

I-39/90/94 Madison to Portage Study

WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE, and CONSUMER PROTECTION

Comments on the Indirect Effects of the Five Corridor Alternatives

The Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) is the state agency responsible for the support and promotion of agriculture in Wisconsin. Wisconsin has placed a priority on protecting farmland through a wide range of state programs. With this responsibility in mind, DATCP has reviewed all available documents detailing the specifics of the seven alternatives identified by the Wisconsin Department of Transportation (WisDOT) that would reduce congestion on I-39/90/94 from Madison to Portage. Additionally, we have reviewed available information for the region collected by DATCP, the USDA, and other state and federal agencies. Based on this review, we respectfully submit the following comments regarding the indirect effects of the alternatives for this project. WisDOT has identified the following corridor alternatives for this study:

- I-39/90/94 Existing Corridor: No Build Preserve & Maintain
- I-39/90/94 Existing Corridor: Reconstruct No Capacity Expansion
- I-39/90/94 Existing Corridor: Capacity Expansion
- East Reliever Option A
- East Reliever Option B
- East Reliever Option C
- East Reliever Option D

For the purposes of this document, the DATCP comments address only the options that would require acquisitions of agricultural properties, which include the capacity expansion of the existing corridor and the four East Reliever Corridors (A, B, C, and D). DATCP also understands that the final design will require significantly less than the 2,000-foot wide corridors currently identified and mapped by WisDOT during this phase of the study. However, because the exact dimensions and specific locations of these route alternatives have not been identified by WisDOT, all comparative analysis in this document was conducted on the entire 2,000-foot wide corridors. When a specific route or alternative is chosen by WisDOT, DATCP will calculate new impacts and provide revised comparisons.

I. POTENTIALLY AFFECTED COMMUNITIES

Of importance to note is that the expansion of the existing corridor and the four WisDOT East Reliever Corridors (A, B, C, and D) would cause agricultural impacts to a large number of communities. The communities that might be impacted are as follows:

Table 1: Communities Potentially Affected by the I-39/90/94 Madison to Portage Study Corridors

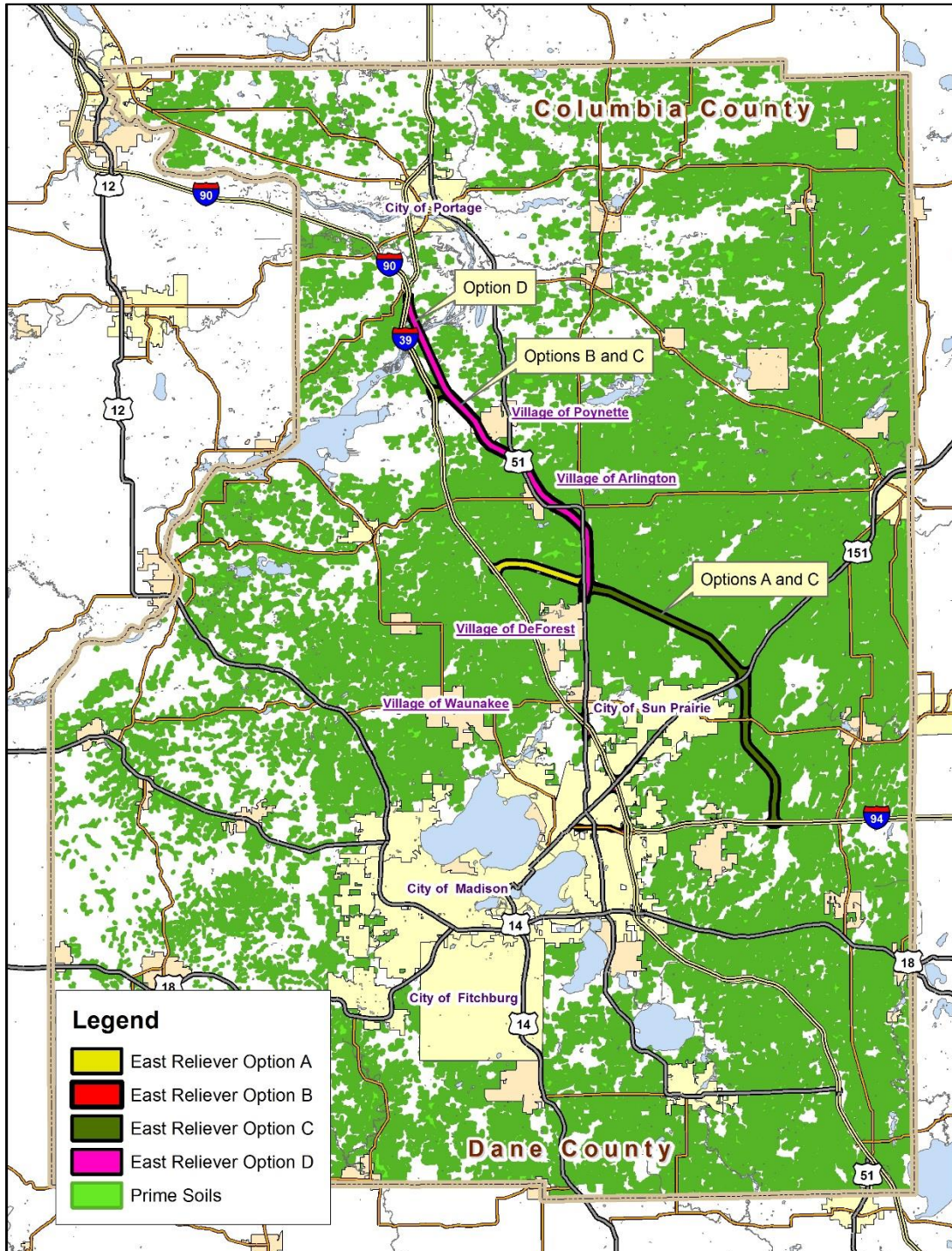
Existing Corridor Expansion	East Reliever Option A	East Reliever Option B	East Reliever Option C	East Reliever Option D
Dane County				
Blooming Grove, town of	Blooming Grove, town of	Blooming Grove, town of	Blooming Grove, town of	Blooming Grove, town of
Burke, town of	Bristol, town of	Burke, town of	Bristol, town of	Burke, town of
DeForest, village of	Burke, town of	DeForest, village of	Burke, town of	DeForest, village of
Madison, city of	Cottage Grove, town of	Madison, city of	Cottage Grove, town of	Madison, city of
Sun Prairie, city of	Deerfield, town of	Sun Prairie, city of	Deerfield, town of	Sun Prairie, city of
Vienna, town of	DeForest, village of	Vienna, town of	DeForest, village of	Windsor, village of
Windsor, village of	Madison, city of	Windsor, village of	Madison, city of	
	Medina, town of		Medina, town of	
	Sun Prairie, city of		Sun Prairie, city of	
	Sun Prairie, town of		Sun Prairie, town of	
	Vienna, town of		Vienna, town of	
	Windsor, village of		Windsor, village of	
Columbia County				
Arlington, town of	Arlington, town of	Arlington, town of	Arlington, town of	Arlington, town of
Caledonia, town of	Caledonia, town of	Arlington, village of	Arlington, village of	Arlington, village of
Dekorra, town of	Dekorra, town of	Caledonia, town of	Caledonia, town of	Caledonia, town of
	Leeds, town of	Dekorra, town of	Dekorra, town of	Dekorra, town of
		Leeds, town of	Leeds, town of	Leeds, town of
		Poynette, village of	Poynette, village of	Poynette, village of

Most of the potentially affected towns are dominated by agricultural land uses and the incorporated municipalities have significant ties to the agricultural economies that surround them. The following details illustrate the economic importance of agriculture for these two counties:

- Dane County currently ranks number one out of Wisconsin’s 72 counties in total value of agricultural products sold, as reported in the 2012 Census of Agriculture.
- Agriculture accounts for \$3.4 billion in economic activity in Dane County and \$779 million for Columbia County.
- Agriculture contributes \$1.3 billion to Dane County’s total income and \$241 million to Columbia County’s total income.
- Agriculture pays \$80.6 million in taxes to Dane County and \$12.9 million in taxes in Columbia County. These figures do not include property taxes paid to local schools (sources: UW Extension 2014).

A majority of the agricultural land in Dane and Columbia Counties is classified by the USDA Natural Resources Conservation Service's as “prime farmland”. Figure 1 shows how much of the land of these two counties has been identified as prime farmland.

Figure 1: Prime Soils of Dane and Columbia Counties with East Reliever Corridors (Options A, B, C, and D)



Prime farmland has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. It has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed, including water management, according to acceptable farming methods. In general,

prime farmlands have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks. They are permeable to water and air. Prime farmlands are not excessively erodible or saturated with water for a long period of time, and they either do not flood frequently or are protected from flooding.

Each of the four potential WisDOT East Reliever Corridors (Options A, B, C, and D) for the I-39/90/94 Madison to Portage Study cuts through this prime farmland. Farmland, particularly prime farmland, is the basis for individual farm operations and the overall agricultural sector. Farmland cannot be relocated when outside forces conflict with agricultural production. Therefore, once farmland is removed from agricultural production, it is gone forever.

Issues regarding agriculture, transportation, and plans for future growth are discussed in the Comprehensive Plans for Dane and Columbia Counties. The plans for these counties share the following common themes:

- Maintain a balance between economic development, agriculture preservation, the protection of natural and cultural resources, and private property rights.
- Limited resources, such as land, must be used in the most beneficial and least wasteful manner.
- Maintain and upgrade existing roadways before developing new major highways.
- Preserve the most productive agricultural areas by focusing new development in areas that will not adversely impact productive farmland, and by maintaining the integrity of farmland preservation zoning districts.

Both comprehensive plans also discuss the possible addition of lanes and expansion of the existing interstate I-39/90/94 corridor, but neither considers new interstate corridors.

The counties' Farmland Preservation Plans further stress the importance of maintaining sufficient acreage of land in agricultural production to economically sustain crucial agricultural support industries and minimize the amount of land converted from agricultural use to non-farm development.

Given the common themes of upgrading existing roadways first and protecting prime agricultural land, the four WisDOT East Reliever Corridors (Options A, B, C, and D) appear inconsistent with the goals of the county plans.

II. AGRICULTURAL TRENDS and DEVELOPMENT PRESSURES in the PROJECT AREA

Population growth trends for Dane and Columbia Counties are part of the farmland conversion story. Table 2 shows that there has been a steady growth in the population centers over time. However, the increases have also been reflected in most of the towns that surround these urban areas.

Table 2: Population Trends in the Project Area

Municipality	Municipal Population by Year					Percentage Change
	1996	2001	2006	2011	2016	
City of Madison	200,814	210,377	223,280	233,890	247,207	23.10%
City of Sun Prairie	17,785	21,013	25,180	29,443	32,613	83.37%
Village of DeForest	6,065	7,475	8,388	8,965	9,388	54.79%
Village of Cottage Grove	2,079	4,152	5,158	6,209	6,635	219.14%
Village of Windsor*	5,069	5,386	5,779	6,410	7,145	40.95%
Village of Arlington	481	489	596	823	824	71.31%

* In 2015, the town of Windsor incorporated and became the Village of Windsor.

According to the Dane County Farmland Preservation Plan, cities and villages in Dane County annexed a total of 24,000 acres between 1980 and 2000. While some annexed land might continue to be used for agriculture, typically, annexed land is intended for eventual development. If development trends continue, it is estimated that in Dane County more than 15,000 acres will be converted from agricultural lands to urban uses through the year 2030. Taking this amount of land out of production could potentially compromise agricultural land use and productivity in the county.

It has been identified that the areas where growth pressure is the greatest in Dane County are areas where prime farmland is located, including the towns of Bristol, Burke, Middleton, Westport, and Windsor. Municipalities further out from Madison including, Sun Prairie, Verona, and Cottage Grove are predicted to see the greatest increase in land converted to developed uses. (Dane County Farmland Preservation Plan 2012)

Since the mid-1930's, the total acres devoted to agriculture for both Dane and Columbia Counties has steadily declined amounting to approximately 30 percent fewer acres. Figure 2 shows a graph of this decline of land in farms.

From 1997 to 2012, Dane County farmland acres declined by 9.8 percent and the acres of Columbia County farmland declined by 11.6 percent. Farmland that is converted to nonfarm use is likely to be used for residential and commercial purposes. Additionally, Dane and Columbia Counties both lost farms. Similar to state trends, Dane and Columbia Counties experienced both a loss of farmland acres and a loss in the number of farms reflecting the pressure to develop land out of agricultural uses.

Figure 2: Acres of Land in Farms 1935 to 2012

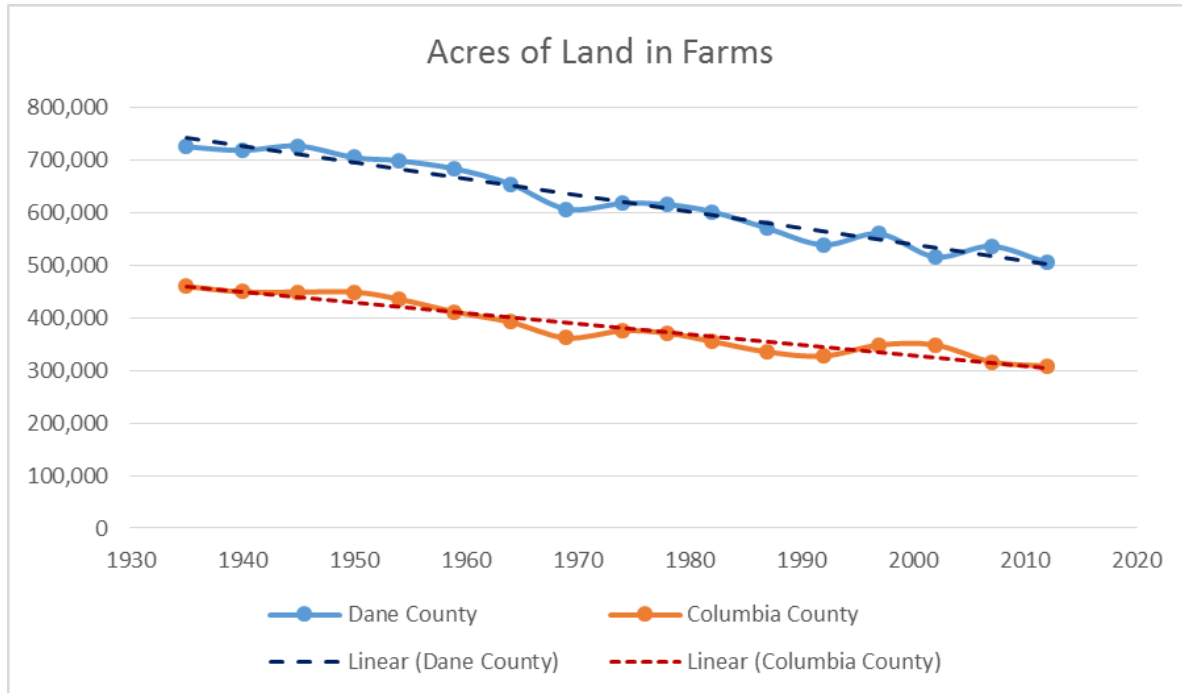


Table 3: State and County Changes in Farmland Acres from 1997 to 2012

	Wisconsin		Dane County		Columbia County	
	1997	2012	1997	2012	1997	2012
Acres of Farmland	16,232,744	14,568,926	559,476	504,420	348,218	307,973
Number of Farms	79,541	69,754	3,179	2,749	1,637	1,564
Average Acres per Farm	204	209	176	183	213	197

Contiguous blocks of farmland is land uninterrupted by natural or manmade features, irrespective of who owns or operates the land and is an indicator of the land’s susceptibility to development. According to analysis by the Capital Area Regional Planning Commission (CARP), the 2000 and 2010 Land Use Inventories show a trend of an increasingly fragmented agricultural landscape at the urban fringes of Dane County. In 2000, there were 1,431 contiguous blocks of farmland in Dane County, with a mean size of 414 acres and a median size of 244 acres. In 2010, there were 2,067 contiguous blocks of farmland, with a mean size of 240 acres and a median size of 54 acres. Contiguous blocks of agriculture have become more numerous but smaller over time. (CARP, 2016) The construction of any of the four potential WisDOT East Reliever Corridors (Options A, B, C, and D) would accelerate the fragmentation of the agricultural landscape in Dane County.

Table 4: State and County Assessed Value, Sales Value, and Average Tax per Acre of Farmland

Location	2015 Dollars per Acre of Farmland		
	Average Tax	Assessed Value	Sale Value*
Dane County	\$4.03	\$235	\$9,272
Urban Counties	\$3.53	\$199	\$7,325
Columbia County	\$4.30	\$239	\$6,862
Rural Counties	\$3.02	\$160	\$4,109
Wisconsin	\$3.15	\$170	\$5,131

* Sale values do not include farmland sold and converted to nonfarm use and do not include farmland with buildings or improvements.

Another issue that can affect the conversion of agricultural land to suburban or urban land uses are farmland taxes, and the lands' assessed and sales values. Table 4 compares the 2015 average property tax, assessed value, and sale price per acre of agricultural land in Dane County, Columbia County, urban counties, and rural counties, and the average for the state. Urban counties are classified as having an average of more than 100 residents per square mile, while rural counties have an average of 100 or fewer residents per square mile. Dane County is classified as an urban county and Columbia County is classified as a rural county. The assessed values and property taxes are based on the use-value of "agricultural land." Agricultural land is defined by Wis. Stat. §70.32(2)(c)1g as, "... land, exclusive of buildings and improvements, and the land necessary for their location and convenience, that is devoted primarily to agricultural use."

Use-value is calculated from the income that could be generated from the rental of the land for agricultural use and not from its potential for development. Use-value is specific to land only. Income and rental from farming are a function of agricultural capability. Since any land can theoretically be used for agricultural purposes, statutes and administrative rules limit the benefit of use-value assessment to lands that are devoted primarily to agricultural use. The sale value of agricultural land is based on the lands potential for development.

In 2015, the average property tax on Dane County farmland by assessed value was 14.2 percent higher than those for urban counties and 27.9 percent higher than the average for Wisconsin. In Columbia County, the average property tax was 42.4 percent higher than the average for rural counties and 36.5 percent higher than the average for Wisconsin (Wisconsin Department of Revenue). These high tax rates may be a significant factor in the steady increase in conversion of farmland to non-farm uses in both counties. These higher tax rates reflect the increasing land values in these counties.

The average assessed value of farmland in Dane County is 18.1 percent greater than the assessed value for farmland in urban counties and 38.2 percent greater than the average for all counties. In Columbia County the average assessed value was 49.4 percent higher than the average for rural counties and 40.6 percent higher than the average for Wisconsin as a whole (Wisconsin Department of Revenue).

The average sale price of farmland in Dane County was 26.6 percent higher than the average for urban counties and 80.7 percent more than the average for Wisconsin. In Columbia County, the

average sale price of agricultural land was 67.0 percent higher than the average for rural counties and 33.7 percent higher than the average for Wisconsin (NASS Wisconsin 2016 Agricultural Statistics). Higher than average prices for farmland is another indication of development pressure in both of these counties but also competition for agricultural land.

The four proposed WisDOT East Reliever Corridors (Options A, B, C, and D) for the I-39/90/94 Madison to Portage Study would significantly affect the agricultural landscape in Dane and Columbia Counties. This region, already responding to continued development pressure and burdened by higher property taxes and land values, the four WisDOT East Reliever Corridors would accelerate the conversion of agricultural land to urban and suburban uses. This is in contradiction to the goals of land use plans and programs which include the preservation of farmland and the farmland economies of the region.

III. STATE and FEDERAL AGRICULTURAL PROGRAMS

The State of Wisconsin has made a commitment to protecting farmland for future generations through legislation, including the Agricultural Impact Statement (AIS) program (Wis. Stat. § 32.035) and the Farmland Preservation Program (Wis. Stat. Ch. 91 and Wis. Admin. Code Ch. ATCP 49).

A. The Agricultural Impact Statements (AIS) Program

In 1978, the Wisconsin legislature created the AIS program to document farmland impacted or lost due to public projects such as roads, utilities, airports, schools, etc. At about that same time, the Farmland Preservation Program was created to provide tax credits to incentivize farmland owners to keep their property as productive agricultural land. DATCP intends to prepare an AIS, as required by Wisconsin law, which will include a complete description of the project, the existing agricultural setting, issues brought forward by farmland operators, and other potential impacts to the agriculture community. The AIS will include DATCP's recommendations to avoid, minimize, and mitigate the identified agricultural impacts.

B. The Farmland Preservation Program

Wisconsin's Farmland Preservation Program helps farmers and local governments preserve farmland, protect soil and water, minimize land use conflicts, and allow farmland owners to become eligible for tax credits. Through participation in the program:

- Counties develop farmland preservation plans
- Local governments can develop farmland preservation zoning districts
- Landowners and local governments together may form Agricultural Enterprise Areas
- Landowners become eligible to claim an income tax credit but must meet soil and water conservation standards
- Landowners agree to maintain the land in agriculture for 15 years

Farmland preservation zoning helps maintain a strong agricultural component in the local economy and is most often used in areas of the state that are experiencing development pressure. These ordinances originate at the local level and are, therefore, reflective of the land use interests of the community.

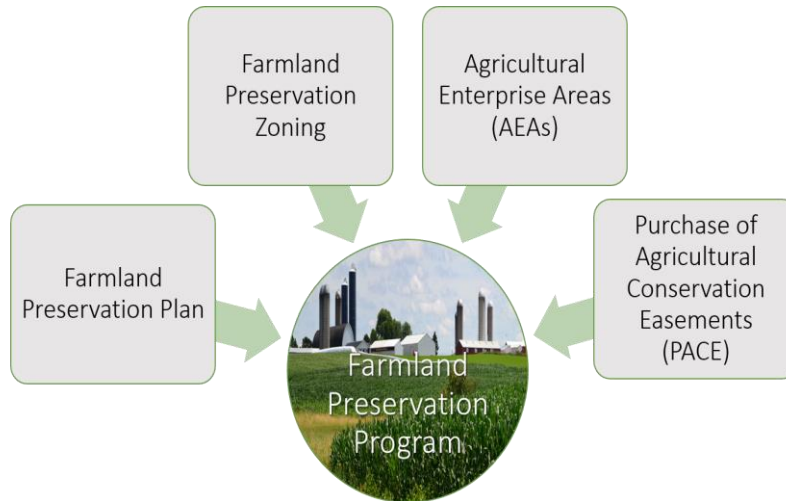


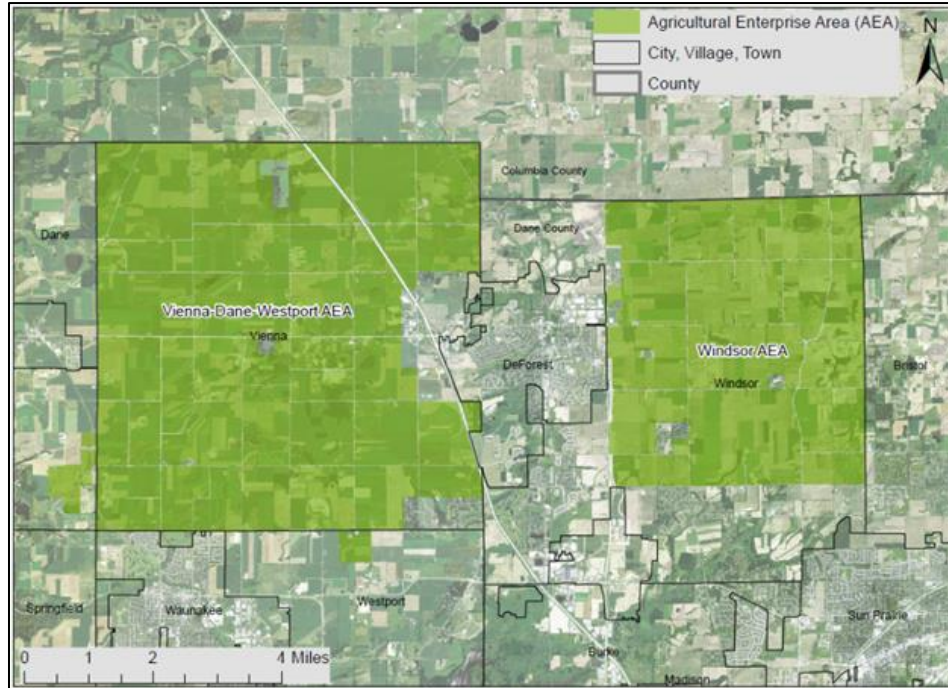
Figure 3: These programs are part of the Farmland Preservation Program which help farmers and local governments preserve farmland.

Significant portions of the project area in Dane and Columbia Counties have exclusive agriculture zoning. A map of these agricultural zoned areas are included in Appendix A. Areas of land potentially crossed by this project may need to be rezoned for transportation use. Acreage re-zoned out of Exclusive Agricultural Use would mean the loss of tax credits for landowners.

Wisconsin’s Agricultural Enterprise Area (AEA) program is another part of the state’s broader Farmland Preservation Program. An AEA is an area of contiguous land primarily in agricultural use. Getting an AEA designation in a community allows for eligible landowners to sign a voluntary farmland preservation agreement on their land keeping it in agricultural use for 15 years. In return, the landowner may claim a farmland preservation tax credit. Landowners claiming the credit must also comply with state soil and water conservation standards benefiting the community, and its’ ecological resources, as a whole. AEAs are often used to establish long-term support for all agricultural businesses and industries within the designated areas.

Currently, DATCP has designated 33 AEAs across the state encompassing over one million acres. The WisDOT options for the I-39/90/94 Madison to Portage Study would significantly affect two state-designated AEAs: the Windsor AEA and the Vienna-Dane-Westport AEA.

Figure 4: AEs Potentially Impacted by the I-39/90/94 Madison to Portage Corridors



Windsor AEA

Designated in 2011, the Windsor AEA was one of the first AEAs designated in the state and involves 525 parcels. It encompasses 10,775 acres in the area north of Windsor Road and east of USH 51 in the Village of Windsor, Wisconsin. The Windsor AEA is certified under the Village's Farmland Preservation Zoning ordinance. This area is meant to both protect productive undeveloped areas of prime agricultural soils, as well as protect the area from encroaching urban development/sprawl. The Village of Windsor also has its own Purchase of Development Rights (PDR) and Transfer of Development Rights (TDR) programs, as well as a certified Farmland Preservation Zoning District. Landowners have also signed Farmland Preservation Agreements to further their commitment to keeping this land in agricultural use.

Vienna-Dane-Westport AEA

Designated in 2013, the Vienna-Dane-Westport AEA encompasses 20,663 acres and 868 parcels. It is predominantly cropland, pasture land, and dairy operations. The goals of this AEA are similar to the goals of the Windsor AEA. The Vienna-Dane-Westport AEA is certified under Dane County's Farmland Preservation Zoning ordinance.

These AEAs understand Dane County's farmland faces significant challenges. The central goal of both AEAs is the prevention of loss of additional acreage of productive agricultural land to urban, suburban or rural development. This is important because of the high-percentage of prime farmland that is included in both AEAs.

Table 5: Percent Agricultural Land Use and Prime Farmland within AEA Boundaries

AEA	% Agricultural Land Use	% Prime Farmland Soil*
Windsor	89.55%	83.80%
Vienna-Dane-Westport	85.44%	69.70%

* Does not reflect/include soils of statewide significance. Prime Farmland for this purpose includes: all areas of prime farmland, prime farmland if drained, or prime farmland if drained and either protected from flooding or not frequently flooded during the growing season.

Maps showing the location of the AEAs as they relate to the WisDOT Corridor Options are attached in Appendix B.

Based on the 2,000-foot wide right-of-ways under consideration by WisDOT, the Windsor AEA and the Vienna-Dane-Westport AEA would be adversely impacted by the proposed corridor alternatives as shown in Table 6.

Table 6: AEA Acreage Impacted from WisDOT Corridor Alternatives

Corridor Alternative	AEAs Impacted	Total AEA Acreage within Corridor Alternative	Portion of Windsor AEA (Acres)	Portion of Vienna-Dane-Westport AEA (Acres)
East Reliever Option A	Both	1,737.24	1100.95	636.29
East Reliever Option B	Windsor	149.45	149.45	0.00
East Reliever Option C	Windsor	1118.55	1118.55	0.00
East Reliever Option D	Windsor	149.45	149.45	0.00
Capacity Expansion	Vienna-Dane-Westport	109.93	0.00	109.93

All corridor alternatives, including the capacity expansion of the existing interstate, would impact the AEA program in some way. The existing corridor expansion would have the least impact though it would be born entirely by the Vienna-Dane-Westport AEA. East Reliever Option A and East Reliever Option C would have the greatest impact to both AEAs and would also impact the greatest number of parcels under Farmland Preservation Agreements.

Table 7: Farmland Owners within AEAs and With Farmland Preservation Agreements That Would Be Impacted by Potential WisDOT Corridor Alternatives

Corridor Alternative	Farmland Owners
East Reliever Option A	53
East Reliever Option B	9
East Reliever Option C	39
East Reliever Option D	9
Capacity Expansion	19

C. Farmland Conservation Programs

There are a variety of other federal and state programs that provide an incentive for farmers to implement various conservation practices. These include the Conservation Reserve Program (CRP) and the Conservation Reserve Enhancement Program (CREP). Losing land enrolled in some government programs may render the remainder of that land ineligible for that program.

There is significant investment in agriculture land uses in this region as documented by the dollars provided through federal and state agricultural programs.

For all USDA farm program payments received from 1995-2014, Wisconsin farmers received a total of \$7.7 billion. Dane County ranks received the most dollars in farm program payments, approximately \$4 million. Columbia County ranks 7th, receiving approximately \$2 million in farm program payments. Given this data, it's evident that farmers in Dane and Columbia Counties have a history of investing in their farm operations and conservation practices in the areas surrounding the corridor alternatives.

CRP is managed by the US Department of Agriculture's Farm Service Agency, and provides financial and technical help to farmers who choose to remove environmentally sensitive land from crop production. The long-term goal of the program is to re-establish valuable land cover to improve water quality, prevent soil erosion, and reduce loss of wildlife habitat.

From 1996-2015, in Dane County, 2,291 farmers received \$48,781,594 in CRP payments, while in Columbia County, 828 farmers received \$13,233,707 in CRP payments. Dane County ranks 4th in the state for the number of acres enrolled in CRP in 2014, while Columbia County ranks 21st.

CREP is a joint effort between federal, state, and county governments designed to help Wisconsin farmers meet their conservation goals while protecting Wisconsin's soil and water resources. Landowners can receive financial incentives to voluntarily enroll their land and install conservation practices such as riparian buffers, filter strips, and wetland restorations. The program's goal is to reduce runoff to Wisconsin's streams and wetlands by installing vegetative buffers and creating wildlife habitat along waterways surrounded by agriculture. In return, landowners receive annual rental payments, cost-share assistance, and other financial and technical assistance.

Two CREP-enrolled properties would be affected by the proposed WisDOT corridor options for this study. The impact of these corridor options are detailed in Table 8.

Table 8: CREP Properties Potentially Affected by WisDOT Corridor Options

Impacts	Capacity Expansion	East Reliever Options A and C	East Reliever Options B and D
CREP farmers directly impacted	1	1	0
Dollars already invested into affected CREP land	\$6,494	\$8,933	0
Estimated future CREP income that farmers would not be able to receive	\$8,258	\$8,933	0

D. Drainage and Drainage Districts

Drainage districts are local governmental units organized to drain lands for agricultural use. All district drains are engineered to meet certain standards relating to drainage capacity and rates of conveyance. Landowners who are part of a drainage district must contribute to the cost of constructing, maintaining, and repairing the district’s drains.

Proper field drainage is vital to a successful farm operation. If drainage is impaired, water can settle in fields and cause substantial damage, such as harming or killing crops and other vegetation, concentrating mineral salts, or flooding farm buildings. Drainage districts are organized under Wis. Stat. Ch. 88 and are governed by county drainage boards.

New construction and specifically the conversion of farmland to impervious surfaces, typically increases the volume of water conveyed by district drains. It may also disrupt the drainage flow patterns and require changes to ditch capacity, drain alignment, and changes to the connections between private and district drains.

WisDOT is required to work with affected drainage boards to design and construct highway facilities so as not to impede the movement of surface water within the drainage district. If the drainage district becomes divided and the highway design cannot maintain the surface water movement for the whole drainage district, WisDOT must alternatively provide for the removal of surface water from each of the divided areas of the original district. This would allow the different parts of the drainage district to function independently and restore the level of surface water management that the landowners were formerly accustomed to.

Each of the WisDOT corridors option for this study would affect two or more drainage districts in Dane County. No drainage districts would be affected in Columbia County. Table 9 identifies the drainage districts that would be affected by the alternative corridors being considered for this project area.

Table 9: Drainage Districts Potentially Impacted by WisDOT Corridor Options

Drainage District	Status	Total Acres	Corridor Options				
			Existing Alignment Expansion	East Reliever Option A	East Reliever Option B	East Reliever Option C	East Reliever Option D
Dane County #4	Active	1,255.5		X		X	
Dane County #22	Active	700.3	X				
Dane County #25	Active	1,621.0	X	X	X	X	X
Dane County #27	Active	785.3	X		X	X	X
Dane County Rattlesnake Separation 2	Unknown	3,305.0		X		X	
Dane County Rattlesnake Separation 3	Active	2,242.2		X		X	

Besides the effects on drainage districts, highway construction can also disrupt improvements such as drainage tiles, grassed waterways, drainage ditches, and culvert pipes, which regulate the drainage of farm fields. In addition, where salt is used on road surfaces, runoff water can increase the content of salt in nearby soils.

Wis. Stat. § 88.87 requires highways to be built with adequate ditches, culverts, and other facilities to prevent obstruction of drainage, protect property owners from damage to lands caused by unreasonable diversion or retention of surface water, and maintain, as nearly as possible, the original drainage flow patterns. Landowners whose property is damaged by improper construction or maintenance of highways and highway drainage structures may file a claim with WisDOT within three years after the damage occurs.

E. University of Wisconsin Arlington Agricultural Research Station

The University of Wisconsin (UW) Arlington Agricultural Research Station (AARS) is located in Dane and Columbia Counties with goals that support all disciplines in the UW College of Agricultural and Life Sciences, as well as the state of Wisconsin in promoting profitable and sustainable agricultural and natural resource practices. It is a 2,000-acre complex that has been in existence since 1963.

All four East Reliever Corridors (Options A, B, C, and D), cross lands owned or used by the AARS. Even with the narrowing of the corridors from 2,000-foot wide to less than 400-foot wide, the East Reliever Corridors would impact the research station. A map is included in Appendix C showing the AARS lands and the East Reliever Corridor Options.

The AARS is composed of and produces:

- Twelve crop and livestock units supporting research from 10 different academic departments at the UW
- Approximately 350 research projects conducted at the AARS, annually
- 2,035 acres of cropland to support crop research, raise feed for the dairy and livestock and for land application of animal waste
- An additional 400 acres rented for crop production and agreements with farmers on an additional 1,800 acres for land application of animal wastes. Much of this land is adjacent to or near the AARS.

The East Reliever Option A would take out of production 130 acres of station land, 63 acres of rental land, and 260 acres of manure agreement land causing the following impacts to the AARS:

- Interference with the Sheep South unit
- Removal of 20 acres of research plots from the long-term Great Lakes Bioenergy Research Center (GLBRC), potentially jeopardizing millions of annual federal DOE grant monies.
- Potentially cuts off access to rented agricultural lands and lands with manure agreements.

The East Reliever Options B, C, and D would take out of production potentially 178 acres of station land, 8 acres of rental land, and 35 acres of manure agreement land causing impacts to:

- Newly certified organic land
- Irrigation system newly constructed in 2016
- Access to rental agricultural lands and lands with manure agreements

The agricultural acres and the mission accomplished by the AARS is highly valued by the state due to its unique soil profiles that have been researched for over fifty years. This land cannot be replaced, once taken out of production due to the history of the work conducted on these lands and its proximity to the UW. Constructing a highway through the center of this station would limit the usefulness of the research station to the state and could affect its viability.

IV. INDIRECT EFFECTS of NEW HIGHWAY CONSTRUCTION THROUGH AGRICULTURAL LANDS

A. Developmental Pressures

New highways are often routed through lands that are well-drained, generally flat, and not prone to erosion. These are the lands that are also best suited for development. Unfortunately, these lands are the most productive farmland, for the very same reasons. The WisDOT East Reliever Corridors (Option A, B, C, and D) under consideration for the I-39/90/94 Madison to Portage Study follow a similar pattern and cross some of the most productive agricultural land in Wisconsin.

The purpose of this WisDOT study is also similar to most new highway expansion or creation. New highways are designed to ease congestion, reduce travel time, and reduce accidents on existing highways. With the removal of traffic congestion, transportation costs are lowered, resulting in the potential for increased conversion of agricultural lands to urban and suburban

land uses. Many studies have established a link between lower transportation costs and land conversion on the urban fringe. One study estimated that for each additional mile of interstate highway there is a corresponding 468 acres of agricultural land conversion (Mothorpe 2013).

Farmland conversion to developed uses continues to increase, pushing development outward from urban centers and along highway corridors. Over many decades, the rate of conversion has remained constant. Each year, land becomes more valued for urban uses as opposed to agricultural land use.

Any highway improvement exerts some degree of incremental effect toward accelerating existing growth trends through improved access. Thus it is likely that induced impacts of a given highway expansion will be greatest in those areas undergoing the greatest outward residential, commercial, or industrial growth demand.

Furthermore, long before WisDOT chooses a potential route or even commits to the construction of the highway, the public aspect of this WisDOT study has the potential to influence land use and developer expectations. The project's review process itself can create uncertainty about future development plans and thus affect land rezoning and farmer expectations of the permanence of proximate farm uses. This can cause land speculation and premature idling of agricultural acreage.

B. Effects of New Development

A common pattern of development along new highways is a proliferation of exurban settlements into the previously rural area, further subdividing what was once contiguous areas of agriculture. Loss of farms may have a chain reaction or negative multiplier effect on the richness of the rest of the farm economy, feeding into the further loss of farms, as services required for residential developments increase the tax burden on farm families who have less political influence on policy decisions. Viable farm districts require a "critical mass" of farm users to operate efficiently, or even to maintain operation. (Wyatt 1992)

Increased development pressure often leads to impermanence syndrome, which means that farmers delay or avoid investments in existing assets or the purchase of new facilities, machinery, livestock, and conservation practices due to the expected conversion of farmland to nonfarm use. Researchers also estimate that for every acre of prime farmland that is lost to scattered residential development, an additional one-half to one acre of farmland is idled as a part of the impermanence syndrome. Conflicts between farmers and their new nonfarm neighbors, increased rates of land speculation, and inflated agricultural land values are factors that can lead to the conversion of farmland to nonfarm use and the impermanence syndrome.

It is important to note that much of the existing development pressure on farmland in Dane and Columbia Counties is due to the economic success of the city of Madison. Madison is the dominant regional employer providing jobs in government, education, healthcare, and high-tech industries. This economic success has tended to increase rent and housing prices within the city. Individuals and families with higher incomes may look outside of Madison to construct new homes on parcels of converted farmland that may be as large as 40 acres. Individuals and families with lower incomes may look to new developments in nearby communities where housing costs are lower than in the city of Madison.

C. Severances of Farm Operations

The East Reliever Corridors (Options A, B, C, and D) would divide up the agricultural landscape and in many cases divide farm operations. Acquisitions that sever farmland frequently create irregularly shaped fields, making equipment usage awkward and production more costly. This increased cost is due in part to the additional time, fuel, and equipment wear associated with maneuvering equipment in corners of fields that are not square or along sides of fields that are not straight. Nonproductive time and labor costs associated with the frequent working of these fields may reduce the possibility of generating profits on these parcels. In addition, when fields are made smaller, an increased proportion of wasteland is created along the edges and in narrow corners of the fields reducing their productive capacity. Figure 5 show the increased amount of wasteland in fields that have narrow corners versus those with right angle corners.

Figure 5: Diagrams of Wasteland Created by Odd-Shaped Fields

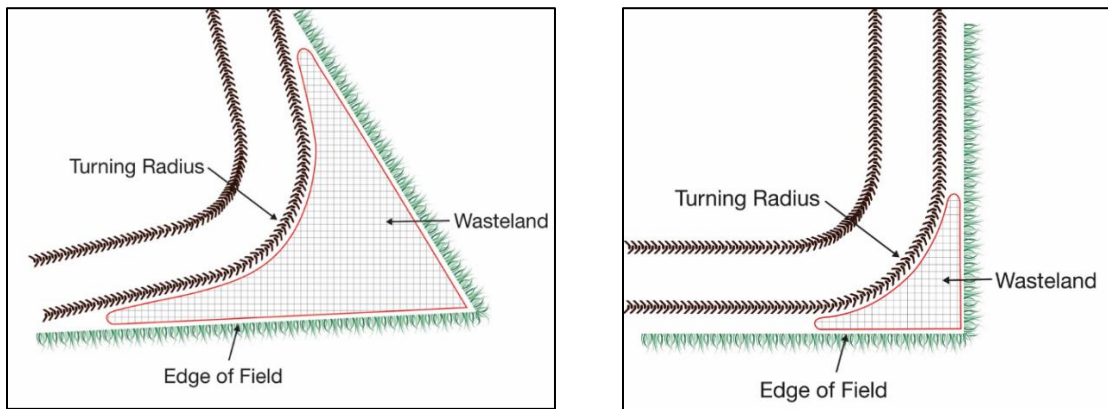
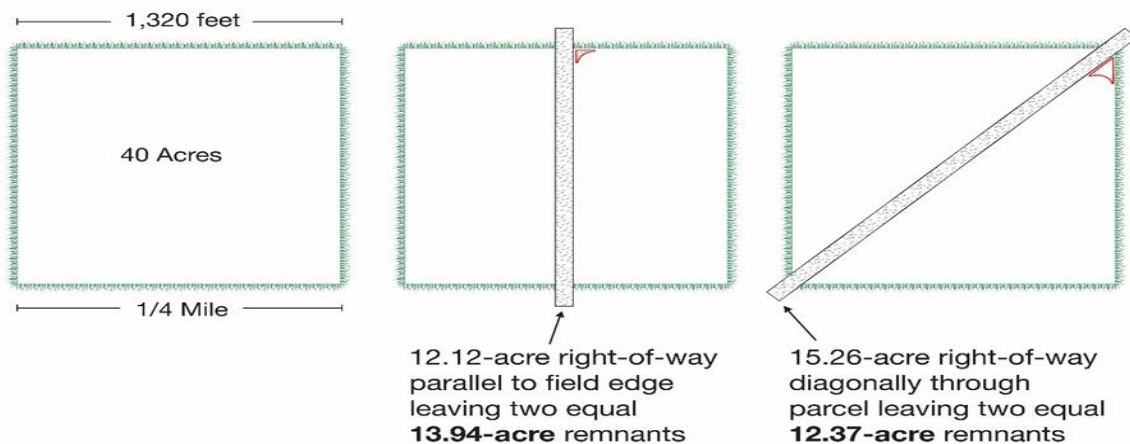


Figure 6 shows examples of the impacts on a 40-acre parcel that is severed by a highway with a 400-foot wide right-of-way. The figure shows that when a parcel is severed diagonally through the middle, more land is needed for the highway right-of-way than if the parcel were severed parallel to the field edge. If a severed parcel is either too small or too irregular, it may no longer be economically viable to farm.

Figure 6: Severances Created by a 400-Foot ROW Passing Through a 40-Acre Farmland Parcel



D. Impacts to Access and Local Roads

All of the WisDOT East Reliever Corridors (Options A, B, C, and D) would be constructed across a number of state, county, and local roads, allowing access only at interchanges. Where the new highway would cross some of these highways and roads, WisDOT may construct new interchanges, underpasses/overpasses, and frontage roads. It is also likely that many local roads would be permanently divided and reconstructed with cul-de-sacs at the point where they formerly crossed the new interstate, permanently preventing through traffic on these roads. WisDOT has not identified the roads which would no longer be through streets.

The WisDOT East Reliever Corridors (Options A, B, C, and D) would create a barrier to farms which currently operate land on both sides of the corridor. It is anticipated that some farmland that is now contiguous and easily accessible without leaving the farm would be divided. Depending on how a farm is divided, the new interstate could be a barrier to seasonal, monthly, weekly, or daily movements of equipment and/or livestock resulting in a reduction in farm efficiency that might range from inconvenient to catastrophic. Since direct access to the new highway will not be provided from adjacent land, farmers with land on both sides of the new highway, whether owned or rented, would have to drive their slow-moving agricultural machinery longer distances and use side roads to reach all of their parcels. The distance between these parcels may become even greater due to the distance between under/over passes that allow access to the other side of the highway. This would increase the time spent and cost of farming these parcels. It is conceivable that this project could put some farm operations out of business due to severances and access changes.

It is also very likely that many farm operations would need to re-evaluate their assets to ensure that they can all be used to their fullest efficiency. Farmers may find it beneficial to sell some parcels of land that are not readily accessible or that in some other way, no longer contribute beneficially to a farm's balance sheet. These same farmers may also want to purchase land to replace the assets that have been lost or diminished. The combination of buying land to replace what was directly lost to the highway project and buying and selling land to improve efficiency on their remaining operations will likely take time and could create a volatile market for farmland for several years.

Where farms are divided by the new highway and farm parcels become landlocked, WisDOT is required to provide access to all remaining parcels. If they cannot, they must offer to purchase inaccessible parcels as uneconomic remnants.

A new interstate highway could also act as a barrier to businesses that serve farms. Such changes could affect the economic viability of some of those businesses. It could also affect the routes for emergency vehicles, school busses, and milk haulers.

E. Circuitous Routes

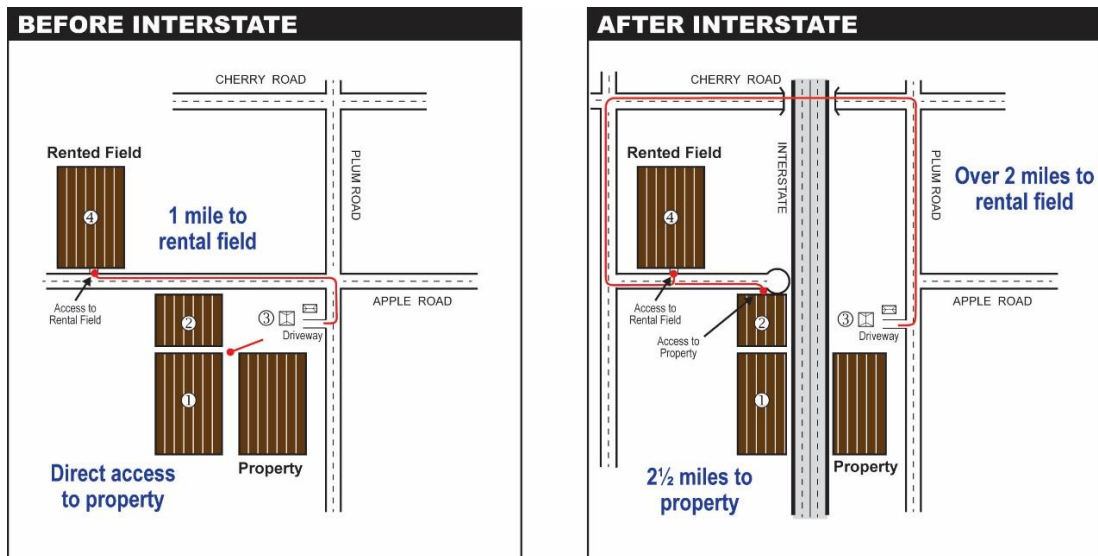
A circuitous route is created when a barrier is constructed between two points that requires a longer travel distance between these two points. Circuitous routes can be necessitated by severing parcels, relocating access points, or closing local roads. Although allowed to, WisDOT does not generally compensate farmers when a circuitous route is created between two noncontiguous parcels of a farm, no matter whether they're owned or rented.

Wis. Stat. §32.09(6)(c) permits the compensation of landowners for longer travel between portions of their property caused by the construction of public projects. The statute states:

“The condemnor may also consider costs of extra travel made necessary by the public improvement based on the increased distance after construction of the public improvement necessary to reach any point on the property from any other point on the property.”

Figure 7 illustrates a circuitous route caused by the construction of a new interstate.

Figure 7: Illustration of a Circuitous Route



WisDOT does not often compensate landowners for circuitous routes. This statute is generally only used when contiguous property is severed. This I-39/90/94 project could be the unusual case where compensation for circuitous routes is made due to the number of severances and the limited access characteristics of an Interstate highway.

V. SUMMARY:

The Wisconsin DATCP appreciates the opportunity to submit comments to WisDOT on the indirect impacts of the I-39/90/94 Madison to Portage Study. Our interest in commenting is focused on identifying all the likely impacts that would result from the potential alternatives under study by WisDOT to individual farms and to the agricultural communities within Dane and Columbia Counties.

Cost/benefit analyses for highway expansion often do not include a comprehensive assessment of all economic and social effects. The implications for farm viability and the rural economy is that the challenges and loss of prime farmland is not factored into the challenge of solving highway congestion problems. Highway expansion and creation such as the ones proposed for this study will have a number of direct and indirect negative impacts to farmland including the direct loss of farmland.

The Wisconsin land impacted by the options under consideration for the WisDOT I-39/90/94 study is highly-valued prime agricultural land. We ask that the analysis presented in this

document be taken into consideration and in specific, the significant impacts that would occur if WisDOT were to choose one of the East Reliever Corridors (Options A, B, C, and D) for this project.

Indirect effects of any of the East Reliever Corridors (Options A, B, C, and D) are extremely likely to cause harm to the individual farms as well as the agricultural economies of the urban fringe and rural areas of Dane and Columbia Counties over the next decades. These corridor options will not only carve up large areas of the agricultural land, it would accelerate the existing documented trend of converting more and more acres of agricultural land to developed uses. This could have significant long-term negative effects on farming and farm-related businesses of the region. The indirect effects of construction of the East Reliever Options include increased competition for land, speculative pressure on land resulting in agricultural capital disinvestment, changes in land tenure, possible premature idling of land, increased property taxes, and the loss of farm political influence through in-migration.

Indirect impacts that are likely to occur as a result of the WisDOT East Reliever Corridors (Options A, B, C, and D) potentially includes:

- Impacts to future land use patterns
 - Inconsistency with county and local land use plans and farmland preservation plans
 - Interference with Wisconsin's Farmland Preservation Program
 - Impacts to current Agricultural Enterprise Areas
 - Promotion of secondary industrial and commercial development along the new highway
 - Promotion of residential development outside of urban areas
 - Negative affects to the agricultural economies of these areas
- Loss of prime farmland
 - Potentially degrades highest quality prime farmland
 - Opens the door for increased development in direct conflict with agriculture
 - Potentially causes increases to land values and property taxes
 - Splits contiguous agricultural areas affecting rural economies
 - Creates new non-through local roads undermining agricultural operations and rural transportation needs
 - Creates hardship to individual farm operations through the severance of farms, creation of irregularly-shaped fields, uneconomic remnants
- Interferes with established Drainage Districts
- Critically affects the mission and productivity of the UW Arlington Agricultural Research Station

Dane County and, to a lesser extent, Columbia County are under continued pressure for development. The construction of any of the WisDOT East Reliever Corridor Options would intensify and accelerate these pressures to the detriment of the agricultural community. It is for this reason and the reasons stated in this document that DATCP strongly endorses the expansion of the existing interstate as opposed to any of the WisDOT East Reliever Corridor Options.

VI. REFERENCES

This document has relied heavily on previous reports and studies including the following:

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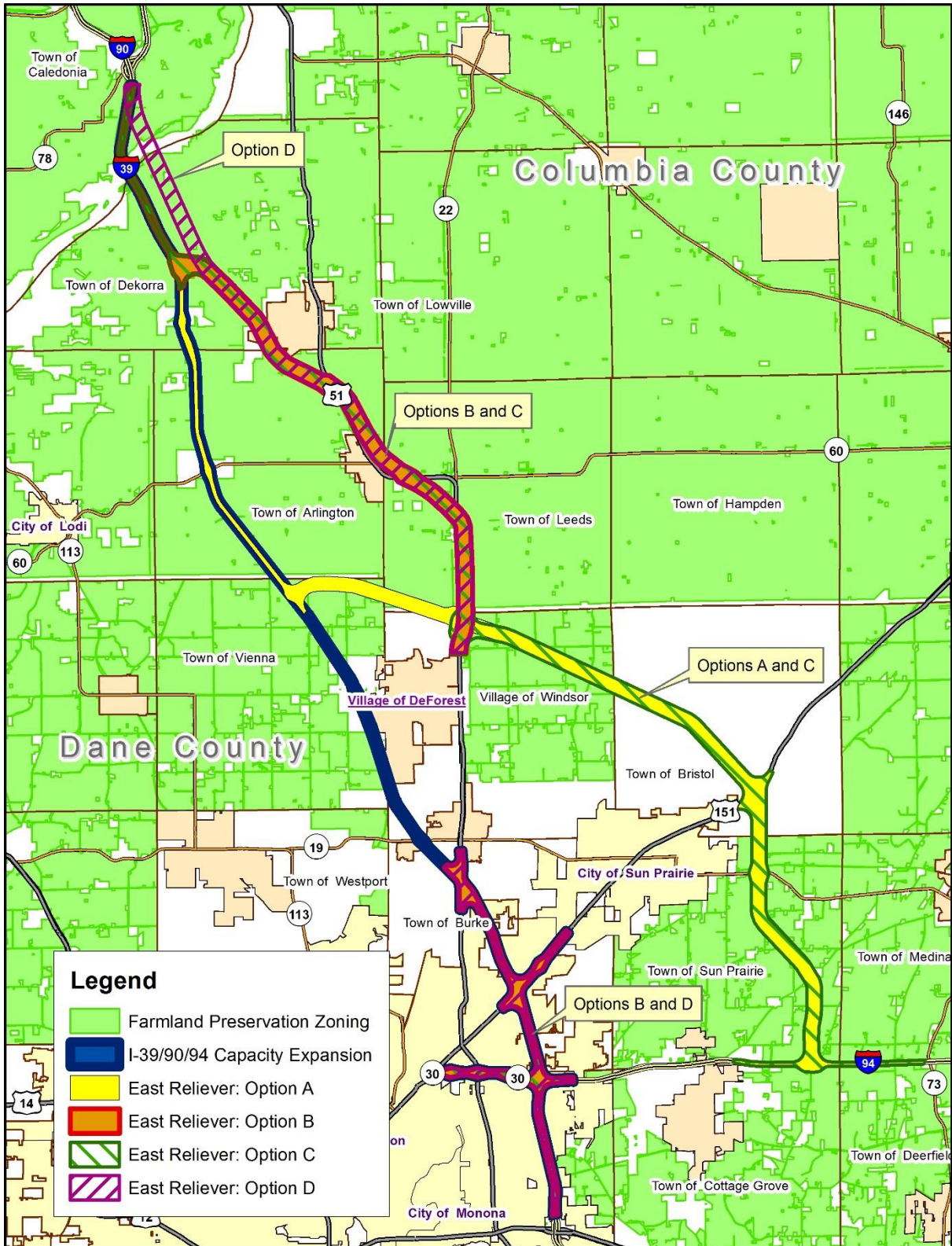
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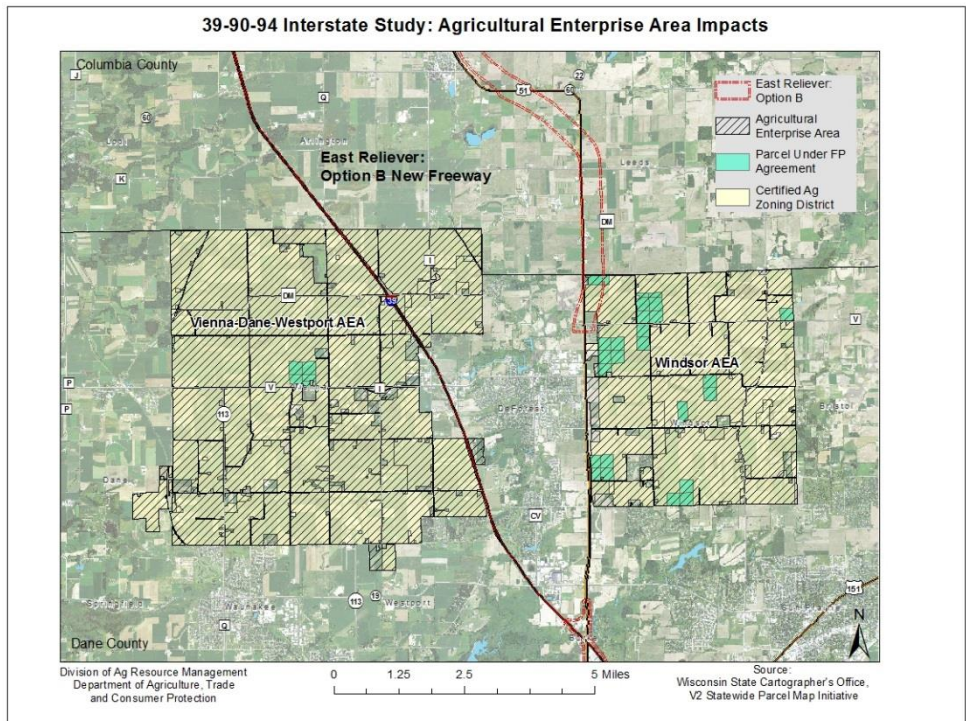
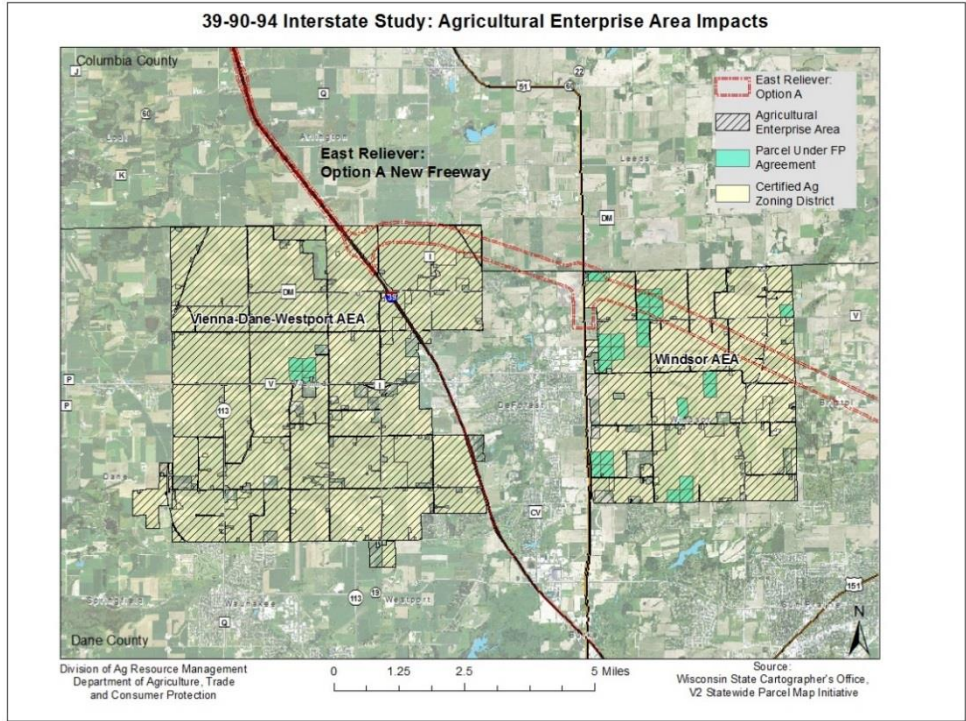
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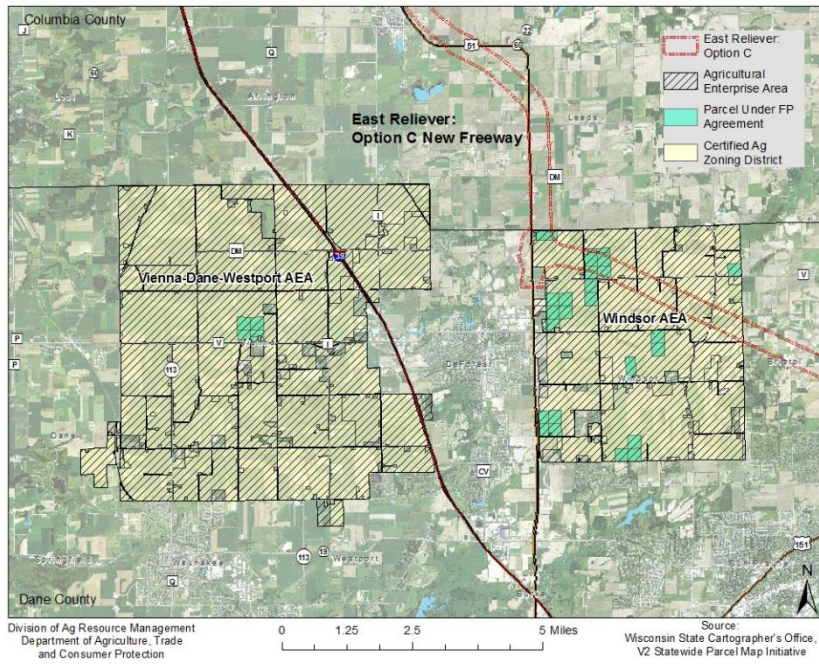
Appendix A: Farmland Preservation zoning in the Project Area



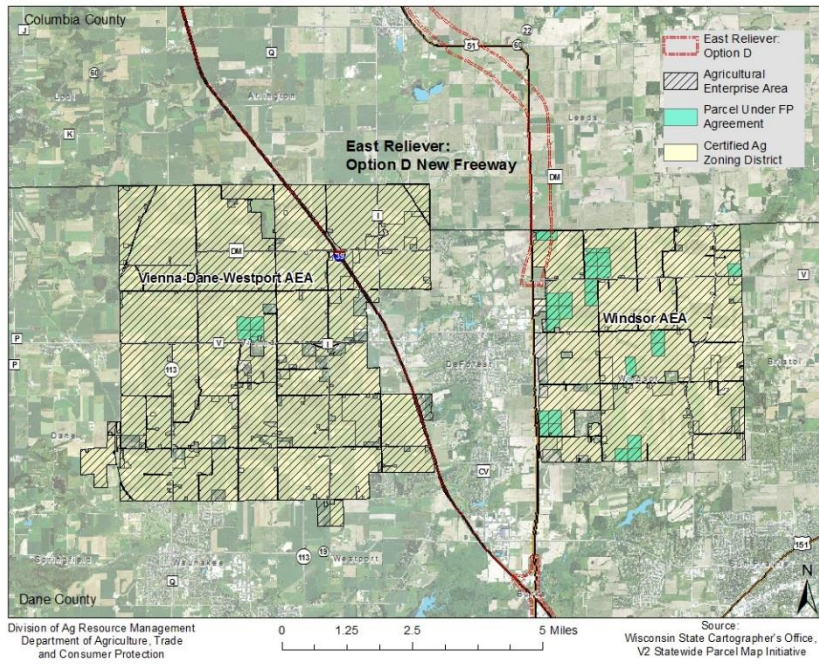
Appendix B: Agricultural Enterprise Areas and I-39/90/94 Madison to Portage Corridors



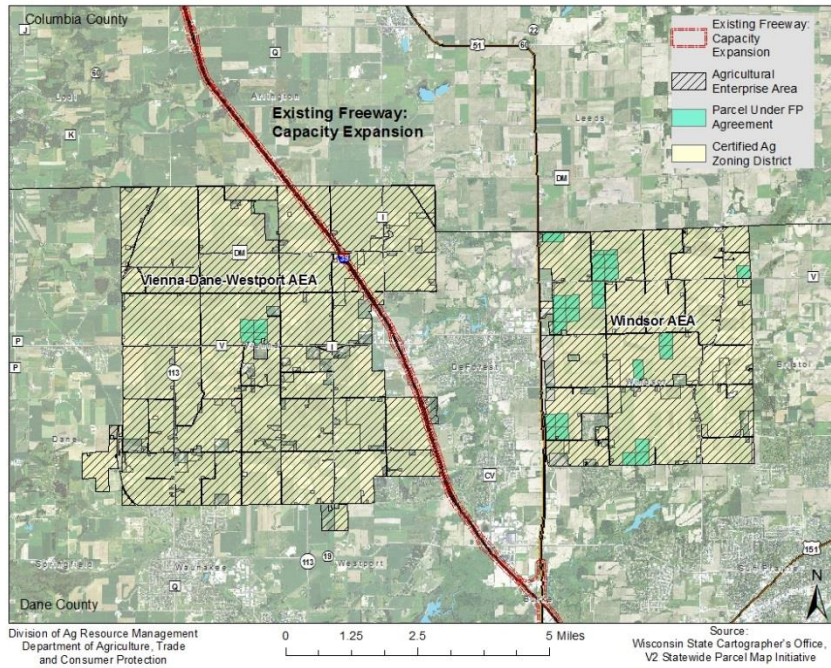
39-90-94 Interstate Study: Agricultural Enterprise Area Impacts



39-90-94 Interstate Study: Agricultural Enterprise Area Impacts



39-90-94 Interstate Study: Agricultural Enterprise Area Impacts



Appendix C: UW-Arlington Agricultural Research Station Map

