US-36 ACCESS MANAGEMENT PLAN
SENECA, KANSAS

CITY OF SENECA
NEMAHA COUNTY
KANSAS DEPARTMENT OF TRANSPORTATION

KDOT PROJECT NUMBER
36-66 KA-0017-01

PEC
SCIENCE APPLIED

MAY 2010

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ACKNOWLEDGMENTS

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Seneca Emergency Management Services
Nemaha Valley Community Hospital
Seneca Chamber of Commerce
Koch & Co., Inc.
Seneca Motel
Industrial Millwork Corporation
Todd Tractor Co., Inc.
Log Cabin Service
Bruna Implement Co.
Stallbaumer Lumber & Hardware, Inc.
Tank It Food & Fuel – BP Station
McDonald's
Seneca Ready Mix Concrete, Inc.
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1.1 Study Location

The City of Seneca, Kansas, situated along US Highway 36 (US-36), is the county seat of Nemaha County. Located in northeastern Kansas, Seneca is about 11 miles south of the Nebraska state line. Nearby towns include Centralia, Marysville, Sabetha and Hiawatha. The study area encompasses the properties along US-36 between K-187 (west boundary) and County Road L (east boundary), including parcels within the City of Seneca corporate limits and unincorporated areas of Nemaha County. **Figure 1A** is a Study Area Map.

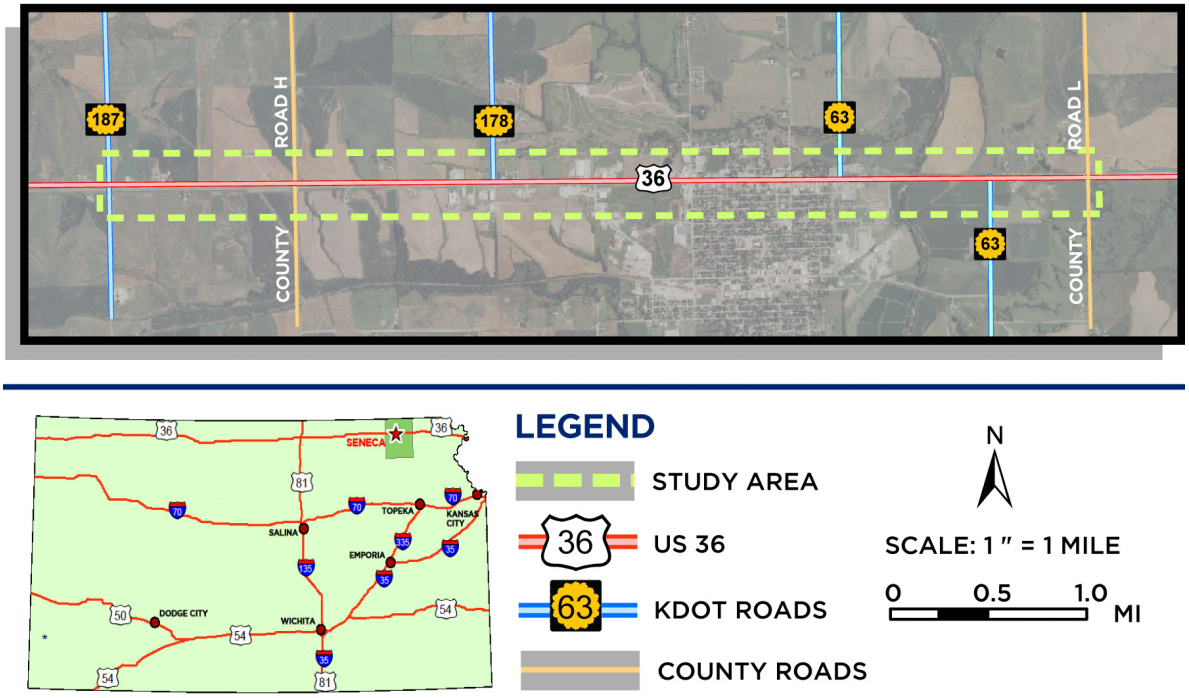

Figure 1A - Project Study Area and Location Map

1.2 Project Background

This project is being conducted by the Kansas Department of Transportation (KDOT) in cooperation with the City of Seneca and Nemaha County. The initial recommendation for an access management plan for US-36 through the Seneca area came from the May 2007 Nemaha County Road Safety Audit (RSA) conducted by KDOT's Bureau of Traffic Engineering. The intent of the RSA recommendation was to determine ways to reduce the total number of excess access points within the study area. This is the first project of its kind conducted by KDOT.

The *US-36 Access Management Plan* evolved to also address issues caused by growth over time within the study area. The project has investigated ways to improve access management to better control the flow of traffic and improve safety along US-36. Another primary concern has been the preservation of land development opportunities along the corridor to enhance local economic development.

It is worth mentioning that this Plan has not investigated a US-36 bypass option around Seneca. KDOT has determined that such an alternative neither appropriate nor necessary to study at the present time. This type of project would only be pursued by the partner agencies if warranted by local interest along with physical, economic, and population growth.

1.3 Vision Statement

For decades, US-36 has been a vibrant commercial corridor and a significant mover of people and goods throughout northern Kansas and the neighboring tier of states. The study partners share a vision for US-36 to remain a safe and efficient highway facility into the coming decades, which is vital to protecting opportunities for economic prosperity and growth along the corridor.

A key component of preserving this vision is a pragmatic and effective approach to access management. The *US-36 Access Management Plan* provides such a foundation of practical access management options. KDOT, the City of Seneca and Nemaha County have committed to an ongoing collaborative implementation process in order to achieve this vision and accomplish the Plan's stated goals.

1.4 Project Purpose and Need

Governing bodies typically draft a Purpose and Need Statement when creating a transportation plan. The role of this statement is to communicate the purpose of the plan, demonstrate a need for the plan, and clearly state the plan's goals and objectives.

The Purpose and Need Statement for the US-36 Access Management Plan is as follows:

The purpose of the US-36 Access Management Plan is to make policy and conceptual design recommendations that wIll enhance the long-term safety and operational capacity of US-36, while providing reasonable access to adjacent properties. This Plan is necessary to address motorist safety concerns, increasing traffic volumes, and commercial development pressure for additional access along US-36.

The Plan will identify a corridor-based strategy to achieve the following goals:

1. *Improve motorist safety within the study area.*
2. *Preserve efficient traffic flow along US-36 through Seneca and parts of Nemaha County.*
3. *Enhance and preserve the economic development potential of Seneca and Nemaha County, as related to commercial development adjacent to US-36 and the subsequent need for reasonable highway access.*
4. *Promote continued intergovernmental coordination between KDOT, the City of Seneca, and Nemaha County.*

These goals address fundamental transportation and safety issues associated with US-36, as well as broader community goals and intergovernmental coordination.

1.5 Planning Process

As previously mentioned, this is the first planning project conducted by KDOT with access management as the entire focus. Therefore, after carefully considering the purpose and need of the project, the study partners adopted a unique and integrated planning process. From the outset, the three agencies were interested in creating a plan that not only made sense from an engineering perspective, but also made sense locally.

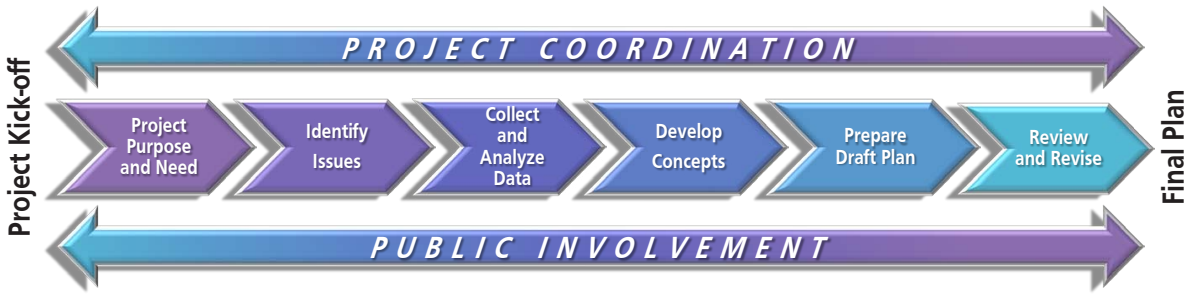

Figure 1B - Planning Process for the US-36 Access Management Plan

The various phases of a planning process do not necessarily occur sequentially. In fact, planning is considered an evolutionary process by definition. That is to say, new issues may be identified as information is gathered and analyzed, which may impact overall project goals and recommendations. So, adjustments and revisions may occur throughout the development of a plan. With that in mind, **Figure 1B** illustrates the basic planning process used to develop the *US-36 Access Management Plan*.

Project Coordination

Coordination between the project partners and consultant are essential to the development of a pragmatic, implementable planning document. This is particularly true when their offices are geographically dispersed across the State of Kansas. Lines of communication must remain open and free flowing to maximize the project's chances for success. Throughout the development of the *US-36 Access Management Plan*, the project partners and consultant coordinated closely through telephone calls, emails, site visits and face-to-face meetings.

Public Involvement

Public involvement is a term that refers to the way the project team communicates with local citizens. Public involvement is a two-way flow of communication intended to give and receive information regarding a project and is a fundamental part of a project's success. Organized public involvement activities took place at various points in the planning process and the KTOC web forum was available throughout the development of the *US-36 Access Management Plan*. A complete overview of the project's public involvement approach is included in **Section 2** of the Plan.

Develop Project Purpose and Need Statement

As indicated in **Section 1.4**, a Purpose and Need Statement speaks to why a project is being conducted and what a project intends to accomplish. It also outlines the broad project goals and sets the tone for the entire document. Generally, the development of a Purpose and Need Statement is the first task in the development of a transportation plan. The aforementioned **Section 1.4** contains the *US-36 Access Management Plan's* Purpose and Need Statement.

Identify Issues

The identification of existing issues helps to determine what data and information is needed for the development of a plan. It helps to focus data gathering efforts on pertinent data. Issue identification also serves as a building block for the formulation of a plan's recommendations. As such, the access management issues identified within the study area were a driving factor behind the Plan recommendations.

The primary issues of the Plan are discussed fully in **Section 4** and **Section 5**, which analyze land use and transportation respectively. However, the following points outline some of the main issues identified during the planning process.

Overabundance of existing access points onto US-36 – The design of US-36 through the study area is more than adequate to handle current and projected traffic volumes well into the future. However, there are some concerns regarding how existing driveways impact operational efficiency. The developed area between 1st Street and 11th Street in Seneca suffers from an abundance of driveways that have been built over time, most of which do not appear consistent with the current *KDOT Corridor Management Policy* spacing and design criteria. Subsequently, traffic does not always flow smoothly throughout the corridor, particularly during peak hours.

Peak hour/event related congestion issues – US-36 serves as a primary east-west corridor through Nemaha County and many commuters use this route for their business travel. Overall traffic volumes through the study area are well within the design capacity of US-36. Still, efficiency becomes compromised during peak hours, which is partially related to the abovementioned issue of excessive driveways. It was also noted during the planning process that school events tend to cause congestion issues in the vicinity of 11th Street.

Inadequate alignment of some access drives and intersections – Ideally, driveways and intersections located across the street from one another are built in direct alignment. This helps to improve safety and efficiency of turning movements. Throughout the developed sections of US-36, many driveways exist with offset alignments. Also, the intersection of 1st Street and K-63 is offset, which causes an awkward turning movement for motorists. This movement specifically impacts truck traffic to and from the grain elevator located south of the intersection, which is frequently accessed via 1st Street.

High proportion of heavy commercial (truck) traffic – Current truck traffic averages 16% - 22% of total traffic volume, depending upon location. The 2040 projected percentage of truck traffic reaches up to 29%. This is illustrated in **Figure 1C**. The heavier weight of commercial vehicles relative to automobiles means that trucks generally require longer distances to stop and to accelerate back up to travelling speed once stopped. Therefore, traffic flows less smoothly where high concetrations of truck traffic exist. Also, truck drivers must account for additional reaction time when stopping or turning to maximize the safe operation of their vehicles.

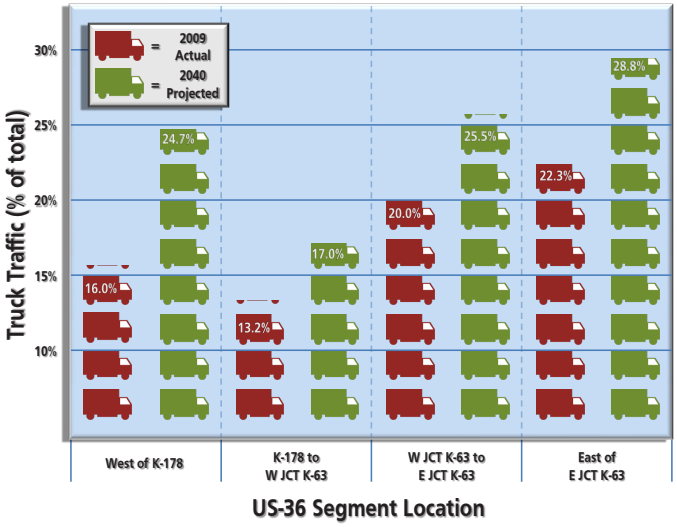

Figure 1C - Truck Traffic by Percent of Total Average Daily Traffic

Collect and Analyze Information and Data

Any planning effort must include the gathering and analyzing of a vast amount of data pertinent to the plan purpose. Once the initial issues are identified, relevant information is collected for two purposes: 1) substantiate the issues; 2) determine the extent of the issues. Sometimes the data provide insight into unanticipated issues, which can result in changes to the plan's issues, goals or recommendations. For this project, a variety of data were gathered and analyzed to understand the full range of existing conditions.

Develop Recommendations

Policy and design recommendations were formulated to address the identified issues. The recommendations were based upon the data and input received during the early stages of plan development. Changes have occurred throughout the process to account for additional data gathering and to address input received through public involvement and project coordination.

Prepare Draft Plan

Drafting a plan can occur only after the project team has a solid understanding of the existing conditions and issues within the study area. The text and organization of the *US-36 Access Management Plan* were drafted by PEC to provide context for the plan recommendations. The draft Plan was then reviewed by the project partners.

Review and Revise

After the draft plan was thoroughly reviewed by the project partners, revisions were made and the recommendations were presented to the community through the public involvement activities. Upon reviewing the final comments and input, appropriate revisions were made and incorporated into the final version of the *US-36 Access Management Plan*.

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2.1 Public Involvement Overview

Public involvement is a critical component to the success of any planning initiative. It is not only important for conveying project information to local citizens, but for gathering input from the public regarding a project and building an understanding of local issues. Successful public involvement begins with a true commitment to such an interactive communication process.

Some of the main objectives of public involvement are:

- Reassuring people that their opinions are of value to the planning process
- Learning public perceptions and local knowledge of a project
- Educating citizens on project alternatives and options
- Gauging local response to potential alternatives and developing acceptable solutions
- Identifying changes in public opinion and perceptions
- Building consensus and local buy-in

The project partners were committed to achieving quality public and stakeholder participation that would identify corridor-related issues, build consensus, and create innovative solutions to a variety of challenges. As such, a comprehensive public involvement approach was developed, which is outlined in the following sections. In addition to the outlined activities, local media outlets were periodically informed of project progress and also assisted in informing the public of upcoming meetings.

2.2 Kansas Transportation Online Community (KTOC)

KTOC (www.ktoc.net) is a web-based forum used to discuss matters related to KDOT transportation projects. A discussion group specific to the *US-36 Access Management Plan* was added to KTOC to facilitate public involvement. Relevant project materials and announcements were posted periodically and comments/questions were able to be posted by the public.

2.3 Stakeholder Interviews

A comprehensive stakeholder list was developed in coordination with the project partners. This list included representatives of local government agencies and key businesses with a vital interest in US-36. The stakeholders were contacted and interviewed in person and by telephone, with follow-up contacts as needed throughout the plan development process.

The interview questions were primarily related to access, development, and general concerns with the US-36 corridor. The stakeholders' understanding of the US-36 corridor was crucial to the process of identifying issues and formulating the plan recommendations.

The full list of stakeholder agencies/businesses is included below for reference.

Seneca Police Department

Seneca Fire Department

Seneca Emergency Medical Services

Seneca Public Works Department

Nemaha County Sheriff's Department

Nemaha County Road and Bridge Department

Kansas Highway Patrol

Nemaha Valley Schools (USD 442)

Nemaha Valley Community Hospital

Seneca Chamber of Commerce

Koch and Co., Inc.

Industrial Millworks

Todd Tractor

Log Cabin Service

Bruna Implement Company

Stallbaumer Lumber

Tank It Food and Fuel – BP Station

McDonalds/Sinclair Station

Seneca Ready Mix

Settle Inn at Spring Creek

Cenex Station/Subway

Highway 36 Association

2.4 Public Open Houses

Public open houses are reasonably effective at informing the public on project goals and receiving input from the local community that will be affected by the project. They are one of the primary types of public involvement meetings utilized by KDOT. The two public open houses conducted during planning process are summarized below.

Public Open House #1 (December 2, 2009)

The first open house afforded the project team and consultant their first opportunity to interact directly with local citizens. Display boards showed the project scope and timeline, while a slideshow presented general information on access management goals and best practices. There was also an opportunity for event attendees to provide input. Graphic boards displayed aerial photography of the study area. Attendees were asked to identify areas of concern by placing numbered dot stickers on locations where access issues existed. They then turned in note cards that contained comments that corresponded with the numbered dots placed on the map. A summary of comments received is included in **Appendix A**.

Public Open House #2 & Corridor Workshop (March 4, 2010)

Public Open House #2 presented the project's status and illustrated the Plan's initial conceptual design recommendations on a series of display boards. Attendees were asked to provide input to the project team by way of comment cards and direct discussion. A summary of comments received is included in **Appendix B**.

Another feature of this event was a Corridor Workshop, which allowed interested stakeholders to sketch their own solutions and revisions to the design concepts. Tracing paper was placed over the design concept plots and the consulting engineers were on hand to provide technical guidance. The sketches were then reviewed for feasibility, with suggestions incorporated into the conceptual designs as deemed appropriate.

2.5 Elected Official Presentations

KDOT staff from their Topeka headquarters and field offices made a presentation on Access Management to the City of Seneca City Council on September 2, 2009. This informative presentation served several purposes. First, access management as a concept was thoroughly defined and explained. Second, some typical access issues were outlined, which tied directly into a discussion of why managing access has become a common practice. Third, a few access management strategies and techniques were presented. Fourth, some options for applying access management strategies to the US-36 corridor through Seneca were discussed. Finally, KDOT made the case for partnering with the City of Seneca and Nemaha County to develop the *US-36 Access Management Plan*.

There are plans for additional presentations to the elected officials of Seneca and Nemaha County as part of the plan adoption process. KDOT and PEC will remain open to presenting information as needed to facilitate project understanding and assist in plan adoption.

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3.1 Understanding Access Management

Simply put, access management means controlling vehicular access to the land parcels adjacent to a road through a variety of techniques that enhance roadway safety and efficiency. Most motorists encounter access management techniques in their daily travels without even realizing it. Design treatments such as turning lanes are commonly used to remove turning drivers from the main travel lanes. This controls where a driver may turn while allowing through traffic to pass unimpeded. A detailed discussion of access management design techniques is included in **Section 3.3**. Other access management techniques are achieved by policy and may not be obvious to the typical road user. For example, some local governments have adopted regulations that control how many driveways a land owner may construct on a given parcel. Regardless of the form an access management technique takes, the main point is to keep traffic flowing.

As previously mentioned, one of the primary goals of access management is to improve safety. Good access management achieves this by reducing the number of conflict points that occur on a roadway. A conflict point is a location where the potential exists for a vehicle to collide with another road user, whether it is another vehicle or pedestrian. This may occur where their travel paths cross, such as at an intersection. A conflict point also occurs where one slowing or stopping vehicle impedes the progress of another, such as at a driveway. **Figure 3A** identifies the conflict points for a typical four-way intersection with two lanes. As illustrated, a common two-lane intersection contains 32 vehicle-to-vehicle conflict points and 24 vehicle-to-pedestrian conflict points. Improvements to typical intersections, such as dedicated turning lanes, result in fewer overall conflict points to improve safety for road users.

The second main goal of access management is to improve operational efficiency. That is, keeping traffic flowing smoothly. Each conflict point is also a friction point. In other words, under most circumstances a collision does not occur at a conflict point, but a slowing or stopping vehicle causes following vehicles to react to their braking. That reaction results in another vehicle slowing its forward progress, increasing the amount of time it takes to travel through a corridor. Therefore, as friction increases on a road, its operational efficiency decreases.

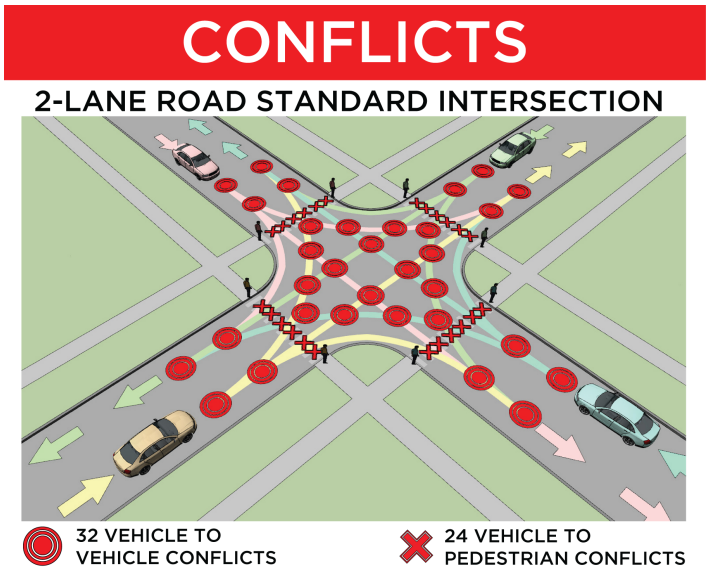

Figure 3A - Intersection Conflict Points

3.2 Roadway Functional Classification

To better understand access management, it is useful to be familiar with the concept of roadway functional classification. As shown in **Figure 3B**, local roadways are commonly classified into three functional classifications: arterial streets, collector streets and local streets. Arterials provide the highest level of service at the greatest speeds for the longest uninterrupted distance, with some degree of access control. US-36 through Seneca essentially serves the community as an east/west arterial. Collectors, as their name implies, collect local traffic and provide connections between property and arterials. They provide a lesser level of service at lower speeds than arterials. One example of a collector in Seneca is 11th St., which conveys traffic from residential areas to US-36. Local streets

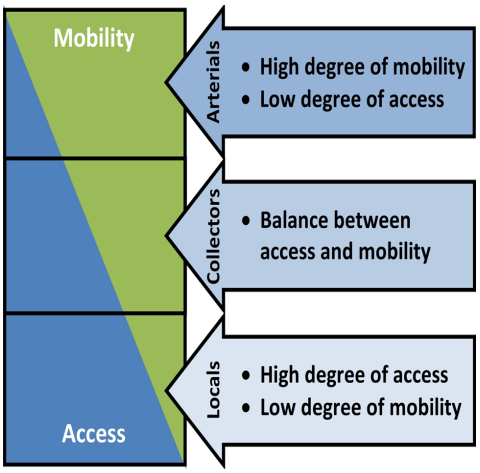

Figure 3B - Functional Classification

primarily provide direct access to property parcels and allow for little, if any, through movement across a community. They are typified by an abundance of driveways and slow speeds. Local streets funnel traffic to collector streets. Most streets within a residential subdivision are considered local streets.

Access management is closely related to functional classification, since the functional classification of a roadway is tied directly to the level of access to property. Under ideal circumstances, arterials provide very limited direct access to property parcels. Where such access points exist, such as to serve retail businesses, they should be spaced appropriately to minimize impact on traffic flow. Access to land parcels along collectors can be more closely spaced since traffic speeds are slower and the access needs are greater. Finally, driveways along local streets can be spaced quite closely because of the low travel speeds and relatively abundant need for direct property access. As one can see, good local implementation of access management is determined largely by functional classification.

3.3 Access Management Design Techniques

To achieve the safety and efficiency goals of access management, a variety of design techniques are employed. This section describes a few commonly used access management design techniques that may have some application within the study area or within the broader Seneca community. This is by no means an exhaustive list. Each technique described in this section has a variety of benefits when used in the appropriate situation. The benefits of some of these common techniques are outlined in **Table 3A**.

	Access Management Techniques					
Access Management Benefits	Medians	Turning Lanes	Roundabouts	Traffic Signal Timing	Frontage Roads	Driveway Spacing
Improve motorist safety	●	●	●			●
Improve pedestrian and bicyclist safety	●		●	●		●
Reduces conflict points	●	●	●	●	●	●
Decreases crash rates	●	●	●			●
Improves air quality			●	●		
Decreases congestion	●	●	●	●	●	●
Improves aesthetics	●		●			●
Decreases travel times		●	●	●		●
Improves access to properties		●			●	●
Preserves roadway capacity	●	●	●	●	●	●

Table 3A - Access Management Benefits

Medians

There are two main types of medians: raised (non-traversable) medians and flush (painted) medians. Medians provide a physical or visual barrier, which separates opposing traffic flows and concentrates turning movements to specific sections of a roadway. Raised medians are particularly useful in access management because they provide physical separation and can also be used for landscaping, drainage and pedestrian refuge.

Turning Lanes

According to the Transportation Research Board[1], dedicated left turn lanes reduce crashes an av-

[1] Impacts of Access Management Techniques: NCHRP Report 420.1999.Transportation Research Board.

erage of about 50% and reduce rear-end collisions an average of 74%. Left turn lanes remove left turning movements from the through travel lanes. This provides left-turning vehicles refuge, which helps preserve traffic flow on through lanes and provides storage space while waiting to make a safe turning movement. Dedicated left turn lanes are separated from through lanes by either a raised or painted median. Left turn lanes also improve visibility of oncoming traffic and increase roadway capacity.

Two-way left turn lanes (TWLTL), sometimes referred to as center left turn lanes (CLTL) are essentially painted medians, which provide left turn refuge for both travel directions on two-way roadways. TWLTLs are often used in areas where moderate to high levels of development exist adjacent to roadways. However, they can be used in lesser developed commercial corridors where left turn demand may be relatively high. TWLTLs also serve as an entrance lane for vehicles turning left from driveways onto a roadway. This allows a place of refuge while waiting to safely merge into the main traffic lane.

Right turn lanes are sometimes deployed at relatively high traffic intersections to remove right turning movements from the through travel lanes. They are not frequently implemented at lower volume driveways and intersections, because right turning traffic does not need to come to a complete stop under normal circumstances. Also, right turning movements do not cross another travel path. However, they can serve an important role in access management by allowing space for right turning vehicles to decelerate to a safe speed prior to negotiating the turn. By removing that deceleration from the through travel lane, friction is minimized and potential conflict avoided.

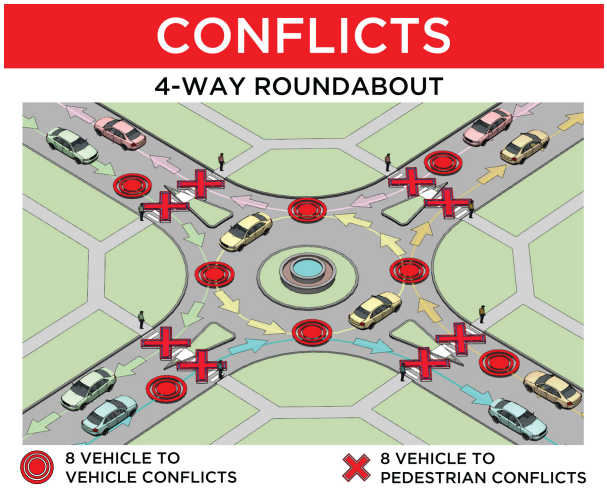

Figure 3C - Roundabout Conflict Points

Roundabouts

A roundabout is a type of intersection in which traffic from all directions merges into a circular facility and travels counter-clockwise until it can proceed in its desired direction of travel. In many situations, roundabouts have proven to be safer and more efficient at moving traffic than signalized intersections.

They can be safer than typical two lane intersections, because they eliminate conflict points within an intersection. The typical two lane intersection, as previously mentioned, has 32 conflict points. In a roundabout, there are no left turn movements. This results in only eight vehicle-to-vehicle conflict points, none of which represent the potential for a head-on collision (**Figure 3C**).

Traffic Signal Spacing/Timing

Traffic signals serve the important purpose of controlling the flow of traffic at relatively high volume intersections. But they should be used sparingly. Generally, signal deployment occurs only as warranted and justified by a thorough traffic engineering analysis. Such an analysis normally considers the broader traffic control needs of the entire corridor and local land use development plans to maximize positive results.

When used, traffic signals should be properly spaced and timed. This controls the ebb and flow of traffic to facilitate access management along a roadway. Too frequent spacing results in decreased operational efficiency by slowing traffic flow. Poorly synchronized timing cycles yield similar results.

taxpayers have begun demanding good infrastructure investments to maximize the dollars spent. Access management delivers. To illustrate this point, some of the major overall benefits of good access management are listed below. [2]

- Benefits to the Roadway
    - Preserve highway capacity
    - Reduce crashes
    - Avoid or minimize costly remedial roadway improvements
- Benefits to the traveling public
    - Faster travel
    - Safer travel
    - Smoother travel
- Benefits to businesses
    - Increased business vitality
    - Improved access for customers
- Benefits to taxpayers
    - Efficient use of existing facilities
- Benefits to public agencies
    - Relatively low implementation costs
- Return on investment is measurable
    - Fewer crashes
    - Travel time reduction

[2] Iowa Access Management Handbook. 2000. Center for Transportation Research and Education, Iowa State University.

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4.1 Transportation/Land Use Relationship

Transportation is closely related to land use. Adjacent land use is a key factor in the design and function of roadways. Conversely, the design and function of roadways often dictate the types of land uses that are appropriate in a given location. For example, industrial land uses are best located along truck routes and arterial roads. Also, roads that serve industrial areas are generally designed to withstand larger vehicles and heavier traffic volumes than residential streets. Decisions regarding transportation facilities must take into consideration local land use and economic demands. In fact, KDOT's Access Spacing Criteria consider land use and level of development among the factors in determining appropriate access spacing.

4.2 Existing Conditions

The *Seneca 2010 Comprehensive Plan*[1] was adopted in 1995. It contains an analysis of land uses within the City of Seneca and its two-mile planning area, including recommendations on future land uses. The *Comprehensive Plan* is a guide for determining the appropriate locations for various types of development and is used by the Planning Commission in the zoning approval process.

For this analysis, the land uses for each individual parcel have not been examined. However, there are obvious land use patterns that can be identified. **Generally, portions of the study area west of County Road H and east of Jupiter Dr. are considered undeveloped. The areas in between are considered to be developed.** The main access management concerns within the study area exist in the locations identified as developed. Existing land uses appear to be generally consistent with the future land use recommendations contained in the *Seneca 2010 Comprehensive Plan.*

One of the driving factors behind this project is a moratorium on the issuance of access permits that was instituted by KDOT. The Fairway Addition, located along the south side of US-36 between Community Dr. and 11th St., is a commercial development that was proposed in 2008. During the approval process, KDOT denied the access permit for the three access locations proposed by the developer. KDOT's preference, consistent with its *Corridor Management Policy*, was that one access be granted to serve the entire development. In response, KDOT suggested that the access situation be studied, as recommended in the aforementioned 2007 Road Safety Audit. This would allow time for KDOT, the City of Seneca and Nemaha County to coordinate a plan for access management.

The impact of this plan extends, however, to an area larger than just the Fairway Addition. Many of the most developable parcels in the study area are located west of 11th St. Currently, that area is largely undeveloped. Properties in that vicinity with US-36 frontage are desirable locations for commercial, and to a lesser extent, industrial development.

The properties fronting US-36 between 11th St. and Jupiter Dr. are mostly fully developed, although there is potential for redevelopment. This location contains an abundance of access points, which were developed prior to the current *KDOT Corridor Management Policy*. Therefore, they are largely inconsistent with the Access Spacing Criteria. Also, many of the access drives are not built consistent with current KDOT design standards.

There are significant barriers to development east of Jupiter Dr. including floodplain, terrain and an at-grade railroad crossing. Therefore, it can be assumed that the future land use pattern in that location will continue into the foreseeable future.

While the properties with US-36 frontage represent a significant portion of the local economy, the balance of the community cannot be left out of this discussion. Seneca's historic downtown is located south of US-36. Downtown Seneca is the center of local government, as the Nemaha County

[1] Seneca 2010: A Comprehensive Plan for the City of Seneca, Kansas. 1995. Bartlett & West Engineers, Inc.

Frontage Roads

Frontage roads are built parallel to the primary roadway and allow no direct access from properties onto the main through lanes. The standard frontage road configuration places it adjacent to the primary roadway and allows front access to properties. The frontage road typically connects to an intersecting roadway, where traffic is then allowed to access the main through lanes. Frontage roads allow businesses good visibility to the primary roadway while minimizing the number of direct access points.

Reverse frontage roads are an alternative configuration to typical frontage roads. They are offset a greater distance from the primary roadway, typically located to the rear of frontage lots. This means that traffic accesses property from the rear of the lot. The main advantage to reverse frontage roads is that the greater offset distance separates the turning movements from the primary intersection, creating a safer and more efficient configuration. This also allows for commercial development on both sides of the frontage road.

Driveway Spacing

The amount of space between driveways can dramatically affect traffic flow. Condensed driveway spacing results in many conflict points along a corridor, while increased driveway spacing creates fewer conflict points. The greater the distance between access points, the smoother the traffic flow. There are several methods used to control driveway spacing. These include cross access, shared access and shared parking.

Cross access occurs when access is gained to a property through an adjacent property's driveway. Shared access occurs when two or more properties gain access through a driveway that is located on a common property line. Shared parking occurs when adjacent properties jointly develop, maintain and use the same parking area.

Such access strategies are commonly implemented by legal agreements entered into by adjacent property owners. The agreements are notarized and filed for record with the local county and are legally binding. Also, access agreements typically run with the land to enable long-term mitigation of access issues. That is to say, they do not expire with a change in ownership, but remain intact as property changes hands. Therefore, access management is enhanced over an extended period of time. Many jurisdictions have standard access agreements to facilitate their use. Such agreements can be used as conditions of development approval.

Another method of improving driveway spacing is through the acquisition of access rights. KDOT is authorized to employ this strategy as an access management tool along corridor segments to implement plan recommendations. When KDOT acquires access rights, they may allow some existing access points to remain. However, they may require others to be closed or consolidated. Generally, new access points in such access control areas will be prohibited.

3.4 Benefits of Access Management

Properly executed access management offers many potential benefits to a variety of transportation system users at relatively low costs. This high benefit-to-cost ratio is the main reason that it has become an essential part of transportation system design in the United States. In recent decades,

Courthouse and Seneca City Hall are both located there. There are also many professional offices, agribusiness and retail establishments. US-36 is the primary east-west route through Nemaha County. As such, US-36 is of vital importance to each of these local concerns and is critical to the entire local economic base.

5.1 Characteristics of the US-36 Corridor

US-36 crosses the state of Kansas from east to west. It is located about mid-way between I-80 to the north and I-70 to the south. As such, it is a primary east-west route serving the mostly rural areas in southern Nebraska and northern Kansas. Throughout most of Kansas, US-36 is constructed to KDOT's "Super Two" standards with two 12-foot travel lanes and ten-foot paved shoulders.

Two state highways intersect US-36 within the study area, both of which run north-south. K-63 connects Seneca with St. Mary's to the south and with southern Nebraska about 11 miles to the north. K-178 connects Seneca to St. Benedict to the north and does not extend south of US-36.

US-36 through the study area has the current lane configurations through the study area, as follows:

- West project limit to 11th St. – Two lane with paved shoulders
- 11th St. to Neptune Dr. – Four lane with curb and gutter
- Neptune Dr. to east project limit – Two lane with paved shoulders

The intersection of US-36 and 6th St. is the only signalized intersection within the study area. It is a four-way intersection with no turning lanes. Pedestrian movements are controlled at all four crossings with push buttons and pedestrian signal heads. However, the crosswalks are unmarked.

The existing conditions graphics (**Figures 5A-5D**) on the following pages show the location of all existing access points onto US-36 located within the study area. This includes existing driveways, but omits crosswalks and intersecting rights-of-way. Seneca's municipal limits and parcel boundaries have been shown for reference purposes. Also shown are the existing speed zones and the parcel development status. The *KDOT Corridor Management Policy* considers areas developed if:

1. Located within the corporate limits of a municipality; or

2. The highway abutting the area has a speed limit at least forty miles per hour; or

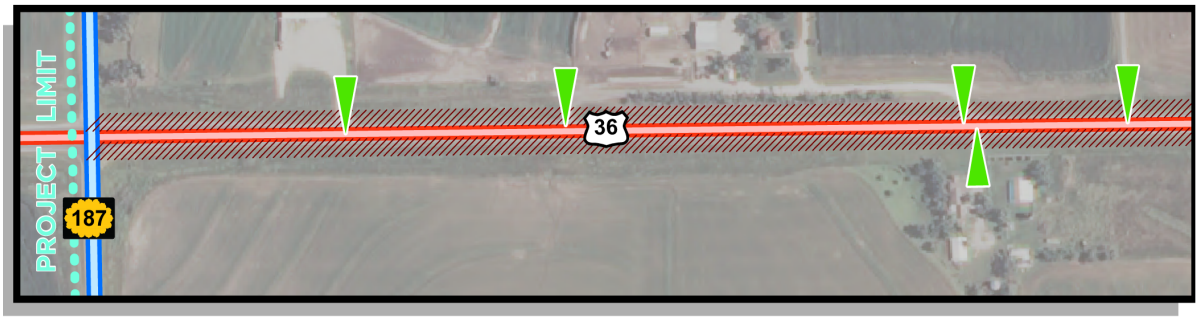
3. At least fifty (50) percent of the frontages abutting the highway have been developed with residences, businesses, and/or industry for a distance of one-quarter (1/4) mile.

The developed portion of the study area starts at County Road H and extends east to Jupiter Dr. There are two undeveloped sections within the study area. The first section starts at the western project limit at K-187 and extends east to County Road H. The second section starts at Jupiter Dr. and extends east to the eastern project limit at County Road L.

Posted speed limits within the study area are generally highest in the least-dense portions outside of the Seneca Corporate limits. The speed limits decrease gradually for eastbound traffic from 65 mph at K-187 to 35 mph just east of the intersection of US-36 and 11th Street. The speed limit increases from 35mph at the intersection of US-36 and the K-63 west junction to 65 mph at east of the K-63 intersection. This limit continues east past the eastern boundary of the project site.

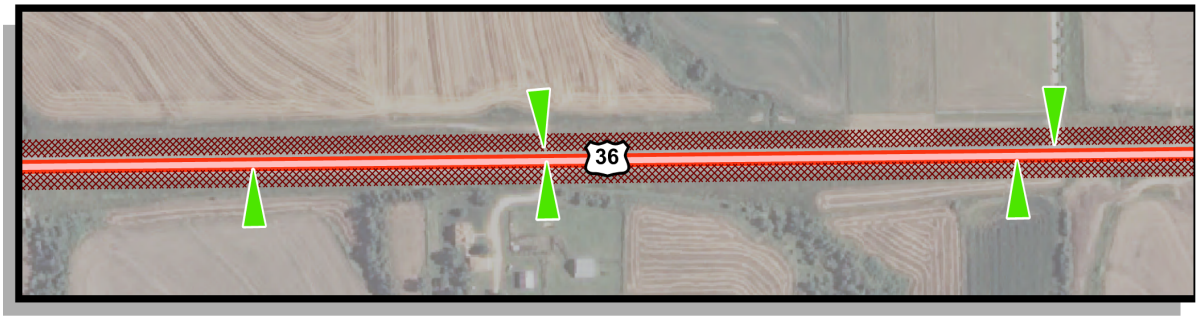
The speed limit for westbound traffic starts enters the project area at 65 mph. The speed limit transitions to 45 mph and down to 35 mph just east of the intersection of US-36 and the K-63 west junction. The 35 mph speed zone is consistent for westbound traffic within the Seneca corporate limits and increases gradually to 65 mph starting west of the intersection of US-36 and 11th St. and extending west past the western project limit at K-187.

It should be noted that the description of posted speed limits indicates existing conditions at the time of data collection. It may not represent the implentation of the most recent KDOT speed study.



SEGMENT 1.1

SEGMENT 1.2



SEGMENT 1.3

LEGEND

- EXISTING ACCESS
- US 36
- KDOT ROADS
- COUNTY ROADS
- SENECA CORPORATE LIMITS
- PARCEL DATA

0 400 800 FEET

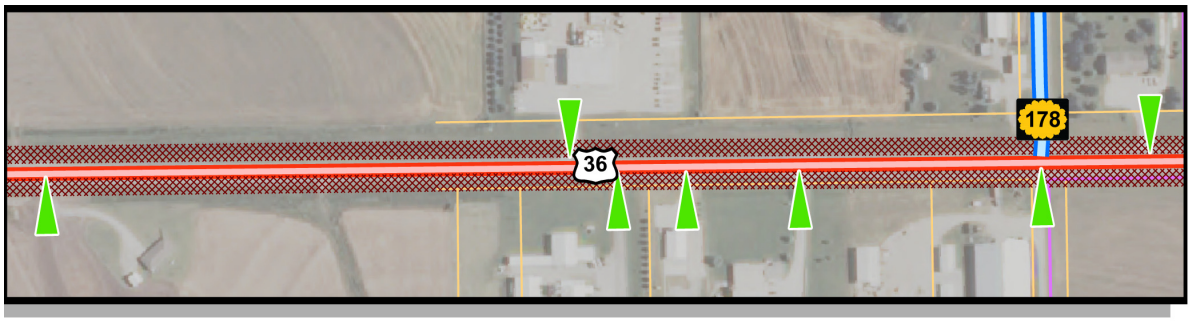
N

SPEED LIMIT (MPH)	UNDEVELOPED[1]	DEVELOPED[2]
25		
35		
45		
55		
65		

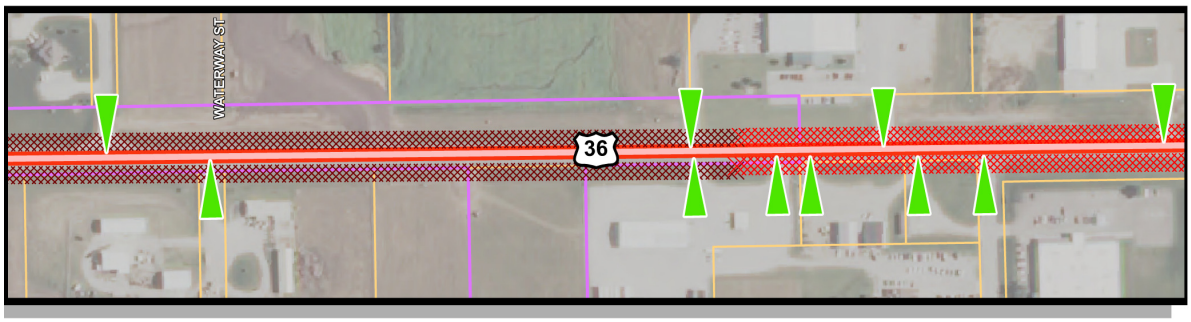
[1] The KDOT Corridor Management Policy defines a DEVELOPED area is within the corporate limits of a municipality, regardless of posted speed limit; or if the street or highway abutting the area has a speed limit at least 40mph; or, if at least 50 percent of the frontages abutting the highway have been developed with residences, businesses, and/or industry for a distance of at least 1/4 mile.

[2] All other locations not included under the developed definition shall be considered as UNDEVELOPED.

Figure 5A - Existing Conditions Segments 1.1 - 1.3



SEGMENT 1.4



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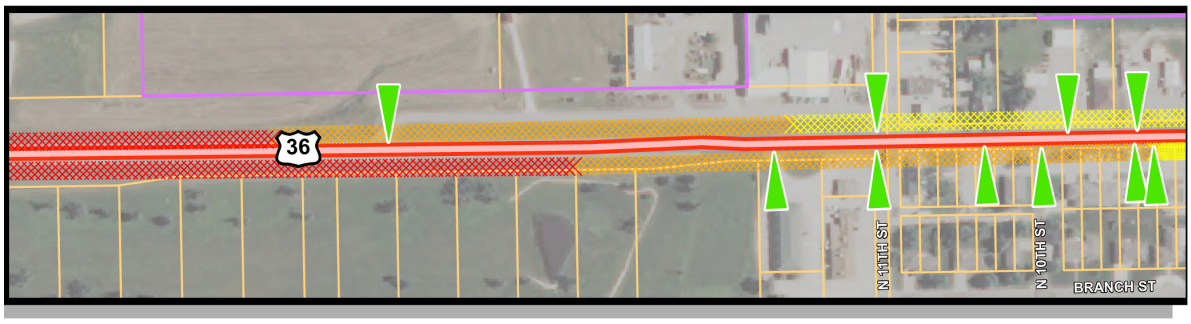


SEGMENT 1.6

LEGEND

EXISTING ACCESS

US 36

KDOT ROADS

COUNTY ROADS

SENECA CORPORATE LIMITS

PARCEL DATA

0 400 800 FEET

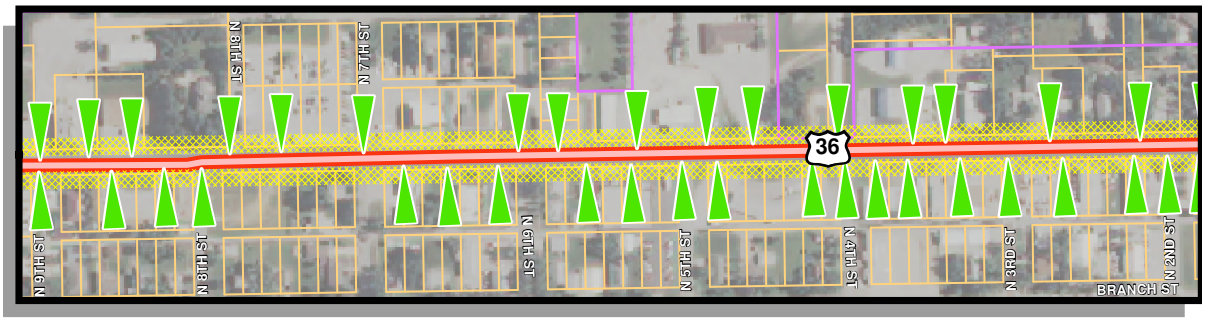
N

SPEED LIMIT (MPH)	UNDEVELOPED[1]	DEVELOPED[2]
25		
35		
45		
55		
65		

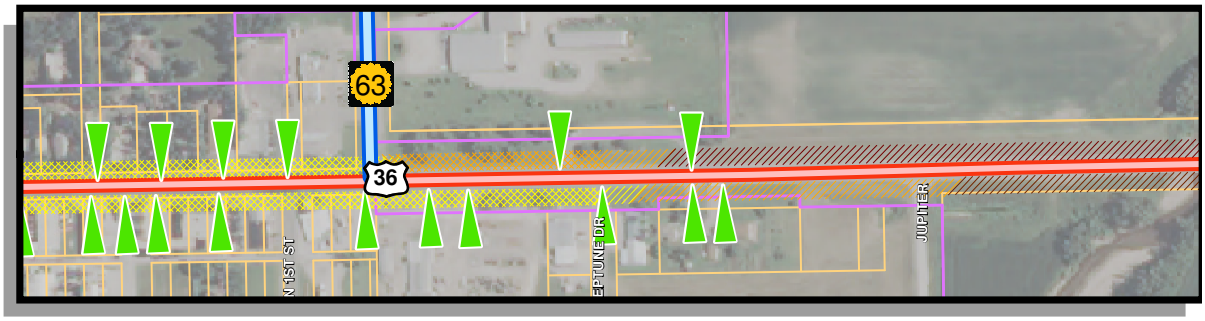
[1] The KDOT Corridor Management Policy defines a DEVELOPED area is within the corporate limits of a municipality, regardless of posted speed limit; or if the street or highway abutting the area has a speed limit at least 40mph; or, if at least 50 percent of the frontages abutting the highway have been developed with residences, businesses, and/or industry for a distance of at least 1/4 mile.

[2] All other locations not included under the developed definition shall be considered as UNDEVELOPED.

Figure 5B - Existing Conditions Segments 1.4 - 1.6



SEGMENT 1.7



SEGMENT 1.8

SEGMENT 1.9

LEGEND

EXISTING ACCESS

US 36

KDOT ROADS

COUNTY ROADS

SENECA CORPORATE LIMITS

PARCEL DATA

0 400 800 FEET

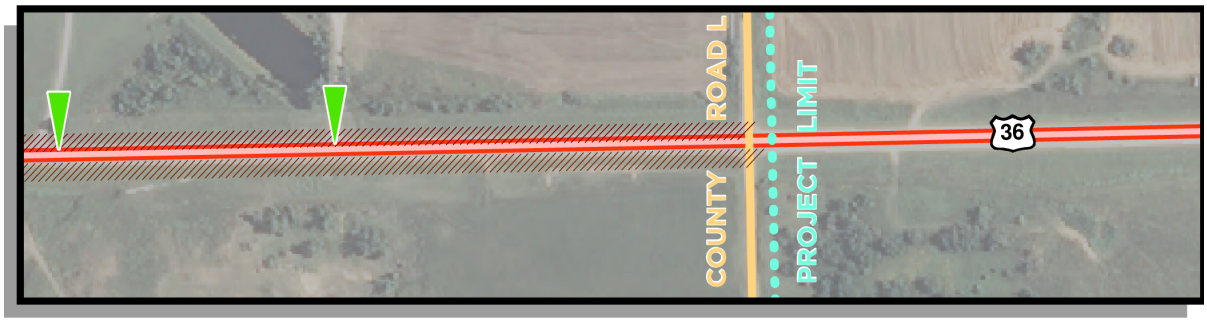
N

SPEED LIMIT (MPH)	UNDEVELOPED[1]	DEVELOPED[2]
25		
35		
45		
55		
65		

[1] The KDOT Corridor Management Policy defines a DEVELOPED area is within the corporate limits of a municipality, regardless of posted speed limit; or if the street or highway abutting the area has a speed limit at least 40mph; or, if at least 50 percent of the frontages abutting the highway have been developed with residences, businesses, and/or industry for a distance of at least 1/4 mile.

[2] All other locations not included under the developed definition shall be considered as UNDEVELOPED.

Figure 5C - Existing Conditions Segments 1.7 - 1.9



SEGMENT 1.10

LEGEND

EXISTING ACCESS
US 36
KDOT ROADS
COUNTY ROADS
SENECA CORPORATE LIMITS
PARCEL DATA

0 400 800 FEET

N

SPEED LIMIT (MPH)	UNDEVELOPED[1]	DEVELOPED[2]
25		
35		
45		
55		
65		

[1] The KDOT Corridor Management Policy defines a DEVELOPED area is within the corporate limits of a municipality, regardless of posted speed limit; or if the street or highway abutting the area has a speed limit at least 40mph; or, if at least 50 percent of the frontages abutting the highway have been developed with residences, businesses, and/or industry for a distance of at least 1/4 mile.
[2] All other locations not included under the developed definition shall be considered as UNDEVELOPED.

Figure 5D - Existing Conditions Segment 1.10

5.2 Existing and Projected Traffic Volumes

Table 5A shows current and projected (through 2040) traffic counts for US-36 through the study area. The traffic count data were obtained from the current 2009 KDOT Traffic Flow Map. The historic count data used in forecasting the future traffic counts were obtained from the KDOT Traffic Flow Maps for the years 2000 – 2008. Traffic projections were determined using the FORECAST formula in Microsoft Excel, which is a linear regression equation. The historic trend was established with the 10 most recent years' traffic count data.

	2009 KDOT Current*		2020 Projected		2030 Projected		2040 Projected	
KDOT Traffic Count Location*	Total AADT**	Truck Traffic (% of Total)	Total AADT**	Truck Traffic (% of Total)	Total AADT**	Truck Traffic (% of Total)	Total AADT**	Truck Traffic (% of Total)
West project limit to K-178	4,310	16.0%	4,623	20.1%	5,058	22.6%	5,493	24.7%
K-178 to 63 W. Jct.	5,220	13.2%	5,710	15.5%	6,395	16.3%	7,080	17.0%
63 W. Jct. to 63 E. Jct.	3,920	20.0%	4,488	21.6%	4,804	23.7%	5,121	25.5%
63 E. Jct. to east project limit	3,340	22.3%	3,507	24.0%	3,516	26.4%	3,524	28.8%

* Source: 2009 KDOT Traffic Flow Map
** Average Annual Daily Traffic

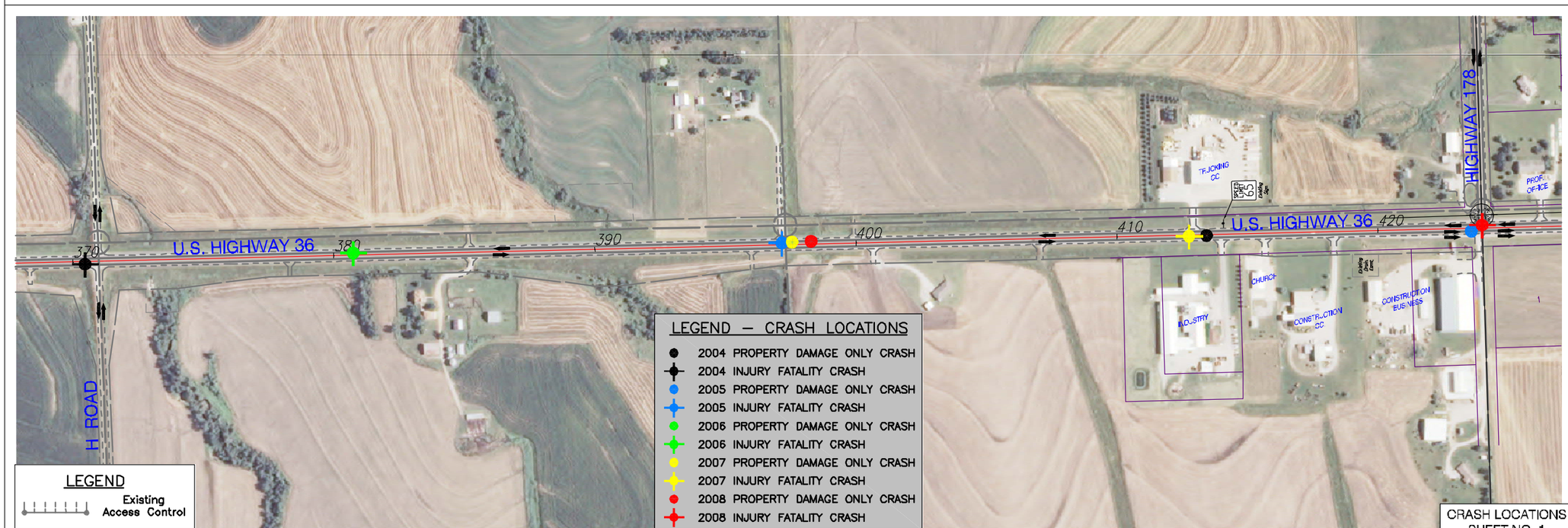
Table 5A - Study Area Traffic Counts (Current and Projected)

5.3 Crash History and Analysis

Transportation and roadway system deficiencies, manifested in vehicle crashes, can contribute to lower productivity, serious economic loss, and human suffering and death. Due to human driver factors, roadway capacity and geometry does not always parallel roadway safety. However, a sig-

Continued on pg. 27

Figure 5E - Crash Locations Sheet No. 1



CRASH LOCATIONS
2004 - 2008
US-36 BETWEEN K187 AND K-178

PLAN CHECKED CHECKED BY DATE

PROFILE CHECKED CHECKED BY DATE

Professional Engineering Consultants, P.A.
1268 SW. TOPEKA BLVD. - TOPEKA, KANSAS 66612
785-233-8300 • FAX 785-233-8855

Designed By TLC Job No. 09302-001
Drawn By MAM Date MARCH 2010

Figure 5F - Crash Locations Sheet No. 2

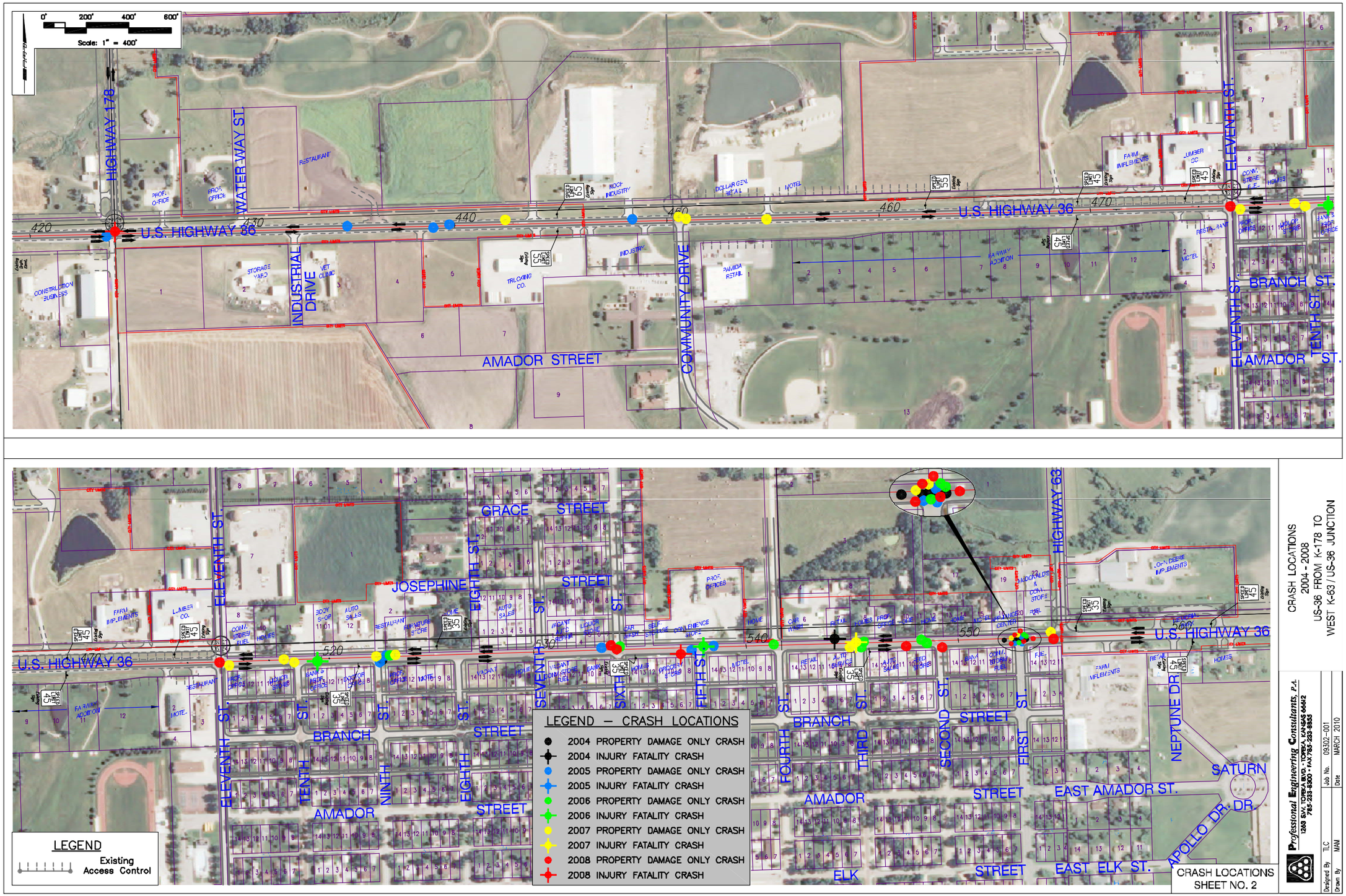
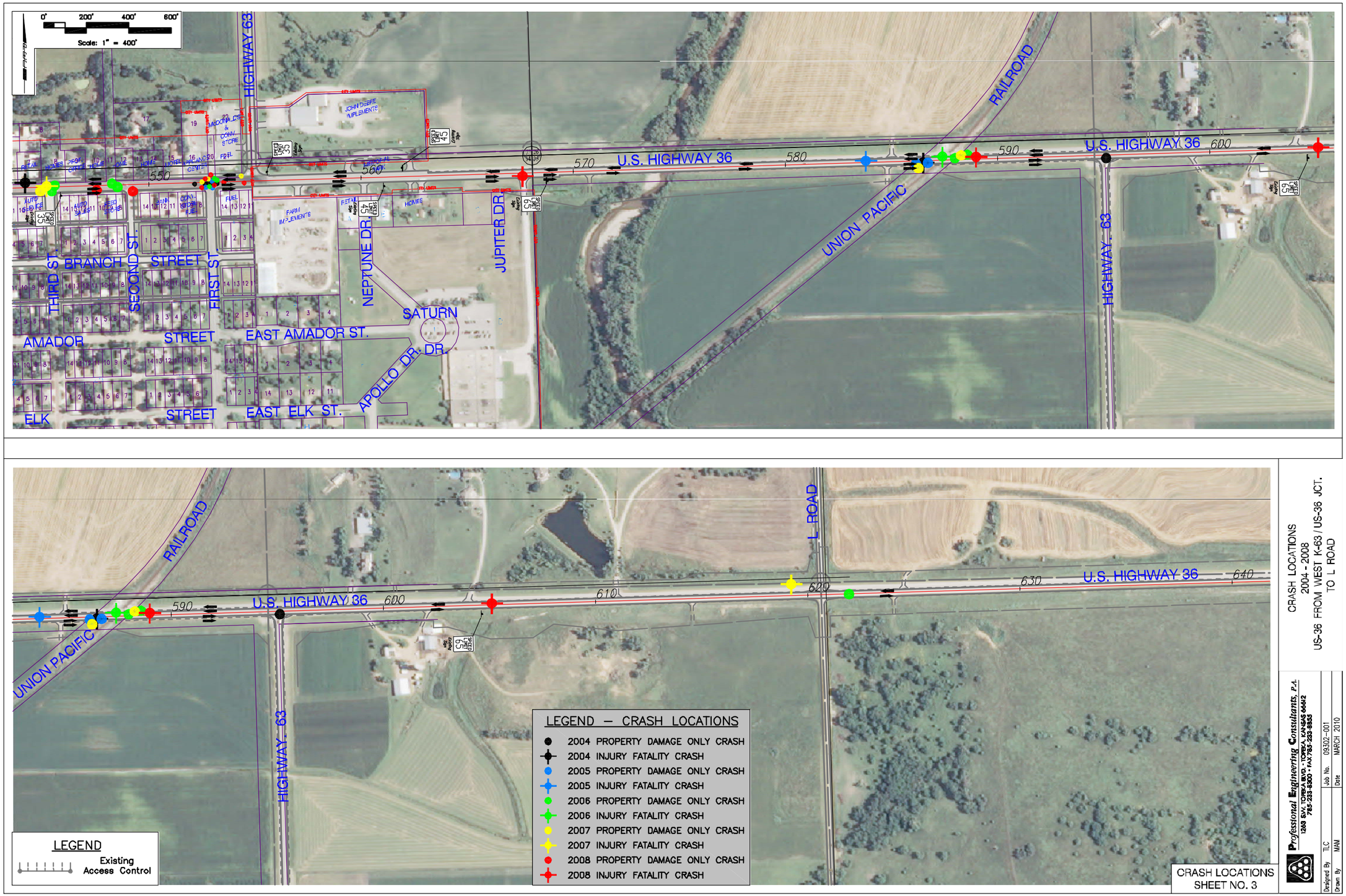


Figure 5G - Crash Locations Sheet No. 3



7.1 Establish Functional Street Classification Hierarchy

The City of Seneca should consider establishing the functional classification hierarchy of its street network and publishing an illustrative map. The *Seneca 2010 Comprehensive Plan* is somewhat ambiguous in its identification of street hierarchy. It is necessary to have a good understanding of how each street functions in order to assure the proper utilization of the transportation network and implementation of appropriate access management strategies.

This recommendation could be easily implemented through a comprehensive plan update. Alternatively, the City of Seneca could complete and adopt a transportation study that establishes a functional hierarchy as policy or the City could create their own functional classification map using the guidance and literature published by the Federal Highway Administration. This item could also be useful in the development of capital improvement programs and street improvement projects.

7.2 Promote KDOT Access Spacing Criteria in Undeveloped Areas

KDOT's Access Spacing Criteria should be promoted as the preferred spacing requirements in undeveloped portions of the study area. It would be undesirable and nearly impossible to achieve KDOT preferred spacing in the developed areas. Generally, in currently undeveloped areas the KDOT Access Spacing Criteria remain a desirable standard for future development.

However, this plan is specific to the plan study area and includes a detailed analysis of access in both developed and undeveloped areas. Therefore, plan recommendations may impact the access permitting process. In cases where the plan recommendations exceed or conflict with the KDOT Access Spacing Criteria, the plan should be considered as the guiding document on access spacing.

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8.1 Intergovernmental Coordination

The City of Seneca, Nemaha County and KDOT should encourage continued coordination on access management issues in the future. The US-36 Access Management Plan is a good example of what can be accomplished when governmental agencies coordinate to achieve common goals that benefit the community. The momentum of this planning effort should be carried into the future. As each of these agencies move forward with plans, regulations and projects, continued consultation should occur. This will help enable meeting plan goals and will minimize negative development impacts on access to US-36.

8.2 Interlocal Cooperation Agreement

An effective way to facilitate continued intergovernmental coordination is an Interlocal Cooperation Agreement. Through the exercise of home rule, by entering into an interlocal cooperation agreement, pursuant to K.S.A. 12-2901 et seq., and by utilizing powers granted to cities and counties by Kansas statutes, significant opportunities exist for cities and counties to cooperate with each other in the creation of financing strategies for the mainline highway enhancements and city connectors and local road projects within the corridor. There is potential for such cooperation in the use of both the traditional and the alternative financing mechanisms described in **Section 8.3**.

K.S.A. 12-2901 et seq. authorizes all public agencies of the state (including KDOT) to jointly cooperate in the exercise of any power, or privileges, or authority exercised or capable of exercise by such agency, including economic development and public improvements, pursuant to an agreement in the form therein provided. See also, K.S.A. 75-5023.

K.S.A 12-2904 (f) dictates that each interlocal agreement, prior to it taking effect, shall be submitted to the attorney general for a determination of whether or not the agreement is in proper form and compatible with the laws of the state. The Office of the Attorney General has made this determination on other interlocal agreements related to implementation of Access Management Plans, so obtaining approval of interlocal agreements, which are based on the KDOT approved template Interlocal Cooperation Agreement, is not daunting.

In addition, K.S.A. 12-2905 requires that, also prior to the interlocal agreement taking effect, it be filed with the register of deeds of every county in which each political subdivision or agency of the state that is a signator to the agreement is located. The agreement also must be filed with the Office of Secretary of State.

8.3 Implementation Toolbox

Substantial effort and expense has been put into the development of the US-36 Access Management Plan. Each of the study partners have invested resources to:

- Collect and analyze all available, relevant background information regarding the study area to fully understand current conditions;
- Study and extrapolate projections and data that may have an impact transportation along US-36;
- Reach out to all interested stakeholders to obtain input and guidance on what has occurred, what exists and what they feel should be the access management goals for US-36 into the future; and

- Forge a consensus among KDOT, the community partners and interested stakeholders on a plan that captures this shared vision for enhancements to the mainline highway and adjacent local street network and the interface between the two, including the type and location of points of access within the study area.

Successfully completing this planning effort is a major accomplishment in and of itself. The dividends which will flow to the parties from having achieved this goal are inestimable.

That being said, the *US-36 Access Management Plan* is just that: A PLAN. The real purpose for doing a plan is to, through comprehensive and thorough analysis, create a guide to decision-making by all the interested parties, so that the vision and, as much as possible, the details of the plan can become reality. To make the vision of the Plan a reality, KDOT and each of the community partners within the study area must take action to implement the Plan. This section of the Plan describes a series of techniques that can be used by the partners to help turn the maps, illustrations, policies, goals, strategies and recommendations of the Plan into the actual facility improvements envisioned by the Plan. The tools described in this section, when put into place, have the supplemental benefit of establishing additional criteria against which state, county, municipal and utility improvement plans and private development proposals can be evaluated, as each is brought forward through time. Having these supplemental criteria in place will give all parties greater assurance that all the resources the parties put toward creation of the *US-36 Access Management Plan* will achieve the vision for the study area.

The tool box of techniques is divided into three major sub-sets: Land Use and Regulatory Strategies, Access Management Strategies and Financing Strategies. Each of these sub-sets contains a variety of tools that, if implemented correctly, can help realize the goals outlined in the Plan. Close coordination between KDOT and the local partners is essential since authority for some of the tools are vested in the state and the authority for others is vested in the local governments.

Planning and Regulatory Strategies

Comprehensive Planning

To help ensure that the land development decisions are consistent with and are made in accordance with the recommendations of the Plan, the City of Seneca should adopt the *US-36 Access Management Plan* as a part of its comprehensive plan. K.S.A. 12-747 authorizes city and county planning agencies to make or cause to be made a comprehensive plan for the development of that community. There is specific authority to adopt area or sector plans covering only a portion of the area within a community's jurisdictional boundaries. The plan must show the commission's recommendation for the development or redevelopment of the territory included in the portion of the plan prepared. The planning commission must hold a hearing on the adoption of the *US-36 Access Management Plan* and make a recommendation to the governing body on its adoption. The plan does not become effective unless approved by the governing body. *Jurisdiction: Local*.

The goal of a comprehensive plan is not only to serve as a guide to development for the planning commission and the governing body but also to owners and potential owners of property within the community's jurisdictional boundaries. That being the case, it is recommended that the amended comprehensive plan be posted on the city's website and at all other appropriate locations to assist in assuring that all interested parties are informed of the recommendations of the *US-36 Access Management Plan* for areas included in its footprint map.

Official Maps

An official map is a legally adopted map that conclusively shows the location and width of proposed roads or streets, public facilities and public areas and drainage rights-of-way. It is also commonly referred to as a major street plan. Although the Kansas statutes do not specifically authorize cities or counties to adopt an official map, K.S.A. 12-747, in its description of the elements that should be covered in a comprehensive plan, clearly contemplates that the plan include the type of information that is traditionally included in an official map. It goes without saying that the lack of specific statutory authority to adopt an official map in no way precludes a city or county from acting pursuant to their home rule authority to do so. In addition, K.S.A. 12-765, discussed below, granting authority to cities and counties to establish building or setback lines, does authorize cities doing so to incorporate by reference an official map in the ordinance or resolution, as the case may be. The adoption of an official map as a part of the community's comprehensive plan or as a standalone document gives that community one additional point of reference and source of guidance when considering development applications relating to land that lies within the study area to determine whether the development proposed will have an impact on the improvements contemplated by the Plan. *Jurisdiction: Local*.

Plan Consistency

To help ensure that the community's comprehensive plan is internally consistent and therefore effectively serves as a comprehensive guide to development within the community, upon adoption or in conjunction with the adoption of the *US-36 Access Management Plan*, the community should review its existing comprehensive plan to assure that other portions of the plan support and are not in conflict with the recommendations of the *US-36 Access Management Plan*. If the community identifies inconsistencies, it should revise and readopt the comprehensive plan with revisions designed to eliminate those inconsistencies using the procedures outlined for the adoption of a comprehensive plan. *Jurisdiction: Local*.

Utility Planning

Utilities necessary to support development will be constructed within the study area. It is critical that these utilities be located at places that are consistent with the Plan, so they will not have to be relocated upon construction of enhancements to the mainline highway at future dates. The study partners should, in coordination with all providers of utility services within its corporate boundaries, prepare and continually update a utility master plan. These utility master plans must be carefully coordinated with the *US-36 Access Management Plan* to ensure consistency between the two. The study partners should carefully evaluate the *US-36 Access Management Plan*, when making decisions about the location of new utilities and related easements. In addition, the study partners should establish a regular point of interface with each utility provider to ensure coordination between the parties in ongoing planning efforts and land acquisition and placement decisions. *Jurisdiction: KDOT/ Local*.

Conformity of Public Improvements

K.S.A. 12-748 provides that whenever a planning commission has adopted a comprehensive plan for an area, no "public improvement, public facility or public utility," of a type covered by the recommendations of that plan, may be constructed without first being submitted to and approved by the planning commission as being in conformity with the plan. Public entities with plans for construction of these improvements, facilities and utilities should consult with the representative of cities and counties with adopted comprehensive plans early in that entity's decision-making process and timely submit those plans to the appropriate planning commissions for this determination. This requirement applies to any public entity that is intending to do this type of construction within the jurisdic-

tional boundaries of a city or county. This is an important way to ensure due consideration is given to the recommendations of the *US-36 Access Management Plan*, once it is made a part of a community's comprehensive plan. Cities and counties that learn of plans for construction of this type, by another public entity within their boundaries, should be diligent in contacting the entity to make sure they are aware of this obligation and then to facilitate the contemplated review, thereby helping to ensure the Plan is fully considered in these situations. It is important to note that the governing body of the entity proposing this construction can over-ride a negative recommendation of a local community planning commission, but even in that instance, an important opportunity for review of the consistency between the proposed construction and the *US-36 Access Management Plan* by the parties is captured. *Jurisdiction: KDOT/Local*.

Development Moratoria

A public sector entity may, through passage of a development moratorium, temporarily halt the processing of applications for all or a specified type of development until a governmental activity is completed, such as the adoption of a plan or the passage of a revised ordinance on a specified subject. The Supreme Court recently held that a reasonable moratorium fulfills a legitimate public purpose and is not per se a taking.

As vigilant as the partners to this Plan may be in incorporating the *US-36 Access Management Plan* into local comprehensive plans and utilizing the regulatory strategies to implement the Plan, situations are bound to arise where development pressures overtake the local professional staff's ability to effectively manage those pressures. In those situations, development moratoria are a very effective tool to help stem those pressures while the community determines what approach will be most effective; be it an amendment to the comprehensive plan or passage of an ordinance/resolution establishing a new or updated regulatory implementation technique, such as an overlay district. The moratorium ceases the processing of applications during a legislatively established period of time needed to prepare and adopt strategies the community determines will best address the circumstance. It is important to note that adoption of moratoria is generally considered to be a zoning action. Accordingly, that ordinance/resolution must be passed pursuant to the hearing and notice requirement of Article 7 of the Kansas Statutes. For that reason, it is critical that communities act quickly to get a moratorium in place once a situation calling for a "time out" is identified. One way to close the window on the rush of applications that might result from notice of the consideration of a moratorium ordinance is for the community's governing body to adopt a resolution directing staff to stop accepting applications until the moratorium ordinance takes effect. The authority for adoption of a resolution of this type is found in the "pending ordinance" doctrine, which has been accepted by the courts of most states. *Jurisdiction: Local*.

Zoning

Zoning is one of the most prevalent and effective mechanisms for implementing a comprehensive plan. Zoning is a process utilized by local governments to classify land into areas and districts. These areas are generally referred to as "zones," and impose, in each area and district, restrictions related to building and structure designs, building and structure placement, and uses to which land, buildings, and structures within these districts may be put, including setbacks and height, lot coverage, and impervious cover restrictions. The authority to establish setbacks from rights-of-ways is not specifically mentioned, but is derived from the authority to set sizes of buildings, the percentage of each lot that may be occupied and the size of yard and other open space. The implicit authority to establish setbacks as a part of zoning district restrictions is located in K.S.A. 12-755. These statutory provisions provide authority to establish setbacks for more than just buildings. They may apply to any structure within the designated setback. Traditionally, however, though established at depths adequate to preserve rights-of-way for the local street network system, the normal front and side yard setbacks included in zoning ordinances and subdivision regulations are not generally sufficient

in depth to preserve rights of way that may be necessary for enhancement to the mainline highway within the Corridor. Zoning ordinances may also make provisions for certain uses to be established community-wide or in individual zones only by issuance of a special or conditional use permit. Rezoning of parcels that have been previously zoned may be initiated by the local community or by a property owner. *Jurisdiction: Local*.

Through the adoption of zoning ordinances, which are carefully tailored to implement the strategies and policies of the *US-36 Access Management Plan*, development within the study area can be effectively managed to ensure successful implementation of the Plan. K.S.A. 12-755 and 12-756 authorize both cities and counties to adopt zoning ordinances, and K.S.A. 12-757 authorizes the rezoning of properties in those instances where changing a property's zoning classification is advisable or necessary to adapt original zoning to current situations.

If a rezoning application proposes a zoning classification that is determined to have the potential of adversely impacting the study area, copies of the application, along with the staff report, should be provided to KDOT for input, at the same time any other affected party is provided notice of the hearing on the application.

K.S.A. 12715b authorizes cities, with a couple of exceptions and under certain conditions, to adopt zoning regulations applicable to land located outside of its corporate limits, but only within three miles of those limits and only if the county has not adopted zoning regulations applicable to that area of the county. Written notice of a city's intent to adopt zoning outside its limits must be provided to the appropriate board of county commissioners. Similarly, each county that proposes to adopt zoning regulations affecting property within three miles of the corporate limits of a city must give written notice of its intent to that city's governing body.

Arguably, the most important Kansas Supreme Court case dealing with zoning is *Golden v. the City of Overland Park*. *Golden* sets out factors that planning commissions and governing bodies may consider when deciding whether to approve or deny a zoning application. One of those factors is consistency with the comprehensive plan. Each community along the corridor, when acting on a development application related to land that lies within the Corridor, should consider whether the development proposed by that application is consistent with the Access Management Plan, as adopted into its comprehensive plan.

Site Plans

The term "site plan" is used here to describe a plan submitted during the course of the development approval process. It is also designed as a mechanism to inform the decision makers of the applicant's proposal for development of a property. The site planning process is generally a one step process that is required of developers that are not required to rezone their property prior to the issuance of a building permit. To institute this mechanism, the community would need to revise its land development codes to require that, in instances of proposed developments, where some other plan approval process is not required prior to issuance of a building permit, the applicant must submit a site plan for review and approval prior to building permit issuance. It would be common for certain types of development to be excluded from the site plan approval process, such as development of a single family house or similar smaller type developments that will have a minimal impact on facilities and services or on the landscape.

The usual site plan would be described as a plan for one or more lots on which is shown the existing and proposed conditions of the lot, including topography, vegetation, drainage, floodplains, wetlands, and waterways; landscaping and open spaces; walkways; means of ingress and egress; circulation; utility services; structures and buildings; signs and lighting; berms, buffers, and screening devices; surrounding development; and any other information that reasonably may be required for

an informed decision to be made by the approving authority.

It is not uncommon for the site planning process to be divided formally or informally into two parts. In these circumstances, an initial submittal, often called a concept plan, is made to the technical staff for informal review. The applicant meets with the approving authority's technical staff to discuss the plan and exchange views on what the applicant is proposing and what the technical staff believes will be acceptable to the approving authority. It can also serve as an opportunity to fine-tune the plan for formal submittal. Once that process is complete, a formal site plan, as described above, or a preliminary development plan is submitted for staff review and report.

The nature of the approval required for a site plan can vary greatly, depending on the expertise of staff and the appetite of the community to delegate approval authority to an administrative official. So, for example, a community could decide to vest plan approval authority for some categories of development in an administrative official, other categories of development in its planning commission and retain to the governing body still another category of development approvals. One would expect that administrative approval would be available for those categories of development that are determined to be of the least potential community impact, moving up to governing body approval on those that could have far reaching impacts, such as development at certain locations (key intersections) along US-36.

If the site plan posed in the application is determined to have the potential of adversely impacting the study area, copies of the application, along with the staff report, should be provided to KDOT for input, at the same time any other affected party is provided notice of the hearing on the application. If no hearing is required, this notice should be provided to KDOT in enough time before action on the application takes place to allow meaningful KDOT input.

Subdivision Regulation

The subdivision of land through platting is the second most common method used by communities to manage the development of property within its jurisdiction. The control of the division of a parcel of land is effectuated by adopting subdivision regulations by ordinance or resolution that requires development be in accordance with set design standards and procedures adopted locally. K.S.A. 12 – 749 grants cities and counties the authority to adopt subdivision regulations. Subdivision regulations may include, but need not be limited to: efficient and orderly location of streets; reduction of vehicular congestion; reservation or dedication of land for open spaces; off-site and on-site public improvements; recreational facilities; flood protection; building lines; compatibility of design; storm water runoff; and any other services, facilities and improvements deemed appropriate. It is through the consideration and action on plats that communities are able to require that the distances which structures are set back from rights-of-way (a very important tool for preservation of rights-of-way for mainline highway), the layout of building lots, the points of ingress and egress from the lot(s) (effective in helping to manage access) and the public improvements associated with those lots do , in fact, conform to locally established standards, including adopted plans, such as Access Management Plans. In some locations, subdivision regulation and plat approval may actually be the most significant regulatory tool for managing development. In some more rural areas, it is more common for counties to have adopted subdivision regulations than to have adopted zoning. In those unincorporated areas, there would be no local legislative authority to manage development through zoning restrictions. Accordingly, subdivision regulation would be those counties' primary land management tool.

Subdivision regulations usually specify what improvements the subdivider will be required to provide and the standards to which the improvements need to be constructed. A plat is a map prepared by a registered civil engineer or licensed land surveyor showing the boundaries and locations of individual properties and the streets of the proposed subdivision. The plat generally also shows land

to be dedicated to a public sector entity for streets and easements for public utilities. K.S.A. 12-749 authorizes a planning commission to adopt and amend regulations regarding the subdivision of land, including payment of a fee in lieu of dedication of land. This same section also authorizes a county planning commission to establish subdivision regulations. Much like zoning, a city may adopt subdivision regulations that control the subdivision of land outside of its corporate boundaries, but only within three miles of that limit or one half the distance between two cities, whichever is less. Similar written notice requirements apply. The regulations must be considered by the planning commission at a public hearing, and the commission must forward its recommendation to the governing body for its approval. K.S.A. 12-750 lays out a process that must be followed where a city desires to adopt extraterritorial subdivision regulations and the county has its own regulations in effect as to that area. That process can result in the creation of a joint city/county committee for subdivision regulation.

K.S.A. 12-752 establishes the procedure for the consideration of and action on plats. Each plat must be submitted to the planning commission, which determines if the plat conforms to the subdivision regulations. If it finds that it does, it notifies the owners of that fact and endorses that fact on the plat. A dedication of land for public purposes must be accepted by the governing body before it takes effect.

Notices should be placed on plats prior to their recording with Registers of Deeds to help ensure that prospective purchasers of properties, which are included in the geographic area covered by the Access Management Plan, are informed of the ramifications on those properties of being within an the area covered by the Access Management Plan. In addition, if the preliminary plat application is determined to have the potential of adversely impacting the Corridor, copies of the application, along with the staff report, should be provided to KDOT for input, at the same time any other affected party is provided notice of the hearing on the application. *Jurisdiction: Local*.

Building Permits

The same section of Kansas Statutes discussed immediately above, prohibits the issuance of a building permit for the use or construction of any structure on any platted lot in an area governed by subdivision regulations, except in the manner provided by that section. It further authorizes subdivision regulations adopted by cities and counties to provide a procedure for the issuance of building permits that takes into account the need for adequate street rights-of-way, easements, improvements of public facilities and zoning regulations, if in existence.

The issuance of a building permit is obviously the last step in the typical development approval process. Although courts hold that a building permit must be issued upon submission of a complete application, if all code provisions governing the process for building permit issuance have been fulfilled, this does not mean that communities cannot creatively incorporate building permit requirements into their governing code provisions. For example, it is common for the issuance of a building permit to be conditional upon the payment of a legislatively imposed fee, such as an impact fee.

In cities or counties that have not adopted zoning or subdivision regulations, local regulations governing the issuance of building permits may not only be the last step, but also the first step in the development approval process, thus markedly increasing the importance of this tool in the arsenal of techniques a community may employ to effectively manage land development. Even in communities that have adopted one or both regulatory tools, the procedure for the issuance of building permits still may play a very a critical role. K.S.A. 12-751 authorizes cities to adopt and enforce building codes outside that city's limits and allows compliance with subdivision regulations to be a condition of the issuance of a building permit. *Jurisdiction: Local*.

Variances

Communities in Kansas have authority to grant variances from the specific terms of the zoning restriction whenever doing so is not contrary to the public interest and where, due to special conditions, local enforcement of the provisions of the regulations in an individual case results in unnecessary hardship. K.S.A. 12-759. The board of zoning appeals has the authority to grant a variance to area and setback regulations applicable to that property. The grant of a variance from district restrictions, such as parking requirements and impervious cover requirements, may be an effective way to allow an important development proposal to proceed with minor modifications that keep it out of necessary rights-of-way and behind setback lines. At the same time, the grant of some variances could adversely impact the recommendations of the Plan. Therefore, it is recommended that the board of zoning appeals consult the *US-36 Access Management Plan*, as incorporated into its comprehensive plan, when considering any request for a variance to ensure that the variance decision supports the recommendations of the Plan. In addition, if the variance proposed is determined to have the potential of adversely impacting the study area, copies of the application, along with the staff report, should be provided to KDOT for input, at the same time any other affected party is provided notice of the hearing on the application. *Jurisdiction: Local*.

Notice of Applicability of Plan

One tool to help ensure that individuals who own property within the study area and who are considering purchase and/or development of that property are aware that the land is included in the area covered by the *US-36 Access Management Plan* is for the study partners to require that all plats approved by them contain a statement, similar to the following, placed in the dedication section of each approved plat.

> "The property shown on and described in this plat is and shall hereinafter perpetually be subject to the US-36 Access Management Plan, adopted by the Kansas Department of Transportation on _____ , the City of Seneca, Kansas on _____, ____and Nemaha County, Kansas on _____, ____, recorded in the Register of Deeds for Nemaha County, Kansas, in Book _____, at Page _____."

Another way to help ensure that those interested in developing land within the study area are aware of the Plan, is for project partners to amend all their development applications to highlight the existence of special planning areas in the city or county, including the areas covered by the *US-36 Access*

Management Plan

This could be handled informally through an internal process established wherein all individuals who request a development application are routinely asked by staff the location of the property that will be the subject of the application to allow the staff member to inform the potential applicant when the proposed development is located in the study area. Alternately, it could be handled more formally by inserting a line on all applications with a space to be filled in identifying parcels covered by the *US-36 Access Management Plan*. The latter is the recommended approach, as it avoids reliance on, what could be, revolving staff to ensure that knowledge of the relevance of the Plan is consistently imparted to applicants. That being said, development application forms cannot always be changed immediately, so the informal process may be employed until the opportunity arises to make the formal change.

Entities or persons interested in land development within the study area may also become informed

of the existence of the Plan as a result of the requisite filing of the Interlocal Cooperation Agreement (entered into among all parties to the Study that resulted in the *US-36 Access Management Plan*) in the register of deeds office in the county where that property is located. It should be noted that upon its filing the Interlocal Agreement will not be filed in the grantor/grantee index, so it would typically not show up on a title search. The agreement is filed under the names of the parties to the agreement. *Jurisdiction: Local*.

Notice and Opportunity to Provide Input

Since the *US-36 Access Management Plan* is a joint cooperative effort between KDOT, the City of Seneca and Nemaha County to create a vision controlling access to US-36, all parties with an interest in potential development in the study area should be afforded an opportunity to provide input on that decision-making process during the requisite application and consideration procedures utilized by that community. Accordingly, the study partners each should provide KDOT with appropriate notice of any development application (including rezoning and associated preliminary development plan applications, special or conditional use applications, site plan applications and preliminary plat applications and hearings on an amendment to that community's comprehensive plan), that could reasonably be expected to have the potential to adversely impact the study area. In addition, each community should provide KDOT with advance copies of all such proposed plan amendments or development applications and any related staff reports. *Jurisdiction: KDOT/Local*.

Land Acquisition

Public sector entities have the authority to acquire land for public improvements, including state highways and local roads and streets by gift, purchase, or condemnation. (K.S.A. 19-101 et seq., Article 12, Section 5 of the Kansas Constitution, K.S.A. 68-404) Sufficient land may be acquired to accommodate immediate construction needs, as well as for future needs. In appropriate circumstances, public sector entities can acquire interests in land for public improvements in advance of the date of the start of construction. Timely acquisition of necessary rights-of-way preserves opportunities to fully implement the goals of the *US-36 Access Management Plan* and helps reduce the cost of full implementation. The primary objective of all the partners in implementing the Plan must be to continually coordinate with one another to identify opportunities to acquire the interests in land necessary to construct the transportation improvements envisioned by the Plan. Continuing coordination is critical, but it means nothing if the partners are not equally devoted to cooperation with one another in the identification of traditional and innovative new sources of revenue and in creative partnering on acquisition strategies. *Jurisdiction: KDOT/Local*.

Access Acquisition

Existing access points that are not consistent with the *US-36 Access Management Plan* can often be eliminated though the KDOT's, city's or county's exercise of their police power. For that exercise to be appropriate however, adjacent landowners must be left with "reasonable" access after the inconsistent access point is removed. A private property owner does not have a legal right to direct access to the highway or to a particular local street. It is only required that a reasonable access is available to a property owner through some alternative means, such as access to a frontage or reverse frontage road, in the case of a highway or from some other adjacent street. That being said, situations will arise where this objective of reasonable access cannot be achieved solely though exercise of a public entity's police power. Situations will also exist where it is desirable to eliminate one or more existing access points to a particular parcel to achieve the access management objectives of the Plan, while still leaving that property owner with a point of direct access that is consistent with the Plan. In those, and in other instances, it may be advisable or even necessary to acquire inconsistent points of access through traditional negotiation or condemnation processes.

Acquisition of access rights can be applied to:

- limiting access to designated locations or side streets;
- controlling access and sight distance at intersections or interchanges;
- introducing long term or permanent access control; and/or
- controlling traffic and turning movements at locations where high numbers of conflicting movements occur.

Land Dedication and In-Lieu Fees

One of the most, if not the most, critical recommendation of the *US-36 Access Management Plan* is that both KDOT and the study partners do everything within their power to preserve and acquire the right-of-way necessary to construct the enhancements to the highway mainline and to the adjacent and interfacing local street network. One of the goals of the plan is to maximize economic opportunities for both landowners and communities along US-36 while, at the same time, appropriately managing direct access. New development that takes place within the study area, in most instances, will create a need for new transportation network facilities to accommodate the vehicle trips it generates.

Both federal and state law authorize the City of Seneca and Nemaha County, as a condition of development approval, that the landowner dedicate rights-of-way needed for network improvements in an amount that is roughly proportionate to the need for facilities generated by that development. A carefully calculated system of fees-in-lieu of dedication also can be effectively utilized to ensure the timely purchase of sufficient rights-of-way. These in-lieu fees are authorized by K.S.A. 12-749. If the study partners adopt well-designed, legally defensible right-of-way dedication and/or in-lieu fee programs, the significant costs of acquiring the right-of-way contemplated by the *US-36 Access Management Plan* can be greatly minimized, thereby helping to ensure successful implementation of the Plan. *Jurisdiction: Local*.

Access Management Strategies

KDOT and local communities can undertake access management activities through its "governmental police powers," beyond the design techniques discussed in **Section 3**. These management strategies can be designed to apply equally to all parts of the transportation network within the study area. The following are several action steps the Corridor partners can take to manage access and help assure successful implementation of this Plan.

Approval of Access

As previously stated, the authority to allow access to a state highway or city connecting links is vested in KDOT. See the *KDOT Corridor Management Policy*. A request for access is approved and controlled through issuance of a Highway Permit. The Permit is the legal document that establishes the relationship between the landowner and KDOT. All points of access to the state highway system must be the subject of a Highway Permit. This includes when access connections or local streets and intersections are installed, relocated, improved, removed, or replaced on or along state highway system right-of-way. The permit will specify such things as the location of the point of access, issues related to the construction of the access, type of use allowed at the access point and other conditions and limitations of access at that point. The KDOT District Engineer has been delegated the authority to approve Highway Permits. A request for a Highway Permit must be made with the appropriate KDOT Area Office.

With respect to access to local streets within the study area, the authority to approve that access is vested in either the city or county that has jurisdiction at the requested location. This authority is derived from the government's inherent police power. The actual procedure for obtaining access will vary from community to community. Some communities may have adopted an access management policy that governs the location and other aspects of access to the public streets and road. In other instances, regulations governing access points may be located in the community's zoning district regulations or its subdivision regulations. On City Connecting Links, a Highway Permit must be obtained for work in the right-of-way. Executed copies of the permit, approved by KDOT and the city or county will be provided to the property owner.

Input to KDOT on Access/Coordination of Access Management

Because of the importance of access management on the mainline highway, and on the road and street network within the study area, and because the authority to permit and close access to the state highway system and its connecting links is vested exclusively in KDOT, (K.S.A. 68-413 and K.S.A. 68404(a)), it is critical that the study partners confer with KDOT respecting development applications that propose access points on the mainline highway and on portions of the local street network that are included in the Plan, particularly if that access is not consistent with points shown in the *US-36 Access Management Plan* as future points of access. *Jurisdiction: KDOT/Local*.

Coordination with KDOT

The *US-36 Access Management Plan* identifies existing access points on the highway that could be consolidated over time, as appropriate circumstances present themselves, to achieve access management objectives. Accordingly, the study partners should cooperate with KDOT in identifying existing access points along the mainline and in closing those points, where doing so, will implement Plan goals. Each local government partner should establish points of contact with KDOT to facilitate the ability to quickly capitalize on opportunities as they arise. Early coordination with KDOT at the site plan and preliminary plat stages is important. *Jurisdiction: KDOT/Local*.

Shared Access

One meaningful way to help ensure that all property owners are afforded reasonable access to the mainline and to the local street network consistent with the full functionality of that network, is to encourage that joint access to that network by adjacent property owners be utilized to the maximum extent possible. Therefore, communities, when reviewing development applications. should consider, as a condition of approval of that application, the grant of a recorded easement by the applicant to adjoining property owners or such other conditions as are appropriate to further the Corridor access management objectives. *Jurisdiction: Local*.

FINANCING STRATEGIES

The *US-36 Access Management Plan* has been developed to maximize economic opportunity while enhancing the safety and efficiency of US-36. The full costs of the improvements to the mainline highway and adjacent street network necessary to achieve these Plan objectives are significant. Monies needed to complete these enhancements may not be available from KDOT or from the study partners when the enhancements are needed. Therefore, the successful implementation of the Plan will rely upon the following:

- Identification of all potential existing financing tools;
- Creative analysis of how these tools can best be utilized individually and in concert with one another to maximize resources;

- Investigation of possibilities for new options using home rule and delegated powers;
- Developing federal and state statutory and regulatory amendments to eliminate funding obstacles and provide new approaches; and
- Seeking new legislative authority for innovative funding approaches.

To achieve this sought-after success, it is imperative that all study partners carefully and constantly coordinate with one another to identify potential sources of funds and work diligently, once sources are identified, to make certain that available funds are utilized in the most effective and efficient way to the benefit of all parties to this endeavor.

That having been said, there is a wide array of financing options available to cities and counties to finance infrastructure improvements. Notably, many of these same financing options can be used as economic incentives to encourage development to occur at a certain location, in a certain form, and/or in specified densities or intensities. These financing options include traditional mechanisms used by cities and counties to raise revenues and to pay for both the capital and operational expenses of government and other alternative financing strategies.

Traditional funding mechanisms include federal and state funds, real and personal property taxation (Article 12, Section 5 of the Kansas Constitution, K.S.A. 19-101 et seq. and K.S.A. 79-1801 et seq.), sales taxation (K.S.A. 12-187 et seq.), economic development tax exemptions (Article 11, Section 13, Kansas Constitution), special assessments (K.S.A. 12-6a01 et seq., and K.S.A. 12-601), and the Main Trafficway Act (K.S.A. 12-685). The latter two are both discussed in some detail immediately below.

K.S.A 12-6a Improvement Districts

Improvement Districts are the Kansas form of a traditional benefit district; a financing and development tool whereby cities and counties can establish a district, construct improvements and then issue general obligation bonds for construction of public improvements and assess the cost to those properties that are specifically benefited by the improvement. The bonds are then retired through payment of special assessments that are paid along with the benefited property owner's ad valorem property taxes by these benefiting properties. There is a very specific statutory process that must be followed to effectively utilize this strategy.

Improvement Districts are used by the city and county to assist in development of arterial roadways (usually associated with section line roads), water lines and sanitary sewers, among other public improvements. It is a responsible and fair method available to communities in Kansas to pay for the roads and infrastructure associated with new development, though its use is not limited to improvements to support only new development. For example it is often used as the financing mechanism for the construction of new sidewalks in existing developments. However, the method can be effectively used to ensure existing property owners do not pay for improvements from which they do not receive a special benefit.

With the number of roadway, sanitary sewers and water line improvements throughout a community, if the community did not utilize improvement districts, either the improvements would not be made or property owner's ad valorem property taxes would need to be raised to allow for the construction of these necessary improvements. Developers have the option to build the improvements in front of their land to meet city specifications, but in so doing, a hodge-podge of improvements would occur, and the improvements could be under construction at different times and cause much more disruption than the orderly process afforded by the creation and administration of Improvement Districts.

Main Trafficways

K.S.A. 12-685 *et seq*. authorizes cities to designate by ordinance any existing or proposed street, boulevard, avenue or part thereof, within its jurisdictional boundaries as a main trafficway, if the primary function of the street is the movement of traffic between areas of concentrated activity within or outside the city. Once designated a main trafficway, the city is authorized to acquire by purchase or condemnation the land necessary for that facility and to improve or reimprove that trafficway. Virtually all aspects of the construction of these trafficways is authorized, including bridges, viaducts, overpasses, underpasses, culverts and drainage, trafficway illumination, traffic control devices and pedestrian ways. The cost for these improvements, including acquisition, can be paid for from the cities' general improvement fund, internal improvement fund or any other available funds or by the issuance of general obligation bonds. No vote of the public is required for issuance of bonds for these purposes. This method is often used in conjunction with the improvement district statute for street improvements.

Because the other traditional mechanisms are regularly utilized by KDOT, cities and counties to pay for capital projects, they will not be discussed in further detail; rather the remainder of this section is devoted to an explanation of several of the less-traditional mechanisms available to cities and counties to pay for improvements contemplated by the Plan and to incent development that is consistent with the Plan's recommendations. All of these financing mechanisms are available to fund improvements contemplated by the *US-36 Access Management Plan* and their use, as the situation dictates, should not be ignored.

Although not actually a source of additional revenue, the bonding authority of cities and counties is worth noting. Each is authorized to issue long-term debt to finance projects, with that debt to be repaid from a variety of traditional and some alternative revenue sources. Bonding authority is important for many reasons, but one key advantage of issuing bonds to finance public improvements is that it allows the issuing entity to pay for an improvement up front (before total project costs are available in hand) to get a project started or even completed in those instances where timing is critical in terms of events in the community and/or to take advantage of favorable financial markets. These improvements can then be paid for over time, generally up to 20 years, as tax revenues or other dedicated sources become available. This can be a huge advantage and can help the partners in their efforts to acquire land for and make the improvements contemplated by the Plan when actual situations in the study area dictate those actions occur.

Most alternative funding techniques are devised by one local government to meet a local need and their use than spreads from community to community. The techniques are refined based on trial-and-error. Many of these approaches do not have specific legislative authority, but are enabled through home rule, local police powers, or a broad reading of authority from another source, such as local planning.

State highway, road and street projects required to support new development, may be constructed utilizing economic incentives, such as tax increment financing, Star Bonds, sales tax reimbursement agreements, tax abatement, special assessment districts and transportation development districts, to name only several of the options. It is important that, wherever possible, local communities along the Corridor be cognizant of their ability to require that revenues from the grant of these incentives to developers be used to offset the cost of the construction of mainline highway improvements and related improvements to the local street network, as shown on the Access Management Plan. But, even more importantly, they must actually make the grant of these incentives conditional on a reasonable portion of these monies being used to pay the cost of Access Management Plan identified improvements.

These incentives also can be effectively used to influence the location, type/uses, form, architectural quality, configuration and density/intensity of development. It is important to utilize these incentives, not only to offset traditional public costs for these facilities, but also as incentives to shape development proposals, so they further Plan recommendations.

Impact Fees

Impact fees are one-time regulatory fees assessed against new development to cover the costs for necessary capital facilities proportionate to the demand generated by the new development. The fee is imposed by a public sector entity on development activity as a condition of granting development approval, and generally is calculated at the platting stage and collected at the time a building permit is issued. Kansas has no impact fee statutory authority. Nevertheless, cities and counties can establish a system of impact fees using their home rule authority. This system of fees requires the development of a local legislative adopted scheme that includes the calculation methodology for the fee, and a system of credits, exemptions and appeals. The system would be adopted by ordinance or resolution, as the case would require. Impact fees must be used to add capacity attributable to new development; they cannot be used to pay for improvements necessitated by existing development. An impact fee must meet three requirements:

- The new facilities are a consequence of new development;
- There must be a proportionate relationship between the fee and the infrastructure demand; and
- The funds collected must be used to provide a substantial benefit to the new development.

In Kansas, impact fees may be collected either across the entire jurisdiction or in a designated geographic area. While they may be assessed at platting, impact fees are typically collected upon building permit issuance. A detailed calculation is necessary to ensure that the system, and particularly the fee charged property owners, is proportionate to the demand for new facilities that each unit of new development generates, i.e., its impact, in terms of facility capacity consumed. In funding transportation network facility improvements, the measuring stick for each development's impacts is the number of vehicle trips it will generate. Since streets are generally designed to accommodate the PM Peak trips, that is generally the time interval used.

The Kansas Supreme Court has recognized the legitimate use of impact fees in McCarthy v. City of Leawood.[1] In that case, the City of Leawood assessed the payment of impact fees on the issuance of building permits and plat approvals for properties within the K-150 (135th Street) Corridor. The purpose of the fee was to finance a portion of the improvements of K150. Back when first established in 1988, the fee was calculated based upon trip generation, at a rate of $26.45 per trip. This rate was then multiplied by the average number of trips generated by a use to determine the individual fee. For example, residential uses were projected to generate 10 trips per day, multiplied by $26.45 for a fee of $264.50 per unit. *Jurisdiction: Local*.

Excise Tax

Technically, an excise tax is a broad term that covers every type of tax, except a property tax. As with all taxes, it is a method of raising revenue. It is distinguished by the fact that rather than being based on the value of property, it is levied on a certain activity or the exercise of a privilege – more accurately described as business done, income received, or privilege enjoyed. Typical examples of excise taxes include taxes on the purchase of gasoline, alcohol or cigarettes, business license taxes and on

[1] 257 Kan. 566, 894 P.2d 836 (1995).

the rental of hotel rooms. In recent past, local governments in Kansas have innovatively used an excise tax to fund transportation network improvements that are required to support development. It is structured as a tax on activity of platting lots. The rate of the tax is based on the amount of square footage proposed to be constructed or on the number of vehicle trips the proposed development will generate on the street network. The key reason for its use has been that because it is a tax and not a regulatory fee, the rate is not required to satisfy the constitutional benefit or nexus requirements of regulatory fees imposed by local governments, such as impact fees discussed above. Kansas courts had upheld this financing approach.

In 2006, however, the Kansas Legislature amended K.S.A. 12-194 to make it uniformly applicable to all cities. By doing so, this provision became no longer subject to a charter ordinance or resolution whereby cites and counties could make its provisions inapplicable to that city or county and adopt supplemental provisions on the subject. This charter approach was the one that cities and had used to eliminate the legal impediment in K.S.A. 12-194 and use their ordinary home rule power to establish an excise tax system of this type. It had become known as a "development excise tax." That amendment, in addition to precluding local governments that did not have a development excise tax in place from adopting one, also included a provision that prevented cities and counties that had levied or imposed a development excise from increasing the rate of the tax without a majority vote of the electors, after July 1, 2006. Accordingly, this technique is only available to local governments that had a development excise tax in place before that date, and those that did have one in place cannot increase the rate charged without a vote. *Jurisdiction: Local*.

Transportation Development Districts

A Transportation Development District (TDD) (K.S.A. 12-17,140 at seq.) is a form of a special district enacted specifically to facilitate the construction, maintenance and financing of a broad array of transportation projects, ranging from streets, roads, highway access roads, interchanges and bridges to light rail and mass transit facilities. Most improvements related thereto, such as streetscape, utility relocations and other necessary associated infrastructure, can also be funded using this technique. While a regular special district can be used to address transportation issues, transportation development districts allow greater funding flexibility, including authority to impose a transportation development district sales tax of up to 1% (K.S.A. 1217,145), in addition to the authority to levy special assessments. If a transportation development district is sought to be imposed, the governing body must hold a duly noticed public hearing in advance of adopting the resolution or ordinance creating the district and approving the method of financing projects within the district. The district may issue bonds backed by the revenues received from properties in the district from the imposed sales tax or special assessment.

One significant difficulty in utilizing this mechanism for improvements covering a larger area is that the district can only be formed through a petition signed by owners of all of the land area within the proposed district. So, if the improvement is adjacent to lands owned by different owners, it may be difficult to obtain the consent of all necessary owners. It may have its greatest utility for distinct segments of the improvements proposed by the Management Plan, such as mainline highway interchanges and access roads located within one tract of land that is designated in the Plan for more dense or intense development. This technique can also be used effectively to assist in the financing of key portions of the adjacent local street network. The statutory scheme allows for a good deal of flexibility in how the boundaries of the district are established, so long as all included property owners agree. For that reason, the community partners should keep this tool on the list of the ones that should be considered for funding, particularly in those instances where a property owner or several property owners want to develop an area of land at an access point with sales tax generating properties. *Jurisdiction: Local*.

Tax Increment Financing

Tax increment financing (K.S.A. 12-1770 et seq.) is a tool used by local governments to capture the future increases in property tax and all or a portion of the revenues received from transient guest, use, local sales taxes collected from taxpayers doing business within the district, and increased franchise fees, and to make revenues realized therefrom available as an incentive to development, by using the revenue to pay for, generally, public infrastructure necessary to implement a redevelopment project plan (K.S.A. 12-170a (o)). Project costs may not include costs related to a structure to be owned by or leased to a developer.

TIF funding can provide funds either as collected (pay-as-you-go) or through special obligation tax increment bonds repaid over twenty years.

While there is specific enabling authority for the use of TIF, it is limited to "eligible" areas that fall within one of the following categories and the boundaries of which are designated by the local government as a redevelopment district:

- Blighted;
- Blighted and in a 100-year flood-plain;
- Intermodal transportation area;
- Major commercial entertainment and tourism area Conservation (becoming blighted);
- Major tourism area;
- Historic theater;
- Enterprise zone, or
- Environmentally contaminated area.

Therefore, not all property within a local government's jurisdictional boundaries may qualify to be included in a redevelopment area.

Eligible project costs most certainly will include all transportation network public infrastructure as identified in the *US-36 Access Management Plan*. *Jurisdiction: Local*.

Sales Tax and Revenue Bond Districts

This mechanism (K.S.A. 12-17, 160 et seq.) is the big brother/sister of tax increment financing. It's "Super TIF," if you will. The entire mechanism works almost exactly like tax increment financing, except the districts are called STAR bond project districts and the individual projects in the district are called STAR bond projects. Each project must be approved by the Secretary of Commerce and include at least a $50,000,000 of capital investment and evidence $50,000,000 in project gross annual sales or, if outside a MSA, met the requirements of K.S.A 12-17,162 (w). It is the heightened level of incentives authorized in these districts that is key. Once a district is established and a project plan is approved, the approving city may issue special obligation bonds. Importantly, those bonds may be repaid from the portion of the city and county sales and use tax collected from taxpayers within the city portion of the district AND the sales tax increment revenues received from any state sales taxes collected from taxpayers in that district. This is in addition to the property tax increment and local sales, use and franchise fee that can be pledged to repayment of the special obligation bonds issued in a traditional tax increment financing project. The Secretary can set a limit on the amount of bonds that may be issued to pay eligible project costs.

Summary of Response Comments

The following are comments that were collected at the December 2nd Public Open House. Concerns are centered on four key intersections along US-36: Hwy 178, Community Drive, 1st Street, and 11th Street. A fifth category addresses concerns at other areas within the project site.

Intersection of US-36 and Hwy 178:

- A possible road to the south should be added to handle a possible industrial site to the south.
- Reduce the speed limit.
- Basically the same problem in all areas plus the corners of US-36/1st Street and US-36/11th Street needs turning lanes. Problem is greatest on the west edge of town as vehicles are traveling at 65mph so to stop for a turning car is far more difficult.
- Reduce speed one mile west of Seneca.

Intersection of US-36 and Community Drive:

- Difficult for westbound traffic to turn south onto Community Drive.
- A right turn lane off US-36 is needed.
- More turning lanes onto Community Drive are needed.
- Dangerous intersection.
- How will we access the old golf course business development area?

Intersection of US-36 and 1st Street:

- Too many driveways and entrances.
- Enforce 35mph now through the main part of town, especially 18 wheelers going west to east.
- Line up US-36 and 1st Street
- A traffic light is needed
- Intersection is very congested and dangerous.
- Better lighting needed.
- Speed limit should be 35-40mph until the railroad is crossed! Not 65mph before.

Intersection of US-36 and 11th Street:

- After school, the 11th Street dismissal is concern. Don't know if signs could be posted.
- If Church Street extended west, where will customers park when they have the huge feeds that occur often? Also when customers are backing out of Valentino's (older people) they pull onto 11th Street slowly. With increased traffic from US-36 during rush period of school and etc., can we keep traffic from backing up too close to US-36? I live on the corner of Branch and 11th.
- A future stop light and turn lane are needed.
- An access road would be nice.
- A traffic light is needed
- Intersection is very congested.
- High traffic area.
- Need a historic downtown brown sign.
- Turning lane would be nice.

Other Areas:

- Traffic entry/exit from church is a problem.
- Need a transportation enhancement grant for $3 million to redo the brick streets. Need a blinker light or better lighting at the corner of US-36 and Snake Road.
- Change speed limit after crossing the railroad tracks. 65mph is too fast before the tracks.
- Access is needed for new business at the old golf course.

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Summary of Response Comments

There were two types of comment forms for Public Open House #2 and Workshop. One asked for open ended comments regarding the US-36 Access Management Plan project. The other was a "Tell Us How We Are Doing" survey with a mix of multiple choice and open ended questions.

Project Comments

We represent the Lucky's Convenience store connected to the McDonalds at 36/K63. Our concern is our fuel tankers (approx. 70 ft. length) need the current exit on K63 to exit the parking lot after dumping fuel. Without that exit they would be required to pack into Highway 36 traffic to exit the lot.

We also have customers with extended trailers (e.g. horse trailers) who would also be required to back into Highway 36 when exiting out lot after purchasing fuel.

A traffic light study should be conducted for the 11th Street and Hwy 36 (North Street) intersection.

The speed limit on the west of Seneca (Hwy 178) eastward should reduce incrementally with 45 mph at west city limit to 35 mph.

Access road to south between Community Drive and 11th Street is urgently needed.

Frontage road on north on 36 from west of implement dealer to Community Drive should be considered.

The speed limit through the area at US 36 and Community Drive should be 45 mph.

Finished slopes of any new construction should be flat enough to maintain mowed with a lawn mower (safely). Some are now too steep.

Why not extend the three lane highway 1/4 mile farther west to include the existing businesses within that 1/4 mile?

The access road that was proposed west of Seneca off of US 36 would cut through the yard. It would leave buildings on different sides of roads as proposed. This is east of H road on the south side. It would be better to move the proposed road east farther.

The overall plan looks workable. I strongly feel that there are 3 areas that need to be top priority. I am not sure of the three which is the most important. In my opinion the top three areas to focus on first is: 1st Street/63 Hwy, 11th Street, Community Drive. Reasonings - Community Drive needs a right turning for eastbound traffic. There has been many close calls there. A left turning lane for westbound traffic is also needed. The 1st St/Hwy 63 is obvious just reviewing accident statistics.

I like the proposed relocation of 1st St. to align with K-63, it would improve safety.

The city of Seneca and KDOT need to partner together and fix the drainage problem that currently exists on US 36. There needs to have added more storm drains between 7th St. and 11th St. on the north (westbound) lanes of US-36.

The access road on the south side of US-36 is a good way to relieve traffic and improve access and safety on US-36.

I think the long range planning and acquiring right-of-way now would be beneficial for the future of Seneca.

Do not close end of access road at 11th Street on north side in front of Stallbaumer Lumber. If a stop light is installed at 11th Street, the end of the access road can be left open. People are very good about not blocking the end when traffic backs up at the current stop sign. That end of the access road is the main entrance to my business -Stallbaumer Lumber. Closing the end will be detrimental to the flow of traffic in and out of my business. If you end up trying to close the end, I will fight it!!!

The access or frontage road is a good idea for traffic flow and safety. One exception is the access road that cuts through the middle of the front yard 1 mile west of Seneca. Surely there is a better location for this access road.

My other comment has to do with the old golf course property. The view of the old golf course as visitors travel down 36 Highway showcases our town and sets Seneca apart from other communities along 36. This green space and park-like setting makes our town look more livable than other similar size communities. Urban communities across the country are trying to develop green spaces for its citizens to jog, relax, picnic and enjoy nature. This contributes to the health, both physical and psychological, and general well-being of its residents. This property is ideal for this because from an urban planning point of view, it would complement what is already in this area such as the swimming pool, baseball and soccer fields and the schools. Surely in the future, Seneca could apply and qualify for some govt. grants to develop this property with jogging trails, picnic pavilions or shelter houses, etc. I would hate to see this beautiful asset that we have ruined with hodge-podge development. Please consult an urban planner(s) for their advice in managing and developing this land. North side of 36 commercial development and west of Pamida on south side would be better.

There are definitely issues with the corner of Highway 36 and Community Drive. We own Young Backhoe and Trenching on the corner and I have witnessed many fender benders and close calls on that corner. I would imagine on any given day 5 – 15 cars go thru our lot to avoid that corner. I feel we need a turn lane and much slower speeds. I do not want to close the access we have currently to enter our business. That was the sole purpose of purchasing here was the ease of highway entrance. With the addition to the hospital for all doctor and clinic visits and enforcing truck route the traffic for Community Drive is much greater than previously with just the added Pamida.

As a business owner located along US-36 in west Seneca I would like to see a lower speed limit of 55 mph from ½ mile west of K-178 hwy to K-178, then 50 mph from 178 hwy east to existing 45 mph zone. A left turn lane “center lane” installed from K-178 hwy east to 11th Street intersection. A stop sign installed at intersection of US 36 hwy and Community Drive.

I would definitely not be in favor of removing any access points in this area. Our business as well as many others depend on easy access and egress from our businesses. Possible realignment, relocation and/or consolidating of some of these points would be acceptable however.

Tell Us How We Are Doing Responses

How did you hear about this meeting?	Newspaper	Radio/TV	Mail	Posted annoucement/Flyer	Roadside Message Board	Other
	7	3	2			3

What is the best way to inform you about meetings and project news?	Newspaper	Radio/TV	Mail	Posted annoucement/Flyer	Roadside Message Board	Other (including emails)
	6	3	1			4

Was the meeting notice timely?	Yes	No
	11	3

Was the meeting time and location convenient?	Yes	No
	8	

Were your questions answered satisfactorily?	Yes	No
	10	

Were the handouts and displays easy to	Yes	No
	9	1

Did the following individuals genuinely listen to your questions and concerns?	KDOT	Consultants	Public Officials
Yes	8	5	5
No	1		

Would you like a follow-up contact to answer more questions?	Yes	No
	1	5

Overall rating for the meeting?	Excellent	Good	Average	Below Average	Poor
	3	3			

Open Ended Questions

What can KDOT do to provide easily understandable information or help meet your needs?

Concerned with my business being affected by closing an entrance/exit. May "will" hurt sales.

I think it was helpful to have lived here a while and to have knowldege of locations of business and residents. That should probably go without saying. Took a little looking to locate and remember. Maybe because you did such a good job of labeling businesses, roads, etc. Thank you. I'm glad to know our experience is or can be helpful to other communities.

Safety slow down the speed limit to 45 started at H Road.

Get exist off Highwy 36 to City land South Side.