

**WISCONSIN DEPARTMENT OF TRANSPORTATION**

**EXECUTIVE SUMMARY AND  
TECHNICAL REPORT  
OF THE  
CORRIDOR MANAGEMENT  
WORKGROUP**

**JUNE 8, 2004**

## FORWARD

This Technical Report was prepared by a multi-divisional workgroup in the Wisconsin Department of Transportation known as the Corridor Management Workgroup. The Workgroup met between June 2003 and May 2004. The Workgroup's goal was to propose a process for managing corridors that focused on improving the efficiency and effectiveness of efforts to achieve short and long term viability of the state highway system.

The mission of the Workgroup was to:

- Outline the elements of the corridor management process.
- Determine the appropriate timing and application of corridor management related tools.
- Discuss the tools/processes that should be improved.

### Membership

The Workgroup was co-chaired by **Gary Brunner**, District 5, Division of Transportation Districts and **Tanace Matthiesen**, Bureau of Equity and Environmental Services, Division of Transportation Infrastructure Development.

Workgroup Members (in alphabetical order) included:

**Sandy Beaupre**, Bureau of Planning,  
Division of Transportation Investment  
Management

**Gary Brunner**, District 5-Systems Planning  
and Operations, Division of Transportation  
Districts

**Jenny Cavanaugh**, District 3-Planning,  
Division of Transportation Districts

**Dave Cipra**, Bureau of State Highway  
Programs, Division of Transportation  
Investment Management

**Adam Clayton**, District 1-Planning, Division  
of Transportation Districts

**Roger Cupps**, District 2-Planning, Division  
of Transportation Districts

**Doug Dalton**, Bureau of Planning, Division  
of Transportation Investment Management

**Barbara Feeney**, District 1-Planning,  
Division of Transportation Districts

**Matt Halada**, District 4-Planning,  
Division of Transportation Districts

**Jim Koenig**, District 6-Planning,  
Division of Transportation Districts

**Tanace Matthiesen**, Bureau of Equity  
and Environmental Services, Division of  
Transportation Infrastructure  
Development

**Anne Monks**, Office Administrative  
Services, Division of Transportation  
Districts

**Aileen Switzer**, District 2-Planning,  
Division of Transportation Districts

**Kassandra Walbrun**, Bureau of Equity  
and Environmental Services, Division of  
Transportation Infrastructure  
Development

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## EXECUTIVE SUMMARY

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### INTRODUCTION

The Wisconsin Department of Transportation (WisDOT) through various administrative rules, statutes, activities, policies and projects work to preserve, protect and enhance transportation in the state. Many of these activities are designed to help WisDOT maintain and improve state highway corridors for safety and mobility within existing roadway conditions or to prepare for upcoming highway projects; and also to prevent premature degradation of the facility. In many ways, there have been times when our activities, while attempting to reach a particular goal at one point in time, have fallen short of adequately merging short, medium and long term objectives. An improved approach is needed to enhance our management of highway corridors for multiple reasons:

- ✓ **Financial constraints.** The transportation needs continue to outweigh current and anticipated future resources. The manner in which WisDOT selects, implements and funds improvement projects and planning activities should continue to evolve.
- ✓ **Community impacts and economic development.** The actions of local governments, developers and private property owners significantly influence the state transportation system. Developing a process that considers all of these needs while managing a safe transportation system is even more critical than ever.
- ✓ **Long term needs.** Inconsistent corridor management goals and direction between business areas within WisDOT limit the Department's ability to think long term about the state system.
- ✓ **Staff resources.** The Department's needs could be better served by investing more staff resources into corridor management and planning activities than traditionally has occurred.

### THE DEPARTMENT'S CURRENT APPROACH TO MANAGING CORRIDORS

The Department has an enormous responsibility of managing the state's transportation network, which involves very complex systems of conducting business. This responsibility is sometimes complicated by the lack of a coordinated approach in the Department between business areas and within the Division of Transportation Districts (DTD) on how to maintain the long-term effectiveness of state highway corridors. While one section prepares long term plans for a certain corridor, others are responding to manage the day-to-day permit requests for access to that corridor, and yet another business area is designing improvements for that same corridor.

There are many examples of where a coordinated approach to managing a corridor would have substantially improved the outcome. For example, building a bypass around an area that has already been bypassed such as Platteville or Eau Claire, suggests our approach needs a long term view that is coordinated and implemented from all levels of the Department from planning, project development to maintenance and operations.

There are other cases (e.g. STH 29) where a significant investment in a corridor was made without a planned approach for preserving that viability of that investment. The safety and congestion problems that arise as a result are costly to address and can have significant impacts to property owners and the environment.

All departmental actions are well intended; however, many times activities and decisions are being made in “silos,” without reference to an overall departmental goal for the corridor. Internal coordination is a challenge that will continue to become more difficult as higher expectations from stakeholders, property owners, the traveling public, the state legislature and the governor continue to influence the Department’s activities. Increased development pressure is also an issue the Department must face.

More recently, WisDOT is experiencing greater resource constraints and the identified needs for staff resources and highway improvements clearly outweigh the available resources. More systematic prioritization on a statewide and Transportation District level will be required in order for WisDOT to maintain a safe, reliable, high quality state roadway network.

Districts in particular have a key implementation role for managing highway corridors. A lack of a coordinated and agreed upon approach to managing a corridor within the Districts can hinder the Department from achieving effective and efficient statewide results.

- All Districts use common tools to address corridor management issues. These tools are primarily regulatory (TRANS 231, TRANS 400, §84.09, §84.25, §84.295, Wis. Stats.), but there are some significant differences in how and when (in the life cycle of a highway corridor) Districts apply these tools.
- Some Districts have formal “methods” of establishing priority roadway segments and for determining the actions they will undertake on those segments. Other Districts have opted to leave the prioritization process loosely defined.
- Districts make their own determinations as to the type and manner of "corridor planning" and "corridor preservation" projects undertaken. Districts are also not held to a particular vision of a corridor. This can cause conflict, for example, when scoping a project where the initial costs estimated can drastically increase without an agreed upon vision.
- There are differences of opinion and conflicting objectives on the end-result of some current efforts (preserve existing facility as it currently functions, protect future, build appetites for improvement projects, build local “buy-in” to preserve existing facility as it functions, etc.) related to planning and project development.
- There are differences in the resources each District is able to dedicate to corridor management activities.
- Corridor management activities, corridor plans and corridor preservation projects are occurring within all three primary program areas (Majors, Backbone, 3R). This results in up to 24 different corridor prioritization/planning/preservation philosophies (Eight Districts with three primary programs each).

## THE CORRIDOR MANAGEMENT WORKGROUP AND THIS TECHNICAL REPORT

Many Department workgroups have been formed to address related issues including corridor planning, access management, driveway permitting, project development, and efficiency improvements to name a few. The Corridor Management Workgroup was formed in June 2003 as a result of work that Office of Policy and Budget (OPB) staff had conducted on corridor planning and land use issues and a DTD interest in improving consistency in corridor planning related activities and resource allocations. Because efforts reach beyond corridor planning alone, the Workgroup was created to examine a broadly defined corridor management approach. The Workgroup includes representation from all modal divisions including staff from six Transportation Districts. (Districts 7 and 8 choose not to participate). Appendix A includes the list of Workgroup members and their mission. Since the formation of the Workgroup, OPB staff were reorganized into the DTID's Bureau of Equity and Environmental Services.

This Technical Report represents a compilation of the Corridor Management Workgroup's efforts. The Report proposes a Department philosophy or approach to managing corridors, from planning to project development to maintenance within a realistic and achievable process. The recommendations seek to retain flexibility to account for differences within various Districts, while moving toward a more consistent statewide approach to corridor management. This Report is written primarily for an internal audience to further corridor management in the Department's policy efforts. Some of the corridor management concepts and policies may warrant public input, especially if carried through the update of the State's Long Range Transportation Plan, Connections 2030.

### The Workgroup Process

Developing a set of definitions was the first issue that the Workgroup examined. Not only was this necessary to provide a framework for discussion, but it was also crucial due to a lack of Department policy and staff's inconsistent use of "corridor" related terms. Appendix B includes for a list of terms used throughout the Technical Report. Using this set of definitions, the Workgroup developed several components, which when put together form a comprehensive approach to corridor management. As a result, this Technical Report includes the following:

1. A process to identify District ***priority management corridors***. This process includes two stages—a quantitative review using Metamanager information and existing data; and, a qualitative review conducted by District staff to filter through non-quantitative data about a specific highway corridor. (See Section Two, page 14.)
2. A process to develop a ***corridor management vision*** along priority management corridors. The vision is a long-term view of how a facility should function. To work toward a shared vision requires short, medium and long term approaches from planning, project development and maintenance and operations. (See Section Three, page 18.)
3. A discussion and matrix of ***corridor management strategies and tools***. A tools matrix is included in appendix C. This section's purpose is to identifying tools and

techniques available to help achieve a desired vision. Some tools are statutory, while others are planning related. Local government tools are also included. (See Section Four, page 24.)

4. A list of key ***recommendations*** that came as a result of discussions and work efforts. (See Section Five, page 34.)

## **OVERVIEW OF WORKGROUP RECOMMENDATIONS**

The Workgroup's recommendations include corridor management process improvements and steps for further work, which seek to implement the corridor management approach. The recommendations of the Workgroup are detailed in Section 5 (page 34). Briefly, these recommendations are as follows:

### **Recommendation 1: WisDOT should adopt a corridor management approach.**

A corridor management approach should be woven into all aspects of WisDOT's programs including planning, programming, construction and maintenance; and should be reflected in financial considerations for all three areas. This report recommends a coordinated approach to shape future work within the Department. Resource allocations and other financial issues are not included in this Report.

### **Recommendation 2: WisDOT should expand the use of the Department's existing program funding streams to finance corridor management activities.**

Spending improvement dollars and staff resources on corridor management activities are not only allowable, these actions help to shape a sound, long-term investment strategy for Wisconsin's current and future transportation needs. Separate prioritization should be developed for each of the three main funding programs (Majors, Backbone, 3R). Appendix D includes a proposal that advances this recommendation, which was developed by Gary Brunner, SPO Chief, District 5-Division of Transportation Districts.

### **Recommendation 3: All potential Major projects should have a corridor plan developed.**

Because Major projects represent substantial state investments, there is an increased need to ensure a consistent approach is developed for short, medium and long-term management of the corridor. A corridor plan is a tool that offers this ability to collectively plan for this future. It also can provide a project to be properly scoped and estimated. A corridor plan for other corridors should be considered within the context of a corridor management vision.

### **Recommendation 4: The updates of the State Long Range Transportation Plan and the State Access Management Plan should incorporate corridor management within its proposed policies for the Department.**

The update of the State Long Range Transportation Plan, Connections 2030, should establish the validity of the corridor management approach as well as integrate the Workgroup's proposal within its policy recommendations. The State Access Management Plan (SAMP) should provide guidance of how it supports a corridor management approach.

The corridor management approach is intended as the “umbrella” process under which decisions are made for a specific corridor. Because a corridor management approach is intended to cover the realm of the activities that a corridor needs to be properly managed, from planning to project development to maintenance and operations, state level plans should provide a system wide, long term view of corridors, especially to provide consistency across Districts.

**Recommendation 5: The Workgroup should be reconstituted as a corridor management implementation workgroup.**

This group would be charged with the further development of recommended policies and actions needed implement the corridor management approach and process. Financial implications should also be included in this Workgroup’s charge.

**Recommendation 6: Additional efforts are needed to improve Department policies on public involvement.**

The Workgroup recognizes the importance of coordination and cooperation with local governments and the public to effectively manage a corridor, including the project development process; however, there are differing opinions on how, when and to what extent public involvement activities should be conducted to implement a corridor management approach.

**Recommendation 7: Additional policy and guidance are needed to improve application of various corridor management tools.**

The Workgroup prepared a matrix of corridor management tools (Appendix C); however, there is insufficient guidance on how and when these tools should be applied. Additional department policies and legal guidance are needed in this area.

## **CONCLUSION**

The Corridor Management Workgroup’s recommendations and the process outlined in this Technical Report do not address the array of issues that still need covered, including resource allocations, broad Department support, the role of public involvement, and the application of corridor management policies and tools. The acceptance of the corridor management approach is a first step in what the Workgroup envisions as an incremental set of advances to address emerging issues. This Report offers a process to begin to improve our Department’s processes to more effectively and efficiently manage highway corridors.

A separate proposal entitled “A Consistent Approach to Corridor Management,” authored by Gary Brunner, has also been included in this report’s Appendix D. Although it was not reviewed or endorsed by the Workgroup, it is a complimentary proposal offering a way to integrate the themes developed by this Workgroup into the financial allocation aspects of District activities.

Finally, the Workgroup sees its proposal as an important and needed “cultural” shift in thinking for WisDOT. It is also accepted that this change of thinking will require broad,



integrated support in all modal business areas from management and technical staff. While training will be necessary for some aspects of corridor management in order to initially advance the concepts, other portions of implementing a corridor management philosophy will require simple technical modifications to current practices. In all cases, incremental approaches are recommended to further institutionalize these concepts introduced in this Report.

Please refer to the complete Technical Report (which immediately follows this Executive Summary) for further explanation and detail on the proposed corridor management process framework and set of recommendations.

## **SECTION ONE: INTRODUCTION TO CORRIDOR MANAGEMENT**

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The Wisconsin Department of Transportation (WisDOT) works to preserve, protect and enhance transportation in the state through various administrative rules, statutes, activities, policies and projects. Many of these activities are designed to help WisDOT maintain and improve state highway corridors for safety and mobility within existing roadway conditions or to prepare for upcoming highway projects, and also to prevent premature degradation of highway facilities. At times, our attempts to achieve one particular goal results in conflicts with other goals on the same corridor, or are inconsistent with actions taken on a similar corridor elsewhere in the state. Much of the inconsistency is a result of the Department focusing on a project-only perspective following a decision-to-decision basis. For example, STH 29, which recently experienced a major improvement project, faces a somewhat uncertain future for its long-term function because of a lack of a consistent vision and approach to the corridor.

### **A CORRIDOR MANAGEMENT PHILOSOPHY AND APPROACH**

Corridor management is a coordinated approach to transportation planning, project development and operations that considers the transportation system from a “corridor” perspective. This approach includes consistent and coordinated application of various activities, strategies and tools to achieve a certain corridor management vision. Several key characteristics of the corridor management approach are:

- Consideration of the highway facility in its context – i.e., surrounding land uses, access management, need for or condition of adjacent facilities, etc.
- A long-term perspective (Up to 30 years).
- A multi-modal approach.
- Focus on preserving as well as improving the functionality of the facility.
- Intergovernmental and community coordination and collaboration.
- Support and incorporation of the approach in the state’s long-range transportation plans.

While all highway corridors are managed with various permits, maintenance activities and projects, certain corridors need specific attention for various reasons. These reasons include an upcoming project, development pressure, existing problems with no project identified and other influences. Fundamental to the development of this approach is the understanding that the “business as usual” method will not close the gap created by a variety of needs outweighing available and anticipated resources.

The approach proposed by the Workgroup is premised upon the following themes:

1. Districts will maintain the primary responsibility to identify and advance corridor management activities within their Districts, and follow stronger Department guidelines and policies.
2. There will be clear consistency in the manner in which Districts establish corridor management priorities with the updates of State Access Management Plan (SAMP) and the State Long Range Transportation Plan (Connections 2030).
3. There will be separate prioritization paths for each of the primary funding programs (Majors and Majors candidates; Backbone projects; 3R projects). A clear program path will be needed for corridor management activities.
4. Districts will prioritize corridor management activities on 3R projects using a consistent philosophy and guided by a measurement process similar to the Department's new "Program Effectiveness Measure."
5. All Districts will use a common set of tools, in the correct legal manner, at consistent times in a corridor's life cycle, and follow statewide Department policies.
6. The desired end products of corridor management activities will be clear to all participants (WisDOT business areas, local units of government, public, stakeholders).
7. There will be a direct link between prioritized needs and resources (staff, project dollars) to perform corridor management work.
8. There will be a tie between priority management corridors, identified needs and the resources available to construct improvements to transportation facilities.

## **THE CORRIDOR MANAGEMENT WORKGROUP**

This Technical Report was developed through the work of the Corridor Management Workgroup. The Corridor Management Workgroup was formed in June 2003 as a result of work that OPB staff had conducted on corridor planning and land use issues and a DTD interest in improving consistency in corridor planning related activities and resource allocations. Because efforts reach beyond corridor planning alone, the Workgroup was created to examine a broadly defined corridor management approach. The Workgroup includes representation from all modal divisions including staff from six Transportation Districts. See Appendix A for the Workgroup mission and membership.

The Report includes a proposed approach to institute corridor management as a philosophy in the Department. The Workgroup recommends that WisDOT adopts a "corridor management" approach that is woven into all aspects of its programs including planning, programming, construction and maintenance/operations.

Through this Workgroup's efforts, the following was developed:

- A discussion on why corridor management is important and how it can be integrated into the Department's efforts.
- A set of consistent, corridor "related" definitions and common terminology.

- A discussion of how this work should be integrated into the future Connections 2030 and SAMP.
- A process for identifying priority management corridors, which includes a set of prioritization factors for corridors.
- A process for developing a corridor management vision for those identified priority management corridors
- A “toolbox” of the various tools available for corridor management purposes including statutory tools, plans and administrative rules. (Includes tools available to WisDOT and to local units)
- A set of recommendations, which includes additional work needed to implement the corridor management approach.

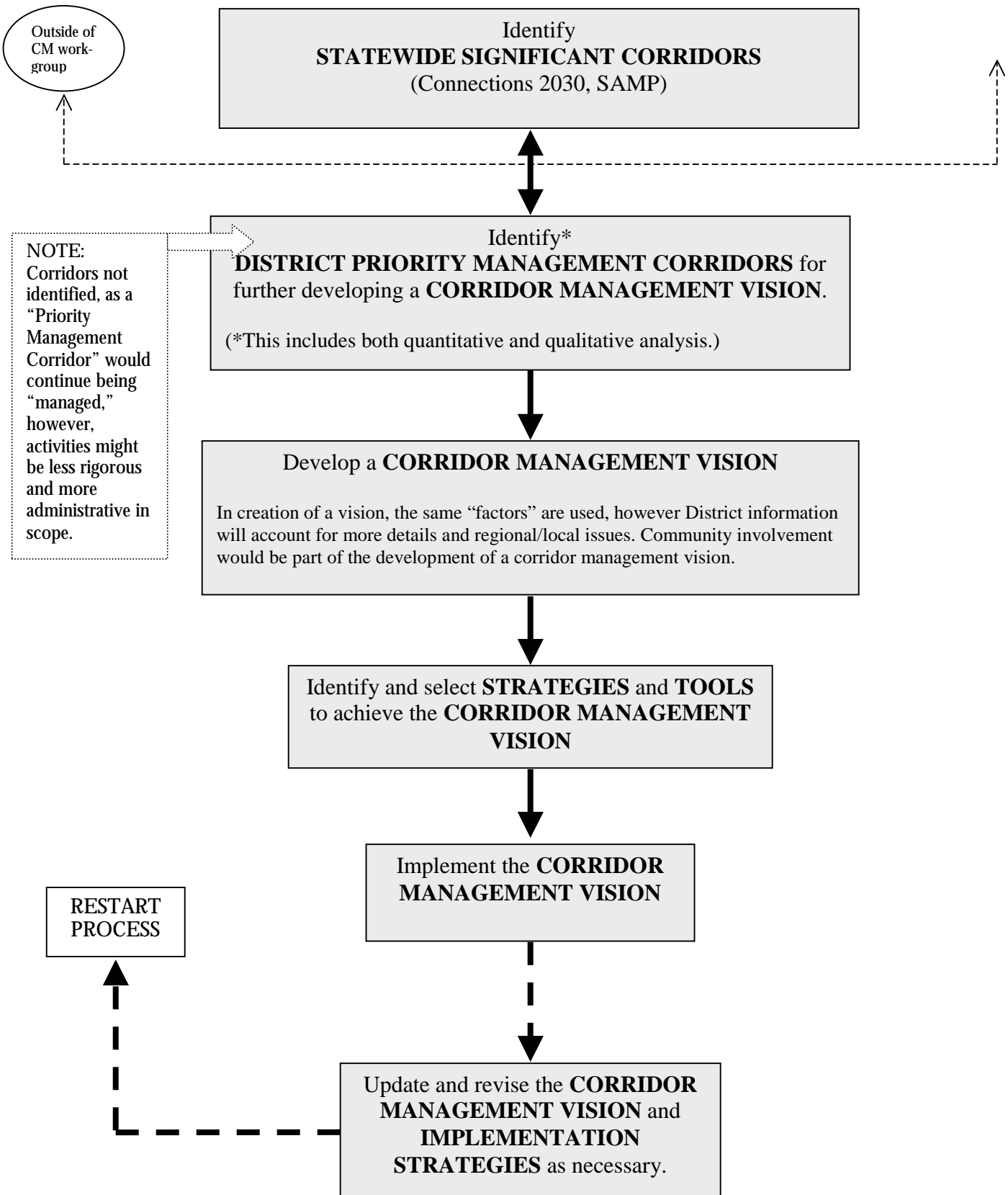
## **A PROPOSAL FOR CORRIDOR MANAGEMENT**

An agreed upon “direction” for the long-term viability of a highway corridor is needed from planning, project development, and maintenance/operations. This effort needs to connect with local governments, stakeholders, and property owners. In order to successfully bridge across various departmental activities and functions to achieve long-term safety and mobility, a corridor management vision should be developed especially on prioritized corridors with an appropriate level of input from the public. The vision considers the role that the corridor has in the statewide transportation network, as well as the needs of the communities and property owners along the corridor.

The corridor management vision should translate into all aspects of Department work—from state level and District planning activities to programming, construction and maintenance and operation activities such as driveway permitting. The process to develop a corridor management vision is led by Districts and will depend on the identified corridor management priorities and staff resources to develop a corridor management vision. Many issues are considered in the development of a corridor management vision such as: safety, mobility, access issues, development pressure, facility conditions/needs, land uses, and community issues/plans.

With consideration of the current State Long Range Transportation Plan and when complete, Connections 2030, Districts must first identify priority management corridors where more detailed planning is needed. The priority management corridors are identified through a process that provides consistent approach across the state and aids Districts in developing a vision for managing a particular corridor. Various factors for identifying priority management corridors, both quantitative and qualitative, are considered and analyzed including development pressure, facility condition, state transportation plans, pending or planned projects, local plans, access issues, etc. The priority management corridors require additional pro-active planning efforts to identify strategies for improvements, preservation or other needs. These types of activities include management actions, strategies, tools and policies.

## Corridor Management Process Flowchart



Because corridor management strategies and tools vary in the application and timing, the implementation of corridor management is funded from a variety of existing funding sources, rather than a separate or new funding program. However, there are separate prioritization paths for each of the primary funding programs (Majors and Majors candidates; Backbone projects; 3R projects). A consistent approach is sought in all Districts. Other funding sources are considered and used as appropriate (SPR; SE Freeways; Maintenance; etc.). Prioritization would occur on a statewide basis for Majors and Backbone programs. There is a tie between prioritized needs and resources to perform corridor management work. There is also a tie between prioritized corridor management activity needs and funding available to construct roadway facilities. The next page provides a flowchart, which outlines the corridor management process. Sections Two through Four of this Report describe each “box” in the flowchart in greater detail.

### **CORRIDOR MANAGEMENT AND ITS RELATIONSHIP TO CONNECTIONS 2030 AND SAMP**

Corridor management is the umbrella process under which all decisions are made for a specific corridor by planning, project developers, construction, maintenance and operations. It also reflects a vision for a corridor that takes into account local goals and plans for land use and economic development. As such, corridor management should have its roots in a number of plans and processes, including Connections 2030, the State Access Management Plan (SAMP), Metropolitan Planning Organization’s plans, and local comprehensive plans.

The **State Long Range Transportation Plan** is a public declaration of the Department's objectives and long-term system goals for the next 20 to 25 years. It is a critical document in formalizing statewide transportation policies. WisDOT’s current plan, Translinks 21, was adopted in 1994 and supplemented by several modal plans, including the State Highway Plan (SHP). SHP provides further details and formalizes the two “subsystems” of the state highway system—Corridors 2020 and non-Corridors 2020 routes. It legitimizes the subset of roadways that may be eligible for inclusion within the Majors program. It formalizes the performance thresholds that WisDOT programs will use to guide decision-making. Districts must demonstrate a connection between the State Long Range Transportation Plan and each improvement project completed on the state highway system.

The current SHP briefly discusses corridor management related objectives by focusing on two levels: planning for new corridors (preserve the ability to expand the STH system) and managing highway access. However, it is silent on the need to preserve many corridors in their current alignment and with the same number of lanes. The need to preserve corridors will be the reality for the vast majority of state roadways for the next 15 - 30 years. In order to address this issue, the SHP will need to further discuss preserving a corridor's ability to function in its current form as a legitimate and necessary activity as is the ability to expand or relocate a facility. These activities become even more critical in the future due to shrinking purchasing power of highway programs (loss of SEG funds, bonding, re-paying on the debt service, etc.). Corridor management is an approach to address these issues in a coordinated and comprehensive fashion.

The **State Access Management Plan (SAMP)**, a system level plan for managing highway access, is an update to the SHP's access management component. SAMP, currently being developed, will provide additional system wide policy guidance that should strengthen and support a corridor management approach. It will provide guidance useful for the corridor management prioritization efforts by Districts and the development a specific STH corridor management vision, as proposed in this Report. SAMP presents an initial designation of access tiers for all STH routes. Those tiers identify an initial forty-year STH access vision and guidance for managing access to meet the vision.

**Corridor management** seeks to address comprehensive, short, medium and long-term management needs for a corridor and include provisions for all business areas. As outlined specifically in this Report, the corridor management approach directly considers the State Long Range Transportation Plan, SAMP and the state level access tier designations of highway corridors when identifying priority management corridors and when developing a corridor management vision. A corridor management approach will be frequently revisited to modify actual investment strategies based upon highway system performance and funding stream.

## **SECTION TWO: A PROCESS FOR IDENTIFYING DISTRICT PRIORITY MANAGEMENT CORRIDORS**

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### **GENERAL OVERVIEW**

While every STH corridor should have a “vision” for managing a corridor’s operation and functions, priorities are needed for conducting this work. The Department needs to consider its resources in order to meet its most urgent management needs, including staffing resources. District Priority Management Corridors are identified where Districts need to further develop a detailed corridor management vision for specific highway corridor. The process proposed in this document is intended to apply broadly to urban and rural segments in all transportation Districts.

Identify\*  
**DISTRICT PRIORITY MANAGEMENT CORRIDORS** for  
further developing a **CORRIDOR MANAGEMENT VISION.**  
  
(\*This includes both quantitative and qualitative analysis.)

See “Corridor Management Process Flow Chart”, page 12

The process is intended as readily explained to management, staff and the public. The purpose of this section is to outline the process for identifying District Priority Management Corridors. Identifying District Priority Management Corridors is a process with two analysis stages, a quantitative analysis and a qualitative analysis.

### **STAGE ONE—QUANTITATIVE REVIEW**

The first stage, a quantitative analysis, is based on three main components—mobility, safety, and development pressure. There are several factors within these three main components and they are weighted. See the below table for the overall factors and their scoring weights.

This first stage, a quantitative analysis, which includes a defined set of factors for a determination of a score for segments of a corridor, is conducted by central office staff through Metamanager and provided to Districts. Existing data from existing sources including metamanager and other state agency data is used in this analysis. Where applicable, the prioritization factors use processes similar to those used in the Major projects analysis. Each of the factors is scored, which is then totaled for a score for each segment of a corridor in each of the eight Districts. Scores are not used in a statewide total; rather, scores are created to help Districts in the second stage in the identification of the corridor endpoints and District Priority Management Corridors.



### Stage One—Overall Factors and Weighting\*

STAGE ONE FACTORS	WEIGHT
<b>Mobility</b>	<b>50%</b>
Functional Class/Corridors 2020 Designation	15%
Year 2030 Level of Service	20%
Truck ADT	10%
Recreation Factor Group	5%
<b>Safety</b>	<b>20%</b>
Crash Rate	10%
Crash Severity	10%
<b>Development Pressure</b>	<b>30%</b>
Population Projections by CVT To 2020	15%
Land Conversion Rate by CVT from Ag/Vacant to Residential, Commercial, Manufacturing, 1990-2000	15%

### STAGE TWO—QUALITATIVE REVIEW

District staff conducts the second stage, a qualitative analysis. First, Districts will apply a set of qualitative factors including four major factors— development pressures, existing facility/planned improvements, regional significance, and community issues. This stage is flexible and encourages the use of additional quantitative data found more specifically in District databases, such as driveway permit requests, on a certain corridor. This stage also considers factors that are difficult to assign a score, but rather provide more insight to what is occurring or may occur in the future along a particular corridor. Then, Districts will need to determine the endpoints of the corridor for purposes of identifying its District priority management corridors. A list of priorities in rank order is generated for then developing a corridor management vision.

Below are the details of quantitative and qualitative factors used in stage one and stage two analysis that will guide each District when developing a set of Priority Management Corridors and where corridor visioning efforts will be conducted. See Section Three for a discussion on visioning.



### STAGE ONE ANALYSIS—USING QUANTITATIVE REVIEW FACTORS

The stage one factors (page 16) are weighted through scoring process as noted above. The outcome of this weighting is to generate a list of scores for corridors in which Districts can further a stage two review using a set of qualitative factors. Within the workgroup's efforts, a successful example was generated using Metamanager using the additional data for scoring. These scores could be provided to each District for STH corridors for the Stage Two analysis. The below chart provides further details of the overall table previously shown on page 14.

## DETAILED QUANTITATIVE REVIEW FACTORS FOR STAGE ONE ANALYSIS

Stage One Factors	Score	Weight
<b>MOBILITY</b>		<b>50%</b>
Functional Class/Corridors 2020 Designation		15%
Local Function	0	
Collector	1	
Minor Arterial	5	
Minor Arterial Corridors 2020 Connector	9	
Principal Arterial Non-Corridors 2020	9	
Principal Arterial Corridors 2020 Connector	12	
Principal Arterial Corridors 2020 Backbone	15	
Year 2030 Level of Service		20%
1.00-4.00	0	
4.01-4.50	8	
4.51-5.00	11	
5.01-5.50	14	
5.51-6.00	17	
>6.00	20	
Truck Percent		10%
Percent Trucks		
0 – 7.5%	0	
>7.5 - 10%	5	
>10 – 12.5%	7.5	
> 12.5%	10	
Recreation Factor Group		5%
Other Factor Groups	0	
Factor Group 5 or 6	5	
<b>SAFETY<sup>1</sup></b>		<b>20%</b>
Crash Rate <sup>2</sup>		10%
< 1.0 std deviations above the mean	0	
1.00-1.49 std deviations above the mean	5	
1.50-1.99 std deviations above the mean	7.5	
>1.99 std deviations above the mean	10	
Crash Severity <sup>3</sup>		10%
< 1.0 std deviations above the mean	0	
1.00-1.49 std deviations above the mean	5	
1.50-1.99 std deviations above the mean	7.5	
> 1.99 std deviations above the mean	10	
<b>DEVELOPMENT PRESSURE</b>		<b>30%</b>
Population Projections by CVT to 2020		15%
0 – 15% rank <sup>4</sup>	0	
>15 – 50% rank	3	
>50 – 85% rank	9	
>85% rank	15	
Land Conversion Rate 1990-2000 <sup>5</sup>		15%
0 –15% rank	0	
>15 – 50% rank	3	
>50 – 85% rank	9	
>85% rank	15	

<sup>1</sup> The safety scores for the traffic segments are based on the weighted average safety scores from the Meta-Manager segment scores. When multiple Meta-Manager segments occur in one traffic segment, the safety score is applied to 50% of adjacent segments within the traffic segment.

<sup>2</sup> Total # of crashes divided by 100 million vehicle miles.

<sup>3</sup> Total # of fatal and injury crashes divided by total crashes on segment.

<sup>4</sup> The percent rank is based on the GEH statistic, which takes into account the absolute and relative growth rates.

<sup>5</sup> Conversions from Ag/Vacant to Residential, Commercial or Manufacturing uses.

## **STAGE TWO ANALYSIS—USING QUALITATIVE REVIEW FACTORS**

Once scores are provided through Stage One analysis, Districts' Planning Sections will conduct the Stage Two review to determine where it should further focus its staff resources to develop a corridor vision for a particular highway corridor. Stage Two considers qualitative factors that are more difficult to assign a score or weighting but important to consider when prioritizing corridors. Stage Two is an essential step in providing insight to what is occurring or may occur in the future along a particular corridor. Districts will then take the list generated in Stage One of the prioritization and adjust the ranking of priorities according to Stage Two quantitative factors.

### **1. Development Pressure**

- Route has access management concerns.
- Number of Trans 233 reviews and requests is significant.
- Number of driveway permit reviews is significant.
- Route has seen a change in character of adjacent area over time.
- Local comprehensive plans call for development along corridor.
- Route has been the subject of speed limit reduction or signal installation requests.
- Route is experiencing community changes from rural to more urban forms of development

### **2. Regional/Statewide Significance of the Corridor**

- Route provides only viable state or regional travel option.
- Route is important for tourism.
- Route serves destination locations (e.g. casino).
- Route is important from a multi-modal perspective.
- Route is designated a Tier 1 or 2 route, as identified in the updated SAMP.

### **3. Community Issues**

- Route has high political sensitivity.
- Route has significant environmental considerations.
- Route has had requests for new interchanges.
- Route has had requests for projects from the local governments.

### **4. Planned Improvements**

- Major project is enumerated or planned.
- New interchanges are planned.
- Other future improvements are planned.

## **ACTING UPON THE IDENTIFIED PRIORITIES**

Districts will need to determine the how the list of priorities is then acted upon. For example if there is a list of ten priorities for one District, considering resources both at a staff level and at a project level, the list may whittle down to three corridors per year of intensive corridor visioning. The list of priorities should be reviewed at least annually through another quantitative analysis through Metamanager and qualitative review possibly abbreviated depending on significance of changes in the Stage One analysis within each District in order to make appropriate adjustments for emerging issues.

### **SECTION THREE:**

## **DEVELOPING A CORRIDOR MANAGEMENT VISION**

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After identifying **priority management corridors**, the next step is to:

### **Develop a CORRIDOR MANAGEMENT VISION**

In creation of a vision, the same “factors” are used, however District information will account for more details and regional/local issues. Community involvement would be part of the development of a corridor management vision.

See “Corridor Management Process Flow Chart”

A **Corridor Management Vision** is a long-term view of a highway corridor, developed by WisDOT with community involvement in its creation and revision. The vision considers the role that the corridor has in the statewide transportation network, as well as the needs of the communities and property owners along the corridor. The process to develop this vision is led by District offices. Many issues are considered in the development of a corridor management vision including: safety, mobility, access issues, development pressure, facility conditions/needs, and community issues/plans.

A corridor management vision should be developed through a consistent set of steps that can be documented and justified. This section serves to outline these steps. This process to develop a corridor management vision for a particular corridor should be conducted after a list of Priority Corridors has been established. (See the Priority Corridor Identification in Section Two, page 14.)

### **DEVELOPING A CORRIDOR MANAGEMENT VISION**

There are five proposed steps to developing a corridor management vision. These steps should be considered a basic framework, and can be adjusted to meet additional needs for a particular corridor. The District Planning Section coordinates the internal development a corridor management vision.

The five steps are:

1. Compile data and information about the corridor.
2. Create supporting documents and maps.
3. Hold an internal visioning meeting with representatives of the various District business areas.
4. Set up a corridor steering committee.
5. Document and distribute the corridor management vision.

Although not identified in the above five steps, public involvement is critical to the successful implementation of a corridor management vision. Various techniques and timing issues need to be considered prior to the initial development of a corridor management vision. More on public involvement can be found on page 22.

Details of the above process are included in the next sections for the development of a corridor management vision.

#### **STEP ONE: COMPILE DATA AND INFORMATION ABOUT THE CORRIDOR.**

The District Planning Section is responsible for requesting information from various sources and compiling the data. A list of the duties of each business area is included below. Each business area should spend enough time necessary to compile the pertinent information about the corridor. A checklist should be provided to help outline the issues for each section. (Note: Digital data is preferred.) It is anticipated that for each business area, 8 hours or less is needed for the development of a corridor management vision and implementation steps for a particular corridor.

#### **Systems Planning and Operations (SPO)—Planning**

- a. Identify all plans for corridor, including Connections 2030, SAMP, regional plans, any local (County, Town, City, Village) comprehensive plans or other plans that relate especially to access issues, economic development plans and land use changes.
- b. Identify issues, perceptions and requests from public, local officials, highway departments, etc.
- c. Utilize the STH Access Vision Map from SAMP as a starting point for access issues and further development of the corridor management vision.
- d. Include any known deficiency information and data for that corridor from Metamanager.
- e. Request regional DNR and/or other state agency representatives to identify natural resource issues and provide community perceptions.
- f. Request data/information such as RPC regional plans, MPO plans, etc. that are pertinent to the corridor. Coordinate where necessary with RPC/MPO staff.
- g. Create maps from Metamanager data for display as well as for handouts.
- h. Facilitate discussions and prepare all handouts and documentation.
- i. Compile all information provided from other business areas.

#### **SPO—Traffic**

- a. Compile crash data. (i.e. map of crash areas, locations, rates, etc.)
- b. Provide information about signals and other intersection specifics.
- c. Identify perceptions and requests for traffic features from public, local officials, highway departments, etc.
- d. Create traffic maps, including crash data, and any other corridor specific data that may be unusual or unique.
- e. Compile traffic forecasts and historical traffic growth data.

#### **SPO—Maintenance**

- a. Provide any general maintenance issues in the corridor area.
- b. Identify problems associated with private driveways, street entrances, and land uses that impact the corridor.
- c. Identify perceptions and requests from public, local officials, highway departments, etc.
- d. Identify pavement longevity issues and general layout of roadway.
- e. Identify the frequency of maintenance.

- f. Identify the usefulness of adjacent support routes.

### **SPO—Intelligent Transportation Systems (ITS)**

Include any ITS plans for future, or ongoing projects with infrastructure installations.

### **Project Development Section (PDS)**

- a. Identify problems associated with private driveways, street entrances, and other geometric problem area, and land uses that impact the corridor.
- b. Identify perceptions and requests from public, local officials, highway departments, etc.
- c. Identify pavement longevity issues and general layout of roadway.
- d. Identify the project issues, concerns, and other project related information (if applicable).
- e. Identify the usefulness of adjacent support routes.

### **Technical Services (TSS)—Real Estate**

- a. Provide knowledge of current extents of the corridor right of way.
- b. Identify property purchased for access under s. 84.09, Wis. Stats.
- c. Identify difficult areas to procure additional right of way, access, etc.

### **TSS—Environment section (District Environmental Coordinator)**

- a. Provide knowledge of environmentally sensitive areas, DNR issues, historic areas and other features of the area.
- b. Provide information on project related environmental reporting requirements and issues.

### **TSS—Utilities**

Identify any areas with specific utility problems, requests, etc.

## **STEP TWO: CREATE SUPPORTING DOCUMENTS AND MAPS.**

Supporting documents and maps that outline the corridor issues should be compiled or created. The District SPO Planning section would:

- Compile all the submitted information from each area onto one checklist.
- Arrange for displays and packets.
- Outline a set of *draft* future goals for the corridor based on the information collected. Example goals may include:
  - a. Increased actions/activities to continue to function safely and efficiently.
  - b. Preservation of existing facility through various strategies.
  - c. Preparation for future or potential project.

## **STEP THREE: HOLD A VISIONING MEETING WITH REPRESENTATIVES FROM VARIOUS DISTRICT BUSINESS AREAS.**

At least one visioning meeting, organized by District Planning Section, should be held with all DOT District business area representatives. Inviting a representative from

DTIM's traffic forecasting section is also suggested. The goal of the meeting is to review corridor data/information, brainstorm future ideas/solutions/issues, and agree on management goals and objectives. This meeting should include staff that can contribute to the discussion based on their job duties related to the corridor. Staff and management should be encouraged to attend. The facilitator, who is a planning section staff member, should lead the discussion with a notetaker documenting the discussion.

The meeting outline should, in general, include the following:

- **A review of data collected.** All participants will outline the corridor issues through a review of their section's data. The issues could be broken into categories including pavement, geometrics, environmental, community and land use issues, access management, public perceptions/requests, real estate, utilities, etc.
- **Goal Agreement.** Agreement is necessary for the set of corridor management goals and objectives.
- **Discuss strategies and tools.** Discuss possible strategies and tools to achieve goals that could apply to the corridor.
- **Consider financial implications.** Various options, scenarios, tools, and remedies for a corridor management vision will have certain financial constraints.
- **Discuss future reviews.** Discuss the need to review of the adopted corridor management vision in the future and set up a review date.
- **Implementation discussion.** Outline District implementation efforts, including who is responsible for each component, in time order.

#### **STEP FOUR: SET UP A CORRIDOR STEERING COMMITTEE.**

A steering committee is necessary to provide consistency and interconnection of the corridor vision with all corridors in the District. A representative that attended the visioning meeting from PDS, Maintenance, Traffic, Planning, and Environment should be included in the Steering Committee. These members will review the information gathered and create more specific solutions for the corridor based on comments taken from vision meeting. These strategies and tools can be separated into short and long-term activities. All sections will review decisions made in this committee, but business sections would not make major changes to the corridor without review of the committee. Another meeting may be required by the steering committee after comments have been reviewed for any potential changes.

In certain complex corridors especially where a project is scheduled, a technical committee, which includes central office staff, may be needed to address specific engineering and project development issues related to the corridor. This technical committee will define future opportunities/constraints for any geometric or otherwise type of projects that are going to be introduced into a corridor. These will be the backbone for future steering committee meetings that involve any geometric or other projects on the corridor. An example of a technical issue is geometric design concepts that are not currently standard practices, that the steering committee feels needs additional perspective prior to implementation on the corridor.



## **STEP FIVE: DOCUMENT AND DISTRIBUTE THE CORRIDOR MANAGEMENT VISION.**

Using a standardized form/data entry or information management system and any other pertinent information, the corridor management vision should be disseminated to all the business areas, outlining the issues in the area, the proposed management strategies and implementation steps for the corridor. This information should be attached to all project files for the corridor, Concept Definition Reports (CDRs) and Memoranda of Understanding/Agreement (MOUs/MOAs) for the corridor. Since public involvement may or may not have been included up to this point, the vision may be considered an internal, interim “vision” for a corridor management purposes. However, if public involvement was included, this vision should be shared with all local governments, stakeholders, and property owners. (More on public involvement efforts below.)

The corridor management vision and associated data could be included in DTDView, which is an interactive Web GIS application. It uses a map to perform a location based view and query of data. <http://dtd-d5/GIS/LaunchDTDView.htm>

## **COMMUNITY INPUT AND PUBLIC INVOLVEMENT**

Community input and public involvement are important to achieving a corridor management vision. Simply put, a vision cannot be achieved without the inclusion of both the public and the communities in the process. Various levels of community input and public involvement are anticipated in the development of a corridor management vision on any particular corridor. Certain corridors may warrant the preparation of a corridor plan, which will include significant public involvement, to reach consensus on a vision and to fully implement strategies that are needed to achieve that vision. When discussing specific tools and strategies for a corridor, a corridor plan effort could be considered. A detailed corridor plan should be considered especially when a project is planned, when communities are divided, or when issues are more complex. Other corridors will require less intense public involvement.

The issue of how, when and to what extent to include the public is not clear outside of minimums in the environmental reporting process. Creating a corridor management vision without community input is contrary to cooperative efforts. However, the public and local officials may have difficulty in understanding an effort to develop a vision for a highway that does not involve an improvement project. District staff will have to carefully determine how to include local communities, stakeholders, citizens, and private landowners in visioning activities without creating expectations that cannot be met.

It is recommended that all corridor management visioning efforts work into the process some level of community input and public involvement. Especially where a transportation project is associated with the corridor, there is a significant benefit to all parties to have early and continuous public input into the process. In addition, for those corridors where land use is a significant issue for the safety and functionality of the corridor, coordination with local governments on their economic development plans is crucial to achieving corridor preservation goals.

Below is a list of general ideas for Districts to include the public in the corridor management visioning process.

1. Distribute the basic corridor information in a letter out to all parties that have had interest in the corridor. Request clarification/accuracy of any information as well as anything that was inadvertently left out. Draft a final version of the information with a date compiled so new info can be added in future years as issues change.
2. Hold informational meetings.
3. Hold a visioning session.
4. Determine if a specific corridor plan is necessary to finalize the corridor management vision especially if a project is pending.
5. Develop a process for involving community interests to share issues in the future.
6. Determine if additional strategies are needed through local government action and activities to achieve the corridor vision.

All public input should be reviewed before and during the development of a project concept definition reports (CDRs) once a vision has been established. Recommendations from the public involvement process should be included into projects that have already been scoped and are beyond the CDR phase. Districts need to ensure that various environmental reporting and public participation requirements are being followed and met. It is important to remember that when developing a corridor management vision for a corridor that has a project planned prior to the final record of decision of an environmental report, various project alternatives cannot be precluded from consideration.

## SECTION FOUR: CORRIDOR MANAGEMENT STRATEGIES AND TOOLS

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Once a corridor management vision has been developed, the next step is to have a set of strategies designed to achieve the desired vision.

Identify and select **STRATEGIES** and **TOOLS**  
to achieve the **CORRIDOR MANAGEMENT**  
**VISION**

See “Corridor Management Process Flow Chart”

These strategies will require various tools to be employed by a variety of WisDOT work units. In addition, some strategies may also include working with local governments to employ various tools that are only available to local governments.

Over the years, many of the tools WisDOT has available to manage corridors have been underutilized, oversubscribed or inconsistently used. More recently, WisDOT’s administrative rule for reviewing all land divisions along STHs, Trans 233, has recently been suspended by the Wisconsin State Legislature, greatly limiting the use of this tool. There is some sense of urgency to address these issues to ensure a more consistent approach to corridor management in the future. Considering the diminishing level of funds available to “correct” a lack of corridor management with a construction project, it is more important than ever to follow this type of visioning process to prioritize corridors for management purposes and develop consistent strategies that should be implemented over years and cross over business area boundaries.

**Appendix C** includes a Corridor Management Tools Matrix, which is designed as a “toolbox” for corridor management tools. Some of the tools will have multiple applications, but all serve the purpose of managing a highway corridor in some capacity. This matrix also serves to identify which tools require additional policy guidance to improve consistent use of these tools statewide.

### CORRIDOR PLANS

One tool that is often discussed in the Districts and the Department is corridor plans. However, various definitions are used in the discussion. To clarify, corridor plans have been defined by the corridor management Workgroup in this context:

#### **Corridor Plan**

A corridor plan is one type of **corridor management tool**. A **corridor plan** is a detailed, specific plan that has a policy document and maps. It addresses and considers a higher level of detail for both land use and transportation issues within a carefully organized, collaborative planning process between the local governments, regional agencies, and WisDOT. A corridor plan includes significant public input within the corridor planning process, to help resolve existing transportation related issues or potential inconsistencies with existing or planned transportation improvements.

A corridor plan can be used to create, revise or enhance a **corridor management vision** for a particular corridor such as preservation of the STH corridor to delay or prevent capacity expansion. A corridor plan outlines specific **corridor management strategies and tools** for local governments and WisDOT to use to better manage existing and future development adjacent to or impacting a corridor. *(See Appendix B for corridor related definitions.)*

Corridor planning offers a process to achieving a coordinated and long-term approach between WisDOT and local governments especially on access and development issues along a corridor in order to achieve a certain vision. There are many reasons WisDOT may decide to engage in developing a specific corridor plan along a particular corridor segment. Corridor plans are often conducted in preparation for a pending improvement project, during the development of various alternatives for a project or for purposes of managing that corridor to preserve its current function.

After a corridor plan is developed, one challenge is ensuring its implementation both within WisDOT and through local government actions. Having appropriate staff follow-up and long-term coordination on land use issues are critical to implementation success. A memorandum of agreement with the local governments along the corridor is critically necessary in order to successfully implement the plan. Local governments need to also incorporate the corridor plan within their local comprehensive plans, which provides a key layer of implementation of the corridor plan.

The Workgroup recommends additional WisDOT policies and guidance is developed for corridor planning that build upon existing practice and guidance that is available. This needed guidance should include the conditions when a corridor plan should be conducted and the basic components of a corridor planning process and implementation.

## **EXAMPLE SCENARIOS**

This section outlines several real examples of corridors, where various corridor management tools were applied by Districts, consistent with the approach outlined in this Report. These examples utilize many tools in ways the group would consider to be best practices; however it should be clarified that these scenarios do not use an overall corridor management approach as proposed in this report.

### **OVERALL GOAL:**

**PRESERVE FUNCTION OF A STH FACILITY AS IT IS CURRENTLY WITH EXISTING FACILITY/ALIGNMENT/LANES.**

#### **1. STH 47 corridor from STH 29 to USH 41 (District 3)**

**Problem/Purpose:** STH 47 serves the Fox Valley and provides a connection between STH 29 and USH 41. Current traffic volumes range from 13,000 near USH 41 to 8,800 in Black Creek and 6,200 near STH 29. STH 47 is mostly two-

lane. Increasing development in the Fox Valley region is contributing to traffic growth on STH 47.

Communities adjacent to STH 47 are developing comprehensive plans. They've asked for direction on STH 47 access and for guidance in planning a local street system that fits the STH 47 access plan.

STH 47 is a low priority for expansion improvements.

**Goal:** The district's goal is to provide good mobility on STH 47 and to preserve STH 47 in its current footprint for as long as possible.

**Strategies/Tools/Techniques:** Work with locals to develop an access plan for STH 47. This includes identifying a local street system that will fit the access plan. Implement larger setbacks to accommodate future state highway improvements that may be needed. Outagamie County will help implement larger setbacks. Land development and driveway permitting decisions will be made consistent with the corridor plan recommendations.

**Deliverable:** The deliverable is a corridor plan showing ultimate access characteristics, larger setbacks, land use and local street network.

**Implementation/Issues:** Adding more lanes is an obvious solution to most people traveling congested highways. The biggest challenge is telling the public that this is a low priority for expansion. Also challenging is convincing the public we can improve and preserve mobility by developing an access plan and developing a sound, local transportation and land use plan consistent with mobility and accessibility goals for STH 47.

## **2. USH 14 corridor from STH 35 to CTH "M". (District 5)**

**Problem/Purpose:** The primary "commuter-shed" on USH 14 out of La Crosse extends easterly to Viroqua, with the most intensive commuting activity occurring within 15 miles to La Crosse. Traffic volumes in the early 1990's ranged from 8,000 per day just east of STH 35, to roughly 4,500 per day through the Village of Coon Valley (15 miles from La Crosse).

One of the few areas near La Crosse suitable for dense development is "Mormon Coulee", the narrow valley USH 14 runs through southeast of La Crosse. Local plans showed the future of the coulee as mainly residential development. Steep, undevelopable bluffs frame the coulee, making it impractical for parallel roadways to be constructed to serve growth. USH 14 climbs out of the coulee 5 miles from STH 35. The bluff it ascends is a natural barrier to intensive development served by City utilities for many years. Traffic volumes drop to about 6,000 per day at the base of the bluff at the intersection with CTH "M".

**Goals:** Take steps to allow the existing roadway in Mormon Coulee to serve for as many years as possible before expansion to 4-lanes, and to allow new development in the Coulee to occur "around" the footprint of the future 4-lane facility.

**Strategies/Tools/Techniques:** The District applied 84.25 statutory access controls on the longer corridor (all the way to Viroqua). The District "mapped the 4-lane corridor" required in Mormon Coulee via a two-year public planning process to determine the location and impacts of a future 4-lane roadway.

**Deliverable:** The standard process to establish 84.25 controls was used. An environmental document (EA) was finalized to complete the NEPA process for a four-lane facility, and a preliminary real estate plat was developed of the lands and interests required to construct the 4-lane roadway.

**Implementation/Issues:** The City of La Crosse, and Townships of Shelby and Greenfield were all heavily involved in the planning process. The new route was never "officially mapped", but all three units of government continue to work well with District 5 to protect the future 4-lane corridor from incompatible developments. The Department has made several advance acquisitions of parcels from willing sellers and developers over the last 6-8 years. WisDOT will likely own much of the right of way by 2015 via purchase from willing sellers.

District 5 timed the EA to be conducted a few years in advance of replacing a failing bridge in the coulee. The bridge was replaced in 1998 on a location that is compatible with the 4-lane future corridor, and a new pavement surface was applied throughout the entire coulee. The 4-lane project will most likely be implemented in about 2015 when the pavement is degraded, assuming finances are available.

**OVERALL GOAL:**

**PROTECTING PROJECT INVESTMENT ON A STH FACILITY EXPANSION AND UPGRADE. (RETROFIT)**

**1. STH 35 from River Falls To Hudson (STH 65 To I-94), St. Croix County (District 6)**

**Problem/Purpose:** The STH 35 corridor connects the city of River Falls to I-94 and to the city of Hudson; it is also identified as a Corridors 2020 connector route.

A Corridor Plan and EIS were completed in the 1980's, which detailed the expansion footprint along with a future interchange at High Ridge/Hanley Road near the north end of this section of highway in what is now the southeast corner of the city of Hudson. The corridor was expanded under a Majors project in the late 1990's to freeway/expressway design standards but was not declared as such under §84.295.

Almost immediately after completion of this reconstruction project, explosive residential, commercial and industrial growth began to take place along the corridor near Hudson and River Falls. Traffic Impact Analyses for these new developments predicted the side road traffic generation would exceed the 20-year forecasts for the expansion project. The District feared the capacity expansion investment by the Department would be lost due to this accelerated rate of growth in, and between, the cities of River Falls and Hudson. To provide further protection for the traffic

carrying capacity of this corridor, the decision was made to apply §84.295 to the highway for future conversion to an expressway or freeway.

**Goals:** Declare the STH 35 corridor a Expressway/Freeway under § 84.295, which would;

- Protect the investment in the recently completed expansion of STH 35.
- Maintain the safety and mobility of STH 35.
- Identify the locations and footprints of any future interchanges and grade separations.
- Provide a mechanism as expressed in §84.295 to purchase property identified in the footprints

**Tools:** The tools used in this effort included:

- Public Involvement to determine the location of the interchanges and grade separations.
- §84.295 authority.
- Environmental Assessment.
- Official mapping under §84.295 for the identified footprint locations.

**Deliverables:** Deliverables included:

- Completed Environmental Assessment (EA)
- Official Maps of the identified interchange and grade separation footprints.
- Preliminary plats for the interchanges and grade separations.
- A Finding, Determination and Order (FD&O) for §84.295 for the corridor.

**Implementation/Issues:** Due to the rapid progression of developments in the southeast section of the city of Hudson (anticipated build-out in seven to ten years), the Department, with cost sharing from the city of Hudson, accelerated the programming of construction of a proposed interchange and grade separation near the north end of this section of STH 35.

The Department also embarked on a study of the remaining STH 35 corridor south of there to determine future locations for interchanges and grade separations along with other access closures. After traffic analysis showed the need for one interchange and one grade separation, the town of Troy insisted on the need for a half diamond interchange to and from the north where the Department was proposing the grade separation. The DOT's traffic analysis did not show a need for additional access. The Town hired a consultant to prove the need for the half diamond. The consultant was unable to justify the need for an additional interchange, and the location is planned as an overhead grade separation.

After consultation with Central Office Bureau of Equity and Environmental Services, the level of environmental documentation was initially determined to be an Environmental Report (ER). However, the ER was upgraded to an EA when the District anticipated the probable need to purchase right-of-way in the near future and questioned the ability to purchase R-O-W with just an ER.

## **2. STH 29 (USH 45 in Wittenberg in Shawano Co. to CTH J in Brown Co.) (District 3)**

**Problem/Purpose:** STH 29, extending from I-94 west of Chippewa Falls to USH 41 in Green Bay, is the most heavily traveled east-west route across central or northern Wisconsin. It connects 3 major urban centers: Eau Claire MSA (pop. 148,337); Wausau MSA (pop. 125,834); and Green Bay MSA (pop. 226,778). STH 29 traffic volume within the preservation plan limits ranges from a low of 7,700 4-5 miles east of Wittenberg to about 22,000 a couple miles east of the Shawano/Brown County line.

This section of STH 29 is a four-lane expressway. Even though access was purchased using s.84.09, roughly 250 accesses remain. This is a concern as land use patterns change and development continues to occur. When traffic needs warrant, as in the case of USH 41 from Green Bay to Milwaukee, STH 29 may be converted to a limited access freeway. A long-range corridor plan for STH 29 enables the district to address many issues including:

- Inquiries from communities about potential long-range transportation improvements.
- Access requests from developers.
- WisDOT's involvement with the Stockbridge Munsee working to create better access from STH 29 to the Mohican North Star Casino as stated in the Gaming Compact.
- American Transmission Company's potential proposal of using the STH 29 corridor for future utilities.
- Short-term and long-term transportation improvements.

Decisions are difficult to reach without knowing future STH 29 corridor characteristics. The decision making process will be easier for many regarding transportation, land development and infrastructure improvements.

**Goals:** The district's goal is to improve and maintain good mobility on STH 29 by planning for a freeway convertible highway.

**Strategies/Tools/Techniques:** Work with local communities to develop a long-range corridor plan for STH 29. The district will complete environmental documentation and develop a plat showing long-range transportation improvements. The district will use §84.295 to preserve right-of-way needed for and long-term transportation improvements.

**Deliverable:** The deliverable is a corridor plan showing a freeway convertible STH 29 including locations of future interchanges and local streets.

**Implementation/Issues:** The largest anticipated issues include:

- Addressing approximately 250 accesses
- Addressing property owners concerns regarding the §84.295 process.



**OVERALL GOAL:**

**PREPARATION FOR A PROJECT OR PLANNING FOR A PROJECT FOOTPRINT (LONG TERM)**

**1. STH 164/CTH J (I 94 to Ackerville in Waukesha County) 19 mile corridor (District 2)**

**Problem/Purpose:** This highway was recently transferred to the state in accordance with the MPO's long range jurisdictional plan. The southern section was severely congested with 14,000 ADT on a two rural facility. The congestion was caused by abutting development, which included business parks, subdivisions and large retail stores along with commuter traffic from northern urban areas. This route is on the National Highway System and is the primary northern route out of the city of Waukesha. The MPO's long range plan indicated the traffic would continue to grow along the entire corridor and recommended four lanes for the entire corridor.

**Goal:** District 2 decided to initiate the development of a plan to reconstruct the southern section and to identify right of way needs for the remaining corridor to allow local government and WisDOT to preserve the corridor. The district also wanted to maintain route continuity.

**Strategies/Tools/Techniques:** Since the southern section was programmed for construction, it was decided to develop an environmental document for the entire corridor. With the magnitude of impacts, and EIS was prepared. During the entire process, public involvement was an enormous effort. Over 75 meetings were held, ranging from one on one meeting with property owners to town hall meetings in the high school gym. There was a well-organized opposition group, which followed our every action. District 2 stressed a main point—land use decisions have a direct affect on transportation needs.

**Deliverable:** A full EIS was developed for the entire corridor. Right of way plats and construction plans were developed for the southern section and functional plans with right of way needs were developed for the remainder of the corridor. The functional plans were sent to all abutting local governments.

**Implementation/Issues:** The southern section is currently under construction and should be completed by 2006. Because of District outreach efforts, local governments are looking a land use issues and are preparing local neighbor plans along with access management. Some local governments are requiring land dedication abutting STH 164 as a condition of land divisions or conditional use permits. One issue that was difficult to get across during the public involvement process was the fact the entire 19 miles was not going to be constructed next year.

## **2. STH 23 in Green Lake and Fond du Lac counties from Green Lake to Ripon. (District 4)**

**Problem/Purpose:** It is anticipated that this five-mile section of two-lane roadway with deteriorating pavement conditions will be reconstructed between 2010-12. The study began with identifying existing deficiencies and then focused on future improvements that would address the highways capacity and safety needs over the next 30 years. Five alternatives were developed ranging from simple resurfacing to a four-lane divided facility. A review of crash data for the study segment reveals that this route has a current overall crash rate of 94 crashes/million vehicle miles, which is less than the statewide average of 104 crashes/million vehicle miles. For a 6-year period between 1994 and 1999 indicates that 44% of all crashes occurred during the Friday-Saturday weekend period and that 74% occurred at intersections. The current average daily traffic volumes in the study area are slightly below 10,000 vehicles per day (vpd). Additionally, area tourism accounts for an ADT volume, which is approximately 55% higher on Fridays, and Saturdays in the peak summer months. It is anticipated that with the potential for new development in the area, projected ADT volumes for a projected design year of 2027 will be 16,500 vpd. Traffic volumes in 2027 are expected to more than double this threshold volume and year 2027 recreational peak traffic volumes to more than triple this threshold. Within this five-mile section, there are currently 41 driveway access locations 11 of which are currently serving commercial needs.

**Goal:** The goals of the project were to improve the deteriorated pavement thus improving the ride of the corridor, improve safety due to above thresholds crash history – particularly fatal & serious crashes at the intersections, address peaking traffic volumes particularly in the summer tourist season, replace the Puchyan River bridge at the end of its service life, and address increased development pressure & existing access/safety problems.

**Strategies/Tools/Techniques:** WisDOT performed a Highway Needs and Alternatives Assessment for State Trunk Highway 23 (STH 23) from the west junction of County Trunk Highway A/North Street in Green Lake to Arcade Glen/South Koro Roads in Ripon. The five alternatives considered have different levels of rehabilitation or reconstruction. The recommended alternative consists of reconstruction with spot improvements for 2-lanes of traffic. The intersection of STH 23 and CTH A is improved. Acceleration and deceleration lanes are lengthened along with additions and improvements of bypass lanes and driveways. Some roads and driveways are closed and redirected. The bridge crossing the Puchyan River will be widened and redecked. The construction cost for this alternative is estimated at \$7.0 million dollars.

**Deliverable(s):** The recommended alternative is a rural two lane highway with passing lanes, access controls, improved intersections and future nodal type land use development in selected areas which can handle increased traffic volumes.

**Implementation / Issues:** The District has programmed an improvement project in year 2010, which utilizes the preferred alternative from our rural STH 23

Corridor study. The corridor study provided these concepts. The town of Brooklyn has adopted this concept in their recently approved Comprehensive Plan.

### **3. USH 63 (I-94 TO STH 64) in St. Croix County (District 6)**

**Problem/Purpose:** This corridor connects I-94, a Corridors 2020 backbone route, to STH 64, a Corridors 2020 connector route. The corridor bisects the Village of Baldwin. A parallel arterial route for the village has been considered since the 1980's.

The corridor serves as an important transportation link from the Twin Cities, Southern Minnesota and Iowa to Western and Northern Wisconsin. Residential housing has also expanded rapidly in recent years; with many of the new residents making daily commutes to the Twin Cities area. The combination of through traffic, commuter traffic, and recreational traffic has placed high demands on the existing state highway system.

Existing Central Office traffic forecasts, using 2% growth, do not predict mobility problems. However, actual growth rates since 1975 reflect a 6%- 7% traffic growth. Recent DOA forecasts predict the Village of Baldwin will grow by 103% over the next 20 years and St. Croix County will grow by 72%, further validating an expectation that growth rates will continue at the 6-7% rate for many years to come. Analysis that factors in the current and historical growth rates clearly indicates a need for capacity expansion within the next 20 years.

Based on the state and regional importance of this route and the high traffic demands being placed upon it, District 6 expects this portion of USH 63 will become a Connections 2030 connector route.

#### **Goals**

- To maintain the safety and mobility of USH 63.
- To determine the ultimate location of USH 63 in the vicinity of the village of Baldwin.
- To employ as much of the existing corridor as possible.
- To define the future footprint.
- To cooperate with the County and local governments to identify, locate, and protect the future footprint.

**Strategies/Tools/Techniques:** The tools used for this effort include the following:

- October 27, 1997, from I-94 to USH 12 West (except CBD) declared a Controlled Access Highway under §84.25.
- From 2000 to 2001 a corridor screening report was completed.
- November 6, 2003, from USH 12 West to USH 8 declared a Controlled Access Highway under §84.25.

- From 2001 to 2003 a Corridor Plan and Environmental Assessment of the Corridor Plan completed.
- In early 2003 Community Impact Assessment (CIA) was used to determine location of USH 63 in the vicinity of the village of Baldwin.
- April 2004 BEES and FHWA give the draft Environmental Assessment a FONSI.
- June 2004 Preliminary Engineering on preferred alternative will begin.
- June 2004 Coordination with local governments will begin.

**Deliverables:** The deliverables for this effort include:

- Corridor Screening Report
- Corridor Plan with Completed Environmental Assessment
- Define future location and footprint
- Local “Official Mapping” of the footprint
- MOA’s with local governments over future of USH 63

**Implementation / Issues:** Local officials do not always represent public opinion. The preferred alternative selected was not what the local officials originally endorsed. After several public information meetings, it became clear the local officials preferred alternative was different than the general public’s preferred alternative. To resolve this difference, a local advisory committee was formed. The District conducted a Community Impact Analysis on the 2 most popular alternatives. After this analysis most of the local officials changed their positions, and a consensus was reached on the preferred alternative.

The local governments have been good about including WisDOT when properties have redeveloped along the corridor.

Completing an environmental document as part of the project was very important factor. Most citizens and local officials would not have supported protecting the footprint without some assurances that the road could actually be built in the proposed location.

We were challenged many times on the “cloud” placed over residences identified for relocation. After explaining what a property owner could or could not do in the footprint, most property owners concerns went away.

#### **4. STH 21 (Omro to USH 41) in Winnebago County: (District 3)**

**Problem/Purpose:** STH 21 is an east-west Corridors 2020 highway connecting I-94 to to USH 41. STH 21 serves the Oshkosh urbanized area. Year 2000 traffic volumes range from 13,500 in the city of Omro, 12,500 between Omro and the city of Oshkosh and 17, 800 just east of USH 41 in Oshkosh.

STH 21 is four lanes from Leonard’s Point Road to USH 41. STH 21 is two lanes from Omro to Leonard’s Point Road however, the District acquired right-of-way for four lanes.

Due to their proximity to the Oshkosh urbanized area and USH 41, the towns of Omro and Algoma are experiencing increased residential and commercial development.

Access is controlled using \$84.09 (purchased access control). However, STH 21 is experiencing congestion and traffic delays at intersections. Transportation improvements are needed to improve operations on STH 21.

Communities adjacent to STH 21 are developing comprehensive plans. Winnebago County is developing a plan showing the location of a north-south arterial located between Omro and Oshkosh.

The city of Omro officially mapped a bypass on the north side of the city.

**Goals:** The district's goal is to improve and maintain good mobility on STH 21 by planning for a freeway convertible highway.

**Strategies/Tools/Techniques:** Work with local communities and their comprehensive planning process to develop a long-range corridor plan for STH 21. STH 21 corridor recommendations will be included in local comprehensive plans. Knowing how STH 21 may look in the future will enable communities to make sound zoning and land development decisions.

A comprehensive corridor plan will enable the district to make informed decisions regarding access and short-term and long-term transportation improvements. The district will use \$84.295 to preserve right-of-way needed for and long-term transportation improvements.

**Deliverable:** The deliverable is a corridor plan showing a freeway convertible STH 21 including locations of future interchanges and local streets.

**Implementation/Issues:** The largest issue is balancing state mobility needs and local accessibility expectations. This project involves many stakeholders and requires a comprehensive analysis of access and local street network alternatives using relevant state and local evaluation criteria.

## **ADDITIONAL COMMENTS**

The only way a corridor management vision can be realized is to share the information within each WisDOT business area, obtain some level of public acceptance and local government cooperation and further review its implementation to ensure progress. Where limits exist, working to improve coordination efforts internally and externally is critical.

It is important for Districts to discuss corridors and future plans while not enhancing or contributing to unrealistic appetites from local levels for an improvement project. Districts need to proactively channel efforts to avoid this potential leap. WisDOT needs to collectively become more realistic in how a particular corridor fits into the state system of priorities in order for each District to guide these corridor management activities.

## SECTION FIVE: WORKGROUP RECOMMENDATIONS

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As the Department becomes more challenged for staff resources and transportation funds, the opportunities to create efficiencies through improved coordination and consistent approach statewide to managing corridors are critically important to take advantage of and move forward. We need to think strategically across all levels of the modal divisions to accomplish this difficult task.

**Recommendation 1: WisDOT should adopt a corridor management approach.**

Corridor management should be woven into all aspects of WisDOT programs – planning, construction and maintenance, and financial considerations for all three. This report recommends a process that offers a coordinated approach to shape future work within the Department. The corridor management themes and basic process proposed by the Workgroup must be embraced from all business areas of the modal divisions, with a willingness from management to evolve our processes to better manage highway corridors for the long-term.

**Recommendation 2: WisDOT should expand our use of existing program funding streams to finance corridor management activities.** Spending improvement dollars and staff resources on corridor management activities are not only allowable, it is a sound, long-term investment strategy for the current and future transportation needs of the State of Wisconsin. Separate prioritization should be developed for each of the three main funding programs (Majors, Backbone, 3R). Appendix D includes a proposal that advances this recommendation, which was developed by Gary Brunner, SPO-District 5, Division of Transportation Districts.

**Recommendation 3: All potential major projects should have a corridor plan developed.**

Because major projects represent substantial state investments, there is an increased need to ensure a consistent approach is developed for short, medium and long-term management of the corridor. A corridor plan is a tool that offers this ability to collectively plan for this future. It also can provide a project to be properly scoped and estimated. A corridor plan for other corridors should be considered within the context of a corridor management vision. There is a varying degree of complexity and level of effort in corridor plans. Additional policies are needed to provide clear direction on development of a corridor plan including when appropriate and what it should constitute. For example, when a project is planned, communities are divided on issues, or issues in general are more complex can all be valid reasons for developing a corridor plan that implement a particular vision.

**The updates of the State Long Range Transportation Plan and the State Access Management Plan should incorporate corridor management within its proposed policies for the Department.** The update of the State Long Range Transportation Plan, Connections 2030, should establish the validity of the corridor management approach as well as integrate the Workgroup's proposal within its policy recommendations. The State Access Management Plan (SAMP) should provide guidance of how it supports a corridor management approach.

The corridor management approach is intended as the “umbrella” process under which decisions are made for a specific corridor. Because a corridor management approach is intended to cover the realm of the activities that a corridor needs to be properly managed, from planning to project development to maintenance and operations, state level plans should provide a system wide, long term view of corridors, especially to provide consistency across Districts.

**Recommendation 5: The Workgroup should be reconstituted as a corridor management implementation workgroup.** This group would be charged with the further development of recommended policies and actions needed implement the corridor management approach, philosophy and process. Financial implications should also be included in this Workgroup’s charge.

Efforts of the group should include (but not be limited to) recommendations for policies and necessary processes to:

- Implementing this process.
- Improve the connection between Corridor Management Priorities and resource allocations.
- Set criteria for requiring corridor plans for potential major projects and other projects.
- Examine public involvement issues and potential improvements to our current processes.
- Apply various corridor management tools, including how and when.

**Recommendation 6: Additional efforts are needed to improve Department policies on public involvement.**

The Workgroup recognizes the importance of coordination and cooperation with local governments and the public to effectively manage a corridor, including the project development process; however, there are differing opinions on how, when and to what extent public involvement activities should be conducted to implement a corridor management approach. From numerous discussions within the Workgroup, it was clear that various Districts have different approaches to involving the public on plans, projects and related corridor management issues. The Workgroup recognized that initially, the Department can develop a draft, general vision, but that without the efforts and coordination of the local governments, property owners and general agreement from the public, there is a significant limitation to managing corridors for the long term. This report briefly outlines the level of public involvement that developing a corridor management vision needs. (See page 22.)

**Recommendation 7: Additional policy and guidance are needed to improve application of various corridor management tools.**

The Report includes discussion on tools and strategies for corridor management and prepared a matrix of the corridor management tools; however, there is insufficient guidance on how and when these tools should be applied. Additional department policies and legal guidance are needed in this area. Additional department policies and legal guidance are needed to improve the application of these tools.

## CONCLUSION

The Workgroup emphasizes the need to continue evolving these concepts, themes, processes and implementation techniques. We do not envision this proposal as an end state, rather a chance to continue progressing. Several key recommendations will require further effort within the Department in order to achieve corridor management implementation.



## **APPENDICES**

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**APPENDIX A: CORRIDOR MANAGEMENT WORKGROUP'S MISSION AND MEMBERSHIP**

**APPENDIX B: CORRIDOR RELATED TERMS**

**APPENDIX C: CORRIDOR TOOLS MATRIX**

**APPENDIX D: A PROPOSAL FOR A CONSISTENT APPROACH TO CORRIDOR MANAGEMENT WITHIN WISDOT (Authored by Gary Brunner, DTD-District 5 SPO Chief)**

## **APPENDIX A: WORKGROUP MISSION AND MEMBERSHIP**

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### **Mission**

WisDOT has a wide variety of tools to address long-term corridor preservation and planning. The Workgroup should conduct its work with the goal achieving a general level of consistency throughout the Department.

The Mission of the Workgroup includes the following:

1. To outline the elements of the corridor management process.
2. To determine the appropriate timing and application of corridor management related tools.
3. To discuss the tools/processes that should be improved.

The Workgroup's goal is about improving our efficiency and effectiveness in planning and preservation for both the short and long term viability of the state highway system.

### **Workgroup Membership** (in alphabetical order)

Sandy Beaupre, BOP, DTIM

Gary Brunner, District 5 SPO (co-chair)

Jenny Cavanaugh, District 3, Planning

Dave Cipra, BSHP, DTIM

Adam Clayton, District 1, Planning

Roger Cupps, District 2, Planning

Doug Dalton, BOP, DTIM

Barb Feeney, District 1, Planning

Matt Halada, District 4, Planning

Jim Koenig, District 6, Planning

Tanace Matthiesen, BEES, DTID (co-chair)

Anne Monks, Central office, DTD

Aileen Switzer, District 2, Planning

Kassandra Walbrun, BEES, DTID

## **APPENDIX B: CORRIDOR RELATED TERMS**

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### **Corridor**

A transportation corridor is a broad geographical band that follows a general directional flow connecting major sources of trips that may contain a number of streets, highways, rail, pedestrian, bicycle facilities and routes and transit route alignments. A highway corridor is a geographical band that follows a general directional flow of a state highway alignment. The highway corridor generally includes the highway's access points, but also can include the parallel state and local roads, service roads, and facilities for other transportation modes such as rail, pedestrian, transit, etc., which influence the highway mobility, capacity and safety issues of that corridor.

The corridor management area is identified as part of the corridor management vision and will include various management considerations for both statewide and regional purposes.

### **Corridor Management**

A coordinated approach to transportation planning that considers the transportation system from a corridor perspective and includes various strategies and tools to achieve a certain corridor management vision, rather than simply from a facility perspective.

The following are key characteristics of the corridor management approach:

- ❖ It considers the facility in its context – i.e., surrounding land uses, access management, need for or condition of adjacent facilities, etc.
- ❖ Is long term in perspective (20 – 30 years).
- ❖ Is multi-modal.
- ❖ Is aimed at preserving as well as improving the functionality of the facility.
- ❖ Includes intergovernmental and community coordination and collaboration.
- ❖ It is incorporated and supported within the state's long range transportation plans.

### **Statewide Significant Corridors**

These corridors, identified in the state's long-range transportation plan, provide a conceptual framework for setting statewide priorities. Statewide significant corridors offer a broad view of transportation in Wisconsin and may include key components for their enhancement, management, protection, and/or special needs.

### **Priority Management Corridors**

These corridors are identified by Districts have a priority for corridor management purposes and require additional pro-active efforts to identify strategies for improvements, preservation or other needs. The priority management corridors are identified through a quantitative and qualitative screening process that provides consistent approach across the state and serve to aid Districts in developing a vision for managing a particular corridor.

### **Corridor Management Vision**

A Corridor Management Vision is a long term view of a highway corridor, developed by WisDOT with community involvement in its creation and revision. The vision considers the role that the corridor has in the statewide transportation network, as well as the needs of the communities and property owners along the corridor. The process to develop this vision is led by the District office depending on the identified corridor management priorities and staff resources. Many issues are considered, such as, safety, mobility, access issues, development pressure, facility conditions/needs, community issues/plans), in the development of a corridor management vision.

### Corridor Management Strategies

Specific approaches and application of tools to manage a corridor to maintain and achieve the corridor management vision, where identified. Strategies include the use of **Corridor Management Tools** (see below definition), the way a vision is achieved, or timing of various projects and tools. It is a description of the way tools are applied in a particular corridor. Strategies will include the use of a number of tools, projects, and actions.

*STH 1001*



*EXAMPLE:* A strategy for STH 1001, from termini a to z, is to develop a corridor plan if and when a STH capacity is warranted along STH 1001 from termini a to k.

*EXAMPLE:* A strategy for STH 1001 from termini a to k, corridor is to apply s. 84.25 (a corridor management tool) to a particular segment to prepare for a future capacity expansion project (which is part of the corridor management vision).

### Corridor Management Tools

Corridor management tools include a variety of statutory, administrative rules, and other policies, which are available for the management of a corridor. WisDOT may not control some tools. Tools are applied to achieve a specific corridor management vision. Examples of corridor management tools include access control under 84.25, local zoning ordinances and comprehensive plans, Trans 233 review, purchase of access control, corridor plans, etc.

The same tools can be applied differently depending on the **corridor management vision** and the set of **corridor management strategies** that have been developed.

### Corridor Plan

A corridor plan is one type of **corridor management tool**. A **corridor plan** is a detailed, specific plan that has a policy document and maps. It addresses and considers a higher level of detail for both land use and transportation issues within a carefully organized, collaborative planning process between the local governments, regional agencies and WisDOT. A corridor plan includes significant public input within the corridor planning process, to help resolve existing transportation related issues or potential inconsistencies with existing or planned transportation improvements.

A corridor plan can be used to create, revise or enhance a **corridor management vision** for a particular corridor such as preservation of the STH corridor to delay or prevent capacity expansion. A corridor plan outlines specific **corridor management strategies and tools** for local governments and WisDOT to use to better manage existing and future development adjacent to or impacting a corridor.

## APPENDIX C: CORRIDOR MANAGEMENT TOOLS AND ACTIVITIES

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This matrix was developed by the Corridor Management Workgroup to focus on what tools and activities are available, whether useful or limited, to managing state highway corridors. Some tools are administrative rules or statutory tools, while others are planning activities. Additional work is needed to further develop the policies to best apply these tools to implement a corridor management approach. In the creation of this tools matrix, several existing resources were used including the Facilities Development Manual and the Highway Access Management Reference Guide. Included in the matrix are plans, statutes and administrative rules, project development process tools, and local tools. Below is a discussion of two key inputs into corridor management—State and Regional Long Range Transportation Plans. While these plans provide an important framework for further developing a corridor management vision for a specific corridor, they are not considered tools and activities that Districts can directly utilize to achieve a corridor management vision.

### **State and Metropolitan Planning Organization (MPO) Long Range Transportation Plans**

State and MPO Plans offer an important framework for developing a corridor management vision. These state/regional level plans offer a high level, statewide view; the tools/activities included in the matrix offer a more directly associated corridor level set of tools that can be applied and used to manage a corridor.

The **State Long Range Transportation Plans**, including the multimodal plan and various modal plans, provide a broad vision as well as strategies and policies for all the state's transportation modes including highways, rails, air, water, pedestrian, bicycle, transit and local roads for a 30 year planning horizon. The State Long Range Transportation Plans contain long-range policy goals that directly impact all divisions. Districts feed this information into its day-to-day work efforts and form a foundation for Districts to identify priority management corridors. The State Long Range Transportation Plans identify system wide priority parameters that are considered iterative, which identify state priorities and agency goals for investment. Districts can use the state level analysis and priority identification to link day-to-day activities and program development.

The **State Access Management Plan (SAMP)**, which is part of the State Long Range Transportation Plan, describes the type of STH access that should be allowed on a particular corridor to achieve a particular access management goal. The SAMP provides an initial overall access management goal, leading to strategies to achieve the goal. The SAMP is an overall state level plan that cannot be used to resolve all decision-making processes for granting access, however helps to keep a long-range goal in mind, consistent with the state long range plan, for the day to day access decision-making processes.

**Metropolitan Planning Organizations (MPOs) Plans** are federally required long-range multimodal transportation plans for metropolitan areas of the state. These plans are required to be updated every 3 years in air quality non-attainment areas and every 5 years in attainment areas. MPOs develop and update regional land use and transportation plans, which guide the Transportation Improvement Programs (TIPs). A TIP is prepared at least every two years that lists all the local transportation projects eligible for federal funding in the metropolitan planning areas. WisDOT, including central office and Districts work with MPOs to ensure a coordinated approach to local, regional and state level transportation planning is occurring. A cooperative approach and an agreement of local partners are essential for WisDOT to implement a project in any metropolitan area.

Statutes, DOT Admin. Rules, Other Activities	Description Of the Tool or Activity	How To Apply the Tool to a Corridor	Tool Benefits	Tool Limitations	Timing of the Tool	Who initiates the tool	Comments
<b>Plans</b>							
Access Management Plans FDM 7-35-10	FDM defines these as plans prepared jointly with local governments for existing and future access points along STHs. Intergovernmental agreements are developed between local governments and DOT.	An access management plan focuses directly on access issues such as median breaks, combining access points, local road connections, etc. The goal of a plan is to preserve the functionality of the highway while providing access to property.	A proactive approach. A relatively inexpensive way to improve safety and improve roadway functionality or prevent degradation of traffic flow functions in the future.	This is a tool from an earlier time, before WisDOT was addressing the importance of land use. Access management can be a controversial topic.	Can be done any time there is a need to protect or improve highway functionality	WisDOT District Staff.	In most cases, a corridor plan, which considers access management issues, may be a more appropriate tool.
Corridor Plans	These plans developed cooperatively with local governments and address transportation environmental, land use and access management issues within a planning process. A corridor plan includes significant public input to develop strategies to manage the highway and growth along it. The main goal of a corridor plan is preserve the functionality of the highway, and develop a common vision that will be followed in managing the corridor.	Should be used to address land use and transportation issues along a STH, particularly where conditions are changing. These plans can be developed prior to, & during a project process. In emerging trouble spots, a corridor plan can be used to prevent the need for untimely projects. Local governments can use the plan to guide development.	Considers impact of local land use and local road system decisions on state transportation system. Develops the basis for a long-term relationship with local units of government, which could lead to better decision-making by all parties.	Time consuming to prepare because of the need to engage local involvement. Many recommended actions in a corridor plan are under the purview of local government.	Can be developed before, during or after a majors study. Can be used in any location where WisDOT is trying to protect highway functionality. Can be used to postpone or avoid the need to add travel lanes.	Usually WisDOT, although local units of government could do so also.	There are multiple benefits for conducting corridor plans, however WisDOT needs to develop a more standardized set of policies to guide the general effort.

Statutes, DOT Admin. Rules, Other Activities	Description Of the Tool or Activity	How To Apply the Tool to a Corridor	Tool Benefits	Tool Limitations	Timing of the Tool	Who initiates the tool	Comments
<b>Statutes and Administrative Rules</b>							
§84.02(3)  Ref: FDM 4-5-1	Allows for changes in the state trunk system.	Identify and map location of change.	Public record. Preserves land needed for changes. Locals officially map.		After identifying ROW needed for change.	State DOT – DTD Planning	Requires environmental documentation.
§84.09 Acquisition of land and interests	Statute used to purchase ROW for highway purposes.  Also used to purchase access rights on properties.	Used with a highway improvement project.	Is usually done in conjunction with an improvement project, so process is easy to implement. Best used where “spot” locations of access restrictions are needed, or where 84.25 are not allowed.	Establishes a value to access, which other processes do not.	This tool is predominantly used when improvement projects are being designed.	Tool is initialed by project development staff and access coordinators	property owner now has a right of access they did not have before. (Koenig)
§84.09(3)(b) Acquisition of land and interests  FDM 4-5-15	This section authorizes WisDOT to request that the County Highway Committee (or other local unit of government pursuant to 84.09 (3m)) acquire all or certain parts of lands for the purposes of WisDOT highways	Would be applied when WisDOT ROW acquisition is required.	Can be useful to get local buy in when implementing an access control strategy. Best used for helping a community with a local cost share.	Difficulties are in the fact that you need local support for them to implement any restrictions that may be controversial.	WisDOT could use tool whenever there is need for ROW associated with improvement projects.	Project development staff and access coordinators	Tool is generally not useful, and should not be used unless agreed upon by both parties, and when mutual benefit is obtained for WisDOT and local government. A good way to partner with a municipality when creating a corridor plan.
§84.095 Transportation Project Plats  FDM 12-15-1	File or record a plat for a transportation project. Used in conjunction with §84.09 access purchases.	Develop plat showing project improvements. Can be used to purchase access under §84.09.	Public record. Detailed information. Purchase of ROW.		Project development process.	State DOT – DTD Planning and Project Development.	Plat development environmental documentation.
§84.25 Controlled-access highways	Statutes provide DOT the authority to control access administratively without purchasing access rights.	Best used when there is no improvement project in the area. This is a stand-alone procedure, which can be applied as	Requires no compensation if access removals or consolidations are necessary.	Highway must meet statutory requirements for project to be implemented.	Must be done as an access control project, but has wide range of uses	WisDOT planning staff in conjunction with access coordinator	Extremely valuable for corridor management and planning.

Statutes, DOT Admin. Rules, Other Activities	Description Of the Tool or Activity	How To Apply the Tool to a Corridor	Tool Benefits	Tool Limitations	Timing of the Tool	Who initiates the tool	Comments
		appropriate on qualifying state highways. (Rural)	Proactive tool for restricting access.	Statutory limit on number of miles that can be controlled. Limited to rural miles.	for timing purposes.	initiates 84.25 projects.	
§84.295 Freeways & Expressway	Statutes provide DOT the authority to designate a freeway/expressway by mapping an ultimate construction of a highway to accommodate 4 lanes or more.	Statutory provision to establish a corridor as a freeway/expressway.	Statutory process that does not give access rights.	Best if used with another process that defines locations of access points. Roadway must be an expressway/free way to be eligible.	Best done with EIS process, or to upgrade existing multilane highways that are not currently designated.	Tools is usually established by planning staff during EIS/EA type study, and in conjunction with access coordinator	Good process for dealing with future access requests, but not defined enough to effectively deal with existing accesses. Best used with another process to deal with existing circumstances.
§86.07 Digging in hwys.	<ul style="list-style-type: none"> <li>Statutes prohibit persons to make any alteration/ excavation, etc. to any highway or bridge without permit from DOT.</li> <li>Allows DOT to revoke permits.</li> </ul>	<p>These statutes provide WisDOT the authority to use the permit process for driveways and other alterations to the STH.</p> <p>SEE TRANS 231</p>	Allow us to review driveway permits under Trans 231.	Cannot be used in lieu of Trans 233.	Reactive tool—at the time a property owner is requesting a driveway or alteration.	Private property owner.	
§86.073 Review of Denial of Permit	<ul style="list-style-type: none"> <li>Upon written request of an applicant, Department can review a District's denial within 30 days.</li> <li>Allows DOT to confirm or modify District decision.</li> </ul>	<p>This section of the statutes allows a private party to appeal a driveway permit denial.</p> <p>SEE TRANS 231</p>	Not a tool that DOT uses. Benefit to private landowners.	May require DOT to grant permit as requested.	DOT reacts to an applicant's request for a review of denial of permit.	Private property owner or applicant.	
§86.32 Connecting	Designates STHs for which municipality is	Department designates in cooperation with local	Gives maintenance responsibilities to	Not a corridor preservation tool	As state highway	WisDOT – DTD Planning	Not really a corridor preservation tool



Statutes, DOT Admin. Rules, Other Activities	Description Of the Tool or Activity	How To Apply the Tool to a Corridor	Tool Benefits	Tool Limitations	Timing of the Tool	Who initiates the tool	Comments
Connecting Highways  FDM 4-5-5	responsible for maintenance and operations.  Municipalities are reimbursed for costs incurred.	cooperation with local jurisdictions.	responsibilities to municipalities better capable of providing urban maintenance services.	preservation tool unless local jurisdiction utilizes corridor preservation strategies and tools.	highway design becomes urbanized.	DTD Planning	preservation tool.
Chapter 236, Wis. Stats. Platting lands and recording and vacating plats	Statutes purpose is to regulate subdivisions of land, provide for orderly layout, provide for proper ingress/egress, etc. (Does not apply to highway plats in 84.095.) Plats must comply with agency rules including DOT rules for STHs.	DOT reviews occur as land divisions occur. Time limits for DOT review apply.	Can remove and limit currently permitted access points as property is developed	Very reactionary. Only useful when WisDOT is presented with imminent land division.	When a land division submission comes into office	WisDOT Land Division Review Staff	Very useful when a plan exists, so access can be minimized, but mostly a reactionary process.
TRANS 231 Permits for Driveways and Alterations in STHs.  Authority in §86.07. Right to appeal under §86.073	DOT reviews and grants permits for the installation, modification, or removal of driveways that provide access to the state highway system.	<ul style="list-style-type: none"> <li>Specific engineering standards apply for construction of driveways including spacing, widths, location, etc.</li> <li>When access to adjacent lands is necessary or desired and adequate access control can be maintained through the permitting process</li> <li>When all other above-listed means of access control are not available</li> </ul>	Good tool to limit and consolidate access onto the STH system. Works best with an established access or land use plan.	Reactive to requests.	As requests are submitted.  When access request or change in use of access point is submitted to District	Driveway permitters with access coordinator and Trans 233 reviewer	Very reactionary process, with limited usefulness unless a plan for access or land use is in place.
TRANS 233 Division of Land Abutting a STH or Connecting	DOT reviews subdivisions abutting and contiguous to STH	Applicable only when a new subdivision only occurs along a STH.	Access and setback restrictions are applied to developing lands at	Labor intensive – utilizes staff and financial resources to	Reactive tool. Whenever a subdivision is proposed	Trans 233 coordinator in conjunction with access	The Wisconsin State Legislature has suspended the majority of Trans 233.

Statutes, DOT Admin. Rules, Other Activities	Description Of the Tool or Activity	How To Apply the Tool to a Corridor	Tool Benefits	Tool Limitations	Timing of the Tool	Who initiates the tool	Comments
Highway (Authority through §86.07 and 236.13) Under suspension –			the time of a land division, when access control is most critical. <ul style="list-style-type: none"> <li>Control and conditions relative to each parcel.</li> <li>May reduce the number of future requests for additional access points.</li> </ul>	implement.	abutting a STH	coordination	With long-range plans in place, such as a corridor plan, these reviews are less controversial because public and local government input was sought prior to the request.
Transportation / Traffic Impact Analyses (TIAs)  <u>Authority under Trans 231</u>  FDM reference 7-35-10	A TIA is an engineering study that compares before and after traffic conditions on a road network due to a proposed land use change. Developer pays all costs of making the necessary STH changes including the engineering, real estate and construction.	<ul style="list-style-type: none"> <li>A TIA should be considered whenever traffic generated by the proposed development is expected to exceed 100 vehicles in the peak hour.</li> <li>Greater consideration should be given for requiring a TIA on an already congested or unsafe highway.</li> </ul>	Helps review impacts of development on STH system, and requires developer to support the costs associated with their developments impacts on the STH system	Reactionary process that does not anticipate development. Only useful with larger developments (in excess of TIA guidelines for traffic counts)	Usually requested when an access request or land division is submitted to WisDOT	Traffic and planning in conjunction with access coordinator, driveway permitters, and Trans 233 reviewer	TIA Workgroup is developing a user manual to assist in the development of TIAs. Useful, but only reactionary. Can be good when used to mitigate effects of development, and has limited use when used in conjunction with an access or corridor plan.

### Project Development Process

Transportation Studies, Needs Assessments, Pre-EISs, etc.	Typically data gathering studies that identify the existing and future corridor needs and also look at known environmental issues related to a series of alternatives with little public involvement	Data gathered is used to identify existing and future issues for the corridor, and to develop the appropriate type of improvement to address those needs.	Corridor needs are documented prior to choosing the action to resolve the issues.	Limited public involvement. Internal use	Prior to developing corridor plan.	WisDOT-Planning	A standardized process to develop these studies should be implemented to assure a level of consistency from year to year and from District to District.
Six Year Programming	Each District schedules and	Improvements identified in a corridor concept or plan	Gives a schedule and estimate for	Funding	After corridor concept or	WisDOT-Programming	A standardized process (scoping team) to

Statutes, DOT Admin. Rules, Other Activities	Description Of the Tool or Activity	How To Apply the Tool to a Corridor	Tool Benefits	Tool Limitations	Timing of the Tool	Who initiates the tool	Comments
TRANS 209	estimates construction improvements over a six-year timeline from all funding sources.	can be programmed as stand-alone project or in association with other work.	recommended improvements		plan is complete.		develop this program should be implemented to assure a level of consistency from year to year and from District to District (Theme 6).
Concept Definition Report (CDR)  <i>FDM 3-5-1</i>	CDR's purpose is to document the agreed scope of improvement, determined by a scoping team consisting of District Project Development ( <b>PDS</b> ), System Planning and Operations ( <b>SPO</b> ), and Technical Services ( <b>TSS</b> ) staff. The team balances the needs with funding and operational characteristics.	CDR is required prior to advancing a highway improvement into the Six Year Program.  This tool should be used to share information with PD related to the corridor such as access issues, whether the community has a comprehensive plan, community issues, or environmental concerns.	Interface between planning and other sections.	Does not guarantee the scope of the improvement does not change.	After corridor concept or plan is complete, plan elements can be included in the scope of improvements.	WisDOT-programming	A standardized process to develop the CDR should be implemented to assure a level of consistency from year to year and from District to District.
Majors Projects <i>TRANS 210</i> <i>§84.013</i>	A "Major highway project" has a special funding source and requires legislature approval. An improvement is considered a Major Project if it meets the following criteria. Total cost of more than \$5 million and/or any of the following: <ul style="list-style-type: none"> <li>Constructing a new highway 2.5 miles+</li> <li>Adding 1+ lanes 5 miles + in length to existing highway</li> <li>Improving to freeway standards</li> </ul>	Transportation Projects Commission (TPC) evaluates proposed major projects and recommends to the Governor and Legislature for statutory enumeration or study.  After approval from the TPC, WisDOT can begin a detailed corridor planning process and other corridor management tools such as official mapping the preferred alternatives.  High-level environmental documentation may also start after approval by the	Allows high-level corridor planning to take place in determining the preferred alternatives.  Controls funding of expansion projects and compares expansion projects on a statewide basis.	Political  Restricted to large projects.	After screening list and alpha studies are completed.	WisDOT or Legislature	Due to scope creep and expanding budgets of recent Major Projects a more detailed scoping and estimating process prior to enumeration is needed for these projects.

Statutes, DOT Admin. Rules, Other Activities	Description Of the Tool or Activity	How To Apply the Tool to a Corridor	Tool Benefits	Tool Limitations	Timing of the Tool	Who initiates the tool	Comments
	10 miles+ of existing divided highway having 2+ lanes in either direction.	TPC (EIS).					
Ch Trans 400, Wisconsin Environmental Policy Act, Procedures For Department Actions	An Administrative Rule developed to guide the Department in meeting the NEPA and WEPA requirements.	Trans 400.07 and 400.08 give guidance for the type of environmental document that should be prepared.	Determines build ability of preferred alternative, develops and documents the plans commitments and decisions	Can only do an EIS with TPC approval.	During corridor plan development.	Lead Government Agency For Transportation projects on STHs-- WisDOT	Federal guidelines <a href="#">Highways</a> suggest all environmental documents start as an Environmental Assessment (EA). Provides valuable information in the decision making process. If right of way is to be purchased or protected the affects of the improvements must be quantified to determine if mitigation will be needed or is even an option.
Environmental Reporting Process (NEPA and WEPA)	A federally defined process for identifying impacts to both natural and urban environments.	Provides valuable information in the decision making process. If right of way is to be purchased or protected the affects of the improvements must be quantified to determine if mitigation will be needed or is even an option.	Determines build ability of preferred alternative, develops and documents the plans commitments and decisions	Can only do an EIS with TPC approval.	During corridor plan development.	Lead Government Agency For Transportation projects on STHs-- WisDOT	Federal guidelines suggest all environmental documents start as an Environmental Assessment (EA).
<b>Local Tools</b>							
Local Comprehensive Plans  §66.1001	All local governments must develop a comprehensive plan by year 2010. After 2010, land use decisions (i.e. zoning,	Opportunity for DOT to work with communities during plan development to achieve consistency with DOT goals/objectives and plans.	Opportunity to achieve consistency between local and state goals. Proactive.	Not all communities involve DOT staff. Plans can change.	Anytime. Sooner the better.	Municipality. Sometimes we encourage them.	Other local plans include Master plans, county development plans and neighborhood plans; however, these are not mandated.

Statutes, DOT Admin. Rules, Other Activities	Description Of the Tool or Activity	How To Apply the Tool to a Corridor	Tool Benefits	Tool Limitations	Timing of the Tool	Who initiates the tool	Comments
	subdivision approvals, etc.) must be consistent with the adopted plan.						
Regional Comprehensive Plans  §66.1001 and §66.0309	Although advisory, these plans are used to guide other plans and policies such as MPO plans, sewer service extensions, etc.	WisDOT staff are encouraged to participate in regional planning efforts, as transportation is a key issue. This is an opportunity to raise issues that affect WisDOT's corridor management goals.	Gives the opportunity for considering the impact of land use decisions on transportation systems. Can build partnerships between communities and agencies.	Quality of planning process depends on abilities of those leading it. WisDOT's participation is dependent upon local's willingness to include the District office, and availability of District staff.	Are generally prepared every 10 years. Can be updated at anytime	RPCs	
Zoning  §59.69 (counties) §60.61 (towns) §62.23(7) (cities and villages)	Local governments have the statutory ability to regulate (zone) property for certain uses through ordinances. County and towns are special cases; whereas some towns are under County zoning, some towns have their own zoning, and some towns have no zoning.	Local governments are to send notice of zoning proposals to WisDOT if it is abutting STHs (as landowners). Zoning decisions can affect WisDOT's ability to achieve corridor management goals. Local zoning proposals can often coincide with access reviews and/or driveway permit requests.	WisDOT can provide local governments with information or viewpoints that can improve decision-making and help prevent negative impacts on transportation system.	Depends upon local consideration of DOT viewpoint. Workload can be an issue.	On-going	WisDOT may initiate comments, or local governments may solicit WisDOT input.	Often local zoning decisions along STHs are connected to WisDOT through the driveway permitting process.
Local Subdivision / Land Divisions	Local governments have the ability to regulate through ordinances the manner in which private property is developed and divided.	Counties, towns, cities and villages review all land divisions including CSMs and subdivisions.	WisDOT can provide local governments with information that can improve decision-making and help prevent negative impacts on transportation system.	Tool is adopted at a local level. WisDOT participation depends on whether the subdivision is along a STH or whether a community engages	On-going	WisDOT reviews subdivisions under Trans 233 along/abutting STHs.	Often reviews are connected to zoning changes. WisDOT reviews subdivisions through Trans 233 along STHs and issues driveway permits through Trans 233.

Statutes, DOT Admin. Rules, Other Activities	Description Of the Tool or Activity	How To Apply the Tool to a Corridor	Tool Benefits	Tool Limitations	Timing of the Tool	Who initiates the tool	Comments
				WisDOT.			
Official Maps §62.23(6)	Local governments have statutory authority to prepare an official map showing features such as streets, highways, waterways, schools, parks and other public land uses. No permit may be issued to construct or enlarge any building within the limits of any street, highway, waterway, railroad right-of-way, public transit facility or parkway, if shown on the map.	Local governments recognized that development could preempt viable and locally preferred alternatives for highway projects such as bypasses. Local governments choose to map these locally preferred alternative routes to improve planning coordination for development and potential future transportation projects.	Can help protect lands from development where a road improvement is expected. Helps communities plan for infrastructure needs, and make appropriate land use decisions.	Requires initiation and adoption by the local community.	WisDOT should ask communities to map ROW after plans for a road improvement have been finalized.	Local government. WisDOT may request they take action to map ROW.	WisDOT must be careful not to promote an alternative during this process if WisDOT has not conducted a full environmental process.

## **APPENDIX D:**

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### **A Proposal for a Consistent Approach to Corridor Management Within WisDOT**

Written by  
Gary Brunner, SPO-Chief, District 5  
Division of Transportation Districts

#### **Introduction**

The term “corridor management” conjures up visions of a wide variety of activities. Activities can range from managing access via the permitting process, to implementing actual improvement projects.

The permitting process includes Driveway permits, T231, and T233 activities. The process is initiated by forces external to the department, when someone applies for a permit. Permits stand alone from other corridor management activities because they are reactive measures, and they apply only to spots where others are initiating changes. The philosophies under which we issue permits should be stable for long periods of time. There is no direct correlation between the Department’s ability to construct (or reconstruct) highway facilities, and the manner in which we issue permits.

Using improvement projects as a corridor management tool is effective to the degree that the Department is able to fund projects. Some effort is expended on virtually every improvement project to “clean up” access density and spacing issues, control encroachments, etc. The appropriate tools to be used to manage corridors as part of improvement projects (pursuing access covenants or using 84.09 (land acquisition) powers, as examples) are related to the kind of project being implemented. The level of financial need for improvement projects is typically higher than the available dollars, which results in a need to prioritize how those limited dollars are utilized. Statewide committees manage project investments through the Majors and Backbone (BB) Rehab Programs. 3R (resurfacing, reconditioning, and reconstruction) investments are controlled by Districts, albeit with oversight being provided by the Program Effectiveness Measure to insure dollars are utilized on the “right” projects as determined by the current “theme 6” investment philosophy.

There is a range of corridor management that exist between the two extremes outlined above. Some of the names currently given to those efforts include:

- Corridor studies
- Corridor Plans
- Needs Analysis
- Alpha Studies
- Corridor Visioning
- Access Management Plans/Projects.

There are very few rules or guidelines in place to direct Districts in when and how to engage in corridor management activities. Most “highway planning” efforts are currently driven by WisDOT, and are related to determining the scope of/planning for future STH improvements for reconstruction/capacity expansion purposes. These efforts both feed the improvement programming process, as well as provide a “blueprint for the future” for the area served by that roadway. An increasing number of efforts are starting to focus on preserving corridors in their existing form. And recently, some planning studies are being driven by local units of government seeking to prepare their legislatively required comprehensive planning documents.

Districts can be as aggressive/passive as they choose to be in undertaking corridor management work. Activities are determined by individual District preferences, by the number of people or dollar resources available to the District, and by past practices. This inconsistent approach to highway planning work is increasingly problematic for the Department due to a lack of a statewide perspective on priorities. Districts continue to identify individual District needs and plan for those needs in very different ways and at very different times in a corridor's life-cycle, which increases local and/or legislative appetite and pressure for expansion projects. There is no assurance that our planning processes are allowing the Department to address the "worst routes first" from a statewide perspective. The problem is largest in the Majors and BB Rehab programs.

The Corridor Management Workgroup, which is comprised of staff from all three modal divisions, has developed consistent definitions for corridor related terms, developed a process for identifying priority management corridors, developed a process for developing a corridor management vision for those identified priority corridors, and identified corridor management tools and strategies and proposed a consistent use of these tools. The corridor management approach is intended to move the Department in the direction of more proactively managing the state highway system within the limits of resources provided, rather than reactively responding to safety and congestion problems by developing improvement projects. The workgroup is expected to complete its work by the end of May with a technical report.

This proposal captures what has been developed through the Corridor Management Workgroup, while further proposing links to funding allocations. This proposed **Consistent Approach to Corridor Management** calls for rules to guide the corridor planning process by establishing a linkage between certain types of corridor planning work to statewide rankings of "priority management corridors" and to funding program type (Majors, BB, 3R).

### **A Consistent Approach to Corridor Management**

This proposal for controls in the manner in which WisDOT performs various corridor related activities should not be viewed as a wholesale condemnation of past practices. There have been many successful planning efforts across the entire state. One can argue anecdotally that 95% of the effort expended in this endeavor over the last 20 years has been appropriate when viewed from the standpoint of each individual corridor that underwent scrutiny and analysis. In spite of the success stories associated with past efforts, each District has largely "done their own thing" for purposes of addressing problems within their own geographic area. This has resulted in sometimes haphazard investments in system improvement when viewed from a statewide system perspective. To a lesser extent it has also resulted in undue pressure for projects that are politically popular or easy to implement, to the detriment of needs that might be more critical, but are more controversial and difficult to implement.

The concept of constraining the type of investments WisDOT makes on state highways is still relatively new to the modal divisions. The most relevant example is the "needs based SHR allocation approach" that has powered District 3R funding for the past few years. The needs based allocation effort was grounded in the premise that the right thing to do on a project is a function of what the FDM standards say, as well as a function of what our projected funding stream will allow. We now accept that we cannot improve portions of the system to full standards if doing so is detrimental to the overall health of the entire system.

The proposal for a **Consistent Approach to Corridor Management** is a continuation of that same approach. The kind of corridor management activities we perform should be a function of statewide funding levels within our improvement programs, a function of statewide corridor priority, and a function of public and legislative buy-in on the number, location, and scope of activities we perform. This last point needs to be stressed. The penalty for WisDOT implementing inconsistent highway planning activities, and working too far out in front of our ability to fund projects, is potentially huge. WisDOT should control the rate and pace of planning work we perform to preclude forces that press upon scarce resources without priority in a



statewide basis. Furthermore, the shift to a *corridor management* focus (versus an *improvement* focus) may, over time, help to constrain need, as certain congestion and crash problem can be delayed or even avoided.

This proposal for a **Consistent Approach to Corridor Management** and related planning activities:

- Utilizes a standardized starting point for determining need and funding program eligibility.
- Diverges to distinctly different investment philosophies for Majors, Backbone, and 3R programs.
- Attempts to match corridor planning work with actual program funding.
- Builds on statewide System objectives as outlined in Corridors 2020, Connections 2030, State Access Management Plan (SAMP), and potentially other statewide plans in time.
- Attempts to maximize existing statutory and administrative rule authorities without jeopardizing them.

### **A Possible Starting Point – Corridor Management Analysis**

The first step in the process is to perform a statewide analysis of system performance. The Corridor Management Workgroup has developed a draft process for establishing priorities for corridor management purposes on a statewide basis. Through the Workgroup's proposal and at the Workgroup's request, the Bureau of State Highway Programs (BSHP) developed a draft initial rating methodology to establish a relative measure of corridor management "need" on each section of highway. The Meta-Manager based analysis uses both corporate data (AADT, crashes, Safety, functional classification, etc.), and data from external sources on regional growth (population projections, land conversion rates, etc.) to arrive at a composite "score" for each section of state jurisdiction highway. The Corridor Management Workgroup recognized that a score would not account for distinctions between management on one corridor versus another, so a second stage was needed. In Stage Two, Districts will review the Stage One analysis and assess the accuracy of scores based upon local knowledge and regional distinctions. Districts will also be involved in making determinations of NEPA-compatible "logical termini" to break the initial analysis into logical sections of roadway to determine funding program eligibility and potential project termini. This will account for Stage Two of the analysis.

It is critical that the Corridor Management analysis is conducted on a statewide basis, involving all state trunk highways in all program areas. Doing the analysis with a common rating methodology behind it will allow the Department to establish a more accurate feel for the level of "priority" needs in each program area. These priorities may assist in setting the most appropriate relative funding levels for our program areas.

Note that the Corridor Management analysis does NOT focus on pavement or bridge conditions. Pavement and bridge conditions are large drivers of the funding allocation and programming process, but projects without "capacity" and "local growth" factors elevating their priority become rather simple "rehabilitation" projects that don't generally result in the need for significant corridor planning work.

The end result of the Corridor Management analysis is a roughly prioritized listing of likely "expansion projects" that will comprise future Majors, BB, and 3R program cycles. The process diverges at this point – policy control on where and how to make investments in Corridor Management will be made by the appropriate group charged with managing each program area and development of policy related to it. Each group will end up having their own specialized decision making processes to build on the initial Corridor Management analysis performed. Pavement and bridge conditions will be much larger driving forces for these individual groups. These groups are:

- Majors Program Peer Review Group (or some logical offshoot)
- Backbone Rehab Program Review Group (or some logical offshoot)
- District Planning/Programming Units (using statewide guidance developed by DTD, DTID, and DTIM)

## **Majors Program Peer Review Group**

There are three distinct categories of “majors projects.”

- Projects enumerated for construction.
- Project enumerated for study.
- Projects eligible for the Majors Program by virtue of statutory criteria on capacity expansion length or expressway to freeway conversion length.

The first two categories of projects are set via involvement with the Transportation Projects Commission (TPC) and legislative processes. The third category of projects emerges from the Corridor Management analysis outlined above. When the analysis process is complete, and we have determined that a system need is properly solved by a project that is legally required to be a Major project, all potential corridor planning actions that could be used on that section of roadway should be undertaken only with the buy-in and permission of the Majors Program Peer Review (or similar) Group. This may be the only method of controlling the rate of projects and costs that enter into the subsequent “enumerated for study” and “enumerated for construction” categories.

This proposal is the next logical step to take for Majors planning and implementation. WisDOT has always done a fair job of trying to run the construction portion of the Majors program on a first-in, first-out basis. We have made good strides towards limiting candidates to only those that meet certain system objectives or exceed certain capacity thresholds. This next step acknowledges that expansion needs will outrun our ability to pay for projects – It ensures that only the highest priority projects enter the funnel and include serious public involvement work completed on them. (A good example of this philosophy was the BSHP-run “alpha study” process conducted 4-5 years ago). WisDOT should still be informing the Legislature of the chasm between “needs” and funds, but until that gap is addressed, we should limit enumerations that don’t mirror priority need by not promoting these potential projects.

The Majors Peer Review Group should establish, as policy, the kinds of tools that should be applied to projects in all three Majors categories. These criteria could possibly read something like this:

**Projects enumerated for construction:** These projects WILL be expanded and/or relocated and/or converted within a 6-10 year time period (at present). Their construction isn’t in doubt, so any and all efforts expended to preserve the lands necessary for implementation is effort well-spent. The immediate focus for all projects is to identify lands and access patterns required via the strongest statutory means possible. Attempts should be made to secure those lands as close to construction as is feasible so as not to unduly harm local tax base too far in advance of project implementation. Appropriate strategies to use could include:

- Complete the NEPA process through a Record of Decision (ROD) as soon as possible.
- Apply 84.295 to all Majors projects intended to ultimately function as freeways or expressways as determined by official C2020, C2030, or SAMP documents.
- Develop a corridor plan to address access, land use and long term strategies with local governments. Within this process:
  - Encourage local units of government to include in their comprehensive plans the protection of corridors.
  - Encourage local units of government to “officially map” routes whose construction is more than 4 years into the future.
  - Encourage local units of government to protect corridors via less formal zoning and land use protection mechanisms than “official mapping”.

**All projects enumerated for study:** Projects that are enumerated for study are, for all practical purposes, between 10-15 years away from construction through the Majors program (if at all). These projects are the

logical candidates for construction enumeration, but the Department cannot assume they will, in fact, be enumerated. Caution needs to be exercised in getting too far in front of the legislative decision-making process. Caution also needs to be exercised to avoid building local appetites for projects so as to invite political motivation for enumeration outside of the routine TPC process. Appropriate strategies could include:

- Complete the NEPA process through DEIS, or as far through the process as dictated by the Majors Program Peer Review Group (MPPRG). MPPRG should determine the exact level of work that should be done on “candidates for study” so as not to overstep the intent of current or pending legislation regarding Majors candidate project development. One thought is to continue with NEPA through FEIS prior to proceeding to construction enumeration hearings so cost estimates are more accurate.
- DO NOT apply an 84.295 designation until a project which involves expansion to four lanes is officially enumerated for construction. Doing so can invite the need for hardship acquisitions for a substantial change in facility too far in advance of actual construction.
- An 84.295 designation CAN be made on expansion candidates (4 to 6 lanes) when expansion will likely occur within the median (ie, does not require the construction of new interchanges and frontage roads, hence, does not substantially change access patterns).
- An 84.295 designation CAN be made on routes that have sufficient mainline capacity but are not constructed to freeway standards with total access control.
- Work cooperatively with local governments to address corridor needs and land use issues including:
  - Developing a corridor plan that addresses joint issues of concern.
  - Encourage local units of government to “officially map” corridors assuming the NEPA process can be completed (see first bullet in this section above).
  - Encourage local units of government to protect corridors via comprehensive planning, zoning and other land use protection mechanisms.

**All projects legally eligible for Majors designation:** Projects that are eligible for the Majors program via length or conversion criteria will not, in theory occur for 15-20+ years. It may not be reasonable to complete NEPA documents and apply the strongest statutory tool (84.295) available to the Department on these projects. Doing so places a 20+ year cloud of doubt on property ownership and utility within the immediate project corridor, and creates pressure for construction enumeration and implementation in a timeframe that we either cannot afford, or potentially displaces some other needier route. While it may be inappropriate to use Majors funds to begin any study on these routes, it is probably not inappropriate to use SHR dollars to do so. Some level of visioning and needs analysis work to determine what the future corridor would look or operate like in 15-30 years is strongly advised. Appropriate strategies could include:

- These projects receive a high priority for “Corridor Visioning” activities as identified by the Corridor Management Workgroup’s proposal. Districts would conduct the corridor visioning process developed by the Corridor Management Workgroup, with the appropriate level of involvement necessary with the local units of government to obtain buy-in on the future of the route.
- Perform additional “needs analysis” on corridors with established visions to attempt to identify the probable extent of future project impacts so as not to leave a cloud on a larger area of land than is necessary.
- The order in which “visioning” and “needs analysis” are performed should reflect system designations, as well as when needs will justify capacity expansion. Higher needs, closer on our horizon demand more immediate attention.
- Work cooperatively with local governments to address corridor needs and land use issues including:
  - Developing a corridor plan that addresses joint issues of concern.
  - Encourage the development of MOU’s with the local units of government to help protect the highway corridor to achieve the agreed upon vision and/or needs identified.

- Encourage the development and adoption of local comprehensive plans or “smart growth plans” to compliment the agreed upon vision or needs identified.
- Encourage local units of government to protect corridors via zoning and other land use protection mechanisms such as official mapping.

Many of the strategies that emerge from the study process in the **legally eligible for Majors designation** category will need to have dual purposes and will likely be difficult to achieve. The immediate concern is to implement strategies to help the existing route function as well as possible for the next 15-20 years. The secondary concern is to prepare the corridor for cost-effective expansion at some undetermined point in the future without unduly whetting public expectations for immediate expansion.

### **Backbone Rehab Program Review Group**

The roadway segments eligible to be funded with Backbone program dollars are pre-determined by system designations in a variety of WisDOT plan/system documents and programming guidelines. All improvements on these roadways are, in theory, to be funded through the Backbone program. The only exception to this is, capacity expansion work on the Backbone system is to be funded through the Majors Program. Projects that have both rehabilitation and expansion components are supposed to be funded by both Backbone and Majors funding sources. (These projects will be examined on a case-by-case basis to determine appropriate splits).

The Corridor Management analysis to determine corridor priorities is simply a “lead-off” effort to help identify the appropriate order in which corridor planning work should be attacked on the Backbone system. The Corridor Management analysis effort as proposed here falls short of being a useful tool for further decision-making in the Backbone program arena. An ongoing effort to determine the “best” way to utilize the funds set aside for improvement projects on the BB system is envisioned by late summer, 2004. The guidelines that drop out of that process to control improvement spending should be extended forward to the corridor planning process as well. Rules similar in nature to those suggested for the Majors program should be developed and managed by the Backbone Rehab Program Review Group.

One of the larger issues the Backbone Rehab Program Review Group must address is the degree to which capacity expansion needs on the BB system should be advanced to the Majors Program. There are a number of “spot expansion” efforts in the current Backbone Program pipeline that could potentially be classified as Majors projects. There are additional “unprogrammed” capacity needs on the Backbone system that are not in the pipeline for Backbone funding. These needs cannot continue to be ignored by the Backbone Rehab or the Majors programs. These needs are extremely large, especially when compared to the current funding stream available for the Backbone program.

Appropriate Corridor Management activities on the Backbone System should be identified for the following general categories of Backbone projects:

- **Pavement Preservation Projects** (normally won't require any corridor planning activities)
- **Bridge Rehab/Reconstruction Projects** (could involve advance corridor planning work if associated with interchanges in growing areas, or overpasses/underpasses for the local roadway system in growth areas, or on portions of BB system affected by the 3-lane bridge policy)
- **Interchange Expansion Projects** (due to safety/congestion).
- **Mainline Capacity Expansion Projects** (Non-majors eligible, short sections only).
- **Others, as determined by the Backbone group.**

### **District Planning/Programming Units – 3R System**

The 3R eligible roadways and projects include everything that is left over after Majors eligible projects and Backbone system projects are removed from the Corridor Management Analysis prioritization process. Districts have typically exercised total control over the manner in which corridor planning activities are performed on these roadways. Districts have a great deal of incentive to manage these kinds of investments well, as the financial impacts of non-action or improper action directly impact “their” allocated dollars for 3R. Similar rules and policies to guide corridor planning efforts on 3R eligible routes should be developed by DTD, DTID, and DTIM, for implementation by the District Planning/Programming units.

The workgroup should consider the types of projects that will typically benefit from having corridor planning work performed on them, and determine the appropriate corridor planning tools that should be applied.

Potential categories of project types and timeframes that should have appropriate strategies identified for them could consist of:

- Short capacity expansion projects within the 6-year program:
- Short capacity expansion projects thought to be 7-12 years away from construction:
- Short capacity expansion projects thought to be 13-20 years from construction:
- Non-capacity expansion Reconstruction Projects within the 6-year program:
- Non-capacity expansion Reconstruction projects thought to be 7-12 years from construction:
- Non-capacity expansion Reconstruction projects thought to be 13-20 years from construction:
- Routes that will likely NEVER compete for capacity expansion/reconstruction projects

The guidance and policies developed should provide a logical, consistent picture of which corridor management tools are the most appropriate ones to be used at various points in time in relation to when improvements will logically be made (or not made). Appropriate tools to be used could range from starting NEPA work earlier than 6 years prior to construction (along with local official mapping), to establishing 84.25 access controls on appropriate routes, to developing MOU’s with local units of government to help encourage healthy, sustainable development patterns. Application of these tools MUST be consistent from District to District to insure general acceptance of these “control” methods by the public and Legislature.

### **Future Steps**

The proposal outlined above revolves mainly around improvement program funding levels, prioritized roadway needs, and the timeframes that will likely be associated with significant construction changes occurring on state trunk routes. A second-generation addition to this concept is to relate staff resources and consultant budget resources to geographic needs to perform corridor management work. The DTD Resource Models would be the appropriate vehicle to capture the demand for this type of work so FTE and consultant budget allocations required to perform this work can be adequately captured by the Division. This step is a long-term goal – the Corridor Management approach both included in the Corridor Management Workgroup’s proposal and further implement through the proposal outlined above must be fully in place first.