the project.

In general, we believe that adequate information has not been provided to document the need for expanding the highway to four lanes for the defined corridor. Data is not provided on the parcel-specific effects of the options. Also, it is not clear that your definition of "farm displacement" is the same as that we would use. You indicated on the STH 23 project in Fond du Lac County that whenever a farm residence was to be displaced, this was assumed to imply displacement of the entire farm operation. However, it is possible for a farm residence to be relocated without the need for relocating the entire farm operation.

There is no indication of what "No-Build" improvement options were considered by WisDOT or what relative impacts these options might have on farm operations. For example, if access control entailed reducing the number of farm access points, what farm impacts could result in terms of farmland loss elsewhere or increased circuitry of travel?

Based on the limited information available, our preferred alternative from the point of view of agricultural preservation would be the No-Build option. However, among the Build options, we favor Option 1A to minimize agricultural impacts, the option which would build entirely on existing right-of-way.

## Proposed Changes to STH 15 Corridor

The proposed project involves an expansion of highway capacity on STH 15 located in Outagamie County between the city of New London and the town of Greenville. Under the proposal this section of STH 15 would be expanded to four lanes. Specifically, the proposed expansion corridor extends from the USH 45 bypass connection to STH 15 at the southeast corner of the city of New London through the town of Hortonia, the village of Hortonville and southeast into the town of Greenville, ending at the connection to STH 76. This section of STH 15 was part of the highway that was previously designated part of USH 45. On October 31, 2003, its name was officially changed to STH 15.

Four route options are under consideration for the eastern portion of the proposed project corridor consisting of all of STH 15 east of the junction with CTH "T" northwest of Hortonville in the town of Hortonia. Option 1 runs entirely along the existing highway right-of-way. Option 2 diverges from the existing right-of-way after the first mile from the east starting point of the corridor, running more directly west and bypassing the village of Hortonville on the south before turning north at a 60-degree angle to connect at CTH "T". Option 3 follows the existing right-of-way for the first 3.6 miles or so on the east end of the route, but then follows a more northerly route through Hortonville, after which it heads straight west on Givens Road. Option 4 is identical to Option 3 for about the first 3.6 miles from the east end of the route. From there, it follows a tight bypass around the southerly end of the village of Hortonville, where it then follows the same route as Option 2 for two miles.

There are two options under consideration for the shorter west portion of the proposed project corridor, a distance of about three miles. These west-portion options, called A and B, are identical for about half of the length of this portion of STH 15. Option A follows the existing right-of-way for the entire length of the western portion of the project corridor. Option B runs about 1/5 of a mile north of the existing corridor in the middle section of the west portion. Both of the west-end options for the project involve building a highway interchange where it links with STH 45 southeast of New London.

It is estimated that 120 feet of right-of-way width would be required for building the four-lane sections along existing route, and that 200 feet of right-of-way width would be needed for construction off the existing right-of-way.

The following table summarizes some of the direct impact information available at this time for the various route options 1, 2, 3, 4, A and B.

Table 1. Information on Direct Agricultural Impacts for STH 15 Route Options

	East Section - Option 1, (Existing ROW)	East Section - Option 2	East Section- Option 3	East Section - Option 4	West Section - Option A (Existing ROW)	West Section - Option B

	East Section - Option 1, (Existing ROW)	East Section - Option 2	East Section- Option 3	East Section - Option 4	West Section - Option A (Existing ROW)	West Section - Option B
Length of Segment (miles)	7.3	7.87	7.29	7.93	3.36	3.16
Existing ROW Used (acres)	51	14	14	14	54	28
New Highway ROW Needed (acres)	64	207	170	187	61	70
Estimated Farmland Converted to ROW (acres)	20	175	110	80	25	48
Number of farms affected	3	14	8	12	1	5
Number of farms displaced	1	0	4	1	3	2
Number of farms severed	0	13	2	9	0	4

Based on the information in this table, and with the proviso that the definition of "farm displacement" needs to be clarified, we believe that among the Build options for the project, Option 1A would minimize the agricultural impacts.

### **SOILS IN THE PROJECT AREA AND THEIR SUITABILITY FOR AGRICULTURE**

Given the four options being considered for the main portion of the STH 15 corridor west from the town of Greenville through or around Hortonville, and the two options from Hortonville west to New London, there are eight potential combination routes.

The most frequently occurring soil map units along these eight STH 15 route options in Outagamie County are: Hortonville silt loams, 2-6% slope (HrB) making up 20% to 29% of

various routes; Kolberg silt loam, 1-6% slope (KoB) making up 11 to 16.5%; Menominee loamy fine sand with loamy substratum, 2-6% slope (MsB) making up from 5% to 14% of most options; Hortonville silt loam, 6-12% (HrC2), making up 4 to 5% of some options; and Symco silt loam, 1-3% slope (SyA) making up 4 to 5% of some options.

The following table provides some basic information as to the agricultural quality of the above soils:

Table 1. Productivity of Major Soils Along the STH 15 Project Route Options

Soil Map Unit	Prime Soils ?	Average Corn Yield (b)	Average Soybeans Yield (bu)	Capability Class in Natural Condition
AdA	No	70	n/a	3w
BoA	Yes	105	35	2s
GrB	Yes	130	43	2e
HnB	Yes	125	41	2e
HrB	Yes	125	41	2e
HrC2	No	115	38	3e
HsB	Yes	125	41	2e
Ke	Yes, if drained	100	33	6w
KhB	Yes	110	36	2e
KhC2	No	100	33	3e
KoB	Yes	85	28	2e
MsB	No	75	25	3e
MsC2	No	70	23	4e
NaB	No	n/a	n/a	6s
Pe	Yes, if drained	n/a	n/a	6w
RoB	No	55	n/a	4s
SeC	No	n/a	n/a	6s
Su	No	n/a	n/a	6w
SyA	Yes, if drained	120	40	2w
WaA	No	70	n/a	3w
ZtA	Yes, if drained	105	35	2w

Notes: Capability classes range from 1 to 8, ranging from Class I soils having few limitations, while Class VIII limitations nearly preclude their use. Subclasses indicated by e,w or s indicate the nature of soil limitations. An "e" shows that the main risk is erosion unless close-growing plant cover is maintained. A "w" indicates that water in or on the soil interferes with plant growth or cultivation. A "s" shows that the soil is limited because it is shallow, droughty or stony.

The table below indicates that Option 2B has the greatest portion of its length in prime soils, and in prime or prime when drained soils. Among the Build options, Option 1A would have the least impact on prime agricultural soils.

Table 3. Comparison of Prime Soils Along STH 15 Project Route Options.

Route Option	% of Route having Prime Soils	% Of Route Soils that Are Prime when Drained
1A - Segments: ABCIJK	41.8%	51.6%
1B - Segments : ABCILK	45.3%	58.4%
2A - Segments: ADEIJK	54.2%	65.8%
2B - Segments: ADEILK	57.9%	72.7%
3A - Segments: ABFIJK	41.9%	53.4%
3B - Segments: ABFILK	44.8%	59.7%
4A - Segments: ABGEIJK	48.0%	56.1%
4B - Segments: ABGEILK	51.7%	63.0%

## PROJECT NEED

WisDOT describes the purpose of the proposed project as to serve existing and projected traffic volumes, by improving mobility, while improving operational efficiency and safety, reducing conflicts between local and through traffic. According to their draft Purpose and Need statement:

"Capacity Expansion of WIS 15 will allow the facility to match the existing design for the USH 45 bypass of New London to the north and of existing WIS 15 southeast to USH 41 in Appleton."

### *Traffic Volume and Level of Service*

The draft Purpose and Need statement also states that "Traffic is steadily increasing along WIS 15." However, the actual data shown on p.3 of that document indicates that this is not always the case. There were 11.7% to 13.9% decreases in total average daily traffic from 2000 to April 2004 at the following project corridor measurement sites: East of CTH M in Hortonville; West of CTH M in Hortonville, east of CTH T, and south of USH 45 in New London. At the site west of CTH JJ, there was no change in traffic volume from 2000 to 2004. The only sites where there were increases were east and west of CTH CB, neither of which are in the current project corridor.

In late 2003, USH 45 was re-routed from the current STH 15 location to another corridor to the southwest (formerly STH 110 and CTH D), resulting in decreased traffic volumes on the newly designated STH 15 corridor under consideration here. WisDOT states that even with this re-routing, "the average daily traffic is expected to increase to 14,700 on the west portion near New London and 22,300 near Greenville by the year 2035." However, projecting traffic volumes that far into the future is highly speculative. It is unclear what assumptions went into this modeling. For example, does it take into account possible negative impacts on travel behavior and trip generation due to the likelihood of long-term gas price increases due to the peaking of global oil production? No evidence is presented to show that this was taken into account.

Also, WisDOT states that:

"Current WisDOT Facility Development Manual (FDM) standards ... for rural state trunk highways call for a 4-lane facility to be considered at 15,000 ADT."

However, as cited above, it is admitted that even by 2035, traffic volumes on the western portion of the project corridor (Segment A) would fail to reach that threshold.

The Purpose and Need draft also indicates that the geometrics and access control on the existing roadway are "inadequate for the current and projected volumes of traffic." However, there are improvements and access control measures which could be applied to correct this without expanding the capacity of the STH 15 corridor to 4 lanes, particularly west of Hortonville in Segment A.

#### *Access*

There are currently 299 access points to the current STH 15 project corridor, about half of them for residences, and about one-quarter for commercial establishments. But the density of access points is only 18 per mile in Segment A and 19.1 per mile in Segment C, the two route portions that are two-lane rural segments. A recent modeling study by the Center for Transportation Studies at UW-Milwaukee found that access point density has no significant effect in contributing to traffic volumes, or to the need for expansion to a four-lane road, when access point density was less than 30 per mile. (A. Alba and Ed Beimborn, Relationship Between land use Patterns and Highway Widening. Final Report. June, 2004, 39) Averaging in the 2-mile urban Segment B with Segments A and C gives a misleading picture of the need for capacity expansion on the overall 11.1 mile route. Looking only at rural segments A and C, which are still two-lane, the access density on the two segments fail to justify an expansion to four lanes.

#### *Safety*

Safety is another basis on which the expansion to four lanes is being justified for this corridor. Improving highway geometrics and reducing the number of access points is arguably the best way to reduce crash rates. WisDOT provides crash rates only for the 1997-1999 period. This data shows that while the crash and fatality rates on the east portion of the project corridor exceed the state average for rural trunk highways, the crash and fatality rates on the western portion of the project corridor are well below the state average rates. Thus, again there is less rationale for expanding the western portion of the corridor to four lanes even based on their safety criteria, which fail to point out the potential for other non-capacity-related approaches to improving safety.

When the average crash rate values for the west and east portions of the STH 15 corridor are weighted by their lengths, the total crash rate of 112.4 per hundred million vehicle miles fails to exceed the state average (115.7 per hundred million vehicle miles.) This does not support the rationale of safety as grounds for increasing highway capacity. Also, at a density of 15 to 20

access points per mile, a FWHA study indicates this alone could contribute up to 177 crashes per hundred million vehicle miles. (See document FHWA-RD-91-044, November 1992, cited as slide in SEH Power Point presentation on access management for STH 26 Corridor Plan, 2001-2003, Rock, Jefferson and Dodge Counties.) This suggests that access management rather than increased road capacity is the best approach to reducing the crash rate.

### **Conclusion and Recommendations**

Our review of the information presented to us to justify the need for this project indicate that an adequate rationale for the Build alternatives has not been presented by WisDOT. This is true for the corridor as a whole, but particularly in Segment A, the west portion. We believe that access management along with other spot improvements could address any safety issues in the corridor and should be considered as an alternative.

We recommend adoption of No-Build options to address issues raised concerning the STH 15 project in Outagamie County. Nevertheless, if a Build option were to be implemented, we would support Option 1A as having the least adverse impact on agricultural land and operations, based on the limited information we have received.

Thanks for the opportunity to comment. We look forward to working with you through the remainder of the process for this project.

# CORRESPONDENCE/MEMORANDUM

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STATE OF WISCONSIN  
DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION  
Agricultural Resource Management Division

**DATE:** April 4, 2007

**TO:** Robert Wagner, Project Manager  
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**CC:** Pete Nauth

**FROM:** Mike Wyatt

**SUBJECT:** Comments on Draft Environmental Impact Statement for Wisconsin STH 15,  
New London to Greenville, Outagamie County, Project I.D. 6430-06-00

## Introduction

Thanks for the opportunity to comment on the DEIS for Wisconsin STH 15, New London to Greenville, in Outagamie County. Our mission as an agency is based on the protection and enhancement of agricultural resources in Wisconsin. Premature or unnecessary introduction of new highway capacity in urban fringe areas can lead to substantial conversion and underutilization of agricultural land, both directly and through various secondary impacts. The bypass alternatives proposed for this project could involve major loss of valuable agricultural land through both direct and secondary impacts. We do not find the arguments in the DEIS persuasive to establish that there is a need for expansion of the STH 15 project corridor to four lanes. Therefore, we continue to support the No Build alternative as the preferred alternative. Among the Build alternatives, we continue to support Alternative 1A, which would expand the highway on its present existing right-of-way. Among the Build alternatives along new alignments, we would support Alternative 3, the North option, as taking the least amount of farmland for right-of-way.

We also find the DEIS treatment of the issue of secondary highway impacts (i.e. indirect and cumulative impacts) is not adequate. Most of our comments below center on the issues of project need and the analysis of secondary land use impacts of highway expansion.

## Project Need

WisDOT describes the purpose of the proposed project as to serve existing and projected traffic volumes, by improving mobility, while improving operational efficiency and safety, reducing conflicts between local and through traffic. According to their draft Purpose and Need statement:

"Capacity Expansion of WIS 15 will allow the facility to match the existing design for the USH 45 bypass of New London to the north and of existing WIS 15 southeast to USH 41 in Appleton."

*Traffic Volume and Level of Service*

The draft Purpose and Need statement also states that "Traffic is steadily increasing along WIS 15." The DEIS also states that "Traffic forecasts are showing steady increases along Wis 15." (p.1-3) Forecast volumes are described as based on "WisDOT's historic counts, and associated growth trends, data from regional and local plans that include present and future land use and development trends." (DEIS, p.1-2 to p.1-3) However, the actual data shown on p.3 of the Purpose and Need document indicates data not consistent with the description of a "steady increase." There were 11.7% to 13.9% decreases in total average daily traffic from 2000 to April 2004 at the following project corridor measurement sites: East of CTH M in Hortonville; West of CTH M in Hortonville, east of CTH T, and south of USH 45 in New London. At the site west of CTH JJ, there was no change in traffic volume from 2000 to 2004. The only sites where there were increases were east and west of CTH CB, neither of which are in the current project corridor.

DATCP-1

In late 2003, USH 45 was re-routed from the current STH 15 location to another corridor to the southwest (formerly STH 110 and CTH D), resulting in decreased traffic volumes on the newly designated STH 15 corridor under consideration here. WisDOT states that even with this re-routing, "the average daily traffic is expected to increase to 14,700 on the west portion near New London and 22,300 near Greenville by the year 2035." The DEIS implicitly attributes the entire 14% decrease in traffic on STH 15 west of Hortonville from 2000-2004 to the re-routing of USH 45 in 2003. They state:

"Traffic forecasts are showing steady increases along WIS 15. ... Early projections for the rerouted US 45, completed in fall of 2003, had anticipated approximately 14 percent of the traffic to be diverted from WIS 15 to US 45. The traffic counts in Table 1.2-1 show that traffic using the relocated US 45 has caused WIS 15 traffic volumes to decrease close to the projected 14 percent decrease west of Hortonville. Despite this decrease, WIS 15 traffic volumes have actually increased or remained the same east of Hortonville. This increase suggests that Hortonville areas development continues to place travel demands on WIS 15." (DEIS, p.1-3)

There are several problems with the inferences drawn in the above passage. First, the traffic history on the WIS 15 project corridor does not show a "steady increase" over the last 25-year period. (See Tables A and B below, using data provided by WisDOT.) Therefore, if the forecast is for a steady increase, this would be a departure from the actual historical data, which shows a more cyclical pattern of alternating increases and decreases. Such a departure from historical trends needs specific justification. In other words, the assumptions that went into the forecast 30 years into the future should be explicitly stated and justified in the DEIS since they are a departure from actual cyclical historical trends. The pattern shown in Tables A and B for STH 15 sites is not even consistent over time for different sites along the STH 15 corridor. In fact it is not even consistent over time for the STH 15 sites located on the same side of the village of

DATCP-2

Hortonville. There is no way that the data shown is consistent with a "steady growth" of traffic on STH 15.

Table A: Average Daily Traffic Volume History on STH 15 Project Corridor Sites from 1979 through 2004.

Location	1976 ADT	1979 ADT	1982 ADT	1985 ADT	1988 ADT	1991 ADT	1994 ADT	1997 ADT	2000 ADT	2004 ADT
STH 15 West of Hortonville	5620	5490	6350	5200	7490	7020	8600	10500	12200	10500
STH 15 East of Hortonville	6780	8090	8400	8730	8760	10410	8400	13900	15400	15400
STH 15 West of STH 76	7100	7790	7930	5620	8220	8420	12700	14400	13500	11300
STH 15 East of New London	5840	5960	6210	5350	6500	7490	9200	10400	11300	9900
US 45 (formerly CTH "D") south of New London	2350	5070	3460	3670	4350	4300	6300	5000	4100	5600
STH 76 (formerly US 45) south of STH 15	2900	4040	2090	1960	2650	2760	5700	5300	7600	7300

Table B: Percent Change in Average Daily Traffic Volume Over Time at STH 15 Project Corridor Sites.

Location	% Change 1976- 1979	% Change 1979- 1982	% Change 1982- 1985	% Change 1985- 1988	% Change 1988- 1991	% Change 1991- 1994	% Change 1994- 1997	% Change 1997- 2000	% Change 2000- 2004
STH 15 West of Hortonville	-2.3%	15.7%	-18.1%	44.0%	-6.3%	22.5%	22.1%	16.2%	-13.9%
STH 15 East of Hortonville	19.3%	3.8%	3.9%	0.3%	18.8%	-19.3%	65.5%	10.8%	0.0%
STH 15 West of STH 76	9.7%	1.8%	-29.1%	46.3%	2.4%	50.8%	13.4%	-6.3%	-16.3%

Location	% Change 1976-1979	% Change 1979-1982	% Change 1982-1985	% Change 1985-1988	% Change 1988-1991	% Change 1991-1994	% Change 1994-1997	% Change 1997-2000	% Change 2000-2004
STH 15 East of New London	2.1%	4.2%	-13.9%	21.5%	15.2%	22.8%	13.0%	8.7%	-12.4%
US 45 (formerly CTH "D"), south of New London	115.7%	-31.8%	6.1%	18.5%	-1.2%	46.5%	-20.6%	-18.0%	36.6%
STH 76 (formerly US 45), south of STH 15	39.3%	-48.3%	-6.2%	35.2%	4.2%	106.5%	-7.0%	43.4%	-4.0%

Secondly, the DEIS infers that all of the decrease in traffic volume on STH 15 west of Hortonville from 2000-2004 is attributable to the rerouting of USH 45 is open to question. This is because it is not matched by a similar decrease on STH 15 east of Hortonville, STH 76 (from which USH 45 was also rerouted in 2003). The decrease there was only 4%, not 16%. Also, it is not matched by a corresponding increase on the rerouted US 45, for example, at the former County Highway "D" south of New London. (See Tables A and B above) The ADT decrease west of the STH 15/STH 76 intersection was 2200, while the increase south of New London on US 45 was only 1500.

DATCP-3

Finally, the statement quoted above is incorrect in its assertion that traffic volumes have actually increased or remained the same east of Hortonville. Data for STH 15 show that although traffic counts just east of Hortonville were unchanged from 2000-2004, counts on STH 15 just west of STH 76 show that average daily traffic decreased 2200, or over 16 percent. (See Tables A and B above)

DATCP-4

The current DEIS projects even greater volumes for STH 15 by 2035: 17,500 ADT at CTH "T" in the west, and 19,000 ADT at WIS 76 in the east. It is unclear what assumptions went into this modeling. Projection of traffic volumes that far into the future is highly speculative. For example, does it take into account possible negative impacts on travel behavior and trip generation due to the likelihood of long-term gas price associated with the peaking of global oil production? No evidence is presented to show that this was taken into account.

DATCP-5

The DEIS (p.1-2) refers to using land use plans to forecast future traffic volumes. This is problematic since plans will not necessarily be enforced. Plans often differ greatly from actual land market trends. Evidence is not presented to show how projected land use changes will translate into increased traffic volumes. For instance, WisDOT traffic projections for no-build alternatives should take into account, or model, the equilibrium effect on the perception and

DATCP-6

behavior of potential drivers, as well as on developers and local government decision-makers, of limiting highway capacity expansion established for the corridor in the long-term planning horizon. Instead, it appears that WisDOT "no-build" traffic projections implicitly accept internalized assumptions of eventual, inevitable highway expansion among affected groups. Implicit assumptions that "accommodate" peak hour drivers at the expense of other constituencies and policy goals need to be made explicit. Such assumptions may operate to encourage the unnecessary or premature conversion of farmland.

The DEIS does not explain how it uses land use plans or development trends to quantitatively project future traffic volumes. The assumptions made about trip generation rates for existing and future land use can significantly impact the projections of level of service (LOS) for both the segment analysis and the intersection analysis referred to in the DEIS. Projections of how future land uses may translate into traffic volumes typically rely heavily on trip generation rates. Most trip generation rates used by WisDOT rely on those compiled by the Institute of Transportation Engineers (ITE). Some experts have strongly criticized these rates have been strongly criticized by some experts as an unreliable basis for estimating the relationship between land use and transportation. (Shoup, 2005; Donovan, 2003)

DATCP-7

### *Threshold for Capacity Expansion*

Also, WisDOT states that:

"Current WisDOT Facility Development Manual (FDM) standards ... for rural state trunk highways call for a 4-lane facility to be considered at around 15,000 ADT." (DEIS, p.1-4)

The DEIS goes on to claim that:

"Much of WIS 15 is already at the levels needed for expansion along the existing route." (Ibid.) However, this claim is open to question. The latest ADT at three of four STH 15 corridor sites listed in Table A for year 2004 have not reached the 15,000 ADT threshold referred to above. Also, at three of the four sites, the traffic volume decreased since 2000, and at STH 15 near the STH 76 intersection, the volume has declined consistently since 1997.

On p.3 of the Purpose and Need Statement, it states that even by 2035, traffic volumes on the western portion of the project corridor (Segment A) would fail to reach that threshold, reaching only 14,700 ADT. However, in the current DEIS, this figure was changed to 17,500 ADT for this section of the project corridor. (See table 1.3-2 on p.1-3 of DEIS) No explanation is given for the increase in the projection. One should be provided to justify the increase.

DATCP-8

However, the 15,000 ADT threshold for shifting a rural arterial to four lanes is also open to question. For example, a recent study determined a threshold for possible widening of a two-lane Class 1 rural arterial to be at a volume of about 20,000 vehicle trips per day (ADT). (Alba and Beimborn, 2004, p.42) This threshold for widening was computed taking for granted typical assumptions of the year 2000 Highway Capacity Manual (HCM). (Alba and Beimborn, 2004, pp.28-42) It is noteworthy that the traffic projections by WisDOT for year 2035 fail to exceed

this threshold except in the **urban** segments of the project corridor, where a higher standard for widening should apply. (DATCP-9)

The Purpose and Need draft also indicates that the geometrics and access control on the existing roadway are "inadequate for the current and projected volumes of traffic." However, there are many improvements and access control measures which could be applied to correct this without expanding the capacity of the STH 15 corridor to 4 lanes, particularly west of Hortonville in Segment A. (DATCP-10)

We acknowledge that there is a stronger case for expansion of highway capacity on the east portion of the project corridor as compared to the west side of the project corridor, although not on the basis of past and current traffic volume trends or crash rates. It is clear from many indicators that development pressure on the east end of the project corridor is an order of magnitude greater than that on the west end. However, the DEIS fails to adequately document these indicators quantitatively to make this case. (DATCP-11)

#### *Traffic Congestion on STH 15 and Inadequate Local Road Connectivity in Hortonville*

According to the DEIS, there is a bottleneck for traffic on the STH 15 segment that goes through the Village of Hortonville.

"The Hortonville WIS 15 segment creates delay for regional traffic traveling through Hortonville. This traffic makes up 60 percent of the traffic traveling through Hortonville. East of Hortonville, regional traffic travels on a 55 mph facility, yet when it enters Hortonville, the traffic must slow to between 25 mph to 45 mph (depending on section) and is subject to a poorly operating traffic signal. ...Because of the geographic features of a lake and a railroad traveling through town, there are no east-west streets that travel all the way through Hortonville other than WIS 15. Local traffic must use WIS 15 to arrive at their destinations within town. ....regional traffic dominates downtown Hortonville during the morning and evening rush hours." (DEIS, p.1-5)

The DEIS appears to take the relative dearth of east-west road connectivity for local traffic in Hortonville as a given that must be accommodated, rather than a problem that can be mitigated locally. An 18-month study by Short Elliott Hendrickson Inc. completed in 2001 found that 42% of traffic on Segment B of STH 15 (encompassing the village of Hortonville) consisted of local trips. Yet it is striking that none of the five alternatives they put forward for addressing congestion on STH 15 included improving or creating a separate continuous east-west (and north-south) route through the village largely using existing right-of-way. Instead, all four Build alternatives rely on new right-of-way whether as a bypass or through the downtown. (Hortonville Comprehensive Plan, pp.79-81)

According to the Village's comprehensive plan:

"As the Village grew, new streets were added that created a very disjointed, non-continuous local street grid. Some of the newest residential subdivisions in the northern and eastern portions of the Village contain wide curvilinear roads, loop roads and cul-de-sacs. ...The resulting discontinuity and lack of local road connections has left the Village with only one

continuous north-south route (CTH M) and only one continuous east-west route (STH 15)... Local traffic that is moving from one quadrant of the Village to another - between residences, businesses, schools and churches - is almost unavoidably funneled onto these two routes. STH 15/USH 45's non-local traffic is already heavy and this local traffic compounds the situation, further lowering the road's level of service, especially during peak morning and evening hours." (pp.76-77)

The above passage suggests that the lack of east-west connectivity in Hortonville was not an inevitable result of geography.

A frequent cause of congestion on many state highways is their excessive or disproportionate use for local access and mobility needs. In other words, many cities and villages (for example, the village of Hortonville in Outagamie County which relies on STH 15), fail to build adequate local intra-urban arterials to assure local connectivity. These local communities rely on the state arterials to varying degrees in lieu of public capital investment to create local arterials to handle local traffic. This underinvestment in local arterial capacity and continued overdependence on state arterials should be reviewed as a matter of state policy. WisDOT should consider ways in which they might better influence local standards on this issue, based on the nexus which local road connectivity has to state highway infrastructure performance and state road aids to localities.

#### *Access*

There are currently 299 access points to the current STH 15 project corridor, about half of them for residences, and about one-quarter for commercial establishments. But the density of access points is only 18 per mile in Segment A and 19.1 per mile in Segment C, the two route portions that are two-lane rural segments. A recent modeling study by the Center for Transportation Studies at UW-Milwaukee found that access point density has no significant effect in contributing to traffic volumes, or to the need for expansion to a four-lane road, when access point density was less than 30 per mile. (Alba and Beimborn, June, 2004, 39) Averaging in the 2-mile urban Segment B with Segments A and C gives a misleading picture of the need for capacity expansion on the overall 11.1 mile route. Looking only at rural segments A and C, which are still two-lane, the access density on the two segments fail to justify an expansion to four lanes based on the above cited study. (Ibid.)

It is well recognized that methods for control and redesign of access in urban areas like the Hortonville section of STH 15 can greatly affect computations of effective functional arterial road capacity. No systematic consideration is given in the DEIS to the quantitative and qualitative contribution of various access design factors to reduced functional capacity of STH 15 within the Hortonville area. Lacking this, there is also no objective assessment of the extent to which access control and design improvements could successfully mitigate existing capacity reductions on STH 15 without actually building additional lane capacity or resorting to a bypass of the city. The failure to adequately address access management options may result in costly physical capacity expansions which have adverse direct and indirect secondary impacts to farmland in the area.

DATCP-12

The No Build alternative offered in the DEIS fails to include access management and other safety improvements which could significantly raise the functional capacity of STH 15 within the

DATCP-13

village of Hortonville. (See description on p. 2-5 of DEIS) By failing to offer alternatives to the addition of physical capacity (i.e. the bypass options) through functional capacity improvements incorporated into the No Build alternative, the DEIS fails to provide a fair and complete spectrum of project alternatives for addressing project goals.

In addition, the three-lane alternative is dismissed in Table 2.2-1 on p.2-4 of the DEIS based on the claim that passing lanes are not feasible anywhere in the east or west rural sections of the project corridor. On p.2-17 the DEIS justifies this based on three claims: 1) that the ADT on the entire length of WIS 15 will exceed the design standards for a four-lane facility by 2025; 2) that the east and west rural sections of STH 15 are too short for installing passing lanes; and 3) because the number of access points and curves on the rural sections would make it difficult to safely locate passing lanes. However, we saw earlier that the WisDOT's projections of ADT are open to challenge as is the threshold relied upon for shifting to four-lanes.

The DEIS states that passing lanes are not recommended on rural highway sections less than 15 miles. (p.2-17) WisDOT's Facilities Development Manual (FDM) recommends lengths of 15 miles or more for design of passing lanes, while also indicating that the proper length for passing lanes ranges from .5 to 2 miles. (WisDOT, 2002, Procedure 11-15-10, p.1, p.3) No explanation is given in the FDM for why passing lane design is not considered feasible for less than 15 miles based on objective criteria. I could find no reference to a minimum 15-mile segment for passing lanes in the Highway Capacity Manual (HCM), where it refers to a 1500-foot sight distance for a passing zone, (Transportation Research Board, 1994, 8-4) and describes passing lane sections as 1 to 2 miles in length:

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"Two lanes are provided for unimpeded passing in one direction for 1 to 2 miles..."  
(Transportation Research Board, 1994, 8-18)

In fact, the HCM notes that passing lanes need to be only from 1.0 to 1.25 miles long:

"An analytic study of passing lane requirements was conducted in Ontario, Canada. This study recommended that passing lanes should consistently be from 1.0 to 1.25 miles long. This length was found to be adequate to disperse most platoons, to provide for additional transition zones, and yet not be too long to change drivers' expectations about the true nature of the highway." (Transportation Research Board, 1994, 8-20)

There are a variety of techniques that could be used to straighten curves and limit access on the rural sections that are not addressed. Such geometrics improvements and access control could be logically combined with a passing lane option.

### *Safety*

Safety is another basis on which the expansion to four lanes is being justified for this corridor. Improving highway geometrics and reducing the number of access points is arguably the best way to reduce crash rates. WisDOT's Purpose and Need statement provides crash rates only for the 1997-1999 period. This data shows that while the crash and fatality rates on the east portion of the project corridor exceed the state average for rural trunk highways, the crash and fatality rates on the western portion of the project corridor are well below the state average rates. Thus,

DATCP-15

again there is less rationale for expanding the western portion of the corridor to four lanes even based on their safety criteria, which fail to point out the potential for other non-capacity-related approaches to improving safety.

When the average crash rate values for the west and east portions of the STH 15 corridor are weighted by their lengths, the total crash rate of 112.4 per hundred million vehicle miles cited in the Purpose and Need statement fails to exceed the state average (115.7 per hundred million vehicle miles.) This does not support the rationale of safety as grounds for increasing highway capacity. Also, at a density of 15 to 20 access points per mile, a FHWA study indicates this alone could contribute up to 177 crashes per hundred million vehicle miles. (See document FHWA-RD-91-044, November 1992, cited as slide in SEH Power Point presentation on access management for STH 26 Corridor Plan, 2001-2003, Rock, Jefferson and Dodge Counties.) This suggests that access management rather than increased road capacity may be a better approach to reducing the crash rate.

DATCP-16

The 2000-2004 crash rates are shown in the current DEIS, Table 1.3-7, p.1-9. The DEIS indicates that both the east and west rural portions of the project corridor have crash rates below the state average for rural arterials. The urban section in Hortonville is barely above the state average for urban arterials. This data doesn't support the need for any major capacity increase for the corridor.

DATCP-17

There is evidence that safety decreases as speeds increase. Therefore capacity increases that allow travel above the speed limit of 55 mph may increase accidents. Three national studies indicate that raising of the speed limit to 65 mph has increased fatalities on rural interstates 20 to 30 percent. (Raloff, 1989, 294; Freedman and Williams, 1992) If expansion of highway capacity leads to an increase in average speed, the same effect might be expected.

The opposing effects of safety and delay reduction criteria in evaluating highway projects was discussed earlier in the section on Level of Service Criteria.

"If a safety LOS were to be introduced into the HCM a decision regarding the final form of LOS would need to be made, namely, should the operational and safety measures be considered separately, or should they be combined in some way. In any event, their differences would need to be resolved. Paraphrasing Hauer (1999): what is good for safety is not necessarily good for mobility. At signalized intersections, for example, the use of more phases increases safety but also increases delay." (Spring, 2000, 66)

#### *Failure to Control for Factors of Enforcement and Driver Behavior*

The Wisconsin State Highway Plan 2020 acknowledges that:

"Driver behavior (such as excessive speed; alcohol or other drug impairment; failure to yield or obey traffic signals; and aggressive driving) accounts for 75% to 85% of all highway crashes. Roadway factors, such as design and condition, account for 10% to 20% of crashes; and vehicles factors account for 5% of crashes." (Summary Report, WisDOT, 1999)

As is the case with other non-capacity road factors, the failure to control for driver behavior and enforcement of traffic rules throws into question the statistical reliability of any comparisons of road segments that fail to control for these quantitatively much larger sources of potential variation in crash rates. Results from a recent study of road infrastructure projects in all 50 states of the U.S. over a 14-year period "strongly refute the hypothesis that infrastructure improvements have been effective at reducing total fatalities and injuries." (Noland, 2003)

In addition, where data on the project subsegments are being compared to statewide average figures, the comparability of the sample of road segments or intersections used is not clearly documented. Since a variety of other variables are known to affect safety, such comparisons may not be valid if the sample of roads used deviates significantly from the STH 15 "urban" road segments in terms of any of these variables.

For example, evidence is not presented to show that the sample of rural arterial roads used for comparison is truly comparable to STH 15 with regard to key variables such as access control, lane width, presence of paved shoulders, vertical and horizontal alignment. If such data is not coded and controlled for in the STH Deficiency File, then it appears that the claims of deficiency made for STH 15 in order to justify capacity improvements and other changes based on injury rates may not be justified. (For additional information, contact Agricultural Impact Program at (608) 224-4645.)

There needs to be a disaggregated analysis of the relative contribution of various safety factors to accident incidence before invoking a need for greater lane capacity. Comparisons between roads must control for other variables than road capacity. This has not been done on this project.

### *Trucks in the Traffic Stream*

The DEIS cites the designation of STH 15 as a "state long truck route, important to commercial and economic development interests within the state" to justify the project based on the route's importance in terms of system linkage. However, according to the DEIS, trucks make up only 7.3 percent of the average daily traffic (ADT) using the STH 15 project corridor. (p.1-2) Actually, the most recent origin/destination study data from January 2006 (Appendix F of the DEIS) shows that the percentage of trucks in the traffic stream on STH 15 is even lower, only 4.3% (See Table 3.04-1, p.3-3, Appendix F, DEIS)

This low percentage is hardly a testimonial to the STH 15's importance as a truck route. By comparison, for example, other origin/destination studies show that at STH 26 in Watertown, trucks were 18% of trips and 40% of through trips. (September 2001, STH 26 Corridor Study: Janesville to Watertown). In a origin/destination study in 1995 for the city of Jefferson, heavy trucks were 18.2% at STH 26 north, 15.3% at STH 26 south; 10% at USH 18 east; 17.6% at USH 18 west; 8.9% at CTH "N" south; and 13.5% at CTH "N" north. In a 1994 Origin/Destination study of Janesville in 1994, heavy trucks were 11.8% at I-90 north; 14.8% at I-90 south; 12.3% at STH 26 north; 10.8% at USH 14 east; 9.4% at USH 14 west. In a 1997 Origin/Destination study of the Fond du Lac area in 1997, heavy trucks were 10.2% at USH 151 west; 16.4% at USH 41 south, 14.4% at STH 23 east.

It should be noted that recent modeling indicates that the percentage of heavy trucks in the traffic stream has no significant influence on the threshold for peak hour traffic volume used to determine when there is a need to shift from a two-lane to a four-lane road based on the Highway Capacity Manual, 2000. (Alba and Beimborn, 2004, 37)

The STH 15 corridor is designated as a "long-truck route," a "Connector" under Corridors 2020, and a "principal arterial" highway throughout the study area according to the DEIS (p.16). However, these designations in themselves do not necessarily justify major capacity expansion. There are alternative regional connector routes available to connect major destinations. The DEIS states that "The route connects the upper Appleton metropolitan area to WIS 29 and northwest Wisconsin." However, alternative primary arterial routes connect the Appleton metro area to STH 29 and northwest Wisconsin including: STH 47, STH 55, STH 76, STH 49 and USH 10 to STH 29 West and USH 39 North.

## **Impact Analysis of DEIS**

### *VMT Impact*

According to the DEIS, "The VMT [vehicle miles traveled] estimated for each of the Build Alternatives is slightly higher than that for the No Build Alternatives, because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network." (p.4-75) This statement fails to address the increase in vehicle miles traveled that often results from a major increase in highway capacity. Such induced trip-making is a fact which has been documented to occur when highway capacity is increased. Induced trip-making is not limited to "rerouted trips" as implied in the above quote from the DEIS. In a number of studies, VMT has been shown to have an elasticity of 0.3 to 0.6 in the short run and between 0.7 to 1.0 in the long run. An elasticity of 0.7 means for example that if highway capacity is doubled (i.e. increased by 100%) as will happen when STH 15 is expanded from two lanes to four lanes in the current project, VMT would be expected to increase by 70% as a result. (Noland,2001; Goodwin,1996; Robert Cervero, 2001; Heanue, 1998) As WisDOT itself notes in one of its publications:

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"The term induced travel is quite distinct from diverted travel and can be used to refer to trips that were not taken prior to facility or service improvement. ...Ryicha Kitamura suggests that the addition of transportation capacity may have some significant long-range impacts on household automobile ownerships, residence, and job location choices. Improved access to/from fringe areas provided by new or expanded service may promote the geographic expansion of an urban area, and eventually result in new levels and patterns of travel in an urban area.(1991)." - (WisDOT, 1994)

### *Emissions Impacts*

According to the DEIS, emissions increases linked to greater vehicle miles traveled under the Build Alternatives

"is offset somewhat by lower MSAT [mobile source air toxics] emission rates due to increased speed; according to EPA's MOBILE6 emissions model, emissions of all of the

priority MSATs except for diesel particulate matter decrease as speed increases. The extent to which these speed-related emissions decreases will offset VMT-related emissions increases cannot be reliably projected due to the inherent deficiencies of technical models." (p.4-75)

However, according to the Federal Highway Administration, this is not accurate. In fact, over much of the range of travel speeds, nitrogen oxide and carbon monoxide emission rates increase rather than decrease.

DATCP-21

"NOx and CO emission rates exhibit a third order polynomial relationship with facility speeds. Between 10 mph and 35 mph, the NOx emission rate decreases as speed increases. Within the 35 mph to 65 mph range, the NOx emission rate increases as speed increases. CO emission rates decrease as speed increases in the range of 2.5 to 25 mph and increase in the range of 25 to 65 mph." (US DOT, p.4)

It is likely that the main impact of capacity increases on STH 15 will be at speeds well within the range at which CO and NOx emission rates would increase much of the time. The DEIS is somewhat ambiguous about average travel speeds east and west of the Village of Hortonville, noting in one place that average travel speeds are from 25 to 40 mph while elsewhere stating that they increase to 55 mph.

DATCP-22

"East and west of Hortonville, WIS 15 is a rural roadway. In these sections, WIS 15 currently experiences LOS E with peak-hour volumes. This LOS is characterized by average travel speeds of 25 to under 40 mph with passing being virtually impossible....East of Hortonville, regional traffic travels on a 55 mph facility, yet when it enters Hortonville, the traffic must slow to between 25 mph to 45 mph (depending on section) .... West of Hortonville, the traffic then speeds to 55 mph speeds." (DEIS, p.1-5)

In either case, the speeds cited are well within the ranges at which CO and NOx emission rates would increase, not decrease, with an improvement in level of service based on the speed-emissions relationship previously cited from the FHWA publication.

DATCP-23

The DEIS fails to accurately address this issue. It does not address the current distribution of speeds in the project corridor or offer realistic estimates of the total emissions impact from expected changes in speeds after construction.

DATCP-24

In addition to examining the impact of induced VMT under the Build alternatives, the DEIS should look seriously at the effect on increasing the total number of trips. Induced traffic effects include growth in both average trip length and in the total number of trips made within the corridor. As FHWA notes:

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"Each mile that a vehicle travels, it emits more pollution, so reducing vehicle travel mileage will reduce emissions of all seven gases. However, in conducting emissions analysis, it is important to examine not only the reduction in vehicle miles traveled (VMT), but also the reduction in the number of vehicle trips. During the first portion of a vehicle trip, when the vehicle engine starts cold, the vehicle emits some pollutants at a much higher rate than during the remainder of the trip, since emissions control technology does

not operate as efficiently as when the vehicle is warm. Some strategies reduce VMT by shortening vehicle trip lengths but do not reduce the number of vehicle trips." (US DOT, FHWA. Multi-Pollutant Emissions Benefits of Transportation Strategies. See [www.fhwa.dot.gov/environment/conformity/mpe\\_benefits/2.htm](http://www.fhwa.dot.gov/environment/conformity/mpe_benefits/2.htm))

By the same token, growth in the total number of trips as a factor in VMT would increase the total number of cold starts compared to growth in length of trips as a VMT factor. Beyond that, the type of induced trip growth bears some examination also in analyzing secondary impacts of new highway capacity. For example, a growth in the number of linked trips, or even a shift from unlinked to linked trips as a result of the expanded corridor's effect on travel patterns could also lead to a greater number of cold starts and idling events.

DATCP-26

### **Critique of Indirect and Cumulative Impacts**

This section of the DEIS provides no quantitative information about housing costs, trends and market segments, or real estate generally, including trends in equalized values by land use class and sales of agricultural land. Appendix C of the DEIS presents information on population, housing growth and employment for Hortonville, and the four towns in the immediate project area: Ellington, Dale, Greenville and Hortonia. However, no context is presented to allow comparison of population, housing and employment in these municipalities to other municipalities in Outagamie County or other parts of the Appleton metro area. There is no project-specific discussion of trends in demographic profile, housing and land costs, land use, land values, or tax rates among area communities or labor market trends which could affect potential secondary impacts of highway improvements. Similarly, no data is presented on detailed economic development trends or plans affecting the area. There is no analytical presentation of commuting data, or other travel data, as part of the discussion of secondary impacts.

DATCP-27

DATCP-28

#### *Delineation of Study Area*

The project study area chosen in the DEIS is defined as "The geographic area that may be affected by the highway project's indirect or cumulative impact on land development." (p.4-120) This includes the towns of Maple Creek, Bovina, Liberty, Hortonia, Ellington, Dale, and Greenville in Outagamie County, and Lebanon, Mukwa and Caledonia in Waupaca County. According to the DEIS, the study area was chosen to include "the major commuting destinations of New London and the Appleton Metropolitan Area". (Ibid.)

However, the study area of potential impacts should be broad enough to assess potential for redistributive impacts within the Appleton metro area as a result of the current project. Therefore, it should include a complete commutershed outward from the primary Appleton and Grand Chute commuting centers in all directions, not just along the STH 15 project corridor. The 10% commuting contour line connecting places of origin with 10% or more of resident workers commuting to the city of Appleton is very broad and ranges from the towns of Caledonia and Fremont along STH 96 (formerly US 10) and the city of New London in Waupaca County through the northern tier of Winnebago County towns across to the towns of Woodville and Stockbridge in Calumet County and covering virtually all of Outagamie County.

DATCP-29

The study area chosen in the DEIS to assess potential impacts does not include other alternative destinations that arguably need to be included in order to achieve a more complete and accurate analysis of commuting, housing, tax, manufacturing, commercial and labor market interactions with potential highway improvements. The STH 15 project corridor needs to be analyzed within the larger regional economic market it resides within, which includes portions of four different counties: Waupaca, Outagamie, Calumet and Winnebago. The linkages that define this larger regional economy only become apparent upon a more detailed regional commutershed analysis. Because of the strong interconnectedness within this region, housing tax and land use trends need to be assessed at the regional level as well.

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DATCP-31

DATCP-32

### *Reliance on Expert Panel*

As stated in the DEIS, "This study solicited the input of a 13-person Expert Panel to determine the potential indirect and cumulative effects of each proposed alternative." (p.4-121) It appears that the entire Indirect and Cumulative Effects Analysis for the STh 15 project relies exclusively on interviewing local officials, reviewing local plans, and engaging the opinions of an "expert panel". Such dependence on an expert panel may be more understandable in cases where little objective data is available. However, even in remote rural areas, there is considerable data available on housing and land sales trends, tax rates, equalized value trends by land use class, commuting data, employment data. The opinions of "expert panels" is not a substitute for objective analysis.

DATCP-33

The DEIS provides little information on the details of the process used in their expert panel approach. No information is provided as to what actual formal protocols, if any, were followed in conducting these meetings or interviews. There is reference to "survey questions" given to panel members, but no copy of the survey is included, and the raw survey result data is not included in the DEIS. No minutes are provided for any meetings held by the panel or of any interviews with local officials and consultants. There is limited information provided in the DEIS text on the comments of these individual. The reasoning process used by panel members in coming up with their conclusions is also not documented. The DEIS reader is asked to take all this on faith.

DATCP-34

The DEIS states that an information packet was mailed to each panel member which:

"included all relevant and available data for the study area, including local land use plans, census data, and GIS data. Following is a general list of materials that were included in the packet:

- Project background, purpose and need, and description of project alternatives
- Summary of adopted land use plans and regulations
- Housing data
- Population trends
- Commuting information
- Summary of Previous public Involvement
- Natural Resource Maps and Information" (DEIS, p.4-121)

The packet is not included in the DEIS, so it is impossible to judge the degree of relevancy and inclusiveness of the data in the packet provided to panel members. Listed terms like "housing data" and "commuting information" are too vague and general to draw inferences with respect to relevancy and inclusiveness. For example, was data provided on relative housing costs, and

trends over time for study area municipalities? Was comparative data provided on the distribution of housing by age class for study area municipalities? Was data provided on time series for certified surveys and subdivision plats by town? Was longitudinal data provided on changes in land use over time, and the location of plats over the last 10 -20 years?

However, it appears that significant data sources relevant to assessing indirect and cumulative secondary impacts of a STH 15 expansion were not included in the information packet, just as they are not included in Appendix C of the DEIS. These include for example: data on the detailed commuting percentages for each study area municipality not just to Appleton but to all employment destinations; data on in-migration of households; distribution of housing by age and municipality; data on agricultural land sales trends - both continuing in ag use and diverted to non-ag use; data on equalized value trends by land use class; data on local-purpose property tax rates; data on median home values; data on average wage levels by sector; data comparing local amenities in area communities; data on the track record in enforcing land use regulations and the consistency of regulations with plans; data on internal consistency of area land use plans; data on shopping trends; shifts in the nature and type of agriculture in area communities. This throws into question the DEIS' claim that "all relevant and available data for the study area" (DEIS, p.4-121) was included in the information packet sent to panel members.

DATCP-35

It is also unclear how the "expertise" of panel members was relevant to completing an objective analysis of potential secondary highway land use impacts. The subjective nature of the "expert panel" process is highlighted by the fact that "the interview results indicate very little consensus regarding the potential impacts of each alternative". (DEIS, p.4-122) There is no documentation of how, or if, panel members individually or collectively utilized any of the information sent to them. The assumptions that went into their analyses are not laid out for the reader to examine and judge. One essential purpose of the EIS process is to provide a rational basis for decision-makers to make informed judgments about project impacts. This purpose is not well-served by the lack of documentation presented for the "expert panel" process. The expert panel methodology serves a useful purpose as an additional confirmatory tool for an analysis of potential secondary highway impacts arrived at independently. It fares less well as a substitute for doing such an independent analysis.

DATCP-36

#### *Impact of Project on Location and Spatial Extent of Development in Study Area*

Most of the analysis of cumulative and indirect effects of the STH 15 project within the DEIS compares the different locations of projected land use resulting from the four bypass options in the village of Hortonville. There is no discussion in the DEIS of the time horizon for which panel members were asked to project potential impacts. This can make a difference: impacts 5 years out may be very different from a long-term build-out scenario. For example, the DEIS states:

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"Expert Panel members were also asked where potential indirect effects would occur based on the various project alternatives.... In all cases, members identified the indirect effects to occur close to the highway corridor. No indirect effects were indicated to occur in more remote areas of the study area." (DEIS, p.4-123)

This passage calls out for the reader to ask "What time horizon were panelists making projections for?" The fact that there was such a consensus by panelists does not imply accuracy of the analysis. It may simply reflect the artifact of conscious instructions or unconscious predilections commonly held by panelists that reflect an overly narrow temporal range for examining impacts. For example, the literature studying land use impacts of highways shows evidence that secondary highway expansion impacts are not narrowly confined to the corridor immediately near the highway as claimed by the "expert" panelists. Rather, highway expansions can have fairly broad spatial induced impacts as we will discuss next.

There are a number of early studies demonstrating a strong evidence for the causal impacts of highways on development in the case of the original construction of the Interstate system, as well as providing evidence for broad spatial impacts on development, not just narrow corridor effects. The Interstate highway system provides a relatively pure case for the study of highway impacts, in comparison with more recent studies which face the confounding influence of multiple major road networks. In the following discussion of various studies of highway impacts, it is important for the reader to keep in mind that the studies represent a wide range of contexts in terms of the type of road (Interstate, rural arterial, freeway, expressway), the type of capacity added (addition to existing right-of-way versus new right-of-way), the time period and geographic density of the overall road network, and many other variables. No study is fully transferable to the immediate project under consideration. Nevertheless, the likelihood of occurrence of secondary highway impacts, as well as the factors affecting their magnitude and location, can be extrapolated from within the spectrum of analytical factors identified in such studies.

Over the period from 1950 to 1975, the classic Briggs study notes:

“As a group, counties with freeways experienced higher rates of migration, irrespective of the migration measure used, than counties off the System. Further, there is evidence to believe that this association is to some degree causal with the opening of Interstate Highways bringing about higher rates of net migration. Controlling for the possible location of the Interstate System in areas already experiencing higher migration rates (by comparing counties with open Interstates with those on the System but with the freeway yet to open), counties with an open Interstate experienced higher migration rates than those where the freeway was yet to open. An even more stringent test which examined migration rates by date of freeway opening during one decade experienced the highest rates of net migration among all county types during the immediately following decade. The data showing that the opening of Interstates during one decade is followed by above average rates of migration during the succeeding decade provides strong evidence for a causal impact of Interstates on migration. ... For these comparisons, two possible confounding influences suggested in the literature are adjacency to metropolitan areas and size of largest place in the non-metropolitan county. Both of these are known to be associated with migration....However, when both of these factors were controlled, counties with freeways continued to show higher rates than those without.” (Briggs, 1980, 50-51)

The final point made in the above passage can be interpreted as pointing to how the true role of highway improvements in catalyzing rapid land use growth depends on many mediating factors, which include: the pattern and character of local land use controls; the extent and rate of regional growth; the geographic and historical particularities of land, labor and housing markets; the presence of bottlenecks or underutilization within the regional road network; and the relative

attractiveness of various local areas near the highway corridor. That these factors mediate the role of highway impacts was recognized in the classic Briggs study referred to earlier.

"The combination of raised accessibility levels throughout nonmetropolitan America, not just in proximity to the Interstate, and the need for triggering forces not necessarily directly tied to the location of Interstates, leads to development occurring only at certain points along the Interstate, as well as away from it. Consequently, the empirical link between Interstates and development **appears** weak." (Briggs, 1980, 104)

Note that Briggs is not saying that because the secondary effect of highways on development was more diffuse and less corridor-specific than commonly believed, that it was therefore illusory or nonexistent. He is not claiming that the same extent of land use growth would have occurred regardless of whether the highway was there. Rather, Briggs is suggesting that the growth rate may be significantly higher because of the highway being there, but that this cannot be accurately measured through studying narrow corridor effects. Another report notes:

"The major effect of the Interstate may have been to raise accessibility levels throughout the non-metropolitan U.S **with the effect less location-specific for areas in close proximity to freeways as commonly believed.**" (Apogee Research. Inc., 1989, 9)

Another study also suggested the broad spatial effects of highways:

"The consensus of previous studies is that highways do not affect strongly single-family residential land use. However, most of these studies investigated effects in relatively small areas within a small (1 to 2 miles) distance from new highways. The regression equation for single-family housing implies that new highways affect construction in areas much further away, and that this influence is consistently measurable for larger study districts. An area need not be bisected by a highway to be affected;" (Bascom, et.al., 1975,58)

Another study was based on longitudinal aerial photography broken down into small cells averaging about 6,000 acres in size covered 2,150 square miles in New York State compared for the years 1938, 1955 and 1968. This study provided a refined study of the amount of residential and commercial development in relation to distance from highways and urban centers over time. It found:

"more intensive uses of land displaced agriculturally productive land use in both the uplands and the valleys. The displacement extends into the hinterlands and is not confined to a relatively narrow band along the highways." (Gessaman and Sisler, 1976, 7)

"The isolated nonfarm residences, many of which were originally farm dwellings on the approximately 6,300 farms which discontinued farming during the study period, were rather regularly distributed across the countryside. There was no significant relationship between their distribution and soil capabilities, although their density declined with increasing distance from highways and urban areas.... The distribution of the estimated average number of all nonfarm residences per square mile was found to be closely related to distance from highways and distance from urban areas. Density of housing decreased as these distances increased" (Gessaman and Sisler, 1976, 6)

The literature indicates that proximity to major arterials have a negative effect on residential property values immediately adjacent to major arterials due to noise, pollution, traffic and competition from commercial uses. Several studies found residential properties abutting an interstate highway were valued considerably lower than comparable properties located further away from the corridor. (Langley, 1976, 36-44; University of Kentucky, 1960, cited in Bascom, 1975,112; Lemly, 1959 cited in Bascom, 1975, 114) Another study notes that pressure for commercial development in the highway corridor arrests residential development. (Carroll, 1958 cited in Bascom, 1975, 108) A very detailed longitudinal study of a beltway's impact on residential property values at different distances over 17 years found conclusive evidence that residential values adjacent to the highway increased at a lower rate than at more distant sites. (Langley, 1981) This is exemplified in the case of a rural two-lane bypass south of Minneapolis in the 1950's where "the wave of residential expansion jumped over a three-block swath, leaving vacant land along most of the highway." (Baerwald, 1982, 9)

Combined with this is the fact that many commercial uses are attracted to the highway corridor and can outbid any residential uses for this accessible land. Because land near the highway is more costly, residential uses locating further away can trade off the added distance for larger lot sizes (Peiser, 1989, 199), or cheaper land prices (Dunford, 1985, 14). The presence of commercial and industrial uses is a disamenity for residential uses and drives residential uses further away from the immediate highway corridor.

"highways appear to promote conversion of vacant (farm) land to low density residential use at the urban fringe... Generally, such development takes place some distance away since various factors related to highways (induced commercial development, noise and air pollution) inhibit residential uses." (Bascom, et.al., 1975B, 10)

A detailed study in Michigan indicates the inadequacy of a two-mile highway corridor depth for purposes of secondary impact analysis. It notes that over the 47-county highway impact area examined, 76 percent of the highway project exhibited development impacts at a depth of **over** two miles from the highway corridor. (Philbrick, 1961, cited in Bascom, 1975, 117) Also, this study was done in the 1940's. Today, the land use impacts would be expected to be even broader geographically since the supporting county road systems is more extensive and higher quality. As one of the early researchers on commuting noted the "frictions of distance have become decidedly less important" over time. (Winger, 1973, 565) Despite this finding, studies are carried out based on the assumption that a two-mile depth on either side of a highway right-of-way is adequate to capture secondary land use effects. An example is the expert panel assessment of the impacts of Highway 29 near Wausau. (WisDOT, 1986, 3)

The negative effect on residential property values of immediate proximity to major co-exists with the broader and better known inverse relationship between highway access and property values applicable to land uses in general. In the area adjacent to a major corridor, the two effects are overlaid, and may neutralize each other, with the negative gradient of property values only becoming evident at some threshold distance from the highway corridor. In general, there is still a greater likelihood of highway-induced development in towns abutting a highway compared to those towns further away. The two effects occur at different geographical scales.

The above studies, and others, show that residential development in general decreases as a function of distance from major highways and from urban centers. (Bone, 1959; Connally, 1968) However, in one study, there was a statistically significant negative association of 1970 out-of-county commuting percentage with presence of a minor civil division within 10 miles of a four-lane divided highway or a limited access interchange, after controlling for distance to the SMSA, distance to the nearest small city, population, and an index of local employment. (Taaffe, Gauthier, and Maraffa, 1980, 323) This effect was not true within 15 miles of the metropolitan central city, where, in 1970, the average percentage of workers commuting outside the county was 28 percent for minor civil divisions within 10 miles of a four-lane divided highway compared to only 7 percent for those not within 10 miles of a four-lane highway. Beyond 15 miles, the relationship is reversed with 2 to 4 times higher out-of-county commuting percentage for communities more than 10 miles from a four-lane highway.

This may reflect a real fact: the disamenity effect on residential location of highway proximity which encourages people to locate residences further out, facilitated by the time savings of the four-lane divided highway. It would not be surprising that "population increase took place more rapidly in communities located on arteries of the highway than in those not located on arteries." (Dansereau, 1965, cited in Skorpa, et.al. 1974, 34) But a study area that is too narrowly delimited not capture much of the geographic scope of induced development impacts of either two-lane or four-lane roads, and could underestimate actual impacts of both. It also would not reliably measure actual net differences in their respective impacts on population growth. In this connection it is important to remember the classic study of the Interstate system by Briggs which concludes that:

"The Interstate System has raised accessibility levels throughout nonmetropolitan America... The channeling of nonmetropolitan development along Interstate System corridors is, at least, a minor, rather than a major, feature of the spatial pattern of nonmetropolitan development." (Briggs, 1980, ii)

Therefore, the original DEIS methodology may underestimate the potential highway-induced development impacts by restricting its scope of observation too narrowly to the immediate corridor on the one hand, while failing on the other to examine the important mediating or "triggering forces" which can lead to accelerated growth.

#### *Highway Effects on the Rate of Development in Area*

According to the Expert Panel cited in the DEIS:

"None of the proposed alternatives will alter the pace of development in the study area overall to a degree that is significantly greater than what is already occurring. However, the location of development will vary as a result of the chosen project alternative." (DEIS, p.4-122)

This conclusion is counter-intuitive and contrary to a considerable body of literature showing the reality that the secondary impact of major highway expansions has been frequently found to greatly accelerate development and to increase the total development within a given radius over any specified time period. We give some examples of this evidence from the literature on highway impacts.

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As noted by Humphrey and Sell,

“A nonmetropolitan community intersected by a controlled access highway, for years after the road is constructed, will probably grow faster than one which is not so intersected. However, other roads in different places also may be constructed as time passes. This evolution in the automotive transportation system can distribute the competitive advantages of greater accessibility more equally throughout a region. The possibility of diminishing returns over time from road building has not been explicitly examined in past research. There is, consequently, a need to evaluate the demographic impact of controlled access highways on a longitudinal basis.” (Humphrey and Sell, 1975, 334)

Humphrey and Sell found significantly higher population growth rates of minor civil divisions if they were within 10 miles of a highway interchange rather than within two miles of a highway corridor. Another study noted that new highways may:

“have great impact upon both the value of adjacent land and upon the location and timing of development. Studies indicate, for instance, that the value of land abutting new freeways can typically increase from two to 50 times in value.” (Sargent, 1976, 37)

Several relatively well-designed recent studies document the role of highways in inducing and accelerating development patterns, i.e. the rate of development, not just the location of development. A recent study of the chronological timing of parcel development and highway construction among several Maryland counties found strong evidence of a causal role for highways in subsequent development within a 5-mile radius of major highway corridors:

"An analysis of all developed residential and commercial properties in Central Maryland and the Eastern Shore in relation to all major highways indicates that highways act as magnets for development. The first indicator of this is that most of the properties lining highways were built after the highways had already been laid....80% of properties within the highway corridors of Central Maryland were built when a highway already existed within five miles. In the areas served by only one or two highways, where the effect of those highways is easier to measure, these trends are most clear:

- In Montgomery County, 93% of all developed properties within five miles of I-270 and beyond the beltway were built after the adjacent section of the highway was built. After highway construction, property was developed in the highway corridors 67% faster than in the rest of the county.
- In Howard County, 94% of all developed properties in the highway corridors had a highway within five miles when the properties were developed.
- In Frederick County, 83% of all developed properties in the highway corridors had a highway within five miles when the property was developed. Land in the highway corridors has been developed at a rate three times faster than in non-corridor areas since the highways were built.

The second indicator is the fact that highway corridors are more developed than areas beyond the immediate vicinity of the highways. In the area surrounding Baltimore 5-20 miles from the city, 54% of the land in the corridors is developed, not including roads,

while 39% of non-corridor land is developed. Surrounding Washington, 61% of the corridor is developed, compared to 40% of the non-corridor area. This difference is larger in the areas further out from the cities, suggesting that highways play a greater role in the sprawling developments at the suburban fringe than they do in the areas immediately surrounding the cities. ...it appears that without the highways, less development would have been drawn outward from the cities into the outlying regions. This growth is not simply a function of population pressures. In Montgomery, Howard, and Frederick Counties, during the last five years of the highway building boom in those counties and the five years following, the rate of property development increased sharply as the rate of population growth decreased sharply." (Heavner, 2000, 5)

A study of highway impacts on land values found that:

"the evidence from Orange County suggests rather strongly that new highways change the geographic pattern of accessibility, that those changes are reflected in home sale prices, and that it is thus reasonable to conclude that new highways will also create changes in development patterns. ... The evidence in this study indicates that home buyers are willing to pay for the increased access the new roads provided. It is that willingness to pay for increased access that influences both development patterns and, potentially, induced traffic. Overall, our results are consistent with recent research suggesting that induced travel is a real phenomenon and consistent with the hypothesis that changes in development patterns are one cause of induced travel." (Boarnet and Chalermpong, 2001, 600)

"Multiple regression of home sales prices showed that a negative house price gradient appeared after the initial links of the toll road system were built. That gradient was not present before the roads were constructed. As urban economic theory would predict, home prices declined with distance from the toll roads. The absence of this effect before the toll roads began construction suggests a causal influence..." (Boarnet, 2002A)

"This provides evidence that the toll roads changed the pattern of employment growth in Orange County. ...The influence of the toll roads on employment growth which can be inferred from the regression results is not simply due to the fact that employment followed population to the growing corridor areas. The influence inferred from the changing sign and significance on the toll road dummy variable in the employment equation can be credited to the toll roads even after controlling for contemporaneous population growth. Interpreting further, one might conclude that the toll roads were located in areas of pre-existing high population growth, which suggests that the roads were placed where growth would occur in the future. Yet once the roads were built, there is evidence that the existence of the toll roads exerted an independent effect on employment growth in the census tracts that contained the toll highways. Thus even if... the toll roads were built in areas that were growing rapidly for other reasons, the construction of the roads appears to have altered the growth pattern, and in particular the employment growth pattern, in the toll road corridors." (Boarnet and Chalermpong, 2002B, 26-27)

"Using a Geographic Information Systems (GIS) street layer as a guide, paths of the 24 selected freeway projects were digitally traced. Next, four-mile buffers were formed around each project segment and superimposed onto a GIS layer of municipal boundaries. From this, the percentage of land areas of each affected municipality that lay within the four-mile buffer was determined....The hypothesis of "induced growth" - i.e. road improvements and the resulting swifter travel speeds spur real-estate construction along a corridor - was substantially confirmed....Notably, the share of countywide building square footage and valuations along a corridor increased with the share of countywide freeway lane-mileage added three years earlier.... Overall, development seemed to be fairly sensitive to freeway improvements across all six land-use categories. Home-building was most responsive. Lane-mile additions two to four years previously, and in the case of apartments and multi-family units, operating speeds two years earlier, significantly explained residential construction, with elasticity estimates well above one. .... The opening of new lanes and the ensuing higher travel speeds appear to have prompted housing developers to draft plans and seek building permits, with actual housing additions occurring several years later." (Cervero; 2001; 8-9, 18, 20)

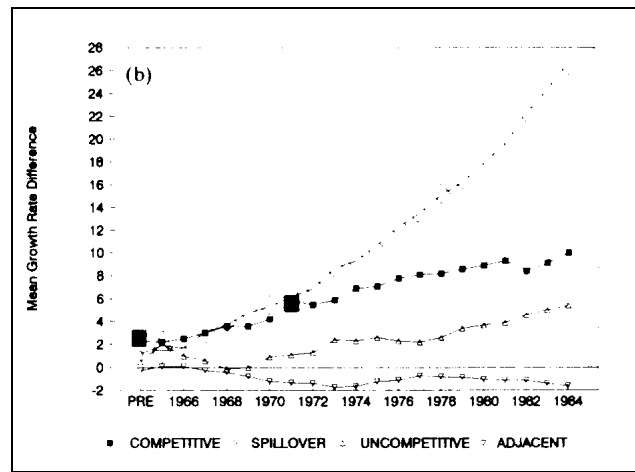
One of the most defensible methodological approaches in the literature for measuring the quantitative impacts of highway projects on population involves a quasi-experimental approach. This is exemplified in a 1994 study which uses a comparison of a very large sample of counties with an interstate highway present for 9 miles or more to those without. (Rephann and Isserman, 1994) The counties are paired to control for a large number of other potentially relevant variables, although some important variables are not controlled for. The study uses a spatial scale – counties and groups of counties – adequate to fully capture the secondary effects of highway projects, unlike many studies. It includes a longitudinal component, measuring impacts over 20 years, which many studies do not do. Finally, the study makes use of a stratified sample based on a functional economic classification that permits a much more refined differentiation of impacts than is typically done in highway land use or economic impact studies. This permits the reconciliation of results which might appear disparate and contradictory in the absence of such stratification. In fact, it is likely that the failure to control for a wide range of relevant variables, including these, may adequately explain apparently contradictory findings in regards to the scope of highway impacts in much of the literature.

The analysis compares population, residential growth, and economic indicators for the targeted counties, those from among a sample of 1,360 which contained at least nine miles of interstate highway mileage as of 1987, to several classes of comparison counties in two-year intervals over an 18-year post-construction period. Choice of targeted counties was restricted to those where interstate construction both began and ended in the period 1963-1975. Thus, there is some degree of control over this crucial time variable, although the analysis is still so aggregated over time as to introduce a major source of error. A twin selection algorithm was used in the study to select a control group of counties that lack interstate highways but are optimally matched to the individual counties in the target group with respect to a host of selected variables including baseline population growth rate, income growth rate, per capita income, population per square mile, log of population, earnings by economic industry sector, transfer payment share of total personal income, and other variables. This procedure resulted in a group of 142 counties with interstates, and 192 matched off-interstate counties. In addition, "adjacent counties" were defined as off-interstate counties within 30 miles of the 142 interstate counties selected. The interstate counties themselves

were then subdivided into three classes of counties. **Urban spillover counties** were those close enough to an urban area to experience residential decentralization effects: those within 60 miles of cities of 250,000 or more people, or within 40 miles of counties with cities of 100,000 to 250,000. **Competitive counties** were those containing cities of more than 25,000 people, primarily small cities, since the largest cities already had some freeways converted to interstates before 1962 and hence were excluded. **Uncompetitive counties** were those that were predominantly rural and relatively far from cities, those not classified as "competitive" or "urban spillover".

For our purposes here, the most interesting finding concerns the result of a comparison of population growth rates over time between matched counties in the urban spillover counties compared to the other county groups. The population growth rate increased at a statistically significant greater rate in the urban spillover and competitive counties than in the other county groups, in which the rate increase was much more modest over time. All of the county groups along interstate highways increased at faster rates than those of the matched counties not adjacent to highways.

The mean growth rate change in urban spillover counties by 1984, ten years after the close of the highway construction demarcation period, was 26 percent over the base year, compared to 10 percent in the competitive counties, 6 percent in the uncompetitive counties and negative 2 percent in the adjacent counties. (Rephann and Isserman, 1994, 742) This study suggests that such a highway expansion might result in a net 28 percent growth in population in such a county 9 to 18 years after construction compared to the adjacent control counties.



Moreover, these growth rates are countywide averages, and probably greatly underestimate the actual growth rates in the geographic areas of these counties most in proximity to the highway corridors. Given that parts of a county further away from the major highway corridor will have below-average county growth rates, we can expect that population growth rates in areas more proximate to the highway corridor will show above-average rates.

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*Reliance on Comprehensive Plans*

According to the DEIS, "Future land use plans give us the best insight into the "reasonably foreseeable" future of the communities." (p.4-125). The DEIS goes on to summarize its interpretation of the main provisions of comprehensive plans for communities in the project corridor, where these have been recently completed. However, there is no discussion of the previous track record of area land use plans in the region over the last twenty years. To what extent have day-to-day rezoning decisions been consistent with plan goals? Such data may be available but this data is not addressed or analyzed in the DEIS. The DEIS states that "The study team also researched the state of land use planning and regulation in the municipalities within the study area." (p.4-121) However, there is no evidence anywhere in the DEIS that the stringency or

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consistency of land use regulation with plans was analyzed. Reviewing pages 3-24 to 3-27 of the DEIS, where land use is discussed, there is no discussion of consistency of zoning and subdivision decisions with either the local comprehensive plan or the county agricultural preservation plan. Instead, the inference is that the study team's review merely took the content of plans at face value.

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Often, the content of land use plans goes unheeded or has a very limited influence on actual land use decisions. The problem of plan implementation is well recognized. It would be helpful if the DEIS included a discussion of any evidence it could find in the record on the degree to which actual land use regulatory decisions at the parcel-level decisions have conformed to the content of area land use plans. An adequate analysis of land use regulation and planning for the project area needs to consider the potential conflicts between market forces and existing plans. This is not done.

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### *Data Sources Not Utilized*

There are many public sources of information that were not utilized in the DEIS to evaluate potential secondary impacts of the STH 15 expansion. These include comparative municipal and regional data on commutersheds, in-migration, housing costs, age distribution of housing, local tax rates, track records on stringency of land use regulation, agricultural land sales, certified survey and subdivision permits, trends in equalized values of land and improvements by land use class, age distribution of housing. Inclusion of this information in a project-specific form could contribute to better informing DEIS readers of potential secondary impacts of a STH 15 expansion.

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### **Conclusion**

DATCP's mission as an agency is based on the protection and enhancement of agricultural resources in Wisconsin. Premature or unnecessary introduction of new highway capacity in urban fringe areas can lead to substantial conversion and underutilization of agricultural land, both directly and through various secondary impacts. The bypass alternatives proposed for the proposed STH 15 project in Outagamie County could entail major loss of valuable agricultural land through both direct and secondary impacts. We do not find the DEIS has adequately established that there is a need for expansion of the STH 15 project corridor to four lanes at this time. Neither historic crash rates nor historic trends in traffic volumes demonstrate a clear need for STH 15 expansion currently. Therefore, we continue to support the No Build alternative as the preferred alternative. Among the Build alternatives, we continue to support Alternative 1A, which would expand the highway on its present existing right-of-way. Among the Build alternatives along new alignments, we would support Alternative 3, the North option, as taking the least amount of farmland for right-of-way.

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We recognize that there is an order of magnitude greater development pressure beginning to affect the STH 15 project corridor east of Hortonville compared to the portion west of that village. Therefore, at some future point, a legitimate need for expansion of the east side of the current project corridor may emerge even in the absence of demonstrated need. In light of this, WisDOT should consider possible segmentation of the STH 15 project into separate east and west projects.

We also noted inadequacies in the content of the treatment of potential secondary land use impacts of the expansion of STH 15 in the DEIS. We believe the use of the "expert panel" process should be only an adjunct to analysis of such secondary effects. However, the DEIS treats the expert panel process as a substitute for such an analysis.

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# FARMLAND CONVERSION IMPACT RATING

<b>PART I (To be completed by Federal Agency)</b>	Date Of Land Evaluation Request
Name Of Project <b>WIS 15</b>	Federal Agency Involved <b>WisDOT</b>
Proposed Land Use <b>Transportation Infrastructure</b>	County And State <b>Outagamie, Wisconsin</b>

<b>PART II (To be completed by NRCS)</b>	Date Request Received By NRCS
Does the site contain prime, unique, statewide or local important farmland? <i>(If no, the FPPA does not apply -- do not complete additional parts of this form).</i>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %
Name Of Land Evaluation System Used	Name Of Local Site Assessment System
	Acres Irrigated
	Average Farm Size
	Amount Of Farmland As Defined in FPPA Acres: %
	Date Land Evaluation Returned By NRCS

<b>PART III (To be completed by Federal Agency)</b>	Alternative Site Rating			
A. Total Acres To Be Converted Directly	25.0	48.0	20.0	175.0
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site	25.0	48.0	20.0	175.0

<b>PART IV (To be completed by NRCS) Land Evaluation Information</b>				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value				

<b>PART V (To be completed by NRCS) Land Evaluation Criterion</b>				
Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)	0	0	0	0

<b>PART VI (To be completed by Federal Agency)</b>	Maximum Points				
Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))					
1. Area In Nonurban Use	15	15	15	12	15
2. Perimeter In Nonurban Use	10	10	10	10	10
3. Percent Of Site Being Farmed	20	20	20	20	20
4. Protection Provided By State And Local Government	20	20	20	20	20
5. Distance From Urban Builtup Area	15				
6. Distance To Urban Support Services	15				
7. Size Of Present Farm Unit Compared To Average	10	4	4	4	4
8. Creation Of Nonfarmable Farmland	10	0	25	0	25
9. Availability Of Farm Support Services	5	4	4	4	4
10. On-Farm Investments	20	20	20	20	20
11. Effects Of Conversion On Farm Support Services	10	10	10	10	10
12. Compatibility With Existing Agricultural Use	10	8	8	8	8
<b>TOTAL SITE ASSESSMENT POINTS</b>	<b>160</b>	<b>111</b>	<b>136</b>	<b>108</b>	<b>136</b>

<b>PART VII (To be completed by Federal Agency)</b>					
Relative Value Of Farmland (From Part V)	100	0	0	0	0
Total Site Assessment (From Part VI above or a local site assessment)	160	111	136	108	136
<b>TOTAL POINTS (Total of above 2 lines)</b>	<b>260</b>	<b>111</b>	<b>136</b>	<b>108</b>	<b>136</b>

Site Selected:	Date Of Selection	Was A Local Site Assessment Used?
		Yes <input type="checkbox"/> No <input type="checkbox"/>

Reason For Selection:

Area actively converting from agriculture to rural residential and subdivisions.

No severances, etc., access should remain on alignment.

Unsure of the actual acreage to be converted indirectly (part III, B). Use the attached maps to estimate.

# FARMLAND CONVERSION IMPACT RATING

<b>PART I (To be completed by Federal Agency)</b>	Date Of Land Evaluation Request
Name Of Project <b>WIS 15</b>	Federal Agency Involved <b>Wis DOT</b>
Proposed Land Use <b>Transportation Infrastructure</b>	County And State <b>Outagamie, Wisconsin</b>

<b>PART II (To be completed by NRCS)</b>	Date Request Received By NRCS
Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply -- do not complete additional parts of this form).	Yes <input type="checkbox"/> No <input type="checkbox"/>
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %
Name Of Land Evaluation System Used	Name Of Local Site Assessment System
	Acres Irrigated
	Average Farm Size
	Amount Of Farmland As Defined in FPPA Acres: %
	Date Land Evaluation Returned By NRCS

<b>PART III (To be completed by Federal Agency)</b>	Alternative Site Rating			
	<u>ALT 3</u>	<u>ALT 4</u>		
A. Total Acres To Be Converted Directly	110.0	80.0		
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site	110.0	80.0	0.0	0.0

<b>PART IV (To be completed by NRCS) Land Evaluation Information</b>				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value				

<b>PART V (To be completed by NRCS) Land Evaluation Criterion</b>				
Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)	0	0	0	0

<b>PART VI (To be completed by Federal Agency)</b>	Maximum Points				
Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))					
1. Area In Nonurban Use	15	12	11		
2. Perimeter In Nonurban Use	10	8	9		
3. Percent Of Site Being Farmed	20	20	20		
4. Protection Provided By State And Local Government	20	20	20		
5. Distance From Urban Builtup Area	15				
6. Distance To Urban Support Services	15				
7. Size Of Present Farm Unit Compared To Average	10	4	4		
8. Creation Of Nonfarmable Farmland	10	25	25		
9. Availability Of Farm Support Services	5	4	4		
10. On-Farm Investments	20	20	20		
11. Effects Of Conversion On Farm Support Services	10	10	10		
12. Compatibility With Existing Agricultural Use	10	8	8		
<b>TOTAL SITE ASSESSMENT POINTS</b>	<b>160</b>	<b>131</b>	<b>131</b>	<b>0</b>	<b>0</b>

<b>PART VII (To be completed by Federal Agency)</b>					
Relative Value Of Farmland (From Part V)	100	0	0	0	0
Total Site Assessment (From Part VI above or a local site assessment)	160	131	131	0	0
<b>TOTAL POINTS (Total of above 2 lines)</b>	<b>260</b>	<b>131</b>	<b>131</b>	<b>0</b>	<b>0</b>

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input type="checkbox"/>
----------------	-------------------	---

Reason For Selection:

Unsure of the actual acreage to be converted indirectly. Use the attached maps to estimate.

Area actively converting from agriculture to rural residential and subdivisions.

No severances, etc., access should remain on alignment.

April 15, 2009

Mr. Thomas Lynch  
Strand Associates Inc.  
910 West Wingra Drive  
Madison, WI 53715

Dear Mr. Lynch:

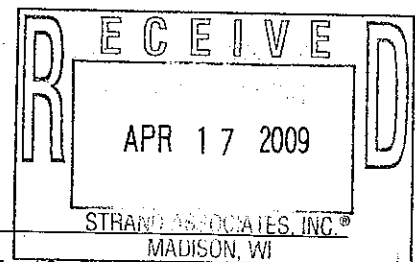
Please find your Farmland Conversion Impact Rating Form for WisDOT Project ID 6430-06-00 in Outagamie County. The site contains prime, unique and statewide important farmland. However the site is not subject to the Farmland Protection Policy Act, due to when there is only one viable alternative option (other than the no-build alternative), projects are exempt from the Act. Therefore, I have left Part V blank.

Good luck with your project.

Sincerely,

  
PHILLIP MEYER  
Area Resource Soil Scientist

Enclosure



## FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

WisDOT I.D. 6430-06-00

**PART I** (To be completed by Federal Agency)

3. Date Of Land Evaluation Request: 3/24/09

4. Sheet 1 of 1

1. Name of Project: WIS 15

5. Federal Agency Involved: WisDOT

2. Proposed Land Use: Transportation Infrastructure

6. County and State: Outagamie, Wisconsin

**PART II** (To be completed by NRCS)

1. Date Request Received By NRCS

2. Person Completing Form:  
Jennifer Zlotocha, SAI

3. Does the corridor contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply - do not complete additional parts of this form)		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	4. Acres Irrigated	Average Farm Size
5. Major Crop(s) <u>Corn, Beans, Alfalfa/hay</u>		6. Farmable Land In Government Jurisdiction Acres: <u>391,619%</u> <u>94%</u>	<u>305,561%</u>	<u>179</u>
8. Name of Land Evaluation System Used		9. Name of State or Local Site Assessment System	7. Amount of Farmland As Defined in FPPA Acres: <u>305,561%</u> <u>74%</u>	
			10. Date Land Evaluation Returned by NRCS <u>4/15/09</u>	

**PART III** (To be completed by Federal Agency)

Alternative Corridor For Segment:

	Corridor A	Corridor B	Corridor C	Corridor d
A. Total Acres To Be Converted Directly (Total Acres) Note: A=No build, B=Preferred Alternative	None	244.1		
B. Total Acres To Be Converted Indirectly	None	0		
C. Total Acres In Site	Varies	244.1		

**PART IV** (To be completed by NRCS) Land Evaluation Information

A. Total Acres Prime And Unique Farmland	Varies	≤55		
B. Total Acres Statewide Important or Local Important Farmland	Varies	≤40		
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted	0	078%		
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value				

**PART V** (To be completed by NRCS) Land Evaluation Criterion

Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)

**PART VI** (To be completed by Federal Agency) Corridor Assessment Criteria  
(Criteria are explained in 7 CFR 658.5 b & c. For Non-Corridor project use form AD-1006)

	Maximum Points	Corridor A	Corridor B	Corridor C	Corridor D
1. Area In Non-urban Use	(15)	10	15		
2. Perimeter In Non-urban Use	(10)	10	9		
3. Percent Of Corridor Being Farmed	(20)	15	20		
4. Protection Provided By State and Local Government (Statewide Protection)	(20)	10	10		
5. Size Of Present Farm Unit Compared To Average	(10)	4	4		
6. Creation Of Non-farmable Farmland	(25)	0	20		
7. Availability Of Farm Support Services	(5)	4	4		
8. On-Farm Investments	(20)	10	15		
9. Effects Of Conversion On Farm Support Services	(25)	10	15		
10. Compatibility With Existing Agricultural Use	(10)	10	8		
<b>TOTAL CORRIDOR ASSESSMENT POINTS</b>	<b>160</b>	<b>83</b>	<b>120</b>		

**PART VII** (To be completed by Federal Agency)

Relative Value Of Farmland (From Part V)	100				
Total Corridor Assessment (From Part VI above or local site assessment)	160				
<b>TOTAL POINTS (Total of above 2 lines)</b>	<b>260</b>				

1. Corridor Selected: <u>Preferred Alternative</u>	2. Total Acres of Farmlands to be Converted by Project: <u>≤165</u>	3. Date Of Selection	4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>
---	--	----------------------	--

5. Reason For Selection:  
Corridor A = No Build  
Corridor B = Preferred Alternative based on alignments Option A and Alternative 3 of DEIS.

Name of Federal agency representative completing this form: \_\_\_\_\_ Date: \_\_\_\_\_

NOTE: Complete one form for each segment with more than one Alternate Corridor

(See Instructions on reverse side)

> -----Original Message-----  
> From: Birch, Gary  
> Sent: Friday, May 26, 2006 3:11 PM  
> To: 'James.Mccarthy@Strand.com'  
> Cc: Braun, Wendy; Wagner, Rob - NE Region; Helmrick, Michael  
> Subject: Hwy 15- New London to Greenville; Lupine/Karner Blue  
> Butterfly Survey  
>  
> On May 25th I had an opportunity to survey the above project area for the  
> occurrence of Wild Blue Lupine (*Lupinus perennis*), and ultimately the  
> Karner Blue Butterfly. Letters from the U.S. Fish and Wildlife Service,  
> dated June 8th and October 25, 2004 said the Karner Blue Butterfly has  
> been documented near the east section of the proposed corridor. It also  
> mentioned that WisDOT conduct surveys for lupine at the project site. On  
> behalf of WisDOT, I surveyed this stretch of highway from North Road west  
> to Co. M within Hortonville. I also surveyed representative (not all)  
> areas along the two alternative routes for the proposed construction.  
>  
> From my surveys, there is no lupine along these routes, nor did I see any  
> soils conducive to their growth. Most of the uncultivated, upland areas  
> of the routes are either characterized by Smooth Brome Grass (*Bromus*  
> *inermis*), or a heavy tree cover, neither an associate of lupine. Without  
> lupine, or other usual native nectar plants, Karner Blue Butterflies do  
> not exist.  
>  
> For those reviewing this survey report, I'm certified through the  
> Wisconsin Department of Natural Resources for KBB surveys. My last  
> training certification occurred in May, 2004 and is good until 2009.  
>  
> Gary Birch  
> WisDOT, Environmental Services  
> Phone: (608) 266-1017  
> gary.birch@dot.state.wi.us  
>



March 6, 2007

Mr. Robert Newbery  
Wisconsin Dept. of Transportation  
Bureau of Equity and Environmental Services  
4802 Sheboygan Ave., Room 451  
Madison, WI 53707-7965

SHSW#: 04-0464/OU  
RE: Reconstruct STH 15: New London to Greenville  
WisDOT I.D.#: 6430-06-00

Dear Mr. Newbery:

We have received the "Draft Environmental Impact Statement" for the above referenced project. To date we have not received an architectural/history survey report or an archeological survey report for the proposed project. As a result, it is not possible to determine if the proposed undertaking will result in an adverse effect to any historic properties. Nothing has been submitted to our office as of this date to comply with 36 CFR 800. Please forward the appropriate project documentation and reports to our office for review and comment. Once we have received the appropriate documentation, we will be able to consult with your agency to determine what effects the proposed undertaking will have on historic properties.

Please call me at (608) 264-6507 if you have any questions concerning these matters.

Sincerely,



Sherman Banker  
Office of Preservation Planning

CC: Johnny Gerbitz, Federal Highway Administration

**SECTION 106 REVIEW  
ARCHAEOLOGICAL/HISTORICAL INFORMATION**

Wisconsin Department of Transportation  
DT1635 11/2006

For instructions, see FDM Chapter 26

**I. PROJECT INFORMATION**

Project ID 6430-06-00	Highway - Street WIS 15	County Outagamie
Project Termini New London to Greenville		Region - Office Northeast Region
Regional Project Engineer - Project Manager Robert Wagner, P.E.		Area Code - Telephone Number 920-492-5983
Consultant Project Engineer - Project Manager Tom Lynch, P.E., PTOE	<b>RECEIVED</b>	Area Code - Telephone Number 608-251-4843
Archaeological Consultant MAP - Kelly Hamilton	SEP 02 2009	Area Code - Telephone Number 608-264-6560
Architecture/History Consultant Tim Heggland	<b>DIV HIST PRES</b>	Area Code - Telephone Number 608-264-6560
Date of Need		SHSW # 04-0464/00
Return a signed copy of this form to:  PG 184		

**II. PROJECT DESCRIPTION**

Project Length 11 miles	Land to be Acquired: Fee Simple ~259 acres	Land to be Acquired: Easement ~1-2 acres
----------------------------	---	---

Distance as measured from existing centerline	Existing	Proposed	Other Factors	Existing	Proposed
Right-of-Way Width	~33'	~100 - 170'	Terrace Width N/A		
Shoulder	8' of which 3' paved	10'	Sidewalk Width N/A		
Slope Intercept	~33'	~100'-175'	Number of Lanes	2	4
Edge of Pavement	15'	18' (two CL)	Grade Separated Crossing	0	2
Back of Curb Line N/A			Vision Triangle N/A acres		
Realignment		~4.2 miles	Temporary Bypass N/A acres		
Other - List:			Stream Channel Change	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Attach Map(s) that depict "maximum" impacts.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Tree topping and/or grubbing	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Brief Narrative Project Description - Include all ground disturbing activities. For archaeology, include plan view map indicating the maximum area of ground disturbance and/or new right-of-way, whichever is greater. Include all temporary, limited and permanent easements.

The Wisconsin Department of Transportation is evaluating alternatives for serving existing and future traffic four-lane expansion on the existing alignment, as well as three bypass alternatives for the Village of Hortonville. The preferred alternative bypasses the Village of Hortonville to the north with two lanes in each direction and a 60 foot median. Work will include pavement demolition, clearing topsoil, earthwork grading, embankments, drainage work and swales, and paving. With the grade separations, some side roads will also experience these same ground disturbing activities.

04-0464/04

PG 284

Add continuation sheet, if needed.

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SEP 02 2009

DIV HIST PRES

**III. CONSULTATION**

How has notification of the project been provided to:

- Property Owners
  - Public Information Meeting Notice
  - Letter - Required for Archaeology
  - Telephone Call
  - Other: Individual Meetings

- Historical Societies/Organizations
  - Public Information Meeting Notice
  - Letter
  - Telephone Call
  - Other: Individual Meetings

- Native American Tribes
  - Public Info. Mtg. Notice
  - Letter
  - Telephone Call
  - Other:

\*Attach one copy of the base letter, list of addresses and comments received. For history include telephone memos as appropriate.

**IV. AREA OF POTENTIAL EFFECTS - APE**

**ARCHAEOLOGY:** Area of potential effect for archaeology is the existing and proposed ROW, temporary and permanent easements. Agricultural practices do not constitute a ground disturbance exemption.

**HISTORY:** Describe the area of potential effects for buildings/structures.

The APE consists of all those properties adjacent to the corridors being evaluated. The APE for history has not changed.

**V. PHASE I ARCHEOLOGICAL OR RECONNAISSANCE HISTORY SURVEY NEEDED**

**ARCHAEOLOGY**

- Archaeological survey is needed
- Archaeological survey is not needed - Provide justification
  - Screening list (date).

**HISTORY**

- Architecture/History survey is needed
- Architecture/History survey is not needed
  - No structures or buildings of any kind within APE
  - Screening list (date).

**VI. SURVEY COMPLETED**

**ARCHAEOLOGY**

- NO archaeological sites(s) identified - ASFR attached
- NO potentially eligible site(s) in project area - Phase I Report attached
- Potentially eligible site(s) identified-Phase I Report attached
  - Avoided through redesign
  - Phase II conducted - go to VII (Evaluation).
- Phase I Report attached - Cemetery/cataloged burial documentation

**HISTORY**

- NO buildings/structures identified - A/HSF attached
- Potentially eligible buildings/structures identified in the APE - A/HSF attached
- Potentially eligible buildings/structures avoided - documentation attached

**VII. DETERMINATION OF ELIGIBILITY (EVALUATION) COMPLETED**

- No arch site(s) eligible for NRHP - Phase II Report attached
- Arch site(s) eligible for NRHP - Phase II Report attached
- Site(s) eligible for NRHP - DOE attached

- No buildings/structure(s) eligible for NRHP - DOE attached
- Building/structure(s) eligible for NRHP - DOE attached

**VIII. COMMITMENTS/SPECIAL PROVISIONS - must be included with special provisions language**

See attached sheet for Commitments/Special Provisions.

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04-0464/01

Pg 3/4

DIV HIST PRES

### VIII. COMMITMENTS/SPECIAL PROVISIONS

The following are recommendations to prevent inadvertent disturbance to three archaeological sites during the proposed construction and subsequent roadway maintenance.

#### Chickadee (47OU251)

The aerial plan shows the slope intercept for the proposed STH 15/USH 45 interchange would be located northeast of the archaeological site. The proposed slope intercept for USH 45 would move farther from the site and would be located along the existing base of slope (approximately).

- No permanent or temporary limited easement will be acquired within the known site boundaries.
- Prior to construction, protective fencing will be placed along the edge of the area of potential effect.
- A qualified archaeologist should monitor construction-related utility relocations within the archaeological site boundaries.
- No excavation will be allowed along the existing ditch back slope along USH 45 at the archaeological site.
- The archaeological site will not be used for borrow or waste disposal or for the staging of personnel, equipment and/or supplies.

#### Medium Pines (47OU216)

The aerial plan shows the roadway alignment shifting away from the archaeological site. The proposed slope intercept would be located along the existing southbound traffic lane.

- No permanent or temporary limited easement will be acquired within the known site boundaries.
- The archaeological site will not be used for borrow or waste disposal or for the staging of personnel, equipment and/or supplies.

#### Creek View (47OU227)

The plan sheets and cross sections show the construction activities would come within 2 to 4 feet of the archaeological site boundary.

- No permanent or temporary limited easement will be acquired within the known site boundaries.
- Prior to construction, protective fencing will be placed along the north (existing slope intercept), east and west boundaries of the archaeological site.
- A qualified archaeologist will monitor construction-related utility relocations within the archaeological site boundaries.
- No excavation, including topsoil removal, will be allowed along the existing ditch back slope along STH 15 at the archaeological site.
- Archaeological site should not be used for borrow or waste disposal or for the staging of personnel, equipment and/or supplies.

**IX. PROJECT DECISION**

- No historic properties (historical or archaeological) in the APE.
- No historic properties (historical or archaeological) affected.
- Historic properties (historical and/or archaeological) may be affected by project;
  - Go to Step 4: Assess affects and begin consultation on affects
  - Documentation for Determination of No Adverse Effects is included with this form. WIDOT has concluded that this project will have No Adverse Effect on historic properties. Signature by SHPO below indicates SHPO concurrence in the DNAE and concludes the Section 106 Review process for this project.

04-0464/20  
Page 484

[Redacted Signature]

(Regional Project Manager)

8-17-09

(Date)

[Redacted Signature]

(WIDOT Historic Preservation Officer)

9/1/09

(Date)

[Redacted Signature]

(State Historic Preservation Officer)

9/21/09

(Date)

(Consultant Project Manager)

(Date)

RECEIVED

SEP 02 2009

DIV HIST PRES



Wisconsin Department of Transportation

Division of Transportation
System Development
Bureau of Equity and Environmental Services
4802 Sheboygan Avenue, Room 451
P.O. Box 7965
Madison, WI 53707-7965
Telephone: (608) 266-3761
Facsimile (FAX): (608) 266-7818

August 28, 2009

Mr. Sherman Banker, Compliance Archaeologist
Office of Preservation Planning
Wisconsin Historical Society
816 State Street
Madison, Wisconsin 53706-1482

An Equal Opportunity Employer

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SEP 02 2009

DIV HIST PRES

WisDOT Project ID 6430-06-00 SHSW#: 04-0464/OU
STH 15 New London - Greenville
Outagamie County, Wisconsin

Your email dated July 29, 2009 (enclosed) requested additional information explaining WIDOT determination of "no adverse effect".

Enclosed for your review and concurrence is the "documentation of determination of conditional no adverse effect" for WIDOT undertaking 6430-06-00/SHSW#: 04-0464/OU (Hortonville Bypass, STH 15, Outagamie County). Also attached is an amended section 106 form detailing the cultural resource commitments to be undertaken by WIDOT for sites 47OU251, 47OU216, & 47OU227.

This additional information along with the previous Section 106 submittal should fulfill the obligations requested in your email dated August July 29, 2009, and allow your office to complete the review of this undertaking. If agreeable, please sign below and return a copy to BEES. A signature on the amended section 106 form, and a copy provided to BEES is requested as well.

If I can be of further assistance, please feel call me at (608) 261-0137.

Sincerely,

WI-SHPO concurs with the supplemental information regarding WIDOT undertaking Project ID 6430-06-00 SHSW#: 04-0464/OU

[Redacted signature]

8/28/09

9/21/09

James J. Becker III
Archaeology Program Coordinator

Date

Sherman Banker
Office of Preservation Planning

Date

Enclosures: SHPO Email dated 7/29/09; amended section 106 form; 2 - copies of the Documentation of Determination of Conditional No Adverse Effect

# *Stockbridge-Munsee Tribal Historic Preservation Office*

*Sherry White - Tribal Historic Preservation Officer*

*W13447 Camp 14 Road*

*P.O. Box 70*

*Bowler, WI 54416*

April 29, 2009

WisDOT  
Robert Wagner  
944 Vanderperren Way  
P.O. Box 28080  
Green Bay, WI 54324

RE: Project I.D. 6430-06-00  
WIS 15 Corridor Study  
New London to Greenville  
Outagamie County, Wisconsin

Dear Mr. Wagner:

Thank you for contacting the Stockbridge-Munsee Tribe regarding the above referenced project. The Tribe is committed to protecting archaeological sites that are important to tribal heritage, culture and religion. Furthermore, the Tribe is particularly concerned with archaeological sites that may contain human burial remains and associated funerary objects.

As described in your correspondence, this proposed project is not in a region of archaeological interest to the Stockbridge-Munsee Tribe. Outagamie county is an area of interest to our tribe but only around Kaukauna.

We appreciate your cooperation in notifying the Historic Preservation Office. Should you have any questions, feel free to contact me.

Sincerely,



Sherry White,  
Tribal Historic Preservation Officer

# *Stockbridge-Munsee Tribal Historic Preservation Office*

*Sherry White - Tribal Historic Preservation Officer*

*W13447 Camp 14 Road*

*P.O. Box 70*

*Bowler, WI 54416*

June 16, 2009

WisDOT  
Robert Wagner  
Project Manager  
944 Vanderperren Way  
P.O. Box 28080  
Green Bay, WI 54324

RE: Project I.D. 6430-06-00  
WIS 15 Corridor Study  
New London to Greenville  
Outagamie County

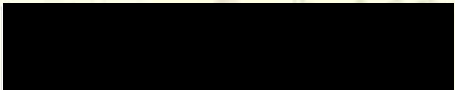
Dear Mr. Wagner:

Thank you for contacting the Stockbridge-Munsee Tribe regarding the above referenced project. The Tribe is committed to protecting archaeological sites that are important to tribal heritage, culture and religion. Furthermore, the Tribe is particularly concerned with archaeological sites that may contain human burial remains and associated funerary objects.

As described in your correspondence, the proposed ground disturbing activity of this project is not in an area of Outagamie County that holds historical significance to our tribe.

We appreciate your cooperation in notifying the Historic Preservation Office. Should you have any questions, feel free to contact me.

Sincerely,

  
Sherry White  
Tribal Historic Preservation Officer



Prairie Band Potawatomi Nation  
Government Center

September 9, 2003

Robert Wagner, P.E.  
Wisconsin Department of Transportation  
District 3  
944 Vanderperren Way  
P.O. Box 28080  
Green Bay, Wisconsin 54324-0080

Dear Mr. Wagner:

I am writing to inform you that I am in receipt of your recent National Historic Preservation Act (NHPA), Section 106 and Section 110, correspondence dated September 4, 2003.


After reviewing the contents of your recent mailing we would like to inform you that we have no objections to the following project:

**Project:** Purpose and Need for the Environmental Impact Study of STH 15 from Greenville to New London in Outagamie County

At this time we are unaware of any historical cultural resources in the proposed development area. We do request to be immediately contacted of any inadvertent discoveries uncovered at anytime throughout the various phases of the project.

Please feel free to call me at (785) 966-4000 or additional information can be faxed to (785) 966-4009. We look forward to working with you.

Respectfully,

  
Zach Pahmahmie  
Chairman  
NAGPRA Representative  
Prairie Band Potawatomi Nation

ZP/vrs

cc: Correspondence



# Sac & Fox Nation of Missouri in Kansas & Nebraska

305 North Main St., Reserve, KS 66434  
Phone: (785) 742-7471 Fax: (785) 742-3785

December 22, 2004

Robert Wagner  
WisDOT District 3  
944 Vanderperren Way  
PO Box 28080  
Green Bay WI 54324-0080

Dear Mr. Wagner:

Thank you for your letter, which is in compliance with Section 106 of the National Historic Preservation Act, and Section 110.

The Sac and Fox Nation of Missouri in Kansas and Nebraska have an interest in this site in issues that result in inadvertent finds of human remains or funerary objects pertaining to:

Project 6430-06-00  
STH15  
Greenville to New London  
Outagamie County

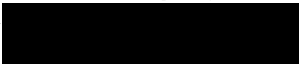
There are two other bands of Sac and Fox that also need to be contacted, the Sac and Fox Nation of Oklahoma and the Sac and Fox of the Mississippi in Iowa.

Johnathan Buffalo, Sac and Fox of the Mississippi in Iowa  
349 Meskwaki Rd.  
Tama, IA 52339-9629

Sandra Massey, Sac and Fox Nation of Oklahoma  
Rt. 2, Box 246  
Stroud, OK 74079

If you have any questions, please contact me at the number or address above.

Sincerely,

  
Deanne Bahr  
Sac and Fox Nation of Missouri in Kansas and Nebraska  
NAGPRA Contact Representative



# Sac and Fox Nation of Missouri in Kansas and Nebraska

305 North Main St., Reserve, KS 66434  
Phone: (785) 742-7471 Fax: (785) 742-3785

February 15, 2007

Robert Wagner  
WisDOT District 3  
944 Vanderperren Way  
PO Box 28080  
Green Bay WI 54324-0080

Dear Mr. Wagner:

Thank you for your letter, which is in compliance with Section 106 of the National Historic Preservation Act, and Section 110.

**Project: 6430-06-00**

The Sac and Fox Nation of Missouri in Kansas and Nebraska NAGPRA department have determined the above project as:

No objections. However, if human skeletal remains and/or any objects falling under NAGPRA are uncovered during construction, please stop immediately and notify NAGPRA representative, Deanne Bahr, at the address above.

There are two other bands of Sac and Fox that also need to be contacted, the Sac and Fox Nation of Oklahoma and the Sac and Fox of the Mississippi in Iowa.

Johnathan Buffalo, NAGPRA Representative  
Sac and Fox of the Mississippi in Iowa  
349 Meskwaki Rd.  
Tama, IA 52339-9629

Sandra Massey, NAGPRA Representative  
Sac and Fox Nation of Oklahoma  
Rt. 2, Box 246  
Stroud, OK 74079

If you have any questions, please contact me at the number or address above.

Sincerely,

Deanne Bahr  
Sac and Fox Nation of Missouri in Kansas and Nebraska  
NAGPRA Contact Representative



*Ho-Chunk Department of Heritage Preservation  
Cultural Resources Division  
Susette LaMere-Arentz, CR Division Manager  
Post Office Box 667  
Black River Falls, WI 54615-0667  
(800) 561-9918 or (715) 284-7181 FAX (715) 284-7449*

**In Response to:**

Letter dated November 11, 2004

Mr. Robert Wagner, P.E.  
Project Manager  
WI DOT District 3  
944 Vanderperren Way  
P.O. Box 28080  
Green Bay, WI 54324-0080

**RE: Project I.D. 6430-06-00  
STH 15  
Greenville to New London  
Outagamie County**

Dear Mr. Wagner:

Please provide us with an updated archeological survey report for any new construction sites, and all pertinent documentation no matter how many times these sites are revised, and/or if there has been site disturbance in its past to what degree.

Please send any and all future Section 106 reviews and documentation to this address. Turn-around time on these reports/responses are generally 45 days. If site is within Aboriginal Ho-Chunk Homelands, then, the process could take longer. This office is responsible for answering each and every letter that comes in and gives due consideration to each site for review.

Respectfully,

  
Larry Garvin, Executive Director Heritage Preservation

SL/ia

11-15-04 / L-5

CC: Larry Garvin, Executive Director

File