Precedent Studies for Transitioning Highway Commercial Corridors from Rural to Urban Services and Land Uses

Prepared for Scott County

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I. Introduction

This report is the result of a research proposal submitted to the Community Growth Planning Assistance Center (CGPAC) by Scott County to assist the County in developing a framework for a county-wide planning effort for the conversion of State Highway 169 to a freeway with limited access and grade-separated intersections. Such an effort will span numerous jurisdictions, stakeholders, and existing plans.
In 2001, the Minnesota Department of Transportation (MnDOT) selected the State Highway 169 Corridor, a 73-mile section of the highway from the Interstate 494 beltway to Trunk Highway 60, for a corridor management plan. The State Highway 169 Corridor Management Plan united approximately 40 representatives from agencies and communities along the corridor. The Plan set forth a vision for the State Highway 169 Corridor\(^1\) that called on communities bordering the corridor to pursue the following land use and access management policies:

- County, city and township land use and transportation plans should support the long-term vision of the Trunk Highway (TH) 169 Corridor Management Plan (CMP).
- Local ordinances should prohibit direct property access to TH 169, making any existing access legal non-conforming. Existing access may continue as long as alternative access is not feasible; however, the existing use may not expand or reestablish and these accesses may be limited to right-in/right-out.
- Local ordinances should provide a review of site access (conformance with the TH 169 CMP) as conditional use permits are issued or modified.
- Local plans should guide development to identified growth areas. Rezoning of property should not precede the availability of the local road network.
- Acquisition of right-of-way should be completed as part of the rezoning or platting process.
- Temporary access may be granted to TH 169 if no other feasible alternative is available; these accesses will be removed/shifted to the local street network as it becomes available.
- Local plans should support conversion of access in freeway transition areas. Access will be converted to frontage/backage roads over time.
- Local policies should promote the adoption of official maps to protect right-of-way in areas that have a high risk for development.

Scott County wishes to create a study that considers these proposed policy changes as well as the needs of the different communities within the County and the existing plans. This report examines past and present corridor planning efforts that attempt to align multiple stakeholders in visioning and implementing an overall corridor transformation from rural to an urban level of service.

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1 In 2009 the U.S. Highway 169 Coalition was created to enhance safety, reduce congestion and maximize economic development along the U.S. Highway 169 interregional corridor. Its website is here: [http://www.us169corridorcoalition.com/](http://www.us169corridorcoalition.com/)
II. Precedent Studies

The following section outlines five past and current corridor initiatives focused on creating and implementing a vision for a transportation corridor with a future in flux. The majority of these initiatives involve a highway in transition into a limited-access freeway. The precedent studies address many of the following issues: future and interim land use, access management, economic development objectives, environmental sensitivity, and community input and engagement.

The analysis first rests on two Minnesota corridor initiatives (the Highway 52 Freeway Partnership and Vision 212) and two corridor initiatives from other states (the Super 70 Corridor in North Carolina and the Route 30 Plan in Westmoreland County, Pennsylvania). The following sections describe each corridor initiative, the background the structure of the planning effort, and a summary of elements Scott County should consider it conducting its own corridor planning effort.

Minnesota Corridor Initiatives

Highway 52 Freeway Partnership

Background

In 2000, MnDot completed the Highway 52 Corridor Study and Management Plan, outlining the steps needed to make State Highway 52 a freeway facility from Interstate 494 to Interstate 90 (Twin Cities to Rochester). Rochester is the only major city in Minnesota not connected by freeway, thus this 80-mile stretch is important to commerce between Rochester and the Twin Cities. MnDot’s study set the goal of the ability to maintain average speeds of 61-65 miles per hour along the Corridor. The study found that many of the communities in the corridor would have grade-separated interchanges to create a freeway facility necessary to achieve the desired speeds and continuity. The study estimated that 20 overpasses/interchanges, with total improvements costing $794 million, would be needed to attain the Corridor’s vision.
In 2002, the Highway 52 Freeway Partnership was formed as a collaboration between Dakota, Goodhue, and Olmsted Counties, in association with the MnDot. The Partnership is advocating for implementing the vision outlined by MnDot’s study. The Partnership cites safety as one of the prime motivations for upgrading the Corridor to a freeway. As of 2008, 27 miles of the corridor are now freeway and 4 interchanges and 5 overpasses/underpasses have been completed.²

**Structure**

The planning efforts to build interchanges and consider the potential impacts of a limited-access freeway were driven locally, with assistance from MnDot. This report focuses on the Highway 52 Oronoco to Pine Island Sub-Area Study. Similar interchange planning efforts have taken place (or are currently happening) in other places along the Corridor at Highway 52 in Rochester, Cannon Falls, and the Elk Run Interchange.

**Highway 52 Oronoco to Pine Island Sub-Area Study**

Goal: To implement the Highway 52 freeway vision between 85th Street in Oronoco Township and 500th Street in Pine Island by choosing new interchange locations and new or improved connecting roads.

The sub-area study is a partnership planning effort between the Minnesota Department of Transportation, the Rochester-Olmsted Council of Governments, Olmsted and Goodhue counties, the cities of Oronoco and Pine Island, and Roscoe, Pine Island, New Haven and Oronoco Townships. The team of professionals brought together for the *Highway 52 Oronoco to Pine Island Sub-Area Study* includes staff from the Rochester-Olmsted Council of Governments (ROCOG), the Minnesota Department of Transportation (Mn/DOT), Goodhue and Olmsted Counties, elected officials from the communities of Pine Island, Oronoco and their surrounding townships, state resource agencies such as the DNR, and SRF Consulting Group, Inc.

**Phase I:** In the first phase of system planning and issue scoping, a preferred concept alternative will be defined and a preliminary identification of social, economic, and environmental issues will be made.

**Phase II:** During the second study phase, engineering details such as interchange configuration and preliminary road design will occur, as well as final documentation of environmental issues and impacts through publication of an Environmental Assessment.

**Phase III:** The final study phase will identify strategies related to right-of-way preservation and corridor protection and will seek jurisdictional approval of the study outcome. At this point, the proposed interchanges and roadways will be officially mapped in order to preserve future rights-of-way.

**STUDY OBJECTIVES:**

1. To maintain the function of Highway 52 as a high-priority interregional corridor connecting I-90 and I-494 between the Rochester region and the Twin Cities metropolitan area.
2. To foster joint planning efforts between agencies and local units of government, build support for the Highway 52 vision, and consensus for a long-term, sub-area system plan.
3. To develop a transportation system plan consistent with major land uses and environmental goals and addressing major planning needs in the corridor study area.
4. To identify and assess transportation system alternatives, including the location of two full-access interchanges and a system of connecting routes ensuring local and regional access, balancing the need for regional mobility against the need for local access and economic development.
5. To establish future right-of-way needs, identify land use, zoning and subdivision strategies supporting implementation of the preferred plan, and to identify steps necessary to protect areas identified for future roadway infrastructure.

For Phase I, two tiers of technical analysis were used. In the first tier, five different
concepts were presented and judged by a set of evaluation criteria, including:

- Travel Time Impacts
- Traffic Impacts
- Jurisdictional Impacts
- Land Use Accessibility
- Construction Costs
- Preliminary Analysis of Social, Economic and Environmental Impacts

The recommendations resulting from the first-tier level of technical analysis were to focus on a three-interchange concept, refining it, based on public input and further technical analysis into a Preferred Study Alternative.

During the second-tier of analysis, the study area was broken into focus areas, allowing the identification of a preferred design alternative for each discrete geographic area. In so doing, a “mix and match” approach could be taken in developing a Preferred Study Alternative. The second-tier level of technical analysis focused on further examination of criteria initially analyzed during the first-tier level of analysis. No new criteria were added to the second-tier level of analysis; rather it consisted of a more in-depth examination of traffic impacts (including 2025 traffic forecasts and trip assignment), an identification of potential cultural and historic resource impacts, and a re-evaluation of Tier 1 criteria using a focus area approach. The following criteria were examined for each Focus Area Alternative:

- Traffic Impacts
- Jurisdictional Impacts
- Land Use Accessibility
- Construction Costs
- Residential Impacts
- Right-of-Way Acquisition
- Wetlands Impacts
- Floodplain Impacts
- Farmland Impacts
- Bicycle/Pedestrian Connectivity

After comments and public hearings, a final preferred alternative was developed. This included a finalized summary of the impacts, an official map, and a future land use map for the sub area. A resolution was drafted for the communities in the sub area to adopt and support the preferred alternative. An overlay district (called the TH 52 Corridor Overlay District) was developed to provide guidance for future and interim land use, access management, and preservation/protection/acquisition of right-of-way.

Public Involvement in Phase I:
- 47 public meetings on the corridor study or official map
- 24 meetings in the City of Pine Island
• 18 public open house meetings on study; 12 in Pine Island

**Vision 212**

**Background**

The newly completed section of Highway 212 travels from Eden Prairie to Chaska. Eventually, freeway will replace the old Highway 212, extending all the way to Norwood Young America, bringing unprecedented access from the Twin Cities metropolitan area.

By geographic definition, the 212 region encompasses most of Carver County, three school districts (112, 110 and 108), and includes the seven cities most impacted by the Highway 212 traffic shed:

• Chanhassen
• Chaska
• Carver
• Cologne
• Victoria
• Norwood Young America
• Waconia

![Figure 1. Map of the Highway 212 Region](image)

The purpose of Vision 212 is to create a roadmap for our region’s future—seizing on the many opportunities presented by the newly completed Highway 212. It is an effort to think broadly and boldly about our communities and to build on our many assets. It presents a compelling vision for the future and an encompassing concept
of regional economic and community development.

Goals
Five goals were identified as the most important to achieve the regional vision. These include:

1. Market the region to attract business, jobs and residents.
2. Develop a regional, life-cycle housing plan to ensure that all community members can live in a positive neighborhood environment.
3. Develop an intra-regional transit system.
4. Attract high quality education and enhance/blend e-12 education opportunities.
5. Create and implement a master park plan to link the parks and trails with the cities and natural resources throughout the region.

Structure
As a first step in the planning process, the Carver County Community Development Agency contracted with the Community Asset Development Group to conduct a high-level strategic planning effort that would unite community leaders around a common vision and identify the major goals and strategies to accomplish the vision.

Throughout the spring of 2009, the Community Asset Development Group (commissioned by the Southwest Metro Chamber of Commerce and the Carver County Development Agency) gathered 85 of the region’s community leaders for a series of eight educational and planning sessions. These leaders identified the region’s strengths, weaknesses, barriers, opportunities and threats. Together they envisioned the best future for the 212 Region and defined goals with associated action steps—The Vision 212 Plan for Progress.

From March through June 2009, the Community Asset Development Group facilitated a series of eight educational/planning sessions with Carver County’s private and public sector leaders. These educational sessions provided the participants with a common base of information about the growth and economic development trends in the region. Providing the education were local experts who shared their insights and analysis regarding relevant issues and trends in the following categories:

- Demographic and Development Trends
- Regional and Economic Development / Industry Clusters
- E-12 Education
- Housing
- Future Trends and Issues in Energy
- Commercial/Industrial Development
In the final two sessions the leaders identified the region’s strengths, weaknesses, barriers, threats and opportunities (SWOT Analysis). They also developed an overall vision and a series of goals and action steps.

Phase II is the implementation phase, which will be much more onerous and time intensive. It will also require a leadership structure or holds the bottom line responsibility for driving the plan, measuring progress and reporting results.

**National Corridor Initiatives**

*Super 70 Corridor (North Carolina)*

Background

Super 70 is a united effort to create positive change along Highway 70 (a 134-mile stretch in North Carolina), initially in Johnston, Wayne, Lenoir, Jones, Craven, and Carteret counties. By working together, this coalition of government agencies can attract the needed resources to realize a shared vision for the corridor.

Vision Statement: “To partner with local, regional, and state government agencies to effectively support initiatives enhancing safety, mobility and economic vitality along
the Highway 70 corridor through land use planning, transportation improvement, and economic development strategies. This partnership is represented by the US 70 Corridor Commission, whose vision is to transform US 70 into a freeway from Interstate 40 to the coast. Some of the transformation would take place along the existing roadway, while other sections would be built on new location. Local governments are actively involved to ensure compatibility with established communities and adopted plans."

In August 2006, representatives from US 70 communities met in county-by-county work sessions to create a clear vision for a freeway corridor. With transportation planners and engineers from Kimley-Horn and NCDOT, the participants mapped out potential interchange locations and connector roads that would both improve mobility on US 70 and maintain accessibility to local roads and businesses. A freeway master plan will be created as a result of these meetings and build upon the access management plan. The counties, cities, and towns along the corridor are in the process of gaining endorsements from their elected bodies for the access management plan and will work to do the same for the freeway master plan upon its completion.

Structure

The US 70 Corridor Commission, through a top-down approach, has prescribed specific policies and strategies to be utilized by communities along the US 70 Corridor. The Commission has produced a number of useful materials, model ordinances, and a memorandum of understanding to unify the communities to a common vision for the Corridor.

Short-term improvements recommended will improve regional mobility along the corridor and reserve the opportunity to build a freeway in the long-term planning horizon. Retrofitting US 70, though, will have a profound impact on properties located in close proximity to the corridor. Land use, building placement, design orientation, landscaping, sign size and placement, and site access requirements included will need to be re-written. Communities along the corridor will need to come together for implementing minimum criteria that protects the intended function of the freeway. More importantly, these communities will need to act in unison for adopting plans, policies, and minimum design criteria that move US 70 towards a freeway. In conjunction with the freeway plan, the local governments are also being asked to adopt a memorandum of understanding (MOU) [See Appendix] to address land control issues along the corridor. Its purpose is to serve the first step in unifying state and local jurisdictions for implementing regulatory tools and policy measures.

3 [http://www.super70corridor.com/]
The US 70 Corridor Commission created the *US 70 Access Management Handbook* for consideration of its members. The handbook is intended to be used as an educational and implementation tool when applying access management strategies to the US 70 corridor. It provides measures and minimum standards consistent with the previous planning process along the corridor, and sets reasonable expectations for protecting the integrity of the transportation corridor. Included in the handbook is the draft model access management overlay ordinance—a legal framework for cities and counties to administer and enforce consistent access management standards along the entire 134-mile corridor.

The US 70 Corridor Commission held a series of public work sessions in each member county between November 2007 and May 2008. The purpose of the work sessions was to engage the general public in a meaningful discussion about the US 70 Corridor and Commission activities. Participants got the opportunity to provide quality feedback regarding the problems, issues, and solutions associated with the corridor.

**Route 30 Plan (Westmoreland County, Pennsylvania)**

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In January 2006, the Smart Growth Partnership of Westmoreland County (SGPWC), Pennsylvania, along with State Senator Robert Regola, initiated a process with local planners and community stakeholders to flesh out a vision and plan for a 40-mile stretch of the historic “Lincoln Highway” that connects the small cities and growing suburbs east of Pittsburgh to the scenic Laurel Highlands. The Route 30 Master Plan is a comprehensive and integrated land use and transportation planning effort for the US Route 30 Corridor in Westmoreland County, Pennsylvania, that builds upon numerous transportation and land use planning efforts conducted over the past several years. When complete, the Plan will become a strategic blueprint for Westmoreland County’s economic growth corridor, utilizing sound transportation and land use planning approaches to develop cost-conscious investment priorities, intelligent strategies for congestion management and multi-municipal development regulations and design guidelines.

Known to many as the Lincoln Highway, the U.S. Route 30 corridor is central Westmoreland County's primary east-west highway. Its position as a transportation facility dates back to the French and Indian War and has played a nationally and regionally significant role in economic growth and westward expansion.

By leveraging key capital investments with intelligent transportation systems and sound land use practices, the U.S. Route 30 corridor in Westmoreland County will be a national example of a safe and efficient transportation corridor of economic opportunity.

Spearheading these actions is a coalition of business and municipal officials who work collaboratively with each other and with PennDOT to ensure that, the U.S. Route 30 of the future is characterized by:

1. A consistent approach to land use regulation that enhances economic activities, balancing the historic character and rural beauty of the highway while respecting individual property rights;
2. The use of the latest technology to intelligently move people and goods safely;
3. An appropriate mix of commercial, industrial, residential, agriculture, open space and other vital land uses that underlie a great quality of life;
4. A multi-modal approach, including transit, air, and rail freight to accommodate the movement of people and goods efficiently;
5. A network of parallel road systems that provides choices for local residents and for the convenient flow of through traffic, including the tourist traveler; and
6. Well-maintained surface, landscaping and traffic control systems that work together to enhance the motoring experience.
Structure

Since the Pennsylvania Department of Community and Economic Development - Community Revitalization grant was announced by State Senator Bob Regola in October 2005, the primary responsibility of the Smart Growth Partnership has been to build consensus to develop a unified strategy, working countywide across the forty-mile corridor. To accomplish this, Smart Growth built a coalition of government, nonprofit and business leaders.

In January 2006, Smart Growth hosted a US Route 30 Summit. Following the US Route 30 Summit, the SGPWC assisted in the formation of a Community Vision Team to provide overall guidance and input for the plan. The CVT is comprised of over 100 persons and includes many private and public interests.

A smaller Project Working Group (PWG) has also been established to guide the development of the Route 30 Master Plan objectives, work to secure more funding, and provide guidance and feedback for the consultants hired to write the Master Plan.

In completing the Visioning phase of the Route 30 Master Plan, the project first conducted an analysis of existing development patterns. At a workshop, citizens were allowed to review specific existing elements and brainstorm ideas for linking land use and transportation strategies. Based on the input from the workshop, the
project team developed a set of optimized community elements to be used to guide development patterns.

Using the whole palette of community elements, regional scenarios were built in CorPlan, a land use and transportation scenario planning model utilizing ARCVIEW© geographic information system (GIS) software, and associated databases linked to Excel spreadsheets. The CorPlan model relies on prototypical community definitions, the community elements, to estimate land development potential and how that potential translates into the location of households and jobs. Each community element is defined by the diversity of land use mix, the density, and design intentions for future development. Future scenarios are created by allocating new community elements to areas considered developable until control totals for future jobs and households are met for the study area. To develop different scenarios choices are made of where, how much to allocate, and what type of community element to allocate for future growth.

CorPlan makes a direct connection between land development patterns and socioeconomic characteristics. As alternative land use scenarios are tested the model automatically generates socioeconomic inputs for travel demand models. The unique travel parameters for each community element are incorporated into travel demand models so they can better reflect the influence of development patterns on travel characteristics. Some localities have used the community elements as a resource to help guide the development of local design standards or ordinances. The detailed information available for each community element is well suited for these tools and enables users to quickly assess the impacts of alternative development patterns over large areas.

The scenarios to be built in CorPlan were developed out of information from a community workshop that employed the dot map game to create ideal development scenarios. Each group was charged with placing colored dots to meet one of the chosen objectives, which reflected the major themes previously raised during community discussions of land use and transportation. For more information on how CorPlan was used and the resulting scenarios, see the Route 30 Master Plan Phase 1 Summary Report.

With Phase 1 complete, Phase 2 is underway, institutionalizing the framework for implementation. It is anticipated that the total cost for developing the US Route 30 Master Plan will be approximately $750,000, including consultant fees and SGPWC management costs. As of January 1, 2007, $395,000 and in-kind services have been committed to the project. More than $350,000 in additional funding is still needed to complete the plan.
**Takeaways for Scott County**

As the precedent studies indicate, a potential county-wide would be best served as a multi-level planning process with assistance from MnDot, along similar lines of the Highway 52 sub area studies, and with involvement from private consultants, and county, cities, townships, and other public stakeholders.

The corridor study could begin with a visioning process similar to what was done in Westmoreland County, Pennsylvania, a much more comprehensive planning effort with the overall guidance of the Vision dictated by the MnDot’s Corridor Management Plan, but inclusive of county-wide development trends and issues. Taking cues from the Vision 212 process, extensive effort can be made to consider more issues than just development pressure, demographic changes, and environmental issues, such as a potential market study and economic development possibilities.

The County could then move into creating development scenarios built out of trends found in the existing conditions (possibly utilizing visioning software like CommunityViz, INDEX, or CorPlan), as well as comments made on the results of the existing conditions. The impacts of these development scenarios can be evaluated with consideration made to specific conditions (as in the Highway 52 sub area studies) outlined by the stakeholders.

Finally, after rounds of comments and revisions, the outcome would be an official map and agreed upon future land use plan for the section of State Highway 169 in Scott County. Communities falling in the Corridor would be urged to sign memoranda’s of understanding that they support the official map and enact zoning overlay districts making way for the interim and future land uses agreed upon for the corridor. Scott County could also put together a corridor management handbook, similar to the one used in the Super 70 Corridor, to help cities and townships plan for the freeway conversion. The handbook would spell out strategies for preserving and acquiring right-of-way, managing access, and language for making the corridor plan compatible with existing plans as well as amending the plan for future changes.