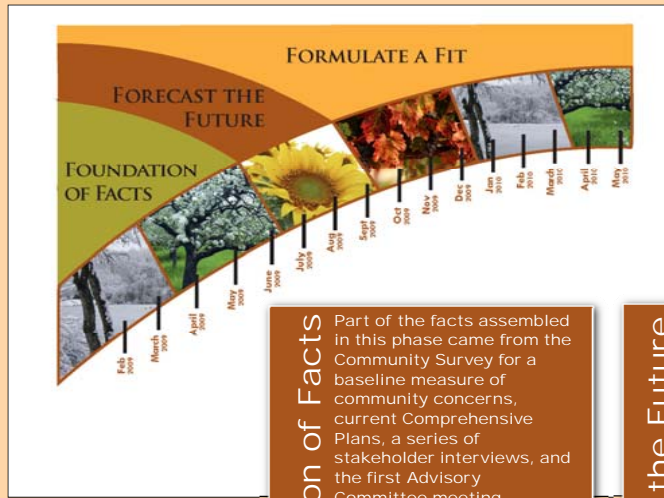


Developing the Plan

KDOT, its partners, and a diverse group of stakeholders were involved in the planning process. They participated in Advisory Committee meetings, group interviews, and workshops during a 15-month planning process that will end in the spring of 2010. Their primary role has been to offer viewpoints that reflect both the interests of particular areas of the corridor and those of the corridor as a whole. The overall goal for the stakeholder groups is to collaborate with KDOT and its partners in an effort to determine what, if any, changes are necessary to respond to community needs.



Foundation of Facts

Part of the facts assembled in this phase came from the Community Survey for a baseline measure of community concerns, current Comprehensive Plans, a series of stakeholder interviews, and the first Advisory Committee meeting.

This phase concluded with the Community Issues Workshop, resulting in a list of issues that were addressed throughout the planning process.

Forecast the Future

KDOT and its partners worked through land use and transportation concepts with the goal of developing recommendations based on input from the second Advisory Committee meeting, a Public Officials Briefing, and a Land Use and Corridor Character Workshop where a consensus land use scenario and varying access management and corridor character elements were reviewed.

Formulate a Fit

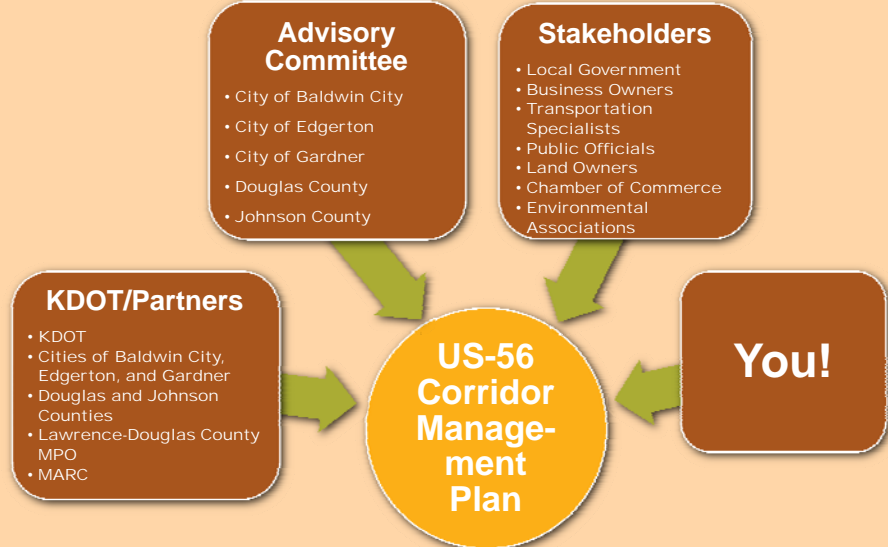
This phase integrates land use, transportation, access management, and community character considerations into the Corridor Management Plan along with appropriate implementation tools.

Input will be incorporated from the final Advisory Committee meeting, a Public Officials Briefing, Corridor Assessment Workshop, and Public Open Houses on such aspects as the roadway elements and community character of US-56.

One Phase at a Time

The US-56 Corridor Management Plan has been conducted in three phases: Foundation of Facts, Forecast the Future, and Formulate a Fit. With your help, the team is currently working through the third and final phase of the planning process.

Seeking Input: What You've Said



- Advisory Committee**
- City of Baldwin City
 - City of Edgerton
 - City of Gardner
 - Douglas County
 - Johnson County

- Stakeholders**
- Local Government
 - Business Owners
 - Transportation Specialists
 - Public Officials
 - Land Owners
 - Chamber of Commerce
 - Environmental Associations

- KDOT/Partners**
- KDOT
 - Cities of Baldwin City, Edgerton, and Gardner
 - Douglas and Johnson Counties
 - Lawrence-Douglas County MPO
 - MARC

You!

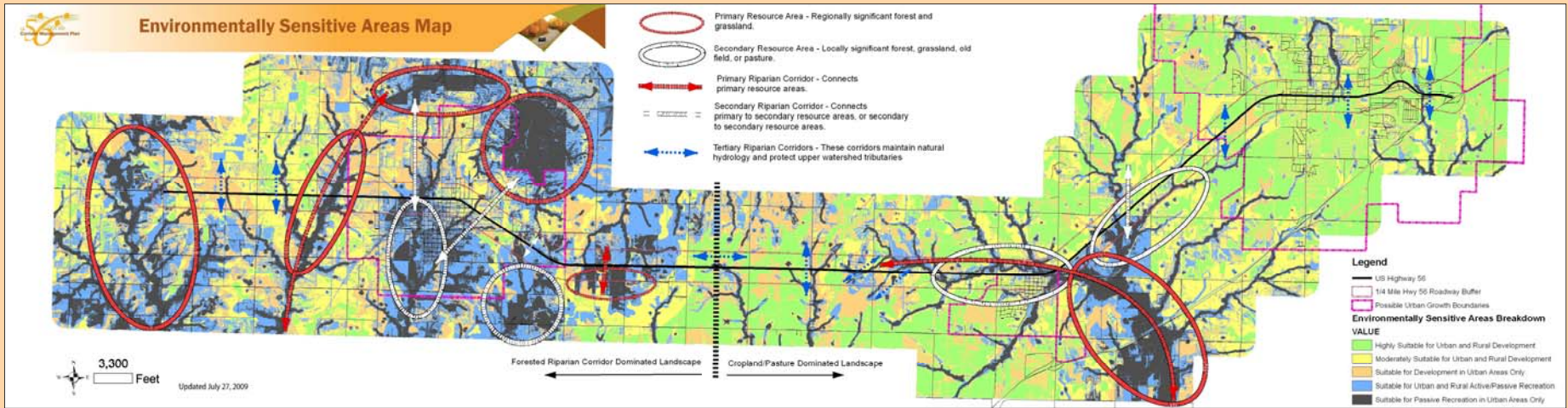
Community Survey Summary
A survey of 742 corridor residents was conducted to gather opinions regarding US-56.

Major findings include:

- 83% of those surveyed indicated they felt either "very safe" or "somewhat safe" driving the corridor.
- Regarding the number of driveways entering onto US-56, residents felt there were "too many" driveways entering onto US-56 primarily through Gardner (38%) and Baldwin City (19%).
- There was support from those surveyed for directing future residential development inside or near the cities (86%).

Stakeholder Interview Summary
Questions were asked related to future development, character of the corridor, and recommendations for roadway improvements. Highlights of the interview include:

- The US-56 corridor is very diverse in terms of land use and character, and it is important to preserve those unique identities.
- There are concerns with truck traffic, sight distances at key locations, and narrow shoulders. Safety (including that of pedestrians) is a top priority.
- Various improvements suggested by stakeholders include: improve sight distance at key locations; add travel lanes or dedicated turn lanes at specific intersections to improve flow and alleviate congestion; and add shoulders for disabled vehicles, and emergency management needs.



Environmental Sensitivity for Land Use Forecasts

The corridor study area has significant streams, floodplains, wetlands, and regionally and locally significant forest and grasslands. Identifying these sensitive areas when reviewing potential future development helps to protect valuable recreation areas, protect water quality, reduce flooding, and provide wildlife habitat.

Key GIS data was assigned weights producing a graphic classification of land ranging from "Highly Suitable for Urban and Rural Development" (shown above in green) to "Suitable Only for Passive Recreation" (shown above in dark grey). Weighted data included soil classifications, hydrology, land cover, slopes, land use, and habitat.

Land Capacity vs. Developable Land

The capacity of land is a measure of how much future development the undeveloped lands can accommodate. Not all of the undeveloped areas, however, are open to development due to environmental constraints and natural resources. Accounting for land that is not already developed and not environmentally sensitive is the basis for determining what areas are deemed developable.

Developable Acreage Within Each City's Growth Boundary

Baldwin City	<ul style="list-style-type: none"> 1,700 net acres of developable land remain (3,700 acres are developed/sensitive)
Edgerton	<ul style="list-style-type: none"> 800 net acres of developable land remain (600 acres are developed/sensitive)
Gardner	<ul style="list-style-type: none"> 4,900 net acres of developable land remain (4,600 acres are developed/sensitive) Note: 40-50% of Gardner's growth boundary is not within the Study Area and therefore not included

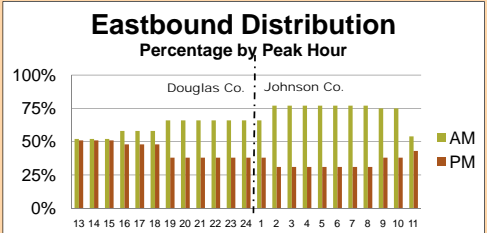
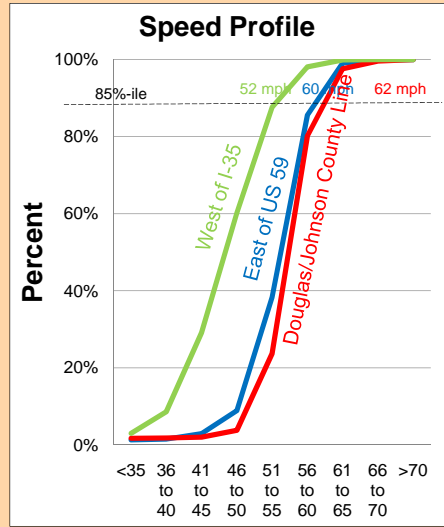
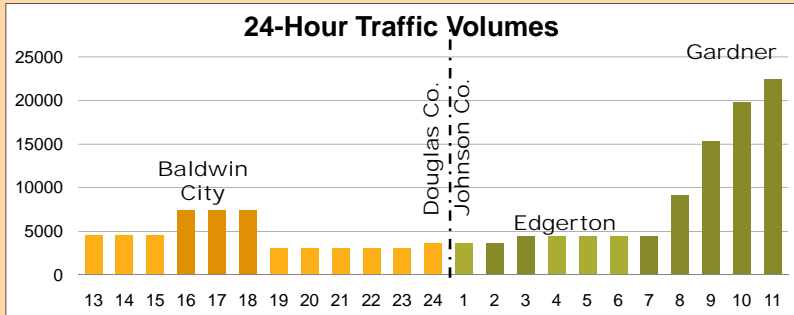


Traffic Volumes (2009)

Traffic volumes have a significant spread along the corridor, ranging from a low of 3,400 vehicles per day (vpd) (between Baldwin City and Edgerton) to over 22,400 vpd in Gardner near the I-35 interchange. Peak hour traffic volumes mimic the daily pattern along the corridor including the increase of traffic volumes within city limits.

The AM and PM total volumes are nearly identical (PM is slightly higher), yet the distribution by direction along the majority of the corridor indicates an eastbound bias in the AM and the reverse direction (westbound) in the PM. However, west of Baldwin City, the directional distribution is equally split. Truck percentages range from 5% to 7% of all traffic representing between 200 and 830 truck per day.

Traffic speeds have also been collected and indicate an 85th percentile speed to be more consistent with the recent posted speed increase to 60 mph.



Traffic Safety

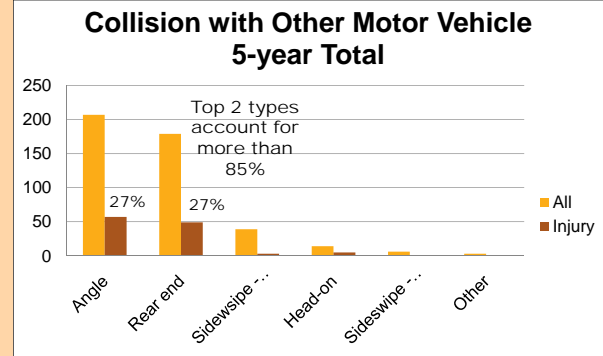
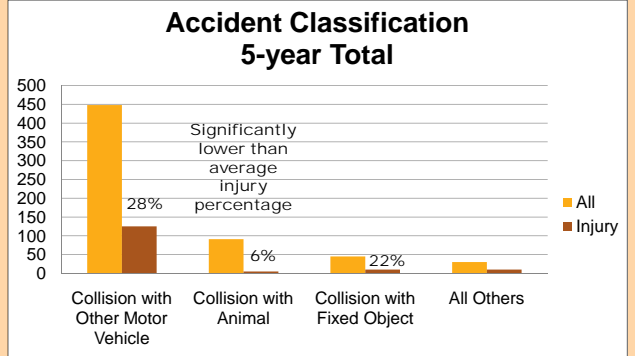
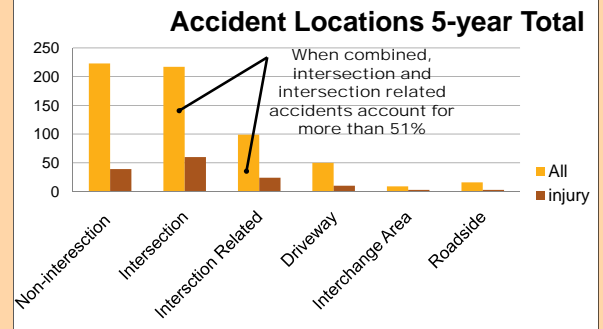
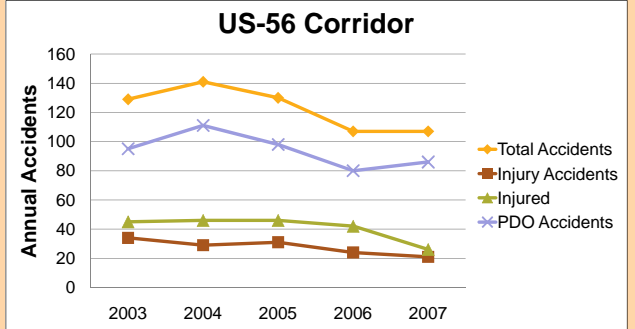
Three Locations Account for 44% of Intersection Crashes

A ranking of crashes at intersections indicates a pattern of crashes at three locations along U.S. 56. The top three locations include Moonlight Road (Gardner), U.S.-59, and 6th Street (Baldwin City). Fortunately the number of crashes has been decreasing for a total of 30 crashes at these three locations in 2003 to just six (6) in 2007.

The predominant type of accident is angle accidents at 80%. The percentage of injury accidents vary by location, with the U.S. 59 junction having a high percentage of injuries, including two fatalities in 2006.

Three Fatal Crashes Occur In One Year (2006)

A total of five (5) fatal crashes occurred over the five year period. Three of the five fatal accidents occurred in 2006. Two of these occurred at the junction of US-59. Four of the fatal accidents were with "other motor vehicles", of which three were angle accidents and the other a rear-end collision. Two of the four "other motor vehicles" occurred at intersections while the other two were classified as intersection related. Causes cited for these fatal crashes included: "traveling too fast", "exceeding posted speed", "failure to yield", and "improper turn".



Physical Conditions

BRIDGE CONDITIONS

There are a total of twelve (12) bridges along the 22-mile long corridor. The majority of bridges cross natural features such as creeks, while only five bridges cross over roads or railroads. The longest bridges over natural features are 112 feet long, while the majority (5) are less than 40 feet. The two longest bridges, over 400 feet in length, carry US-56 in the eastbound and westbound directions over I-35.

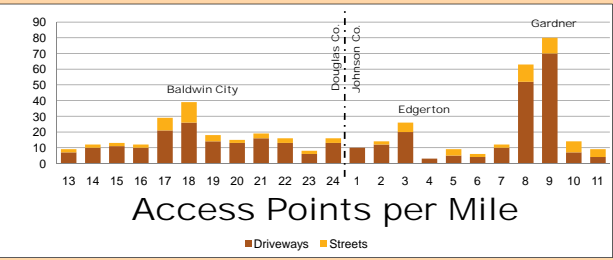
Only four of the bridges are greater than 50 years old, the remainder being less than 25 years old. The age of the bridges is reflected in their sufficiency index. Two bridges have a sufficiency index less than 50, while half have a sufficiency index greater than 90. The two with less than 50 are identified for replacement, while a third bridge is identified for rehabilitation. All three bridge are located in Douglas County.



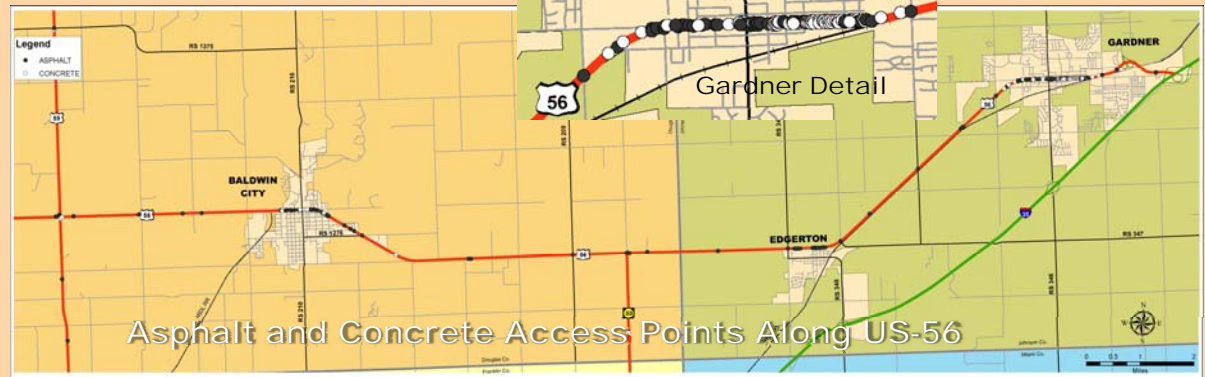
PAVEMENT CONDITIONS

In general, the overall pavement condition along the US-56 roadway is in acceptable conditions. The majority of the roadway (> 80%) consists of composite materials while the remainder varies between bituminous (1 mile) and concrete pavement (approximately 3 miles). As is seen above, shoulders are narrow and terrain is often rolling.

Several different assessments of the pavement reinforce the overall acceptable conditions rating. In terms of roughness, only 3 miles are rated "tolerable", one of those miles being the bituminous pavement and the other two miles essentially within Baldwin City. Approximately 5 miles have been identified as crack seal candidates, all in Douglas County. From a pavement performance assessment, only 6 miles are rated as "tolerable", all in Johnson County.



Access Management



Using KDOT's data set of access points, a rate of access points per mile rate was calculated that shows a range from 8 to over 60 access points per mile in the chart above. As could be expected, access points rates increase in the city limits where traffic volumes increase, speed slows and commercial activity increases. Public street access points are also shown.

How do these rates compare to accepted practice? Are there access point rate "standards" that should be applied?

Comparative access point rates vary based upon rural high-speed characteristics as well as low- to moderate-speed suburban/urban characteristics. In rural areas, a guideline of 8 to 10 access points per mile is suggested. This is achieved along much of Douglas and Johnson County. Rural areas can exceed this threshold and occurs when where six 5-acre residential parcels each have with direct access to US-56.

For urbanized areas, a guideline of 20 to 30 access points per mile is suggested. On a mile basis both Baldwin City and Edgerton are within or below this threshold. However in the City of Gardner, essentially Waverly through Moonlight, the access point rate per mile are more than double the guideline rates.

Access point rates aren't the only means to assess access conditions. Other aspects such as maintaining the functional area of intersections is important as well as the spacing of traffic signals. Yet access point rates do offer a sense of the task ahead if the intent is to bring access point rates into a desired range. Techniques such as removal or consolidation of access points can result in a reduction of rates.

Operating Conditions

HIGHWAY SEGMENTS

Two-Lane Highway segments are evaluated primarily by the ability for drivers to pass and travel at their preferred speed. The rural highway segments, from US-59 to Baldwin City, from Baldwin City to Edgerton, and from Edgerton to Gardner, all operate today with acceptable conditions, albeit the segment from Edgerton to Gardner is beginning to approach the thresholds of acceptable conditions due to the heavy directional split of traffic (eastbound in the morning and westbound in the evening).

INTERSECTIONS

In communities, traffic operating conditions are measured by the amount of delay experienced by drivers at intersections. For signalized intersections an average delay is calculated for all drivers while for stop-controlled intersections delay is calculated for movements that must yield to other traffic, such as a side-street approach or a left-turn off of US-56.

With the improvements currently under construction at Moonlight and US-56, all of the intersections operate with acceptable conditions today.

