



MID-AMERICA TRANSPORTATION CENTER

Report # MATC-KU: 121

Final Report

25-1121-0001-121

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A Preliminary Appraisal of the Safety and Operational Effects on the Regional Transportation System Caused by New Rail- Truck Intermodal Facilities

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2012

**A Cooperative Research Project sponsored by the
U.S. Department of Transportation Research and
Innovative Technology Administration**

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Sponsored by

Kansas Department of Transportation
and the Mid-America Transportation Center,
US Department of Transportation Region VII Transportation Center

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Lawrence, KS 66045-7609

Report 0063576-01
KUCR Project KAN0063576 / UNI48400

July 2012

Technical Report Documentation Page

1. Report No. 25-1121-0001-121		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle A Preliminary Appraisal of the Safety and Operational Effects on the Regional Transportation System Created by New Rail-Truck Intermodal Facilities.				5. Report Date July 2012	
				6. Performing Organization Code	
7. Author(s) S.D. Schrock, R.A. Rescot, T.E. Mulinazzi and E.J. Fitzsimmons				8. Performing Organization Report No.	
9. Performing Organization Name and Address The University of Kansas 1530 W. 15th Street Lawrence, KS 66045-7609				10. Work Unit No. (TRAIS)	
				11. Contract or Grant No. K-TRAN 09-7	
12. Sponsoring Organization Name and Address Mid-America Transportation Center University of Nebraska 2200 Vine St. 262 Whittier Building PO Box 830851 Lincoln, NE 68583-0851				13. Type of Report and Period Covered Final Report, January 2008 - May 2010	
				14. Sponsoring Agency Code MATC TRB Rip No. 17129	
15. Supplementary Notes					
16. Abstract Potential for impacts to a small Kansas city were evaluated in light of a planned rail to truck intermodal facility. The city of Edgerton, Kansas, was selected for an intermodal terminal in 2006 by a Class I railroad due to its regional proximity to the Kansas City market and market conditions favorable to such a facility. Through an analysis of various reports and literature along with original traffic, railroad, and environmental data, along with citizen feedback, the framework was laid to be able to compare the impacts of the facility to a snapshot in time prior to its opening.					
17. Key Words Intermodal, Freight Railroads				18. Distribution Statement No restrictions.	
19. Security Classification (of this report) Unclassified		20. Security Classification (of this page) Unclassified		21. No. of Pages 126	22. Price NA

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Disclaimer

This research was performed in cooperation with the Mid-America Transportation Center, a United States Department of Transportation Region VII University Transportation Center administered by the University of Nebraska–Lincoln and the Kansas Department of Transportation. The contents of this report reflect the views of the authors, who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official view or policies of the Mid-America Transportation Center, the Kansas Department of Transportation, or the University of Nebraska-Lincoln. This report does not constitute a standard, specification, or regulation. The engineers in charge of the study were Dr. Steven D. Schrock, Kansas P.E. #18989 and Dr. Thomas E. Mulinazzi, Kansas #8268

Acknowledgements

The authors would like to thank the Mid-America Transportation Center and the Kansas Department of Transportation for their support of this project. We also thank the following individuals for their help in procuring permits necessary for allowing the research team right of way access for data collection: Celia Duran of the City of Gardner, Kansas; Brian Pietig of Johnson County Public Works; Alicia Turner, Rex McCommon, and Thomas Dow of the Kansas Department of Transportation. Also, the authors thank the data collection efforts of the various undergraduate and graduate research assistants involved in this project: Matthew Becker, Kaley Euson, Garrett Hages, Jordan Herbert, Romika Jasrotia and Jessica Peat.

Chapter 1 Introduction

In today's world of global supply chains, the manufacturing of goods is increasingly spread throughout the world. This ever widening supply chain has placed increased demands for freight movement across the country. Coincidentally, in the United States this has created new opportunities for the railroad industry to compete with the trucking industry for long haul operations. Integral to a significant amount of the projected railroad growth is the strategic expansion of intermodal facilities. In 2006, intermodal business accounted for 6% of railroad freight industry wide by tonnage and also accounted for approximately 15% of revenue, which was roughly \$7 billion. It was also reported in 2006 that intermodal freight had overtaken coal as the leading source of revenue for class one railroads (1).

As major railroads seek to expand their share of the growing freight market, there has been an increase nationally in intermodal freight facilities that streamline the movement of goods from rail to heavy trucks. One example is the planned facility in unincorporated Johnson County, Kansas between the cities of Gardner and Edgerton. As shown in figure 1.1, the facility is located in the central part of the United States and is a key city identified by the BNSF railroad in figure 1.2 for intermodal freight movement from the west coast to the central parts of the United States.

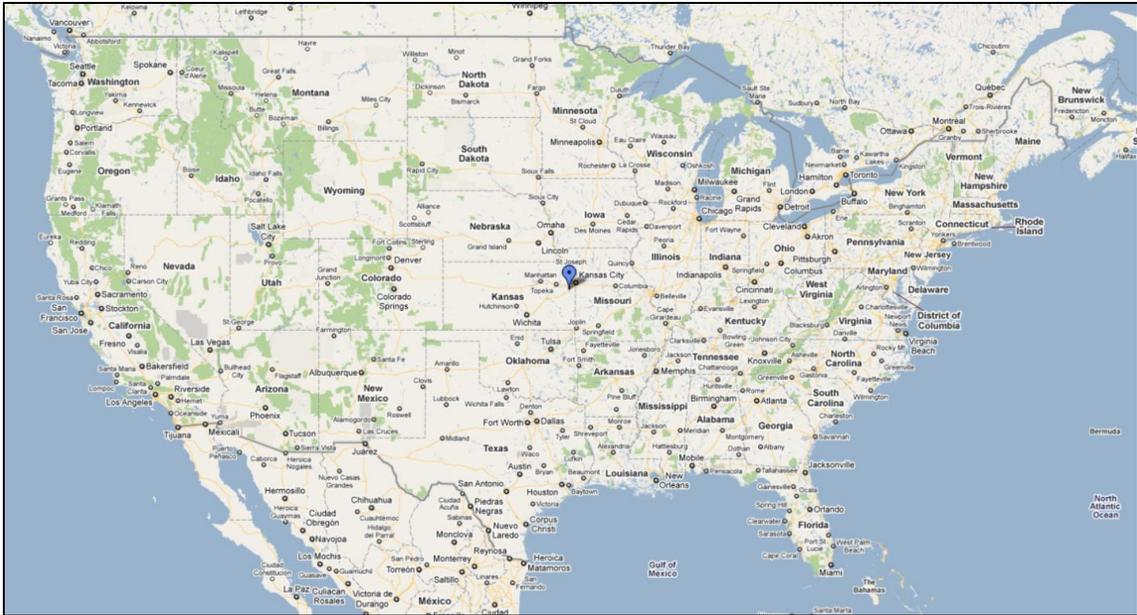


Figure 1.1 Location of the Johnson County, Kansas intermodal facility (2)

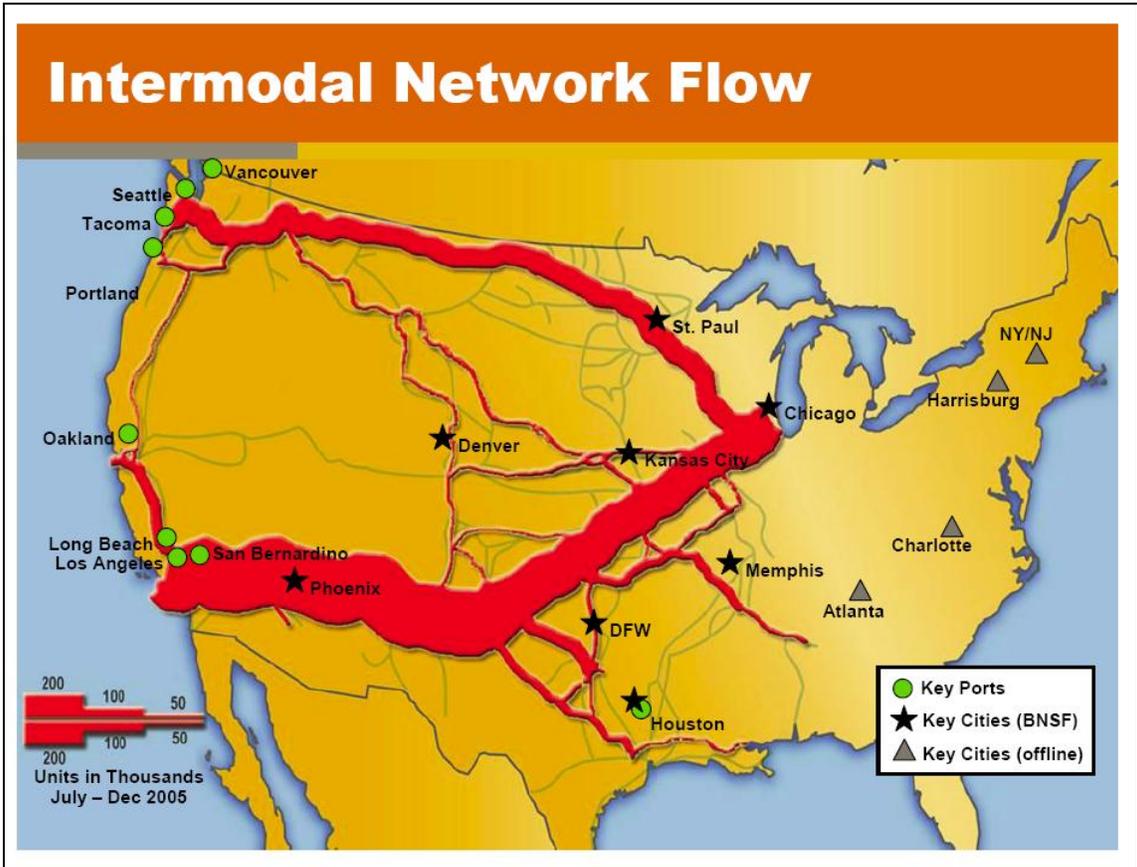


Figure 1.2 BNSF intermodal network flow density (3)

It is speculated that other such facilities will be developed in the future in other locations across the country as the demand for efficient movement of freight increases. Furthermore, it is important for the Kansas Department of Transportation (KDOT) to understand the full impact on the state highway network of such a facility in order to plan for any infrastructure improvements that would be needed due to future facilities. As such, the planned facility near Edgerton, Kansas presents a unique opportunity to study changes in rail and truck freight traffic over an extended period of time.

In terms of safety, these facilities reduce the number of long haul truck trips at the expense of concentrating trucks in a single area, and increasing rail traffic near at-grade crossings along the tracks. Additionally, concerns have been repeatedly raised regarding the potential impacts of emissions from this concentration of trains and trucks. This research seeks to understand the operational and safety impacts of intermodal facilities on transportation networks shared by the surrounding community.

The intermodal facility, as proposed by the railroad and their developer, has been outlined in a variety of ways. As seen through the eyes of the developer the entire complex and its impetus have been described as follows:

Logistics Park Kansas City ("LPKC") will be a 1,000 acre intermodal-served logistics park situated at the gateway to America's population. Located in Gardner, Kansas—25 miles southwest of Kansas City—LPKC is the latest project to be developed by The Allen Group. In the fall of 2006, BNSF Railway selected The Allen Group, a real estate development company, to develop the project for future distribution and warehouse facilities. With the rapid growth of international trade and continuous west-to-east rail freight transit, LPKC will be a key hub for major distribution to the population centers

throughout the central United States. At full build-out, LPKC will have in excess of 7 million square feet of vertical development, creating over 7,700 direct and indirect new jobs and providing in excess of \$1 billion of economic impact to the State of Kansas.

- 1,000 Acre Logistics Park
 - 7+ Million SF of Vertical Development
 - Build-to-Suit & Speculative Distribution & Warehouse Facilities
 - Future Foreign Trade Zone
 - Over 7,700 New Jobs
 - \$1 Billion Economic Impact
- Adjacent to:
 - BNSF Transcontinental Route
 - BNSF Intermodal Facility (Operational By Fall 2010)
 - Interstate 35-The NAFTA Trucking Corridor
 - State Highway 56
 - Proximity to Interstate 70

In 1970, the United States traded a total of \$84 billion in goods, this figure passed \$84 billion by the second week in January, 2006, and now exceeds over \$3 trillion. Today's rapid growth of international trade has quickly changed the way the global supply-chain operates. As Asian imports continue to pour into the United States at record rates, new shipping trends are driving the demand for larger and exceptionally well-located distribution and logistics facilities—known as inland ports. Each year millions of containers are processed at the ports of Los Angeles and Long Beach. Nearly 38% of all goods are double-stacked in containers and hauled via rail along BNSF Railway's premier Southern Transcontinental route leading into America's newest inland port at Logistics Park Kansas City (4).

1.1 Background and History

The location for the intermodal facility was initially chosen in 2005 by the BNSF railroad. The railroad then worked to negotiate various agreements with the adjacent city of Gardner, Kansas for municipal services since the site was in previously unincorporated Johnson County and principally composed of farm fields (see fig. 1.3).

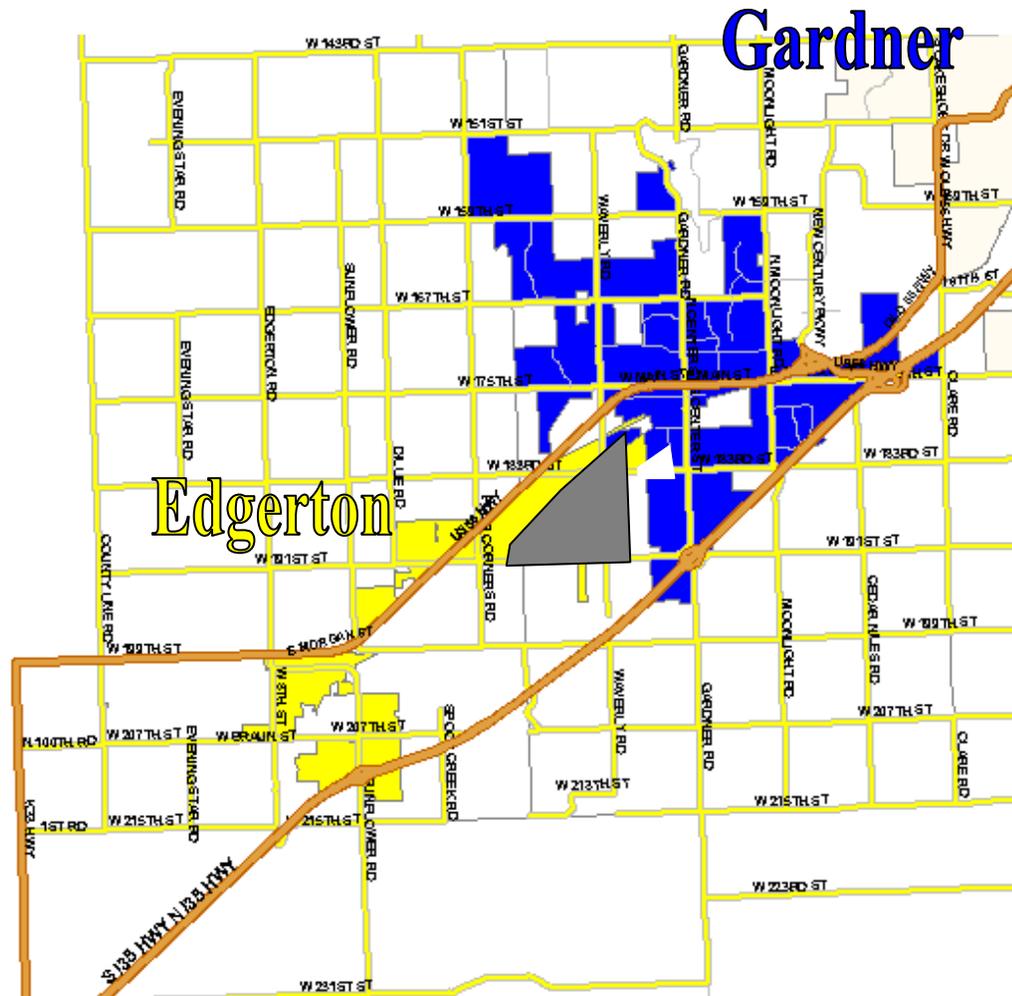


Figure 1.3 Map of intermodal facility location in reference to the Cities of Gardner and Edgerton, Kansas (9)

This project was recognized by the city of Gardner as a potential focal point for attention, and the city council appointed the *Gardner Intermodal Review Committee* for the following purposes:

Identify the issues that the Gardner City Council will have to consider when reviewing a future proposal for a Logistics Park located west of Waverly and south of 56 Highway. Examine those issues, list the pros and cons, provide ideas to maximize the benefits and minimize the problems. Hold a public forum to receive comments and questions from the public, and use that input for the committee's research. Present a paper to the city council no later than July 10 addressing potential issues studied. (5)

A variety of potential project stakeholders comprised the Gardner Intermodal Review Committee. Among the thirteen individuals on the committee were representatives of various civic entities ranging from city council members from the cities of Gardner and Edgerton, Kansas, representatives from the Gardner-Edgerton school district (USD231), economic developers and citizens-at-large (6). The committee, acting at the bequest of the Gardner City Council, prepared a report detailing benefits, concerns and recommendations in regards to economic development, transportation, land use, environment, non-utility city services, city electric service, city water service, and city wastewater service. The chair of the committee, council member David Drovetta, opened the report by noting the uniqueness of the committee:

This committee is unprecedented in Gardner. Never before have we expended so much collective time and effort in the review of a proposed development. The review process for this development began publicly and remained open throughout. In fact, the public review of this proposed development began long before the public review of any other development during my tenure on either the planning commission or council. The scope of this proposed development is so large that complete, quick and open access to information was critical. The development was quickly labeled a "Gardner" issue, but we recognized the reach of this was well beyond the boundaries of our community. As the

committee progressed, county, state and national representatives were kept informed about the meetings. (7)

One key action item early on was a ballot initiative by the city council of Gardner, Kansas to either allow or deny the city annexing the intermodal facility site. The city council put the measure before voters on November 7, 2006, and it was decided to allow the city to annex the property by a vote of 3,025 to 1,149 (8).

Concurrent with the civic negotiations was the application for various permits needed to commence construction of the facility. Key among the permits was the Section 404 Water Quality Permit issued by the United States Army Corps of Engineers. The 404 permit was needed due to the desired location of the facility in the Hillsdale Lake watershed. Based on documents submitted to the Corps of Engineers the facility is described as follows:

The applicant [BNSF] is proposing to construct the Gardner Intermodal Facility (Gardner IMF) including associated track improvements near Gardner, Kansas on an approximate 490 acre site.

The proposed Gardner IMF would be composed of lead tracks off the mainline tracks to access the facility, unloading or stripping tracks, rail-mounted electric cranes, rubber-tired gantry cranes, container storage, trailer parking and chassis storage, and support facilities. Support facilities would include the following: an administration and operations center, hostler employee building, gantry crane fueling and maintenance center, hostler maintenance and fueling center, mechanics shop and parts storage, air compressor buildings and air compressors, spill containment areas, oil/water separator, gate building, and truck portals. The proposed Gardner IMF would also include transload capabilities

where rail lines are located adjacent to truck lanes so that trailers or containers can be transferred directly from trucks to trains and from trains to trucks.

The proposed project also includes the relocation of approximately 5.5 miles of eastbound mainline track that would parallel the existing westbound track at a 15 foot track center spacing. A portion of the existing eastbound mainline track would be transformed into the lead tracks for the Gardner IMF.

The proposed project would result in the relocation of approximately 9,509 linear feet of a relatively permanent unnamed tributary to Big Bull Creek (perennial stream). General grading would also impact and fill approximately 6,606 linear feet of non-relatively permanent unnamed tributaries to Big Bull Creek (ephemeral and intermittent streams).

The general grading associated with the Gardner IMF would also impact and fill approximately 4.61 acres of wetlands and approximately 16.65 acres of open water (agricultural ponds). The proposed 5.5 mile track relocation would result in minor impacts associated with track crossings of 13 linear waters of the United States. The track relocation would also impact approximately 0.282 acres of wetlands. (10)

Critically contained in this description is that construction of the facility would result in the relocation of a perennial stream, and that several acres of wetlands would be infilled.

Consequently, herein lies the obligation of the railroad to obtain an United States Army Corps of Engineers permit as per Section 404 of the Clean Water Act (33 United States Code §1344).

While the railroad could continue to work 'behind the scenes' on the project, only minimal construction was allowed until the permit was granted.

The permitting process for the facility was a multi-year process. The process began in October of 2006; however, the final draft environmental assessment as required for the Section

404 permit was not submitted until July 2009. Included in the final draft of the documentation was a comparison of the Johnson County, Kansas site with an alternative near Wellsville, Kansas in Franklin County. On July 10, 2009 the United States Army Corps of Engineers issued a 21 day public notice inviting comments on the environmental assessment with the comment period closing on July 31, 2009. Due to the number of comments received, the deadline was extended until August 9, 2009. However, the Corps of Engineers did accept several comments after the aforementioned deadline. Upon closure of the comment period a total of 224 unique public comments were received from various public and private entities and individuals. Additionally, another collection of 154 identical public comments were also received for a totaling 379 public comments (11).

A number of local residents opposed the construction of the facility. The opposition was chiefly organized into two groups, the Johnson County Intermodal Coalition and the Hillsdale Environmental Loss Prevention (HELP). Both groups were actively engaged in opposing the facility at every stage. Among the most notable opposition events staged was the *Health and Community Impacts of Intermodal Railyards and Distribution Centers Conference* held on August 6, 2009. This conference was sponsored by HELP and featured eight speakers: a professor of public health from the University of Southern California, a professor of environmental and radiological health sciences at Colorado State University, several members of other likeminded environmental groups and two legal professionals. Near the conclusion of the conference and at the urging of the speakers, a sample response to the Army Corps of Engineers' draft Environmental Assessment was shared with the crowd. This sample response was submitted 154 times to the United States Army Corps of Engineers.

Upon closure of the public comment period and after the review by the United States Army Corps of Engineers, a final decision was reached and a permit issued on December 18, 2009. The determination was as follows:

The Kansas City District Corps of Engineers with cooperation from the United States Environmental Protection Agency, Region 7, has concluded a review of the proposed BNSF Railway Company's Intermodal Facility in Johnson County, Kansas. The Corps determined that the project is in the public interest, is the least environmentally damaging practicable alternative, and will not significantly impact the human environment. All applicable federal and state regulations and guidelines were followed in determining that the project plus associated mitigation will not have a significant impact on any resource of concern, including local and regional air quality. Therefore, the Corps has issued a Section 404 permit to the BNSF Railway Company to construct the Intermodal Facility in waters of the United States. (12)

In a direct challenge to the permit issued by the United States Army Corps of Engineers, a federal lawsuit was filed on February 2, 2010 in the United States District Court, District of Kansas. The plaintiff in the case was the Natural Resources Defense Council Incorporated. They alleged that the Corps of Engineers failed to fulfill their statutory requirements as a regulatory agency in assessing the impacts and issuing the permit. Furthermore, the lawsuits also alleged that an Environmental Impact Statement should have been required of the railroad, rather than the Environmental Assessment as per the National Environmental Policy Act of 1969. The lawsuit names both the chief of engineers and commanding general of the corps, and the district commander of the corps (both acting in their official capacity) as the two defendants. (13)

In the months after the public vote to allow annexation the political climate of the City of Gardner changed dramatically. After being allowed to proceed with the annexation of the parcel of land where the intermodal facility was to be located, the city entered into several agreements with the developer, acting on behalf of the railroad. The land annexation process began with the vote of the city council on September 15, 2008 (14). However, this was met with trepidation by the citizens of Gardner and the elected city council was pressured to act, to halt or otherwise impede the pending construction of the facility. The city council then took action to rescind the previously negotiated agreements on June 22, 2009 (15). However, this action was also controversial and spawned the citizens' group *Gardner Recall Committee* (GRC). The GRC sought to recall two of the city council members, Mary Peters and John Shepherd who were both embroiled in the de-annexation debate. However, GRC clearly stated on their website that their recall intent was broader.

Q: Is this recall based solely upon Peters' and [council member] Shepherd's intermodal votes?

A: No. While their decisions to rescind our city's agreements with BNSF and de-annex the intermodal land are the most costly acts they've done in office, they're not the only egregious acts against the citizens of Gardner. The intermodal votes are just part of a pattern of blatant disregard for the future of Gardner, in an effort to further their personal agendas. If you'd like to learn more about Peters' and Shepherd's other actions in office, visit our track record page (16).

On March 2, 2010 the recall election was held and both city council members were successfully recalled by the voters. Council member Peters was recalled by a 1,269 to 882 margin and council member Shepherd was recalled by a 1,245 to 904 margin (17).

While the city council of Gardner may have passed on the intermodal project eventually residing inside their city limits, the city of Edgerton welcomed the project. On September 10, 2009 the Edgerton city council voted to annex the tract of land containing the pending intermodal facility. Also contained in the following annexation agreement were other agreements with Johnson County and the Kansas Department of Transportation.

On September 10, 2009 the City of Edgerton, Kansas approved an annexation agreement which includes the provision of various municipal services and funding of required public infrastructure improvements. Johnson County will fund upgrades to 191st Street from Four Corners Road to 188th Street. KDOT will fund a new I-35 interchange nearby to accommodate anticipated growth in overall traffic in the Kansas City area, and is currently in the preliminary design and environmental due diligence process. KDOT has also agreed to provide funding and make improvements to the existing Gardner Road/Interstate 35 intersection, as well as improvements to the 188th Street/Gardner Road intersection to accommodate truck traffic pending construction of the new I-35 interchange. (18)

Chapter 2 Literature Review

In reviewing the body of literature relevant to the Edgerton intermodal facility, it is important to first discuss the information stated by the facility owner in the various documents used throughout the permitting process. Understanding the potential impacts of the facility allows for quantifying how existing trends without the intermodal facility in place will project into the future. Investigating current trends allows for forecasting conditions under a no-build scenario that can be compared with data acquired after the facility is operational or comparison with other similar existing intermodal facility sites. While some factors cannot be held constant by researchers (e.g. the global economic climate and regional demand for goods), this method is useful and allows for generalized comparisons of facilities and potential impacts on the communities adjacent to the proposed Edgerton intermodal facility.

Contained in an application for a United States Department of Transportation's Transportation Investments Generating Economic Recovery (TIGER) grant, the BNSF Railway outlined a comparison of the no-build and build scenarios as shown in table 2.1.

Table 2.1 BNSF no-build and build scenarios (18)

No Build Scenario	Build Scenario
Continued intermodal capacity constraints by continued use of the Argentine IMF	KCIMF is constructed and intermodal operations transfer to the new facility
Intermodal volumes in excess of peak historic volume at Argentine would be diverted to long-haul over-the-road trucks	KCIMF would provide additional capacity for intermodal freight transportation, enabling shippers to use rail transportation for long hauls in lieu of truck
Higher transportation costs (all-truck is more expensive than intermodal)	Lower transportation costs (intermodal is less expensive than all-truck)
Higher highway maintenance costs (more truck-miles on highways)	Reduced highway maintenance costs (fewer truck-miles on highways)
Higher highway congestion costs (more truck-miles on highways)	Reduced highway congestion costs (fewer truck-miles on highways)
Higher safety costs (more truck-miles on highways)	Reduced safety costs (fewer truck-miles on highways)
More air emissions (more truck-miles on highways)	Reduced air emissions (fewer truck-miles on highways)
Reduction in inventory costs (shorter transit times by all-truck than intermodal)	Increase in inventory costs (longer transit times by intermodal than truck)
Higher fuel consumption (less fuel efficiency of truck than rail)	Reduced fuel consumption (greater fuel efficiency of rail than truck)
Argentine IMF would experience continued congestion and delay to truck, train, and vehicular traffic	Elimination of continued congestion and delay to truck, train, and vehicular traffic
Continued lack of storage space for containers and semi-trailers at the Argentine IMF would cause some containers and semi-trailers to be trucked to and from remote storage lots	Elimination of lack of storage space for containers and semi-trailers at the Argentine facility that causes some containers and semi-trailers to be trucked to remote storage lots

Recognizing that traffic changes have a tangible impact around the proposed facility, the railroad hired a consulting firm to prepare a traffic impact study for the project. Contained in the study were projections about the facilities operational characteristics, most notably trip generation as shown in table 2.2.

Table 2.2 Trip generation projections (19)

On-Site Trip Generation Opening Year (2009)	<i>Size</i>	<i>Units</i>	<i>Count</i>	<i>Daily Trips</i>	<i>PM Peak Hour Trips</i>		
					<i>In</i>	<i>Out</i>	<i>Total</i>
Intermodal Trucks	0.5	Million Annual Lifts	1	1,822	72	56	128
Intermodal Employees	143	Employees	1	286	0	0	0
Rail Served Warehouses	350	Thousand ft ²	1	1,638	37	139	176
Non-Rail Served Warehouses	500	Thousand ft ²	1	2,190	49	184	233
Total				5,936	158	379	537
Year 2025							
Intermodal Trucks	1.1	Million Annual Lifts	1	4,003	157	123	280
Intermodal Employees	288	Employees	1	576	0	0	0
Rail Served Warehouses	350	Thousand ft ²	6	9,828	221	832	1053
Smaller Rail Served Warehouses	350	Thousand ft ²	1	1,086	24	89	113
Rail Served Warehouses	200	Thousand ft ²	1	1,638	37	139	176
Non-Rail Served Warehouses	350	Thousand ft ²	4	8,760	195	736	931
Total				25,891	634	1,919	2,553
Off-Site Associated Uses Year 2025							
Rail Served Warehouses	350	Thousand ft ²	3	4,914	111	416	527
Rail Served Warehouses	350	Thousand ft ²	3	4,914	111	416	527
Non-Rail Served Warehouses	500	Thousand ft ²	11	24,090	573	2,022	2,559
Total				33,918	795	2,854	3,613

As shown in table 2.2, it was expected that a significant increase in daily on-site trips would be generated by the facility and supporting businesses/warehouses. Coupled with the changes in surface traffic, changes in rail traffic were also anticipated. The most visible change would be train lengths extended up to 8,000 feet. This elongation of trains, combined with trains queuing for access into the intermodal terminal has prompted plans to close access to several local roads. The two principal road closures would be at 191st Street between US 56 and Four Corners Road, and at Four Corners Road between 191st Street and US 56. A third road closure at 183rd Street

between Waverly and US 56 was also proposed (20). A map of the closures around the proposed intermodal facility is shown in figure 2.1.

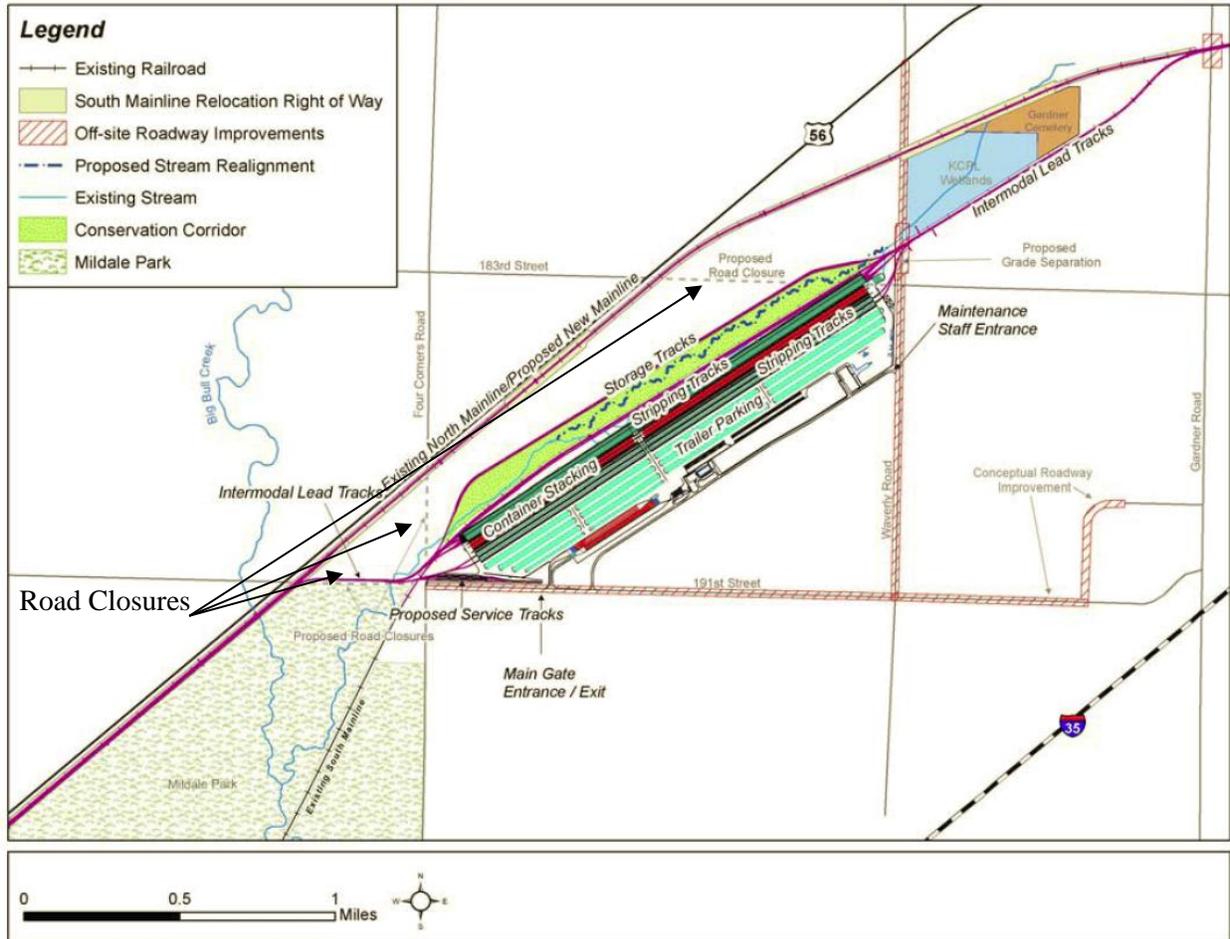


Figure 2.1 Facility overview (20)

Recognizing that the traffic generated by the facility would influence other roadway infrastructure improvements, the railroad lists several traffic mitigation measures to be implemented along with the construction of the facility—referred to as “Off-site improvements” which includes the following (20):

- Improvement of 191st Street between Four Corners Road and 188th Street. Prior to opening day of the IMF, 191st Street east of Four Corners Road would be reconstructed and widened to a three-lane roadway with shoulders to handle truck traffic for the IMF. The applicant proposed 191st Street have two-lanes; however, Johnson County requested that it be constructed as a three-lane roadway. At the same time 191st Street would be realigned to join 188th Street west of Gardner Road at a signal-controlled intersection at 188th Street and Gardner Road.
- Improvement of Waverly Road from US 56 to 191st Street. Waverly Road would be reconstructed and widened to a two-lane roadway with shoulders to handle truck traffic related to the Proposed Action and the Logistics Park. Additionally, reconstruction of the US 56 and Waverly Road intersection was planned and would include realignment to eliminate the skew angle and improve sight lines. Although timing had not been determined, reconstruction of the interchange would occur when the Waverly Road grade separation over the north mainline and relocated south mainline would be constructed.
- Improvement of Waverly Road at the eastern lead tracks and modification of the Waverly Road and 183rd Street intersection. A two-lane grade separation on Waverly Road over the eastern lead tracks was planned to be constructed when Logistics Park related traffic warrants such expansion. Modification of the Waverly Road and 183rd Street intersection would become a three-way intersection by closing 183rd west of Waverly Road. Final timing of construction was not determined.
- Modification of the spans of Center Street Bridge would be required to allow construction of a second 8,000 foot-long lead track. This was anticipated to be a

modification of the existing bridge only to provide horizontal clearance for the second lead track. Timing of construction was not determined.

In the same report as the aforementioned information, it is also noted that the logistics park is separate from the railroad owned intermodal terminal. As a separate entity, the intermodal terminal is said to be able to function as a stand-alone operation and its feasibility is independent from that of the warehousing conjectured for the logistics park. This independence is reinforced in the description of the criteria for alternate sites where it is stated that a replacement for the Argentine, Kansas intermodal facility needs to be within 30 miles for maintaining service to existing intermodal customers (20).

Extending beyond the Kansas City metropolitan area, the actual footprint of the facility would be much larger. On page nine of the Environmental Assessment the railroad states: “To provide the Kansas City region and much of the Midwest with intermodal service, the applicant currently conducts intermodal operations at the Argentine IMF located in Argentine Yard” (20). Further clarification of this was asserted in a comment received by the United States Army Corps of Engineers in response to the Draft Environmental Assessment being released. The commenter claimed that Skip Kalb (BNSF’s Director of Strategic Development), stated in a September 27, 2007 Johnson County Board of County Commissioners meeting that “trucking radius would be up to 500 miles” (11). The territory of this truckshed is shown in figure 2.2 which includes states as far away as Colorado, Kentucky, Louisiana, and Minnesota.

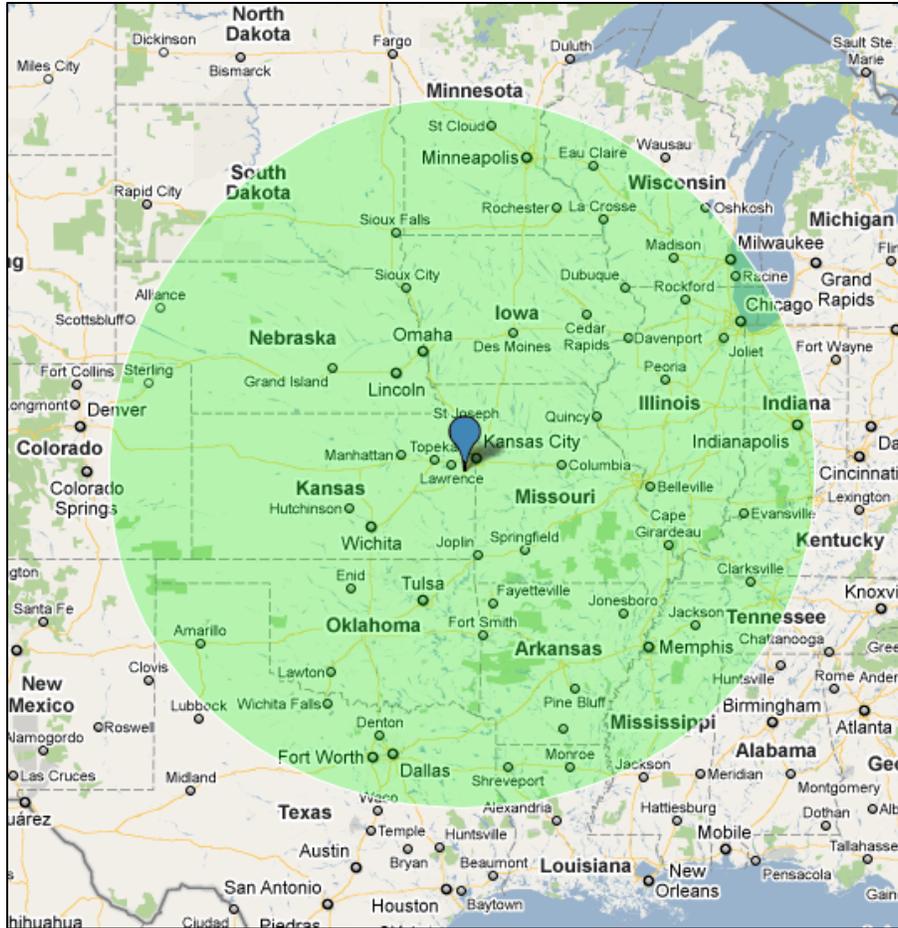


Figure 2.2 500 mile radius around intermodal facility location (2)

In addition to the traffic generated by the proposed facility, the Environmental Assessment for the facility also investigated changes in air quality. Chemicals typically evaluated in the air include: carbon monoxide, particulate matter, lead, sulfur dioxide, nitrogen dioxide, and ozone for which the Kansas City metropolitan area has been classified as a maintenance area by the United States Environmental Protection Agency. The document noted that within the project area, the addition of the facility would meet the National Ambient Air Quality Standards and chemicals present in the air were projected to either decrease or remain constant as shown in figure 2.3.

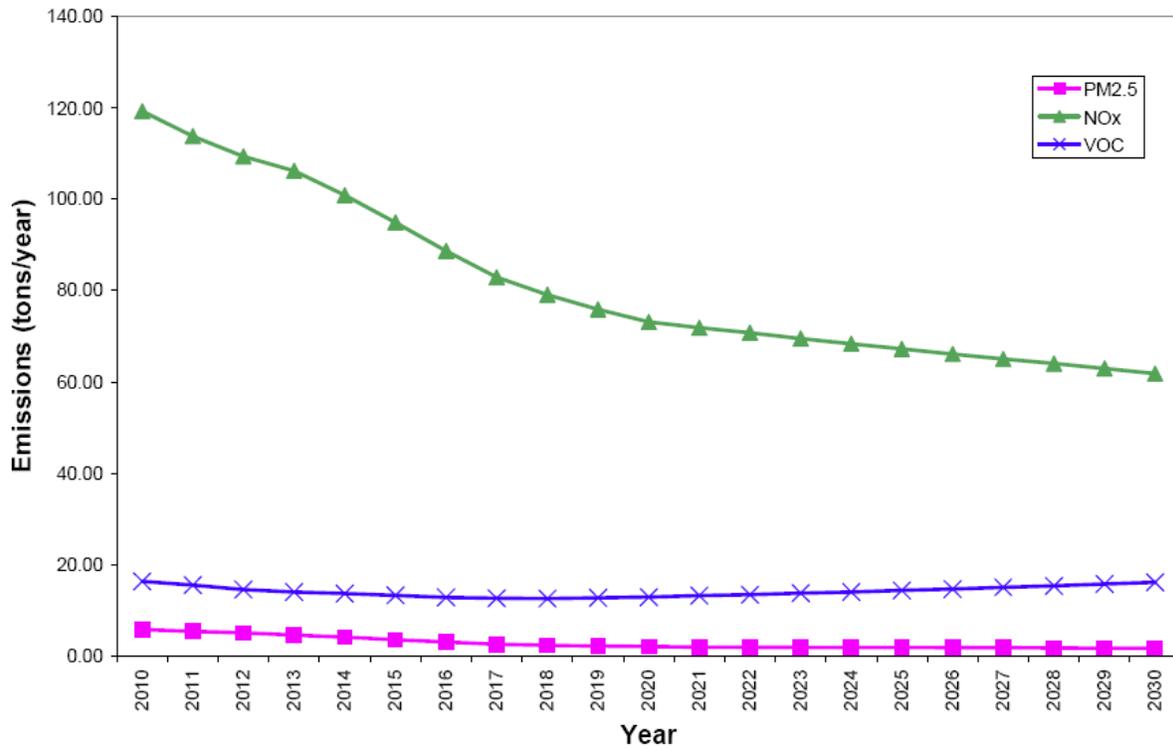


Figure 2.3 Emissions projections (20)

As shown in figure 2.3, the assessment predicted that the maximum estimated concentrations of the regulated pollutants were expected to remain below national regulatory standards including several that were expected to decline after the facility opened due to legislated phased federal rule changes for such emissions. More specifically, the maximum modeled pollution due to particulate matter did not exceed EPA reference concentrations (20).

Cancer risks from the facility were another concern related to air quality. The Environmental Assessment document predicted that the cancer rate at the facility fence line would be 330,000 per million (20). This value compared to the rest of Johnson County cancer rate was almost 85 times higher, and compared to statewide figures, 70 times higher. Shown in

Table 2.3 are the percentages of the population developing cancer in counties within and surrounding the Kansas City metropolitan area.

Table 2.3 Cancer rates for selected counties in Kansas (21)

Percentage of Population Developing Cancer				
Year	Johnson County	Wyandotte County	Miami County	Statewide
1997	0.379%	0.442%	0.369%	0.462%
1998	0.395%	0.487%	0.431%	0.463%
1999	0.393%	0.484%	0.395%	0.470%
2000	0.387%	0.459%	0.393%	0.468%
2001	0.404%	0.435%	0.463%	0.464%
2002	0.376%	0.443%	0.432%	0.467%
2003	0.372%	0.455%	0.425%	0.476%
2004	0.397%	0.425%	0.424%	0.479%
2005	0.393%	0.429%	0.472%	0.475%
2006	0.403%	0.422%	0.434%	0.477%
<i>Average</i>	<i>0.390%</i>	<i>0.448%</i>	<i>0.424%</i>	<i>0.470%</i>

Statistical tests were used to compare whether the difference in cancer rates between counties were statistically different at the 95 percent level of confidence. All data averages were found to be statistically different except for those data in Wyandotte and Miami counties. The Johnson County cancer rate where the proposed intermodal facility is to be constructed was found to be statistically less than the statewide average at the 95 percent level of confidence. Similar results were found when average cancer rates of Wyandotte and Miami counties were compared to the statewide Kansas cancer rate.

Chapter 3 Field Data Collection

One of the most significant identified changes to the area around the intermodal facility would be the changes in traffic operations. These changes in traffic patterns are expected to have a wide reaching scope including variances in average daily traffic (ADT) on roads, shifting of peak hours and an increase in the number of heavy vehicles on the roadway network. It is also important to recognize that the potential for these changes are not exclusively due to trucks servicing the intermodal terminal, but also include employee traffic to/from the facility.

Since an increase in traffic has unequal spatial distribution, there is the potential to alter the existing roadway travel time equilibrium. This equilibrium as stated in Wardrop's first criterion for traffic assignment indicates that the travel time on all routes used between an origin and destination are the same. In other words, if the traffic volume along the shortest route becomes too large and once the travel time incurred along the quickest route is the same as a longer route, the longer route will begin to be used. In the context of collecting traffic data, it is equally important to consider how the intermodal facility will affect the area network performance as a whole.

3.1 Traffic Data

In an effort to quantify existing vehicular traffic, data were collected at eight locations around the city of Gardner (figure 3.1) and in Johnson County, Kansas for a total of nineteen specific traffic counts (table 3.1). These counts were conducted eight times over a twenty-six month period (table 3.2).

Table 3.1 Traffic count study locations

Center Street & Park	US 56 at Four Corners Road, North side of Intersection	191st at Waverly, West of Intersection	SB I-35 On Ramp	NB I-35 Off Ramp
Center Street & Main	US 56 at Four Corners Road, South side of Intersection	191st at Waverly, North of Intersection	Gardner Road North of I-35	Gardner Road South of I-35
Gardner/Edgerton High School	US 56 at Four Corners Road, West side of Intersection	191st at Waverly, East of Intersection	SB I-35 Off Ramp	Moonlight between Main and Santa Fe
Four Corners Road, South of 191st Street	US 56 at Four Corners Road, East side of Intersection	191st at Waverly, South of Intersection	NB I-35 On Ramp	

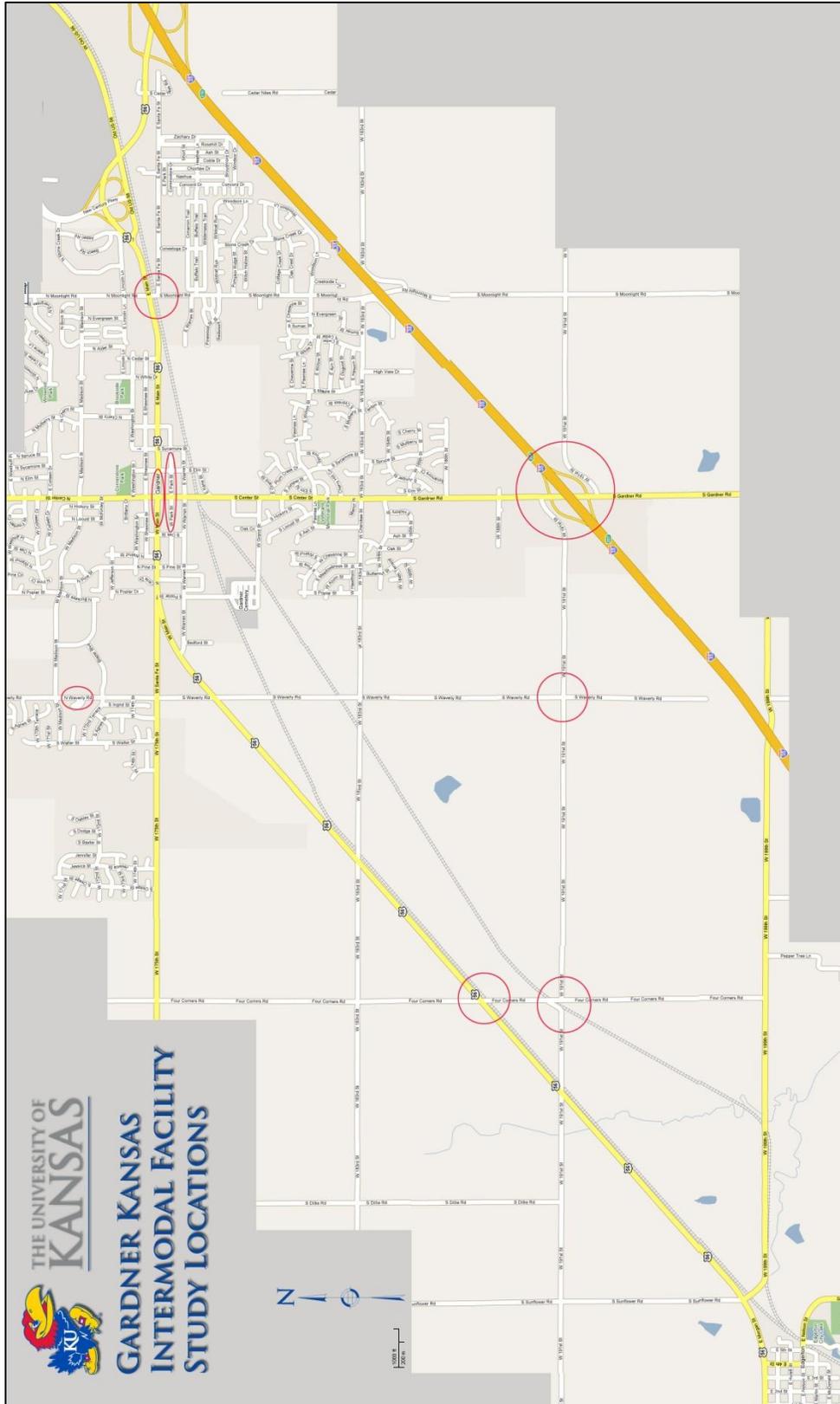


Figure 3.1 Traffic count locations

Table 3.2 Dates of traffic data collection

Data Collection #	Dates
1	November 12-19, 2007
2	May 12-16, 2008
3	September 1-5, 2008
4	November 17-21, 2008
5	March 16-20, 2009
6	May 31–June 5, 2009
7	August 31–September 4, 2009
8	November 18–25, 2009

The data collection locations were selected based on several factors. First was consideration surrounding the intermodal facility, noting that the proposed entrance was on 191st Street and that Four Corners Road between 191st Street and US 56 was scheduled to be closed. Secondly, when considering possible routes for trucks exiting the facility via designated principal routes such as I-35, (also taking into consideration points of interest in the city of Gardner) the locations for this study were chosen with the aid of the Gardner city engineer, Celia Duran and consultation from Johnson County engineer Brian Peitig.

One feature of interest was the interchange of I-35 with Gardner Road (as shown as Center Street on figure 3.1). This interchange would serve as the principle gateway to the Interstate system for the truck traffic. As part of the preparation for the proposed facility, the BNSF Railway and a consultant prepared a Break-in-Access study to evaluate the feasibility of an interchange at Waverly Road and I-35. This Break-in-Access study noted several conclusions including the following (22):

- Existing traffic operations within the Traffic Study Corridor (I-35, its interchanges, and nearby study intersections) were generally acceptable. At two currently unsignalized ramp terminals (I-35 Southbound Ramps/US 56 and I-35 Northbound

Ramps/Gardner Road), certain stop-controlled movements were operating at a poor level of service (LOS) indicating symptoms of potential future capacity needs.

- By the year 2030 the planned and anticipated local land-use growth coupled with regional growth, were forecasted to cause large traffic-volume increases throughout the traffic study corridor. These volumes were anticipated to result in unacceptable operations (LOS E) on the segment of I-35 north of US 56, even with the assumption that I-35 would eventually be widened to six lanes. Additionally, growth was anticipated to result in unacceptable operations at I-35's interchanges with US 56 and Gardner Road. This resulted in the potential need for substantial improvements at both interchanges. At I-35/Gardner Road, the interchange configuration dictated by the forecasted volumes would be unreasonably out-of-scale for a local service interchange.

It is important to recognize that regardless of the facility's construction status, the dynamics of the surrounding communities of Gardner and Edgerton are certain to change over time and the need for collecting existing data to set a control is necessary. In the City of Gardner, two specific control locations were chosen: Park Street near Center Street, and Waverly Road near the Gardner/Edgerton High School. Both sites were chosen as control locations since these locations were not projected to handle any truck traffic directly related to the intermodal facility; and may serve as indicators for overall changes in traffic conditions.

3.2 Crash Data

The Kansas Department of Transportation (KDOT) provided vehicle crash reports for Johnson County, Kansas from 2007 through 2009 involving heavy vehicles (commercial trucks and busses). A total of 1,712 reports were narrowed down to only include crashes occurring

within a seven mile radius of the intersection of Main and Center Streets in downtown Gardner, Kansas. This seven mile radius includes the entire cities of Gardner and Edgerton as well as all the existing accesses to interstate I-35. As shown by the seven mile radius in figure 3.2, the total number of vehicle crashes was 56 which included 15 in 2007, 24 in 2008 and 17 in 2009.

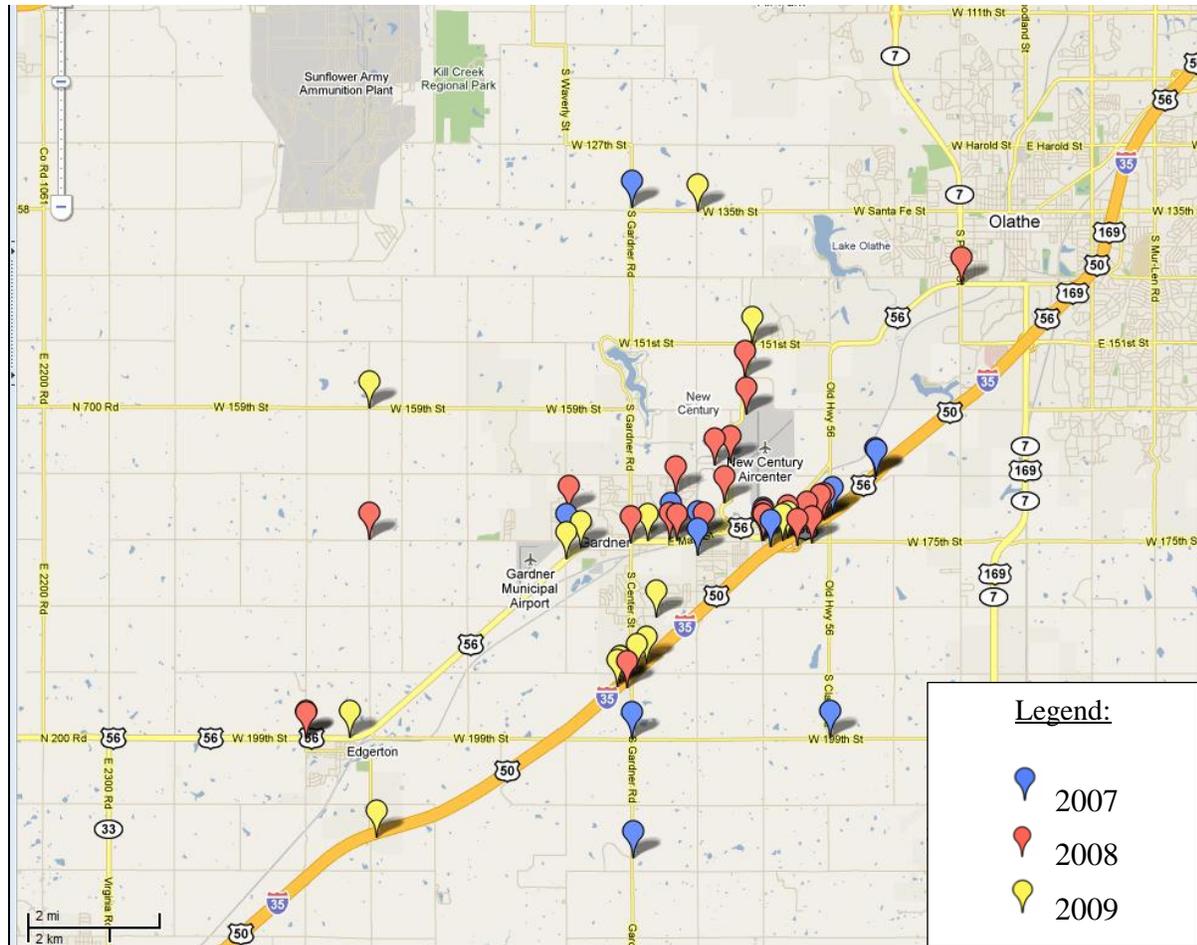


Figure 3.2 Map of heavy vehicle crashes 2007-2009

3.3 Railroad Data

In addition to surface street traffic, an intermodal facility is designed to service rail traffic. As shown previously in table 2.2, the number of trucks using the facility was expected to

increase after construction of the proposed intermodal facility. Truck traffic was recognized by the research team as a sign that operations will incrementally increase to full capacity and that this growth has potential to coincide with an increase in the number of trains traveling through the proposed BNSF intermodal facility. This increase would undoubtedly lead to additional traffic delays at at-grade crossings both near the intermodal facility and along the rail line extending to the Kansas state border and beyond as shown in figure 3.3. The affected crossings in Kansas have been cataloged in Appendix D Listing of US Rail-Truck Intermodal Facilities.

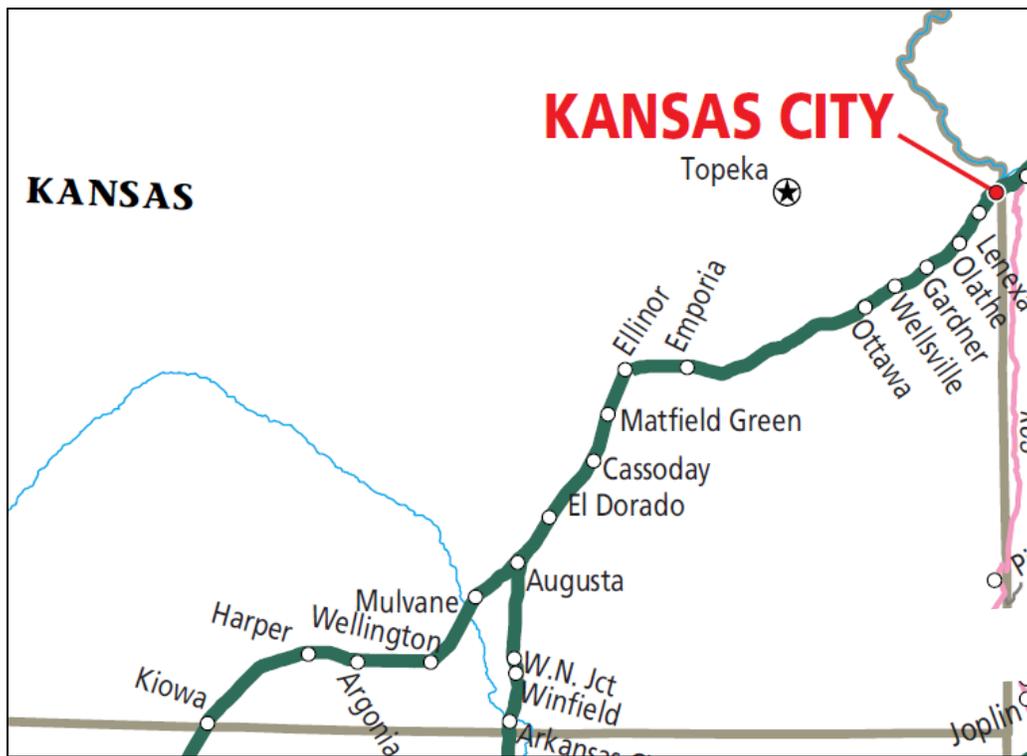


Figure 3.3 BNSF intermodal route through Gardner/Edgerton facility (23)

Working in cooperation with the project stakeholders, the research team sought to determine the average hourly number of trains operating along the BNSF owned tracks that traverse the facility area. At the busiest at-grade crossing (Moonlight near Main), a surveillance camera was deployed to record all train movements through the area, the number of train cars

and locomotives in each train, and the average time that the railroad crossing gates were closed. The results of the analysis are provided in Appendix B Railroad Data.

3.4 Environmental Data

Recognizing a concern for particulate matter concentrations in the air surrounding the intermodal facility, a data collection plan was established for the two common sizes, namely PM_{2.5} (particulate matter less than 2.5 microns in size) and PM₁₀ (particulate matter less than 10 microns in size). Data were collected bi-weekly for one calendar year at three carefully selected sites using a standardized procedure.

Particulate data collection sites were selected working in conjunction with environmental engineering faculty members at the University of Kansas. The first step was to establish the prevailing wind conditions in the study area. After a careful analysis, it was determined that prevailing wind conditions were generated from the south and southwest blowing to the north and northeast (24). Sites located north and northeast of the building location are most apt to show any changes due to the intermodal facility. Given that the corollary effect for changes in particulate matter concentrations described in the literature are overwhelmingly related to public health issues, it was important that data collection sites should be located near population centers. Consideration was also given to locating a data collection site near the proposed fence line of the facility. However, since the existing roads were gravel and produced dust this methodology was ruled out. Finally, it was also important to have a control location where potential changes in background particulate matter concentrations could also be monitored. Illustrated in figure 3.4 are the prevailing wind directions and data collection locations.

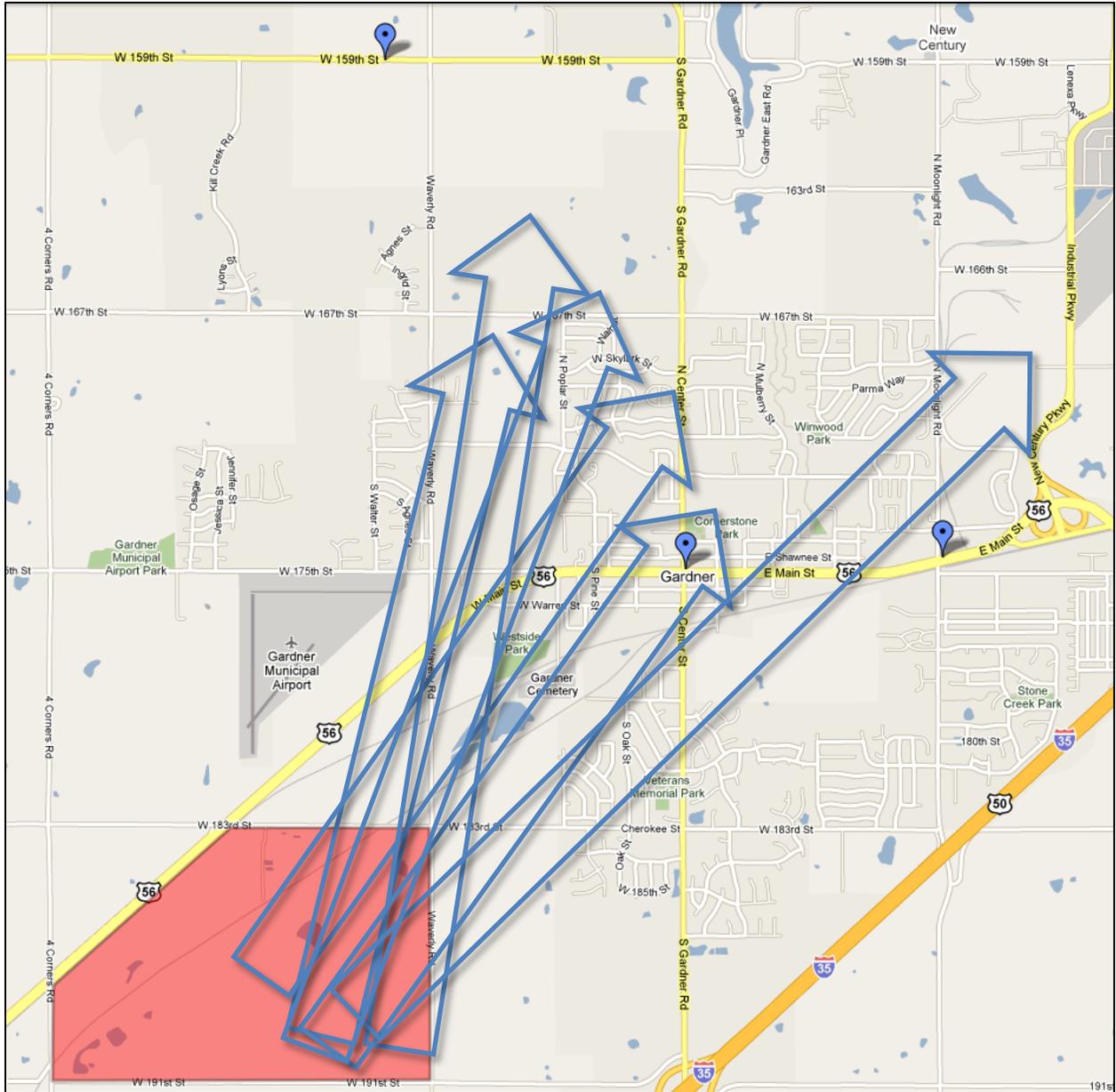


Figure 3.4 Particulate matter data collection sites and prevailing winds

As shown in figure 3.4, the three data collection sites selected were: (1) Main at Center Street, (2) Main at Moonlight, and (3) 159th Street between Waverly and Kill Creek. Selection of the first two sites also accounted for potential changes in truck volume to US 59 which travels through downtown Gardner, Kansas. These two sites also capture the approximate population

center of the city of Gardner. The third study site was located approximately three miles north of the proposed intermodal facility and was selected to be used as a control location.

Data were collected using equipment previously owned by the United States Environmental Protection Agency. Specifically, each study location utilized a pair of battery powered mini-volumes. These devices included a filter which was equilibrated and weighed in an environmental chamber using a microbalance. One mini-volume was configured to reject particulate matter greater than 10 microns and the other was configured to reject particulate matter greater than 2.5 microns, capturing both PM_{2.5} and PM₁₀. The mini-volume worked by use of a pump to circulate air through the filter and capturing the particulate matter on the filter. Particulate matter with a diameter exceeding the rejection size was mechanically discarded and never came in contact with the filter. Data collection commenced every other week beginning March 23rd, 2009 and continued for a full calendar year (21 weeks) as shown in table 3.3.

Table 3.3 Dates of particulate matter data collection

Week 1^a	March 26, 2009	Week 8	June 18, 2009	Week 15	December 17, 2009
Week 2^a	April 2, 2009	Week 9	June 25, 2009	Week 16	January 13, 2010
Week 3^a	April 16, 2009	Week 10	July 9, 2009	Week 17	January 27, 2010
Week 4^a	April 30, 2009	Week 11	October 21, 2009	Week 18	February 10, 2010
Week 5	May 14, 2009	Week 12	November 4, 2009	Week 19	February 24, 2010
Week 6	May 28, 2009	Week 13	November 19, 2009	Week 20	March 10, 2010
Week 7	June 10, 2009	Week 14	December 3, 2009	Week 21	March 24, 2010

^aDenotes that the data were discarded due to procedural irregularities

Table 3.3 lists the dates for the particulate matter data collection. However, the first four weeks are marked with an asterisk. The data from these weeks were discarded due to an irregularity in assembling the mini-volumes in the field which resulted in invalid data. Also

shown is a significant temporal gap of over three months between weeks ten and eleven. This occurred due to the temperature and pressure controlled room. The mini-volumes were pre-programmed to collect data on the Thursday of each specified week, and were placed at the locations typically on Wednesday and retrieved on Friday. Working with the City of Gardner's electric utility, the collection devices were mounted to a wooden electric pole at each study site.

The data collection process began and finished in the laboratory. First, new filters for each week were individually placed on a rack to be equilibrated in a temperature and humidity controlled room by a technician. After allowing the filter to equilibrate for 24 hours to the control room conditions, they were individually removed from the rack by a technician and their masses recorded using a precision microbalance. The microbalance precision was one one-thousandth of a milligram (0.001mg). The microbalance was calibrated using a National Institute of Standards and Technology certified mass prior to each session the microbalance was used. Working inside the temperature and humidity controlled room, the baseline filter mass was recorded in a log book and placed in the detachable collector assembly using tweezers. The detachable assembly was sealed in a plastic bag to keep out other possible sources of particulate matter until it could be attached to the mini-volume at the correct data collection site. At the end of each data collection week, this process was repeated and used filters were then equilibrated again for at least 24 hours. They were then weighed with the final mass value also being recorded in the log book. The mathematical difference between the before and after mass values of the filters represented the mass of particulate matter collected.

In the field, the mini-volumes were assembled and readied for data collection. Each unit was first connected to a rechargeable battery. Once the battery was in place for each unit, an hours-of-service odometer reading was taken from the mini-volume device and recorded in the

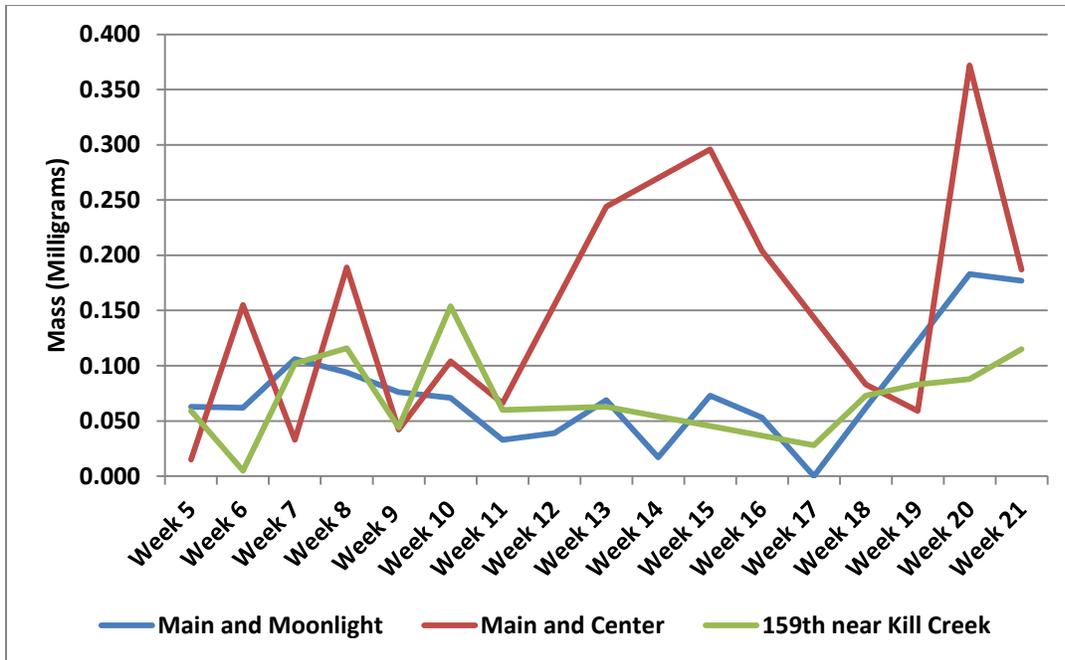
log book. During this time, the programming and clock were checked to ensure the device would properly function. This was followed by removing the detachable filter assembly from its sealed plastic bag and fastening it to the mini-volume followed by attaching the entire device to the pole. The time and date of installation for each device was also recorded in the log book. After the data collection period finished (Friday), the mini-volumes were taken down and disassembled. The odometer reading from the mini-volume device, along with the time and date of disassembly, was recorded. Then the filters and filter material were subsequently placed in the laboratory's humidity and temperature controlled room for the aforementioned procedure to commence. The data collected on the valid dates are presented in Table 3.4

Table 3.4 Twenty-four hour particulate matter sampling data

	Less than 2.5 μ (PM _{2.5})			Less than 10 μ (PM ₁₀)		
	Main and Moonlight	Main and Center	159th near Kill Creek	Main and Moonlight	Main and Center	159th near Kill Creek
Week 5	0.063	0.015	0.059	0.143	0.012	0.132
Week 6	0.062	0.155	0.005	0.132	0.010	0.053
Week 7	0.106	0.033	0.102	0.218	0.239	0.027
Week 8	0.094	0.189	0.116	0.136	0.113	●
Week 9	0.076	0.042	0.044	●	0.125	0.150
Week 10	0.071	0.104	0.154	0.075	0.189	0.295
Week 11	0.033	0.066	0.060	0.012	0.030	0.027
Week 12	0.039	●	●	●	0.003	●
Week 13	0.069	0.244	0.063	0.147	0.086	0.154
Week 14	0.017	●	●	0.071	0.087	0.123
Week 15	0.073	0.296	●	0.075	0.260	●
Week 16	0.053	0.204	●	0.057	0.116	●
Week 17	0.000	●	0.028	●	●	●
Week 18	0.062	0.083	0.073	0.239	0.221	●
Week 19	0.122	0.059	0.083	0.262	0.048	0.193
Week 20	0.183	0.372	0.088	0.184	0.209	0.106
Week 21	0.177	0.187	0.115	0.241	0.086	0.101

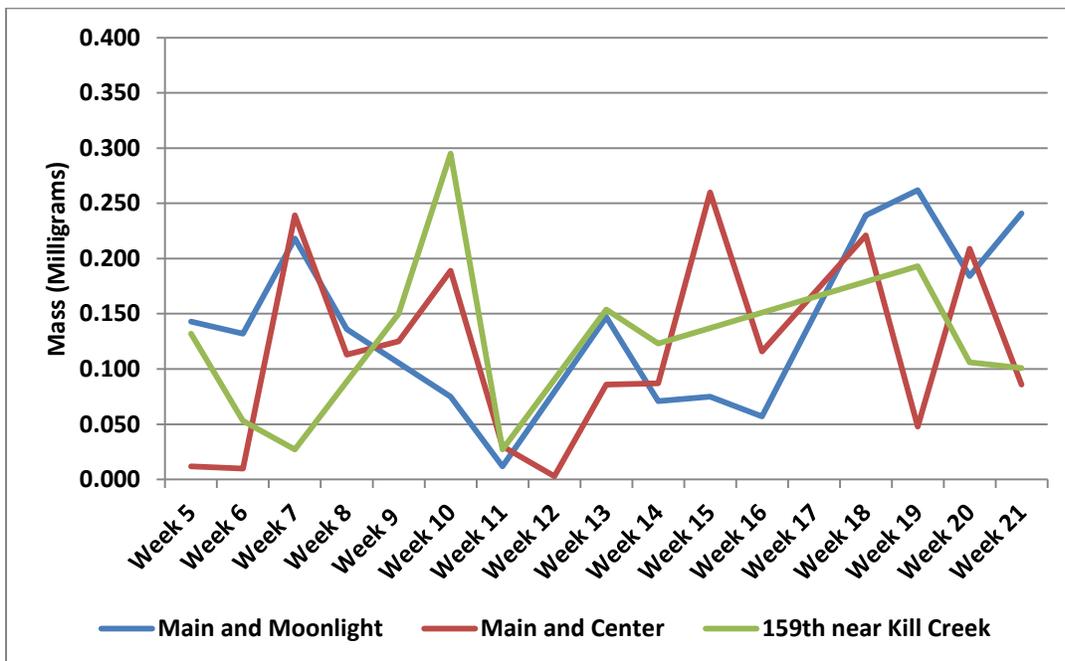
● Denotes discarded data

As shown in table 3.4, data has been omitted and represents unidentified technical irregularity such as the mini-volume not sampling for the full 24 hours (as determined based on the differences in the hours of service odometer reading before and after sampling), or the filter becoming possibly cross-contaminated due to improper handling of the detachable filter or assembly as a whole. It was also important to note that since PM_{2.5} and PM₁₀ data were collected using separate mini-volumes, the mass of PM_{2.5} collected may not always be less than the mass of PM₁₀. The data presented in table 3.4 are shown in figures 3.5 and 3.6 for PM_{2.5} and PM₁₀ respectively.



Note: lines are interpolated between missing data points as shown in table 3.4

Figure 3.5 Mass of particulate matter < 2.5 (PM2.5)



Note: lines are interpolated between missing data points as shown in Table 3.4

Figure 3.6 Mass of particulate matter < 10μ (PM10)

Chapter 4 Focus Groups

On May 20, 2010 researchers with the University of Kansas held two community focus groups relating to the proposed intermodal facility. One focus group was held each in the cities of Gardner and Edgerton, Kansas. Participants were recruited by advertisement fliers disseminated in the downtowns of both cities. This allowed the research team to collect opinions from both areas giving a random and unbiased sample. An interactive session with each focus group was conducted, and the goal was to quantify the concerns of ordinary citizens in the geographic area surrounding the proposed intermodal facility. Each session lasted approximately one hour and included three men and seven women. Of the ten participants, nine were Caucasian and one was an African American. Educational background of the entire group consisted of two people with a high school education as the highest attained degree, six people whom had attended a trade school or some college, one person with a college (bachelors) degree and one person with a graduate degree.

The focus groups were structured not to avoid political debate, but rather to draw out citizen thoughts and their current state of knowledge about the project. The almost unanimous consensus was that there had been a lack of publically available information about the project. When asked if information was available on the City of Gardner's and the United States Army Corps of Engineers' websites, the participants indicated that finding this information on the internet was too technical in nature to comprehend. It was also noted that there were no present concerns about air quality in the area. However, the concern that was echoed by participants was concern over local job creation given that BNSF will be relocating their existing intermodal operation from Argentine, Kansas to the proposed Edgerton/Gardner facility. Similar participant questions regarding potential jobs included unknown information relative to union and non-

union jobs and their respective benefits. Other specific concerns expressed in the focus groups included:

- Drifters may be attracted to the facility;
- Possible increase in crime;
- Intersection of Center and Main was “At the mercy of progress” (alluding to a perceived correlation between congestion at the intersection and adjacent development)
- Concern about a nearby park that was recently built (Westside Park);
- Safety at at-grade railroad crossings;
- Signal preemption due to railroad traffic that may causes delays to motorists at the Main and Moonlight intersection; and
- Apprehension about too many truck accommodations being built, such as truck stops that welcome trucks rather than encouraging them to leave and continue their journey.

Recognizing that public perception does not always match actual engineering data, several specific questions were asked to further quantify the public’s qualitative opinions about both the present and the future in regards to the proposed intermodal facility. The questions, summary data, and raw individual data are shown in table 4.1.

Table 4.1 Focus group quantitate data

Question	Average	Standard Deviation	Subject Number									
			1	2	3	4	5	6	7	8	9	10
On a scale of 1 (worst) to 10 (best) how would you rate the current prevailing traffic conditions?	6.20	2.15	9	6	6	5	3	10	4	7	5	7
On the same scale how do you predict traffic will be once the intermodal facility is in operation?	3.80	2.04	3	4	5	2	1	5	4	6	7	1
How many trains per day do you estimate current pass through Gardner/Edgerton on a typical weekday?	30.90	31.05	75	20	8	20	30	10	20	100	13	13
How many trains per day do you estimate will pass through Gardner/Edgerton on a typical weekday once the intermodal facility is operational?	95.11	100.31	75	40	16	30	150	25	20	200	??	300
On a scale of 1 (worst) to 10 (best) how would you rate the current ambient air quality?	8.40	1.65	9	9	7	8	9	10	5	10	7	10
One the same scale how do you predict the ambient air quality will be once the intermodal facility is in operation?	5.50	2.33	7	7	6	6	4	4	3.5	8	8.5	1

The responses shown in table 4.1 were analyzed using a two sample t-test at the 95 percent level of confidence. The subjects predicted in a statistically significant manner, degradation in the traffic and air quality conditions due to proposed intermodal facility. It was also found that compared to documented train counts in Appendix B that the public perception of how many trains per day currently pass through the area are underestimated.

As well as what was stated by the participants, several interesting issues were not addressed by participants. Among these topics included: potential changes in assessed property values, changes in tax revenue, the ability to maintain existing infrastructure, the effects on the Gardner Cemetery, and any effects on the local and regional school systems. One common relationship that these topics have in common is that they are all macroscopic in nature compared to microscopic issues that are more personal.

Chapter 5 Analysis

In evaluating the potential impacts of the proposed intermodal facility, it is important to understand the relationship between the actual railroad intermodal terminal and the needed warehousing. While both types of structures would be constructed by the same developer, the railroad would own the terminal and the developer would own and lease the warehouses independent of the railroad. Clearly there are demands for intermodal freight in the Kansas City market as there are several other similar competing facilities in the metropolitan area (though not every railroad in the metropolitan area serves the same geographic regions of the country). For market reasons, it seemed logical that without the intermodal terminal in southwest Johnson County, an increase in adjacent warehousing would not be in the planning stages. The fact that the railroad included trip generation projections for both the proposed intermodal terminal and warehousing indicates a large scope for this project.

Based on the proposed operational plan, an additional interchange is needed along interstate I-35, and until such time trucks serving the facility would be directed toward the current Gardner Road interchange. This interchange currently serves approximately 8,200 vehicles per day including 350 heavy trucks. The morning peak hour is from 7:00 a.m. to 8:00 a.m. and the evening peak hour is from 5:00 p.m. to 6:00 p.m. In both cases, the majority of this vehicular traffic travels between I-35 and areas north of the interchange. As compared to the projections for the full build out shown in Table 2.2.2, the current volume for the peak hour trip generations is approximately one fourth of the total trips predicted to be generated during the peak hour. However, it is important to understand that most of the predicted vehicle trips generated involve short trips between the proposed terminal and adjacent warehousing. These short trips will include an estimated 280 intermodal truck trips. While many of these short trips

will also likely travel to adjacent warehousing and other distribution centers, they will still gravitate towards interstate I-35 in addition to other trucks leaving warehouses with repackaged/manufactured goods from inbound intermodal shipments. Based on the same data, it is predicted that over 2,500 peak hour trips (representing approximately one-tenth of the total daily trips) will be generated. If one in four of these trips connect to I-35, it is expected that the peak hour volumes using the interchange will likely double.

Truck routes to the facility were discussed in the literature review as primarily being between the proposed intermodal facility and interstate I-35 (via the Gardner Road interchange as shown previously in figure 2.1). However, there is nothing to prevent truck traffic from also using US 56 through downtown Gardner, except for the additional stopped delays that may occur due to traffic signals and local congestion. It is important to understand that the added time due to stopped delays for commercial shippers has real cost and lost productivity complications for the proposed facility. Given the scope of the proposed facility and its expected area of influence, one possible route not considered in the traffic impact study was for west bound shipments intended for areas west of the proposed facility (including Topeka, Kansas). These shipments may also utilize US 56 connecting to north bound US 75 near Scranton, Kansas and then connecting to Interstate I-70 via I-470. The reasons for this route, as compared with routing via I-35 north to I-435 north to I-70 west, would be to avoid paying the \$15 toll for each trip (25). This also includes a savings of 25 miles and 20 minutes of travel time (2). Combining the toll costs plus the time and mileage costs, this creates a compelling business case for trucking companies to utilize US 56. One property that would be affected by increased truck traffic in terms of safety of children along US 56 is the Baldwin City Elementary School as shown in figure 5.1.

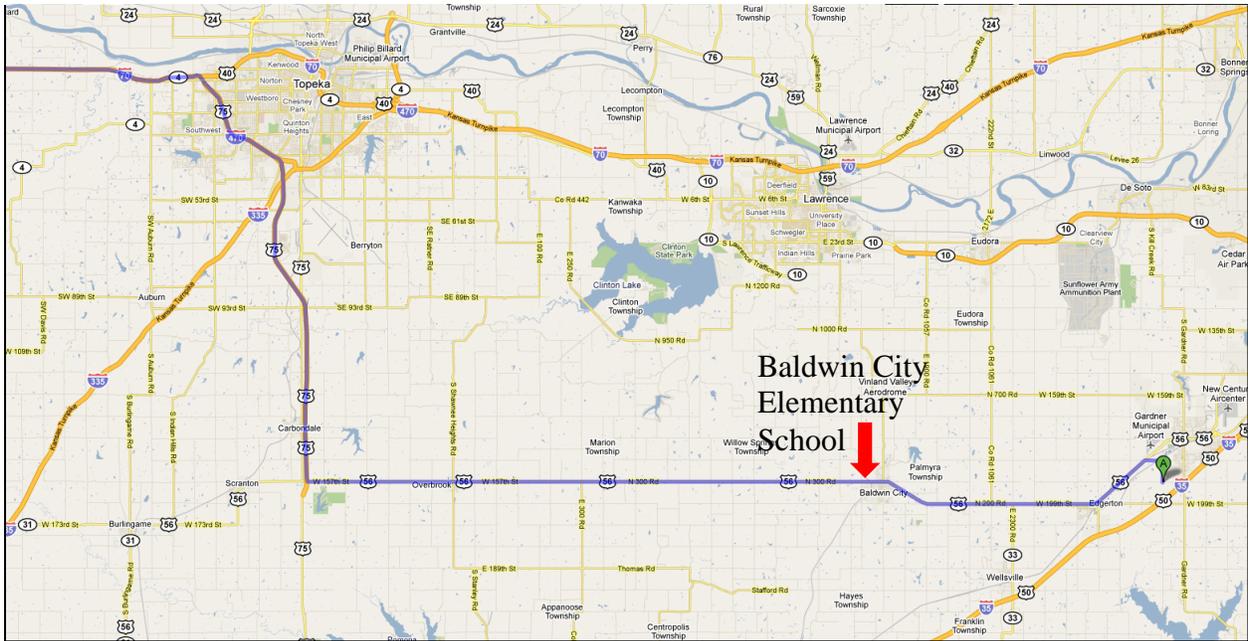


Figure 5.1 Possible westward truck route (2)

While the projections for a 20 year build out for full capacity utilization are included, the values should not be considered as final. While traffic impact studies must be prepared in good faith, factors such as changes in market conditions, geopolitical alliances, technology advances, and regulations cannot be full quantified. For examples, in the Environmental Assessment document, a 20 acre parcel of land for future parking was mentioned (pp. 1-7) but not considered in the analysis (20). If this parking facility is built, additional trip generation would need to be added to the existing traffic impact study.

Chapter 6 Findings and Discussion of Future Research

The research team acknowledges that due to the delay in constructing the proposed BNSF intermodal facility, the findings of this study are limited in scope. Based on the information gathered for this study, it is clear that the economy plays a clear and important role in the future of the facility and any potential impacts from it. For example, if a decrease in global trade can delay the construction of the facility; it would be foreseeable that an increase in global trade would have the potential to increase the operational utilization of the facility. With an economic surge it is speculated that both rail and truck modes of transportation in and around the proposed intermodal facility would increase and therefore demand improved infrastructure, air quality considerations, and local congestion. As of July 2012, KDOT has released plans for an I-35 and Homestead Lane interchange as shown in figure 5.2. The plan calls for a diverging diamond interchange and upgraded intersection at 199th Street and Homestead Lane. Additionally, a new roadway alignment north of the intersection is proposed which will connect Homestead Lane to 191st Street with the inclusion of a new bridge.

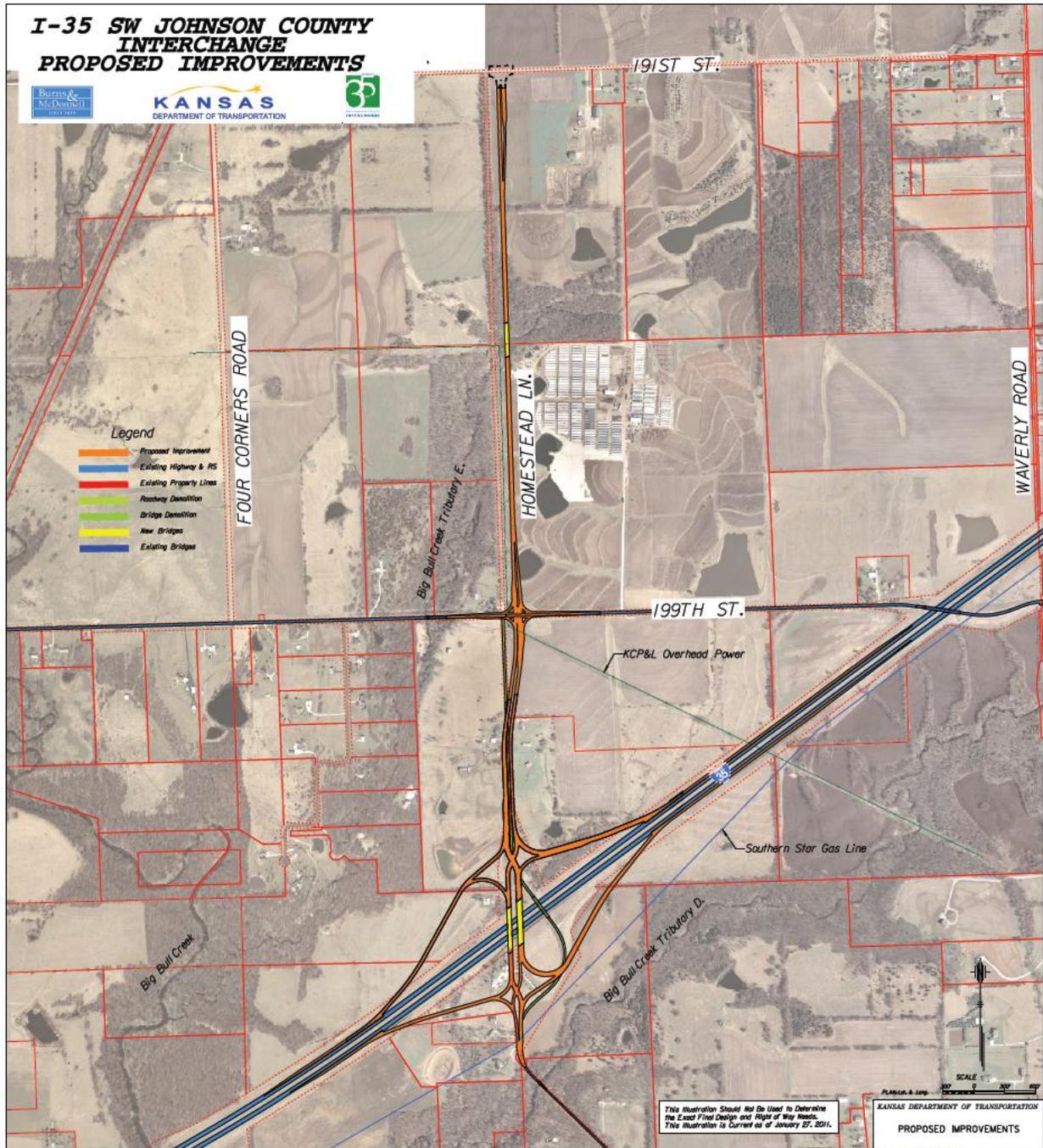


Figure 5.2 Proposed interchange at I-35 near Gardner / Edgerton, Kansas

6.1 Future research needs

Given that the BNSF intermodal facility remains in its present status as an up and coming project, clear needs for a companion follow-up study to identify the actual traffic and health impacts of the facility as they materialize. A future study after construction on the facility would also capture and verify both the predicted effects as well as any unintended consequences of constructing such a facility in this location. This type of study may benefit other communities interested in pursuing an intermodal facility.

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Appendices

Appendix A1 Traffic Data

The following traffic data is presented in two parts. The first part (Appendix A1) shows traffic data collected using tube counters that were able to determine direction of travel, speed, and axle-based classification. For dates and locations of the traffic counts, please refer to tables 3.1 and 3.2, respectively. The data herein listed has been truncated to include data collected on ‘typical’ traffic days (Tuesday-Thursday) and is reported here as a directional hour-by-hour average. The second part (Appendix A2) shows raw traffic data collected using tube counters that report only passenger car equivalent volume counts. Such counters make no distinction for direction of travel and have no mechanism for internal storage of data; thus, data is only recorded from these counters upon physical inspection. For reference, the time of inspection is also included. Please note that each data collection period resulted in separate data that appears in either Appendices A1 and/or A2. Please note that when comparing data collection periods the same site may alternate between being reported in Appendix A1 or Appendix A2.

Table A1.1 Center Street at Main: Eastbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.		14	24	12	22		9	12
1:00 a.m.		8	13	11	10		8	9
2:00 a.m.		9	6	12	13		13	9
3:00 a.m.		11	6	19	18		13	14
4:00 a.m.		25	10	35	30		35	40
5:00 a.m.		106	25	163	130		159	130
6:00 a.m.		190	114	422	355		381	360
7:00 a.m.		133	303	492	483		475	481
8:00 a.m.		167	413	376	350		340	328
9:00 a.m.		140	309	256	272		254	247
10:00 a.m.		131	186	210	261		234	268
11:00 a.m.		118	195	254	294		289	239
12:00 p.m.		98	200	239	297		255	278
1:00 p.m.		97	175	245	278		256	246
2:00 p.m.		92	164	253	282		271	251
3:00 p.m.		104	178	326	267		332	341
4:00 p.m.		85	206	304	295		296	296
5:00 p.m.		59	201	312	317		314	327
6:00 p.m.		94	234	278	287		297	285
7:00 p.m.		114	237	175	216		234	187
8:00 p.m.		105	153	163	160		187	151
9:00 p.m.		85	131	99	106		107	96
10:00 p.m.		63	84	69	77		68	65
11:00 p.m.		19	52	35	42		29	32
ADT		2066	3619	4758	4863		4856	4690
% Cars		38.75%	63.34%	75.84%	79.00%		72.01%	73.86%
% Unclassified		34.23%	31.81%	17.67%	16.20%		19.40%	14.41%
% Heavy Vehicles		27.02%	4.85%	6.49%	4.80%		8.59%	11.73%

Table A1.2 Center Street at Main: Westbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.		37	60	29	45		31	34
1:00 a.m.		19	40	18	19		18	19
2:00 a.m.		19	14	25	25		16	18
3:00 a.m.		16	18	14	17		13	11
4:00 a.m.		19	18	15	14		19	20
5:00 a.m.		51	16	48	47		61	45
6:00 a.m.		79	57	92	87		140	110
7:00 a.m.		85	135	225	149		212	190
8:00 a.m.		126	253	212	191		221	189
9:00 a.m.		165	248	186	203		195	190
10:00 a.m.		150	202	193	209		188	223
11:00 a.m.		172	211	228	249		237	189
12:00 p.m.		179	262	252	275		251	271
1:00 p.m.		195	297	237	264		255	262
2:00 p.m.		205	292	281	302		276	306
3:00 p.m.		193	316	351	352		346	349
4:00 p.m.		261	371	486	449		465	480
5:00 p.m.		179	505	526	503		539	518
6:00 p.m.		195	587	433	386		411	422
7:00 p.m.		206	473	294	298		297	291
8:00 p.m.		208	352	261	282		292	242
9:00 p.m.		209	304	173	203		208	174
10:00 p.m.		141	203	112	115		114	107
11:00 p.m.		76	130	58	72		55	64
ADT		3183	5364	4751	4757		4859	4724
% Cars		75.25%	72.86%	82.25%	82.58%		85.22%	85.71%
% Unclassified		10.02%	20.24%	10.51%	10.27%		9.82%	8.18%
% Heavy Vehicles		14.73%	6.90%	7.24%	7.15%		4.96%	6.12%

Table A1.3 Center Street at Main: All Traffic										
Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009		
12:00 a.m.		51	84	41	67		40	46		
1:00 a.m.		27	53	29	29		26	28		
2:00 a.m.		28	20	37	37		29	27		
3:00 a.m.		27	24	33	35		26	25		
4:00 a.m.		44	28	50	44		54	60		
5:00 a.m.		156	40	211	177		220	175		
6:00 a.m.		269	172	514	442		521	471		
7:00 a.m.		218	438	717	632		687	672		
8:00 a.m.		294	666	588	542		561	517		
9:00 a.m.		305	557	442	476		449	437		
10:00 a.m.		281	389	403	471		422	491		
11:00 a.m.		289	406	482	543		526	427		
12:00 p.m.		276	462	492	572		506	548		
1:00 p.m.		292	472	482	542		511	507		
2:00 p.m.		297	456	535	585		546	557		
3:00 p.m.		297	494	677	620		677	689		
4:00 p.m.		346	577	790	744		761	776		
5:00 p.m.		238	706	838	819		853	845		
6:00 p.m.		289	821	711	673		707	707		
7:00 p.m.		320	711	469	514		531	478		
8:00 p.m.		313	505	423	443		479	394		
9:00 p.m.		294	435	272	309		315	271		
10:00 p.m.		204	287	180	192		182	172		
11:00 p.m.		95	181	93	114		84	97		
ADT		5250	8983	9509	9620		9715	9414		

Table A1.4 Waverly Road near Gardner Edgerton High School: Northbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.			2	2	1	3	2	4
1:00 a.m.			2	2	1	2	2	1
2:00 a.m.			1	1	3	2	1	1
3:00 a.m.			0	0	1	1	1	1
4:00 a.m.			2	1	2	1	2	3
5:00 a.m.			3	7	2	8	6	5
6:00 a.m.			12	25	16	23	25	22
7:00 a.m.			27	149	30	60	172	125
8:00 a.m.			83	84	29	82	96	66
9:00 a.m.			126	24	36	26	24	25
10:00 a.m.			20	30	28	41	31	29
11:00 a.m.			24	45	34	43	38	43
12:00 p.m.			46	41	41	53	47	41
1:00 p.m.			38	26	37	36	38	41
2:00 p.m.			20	44	46	44	43	60
3:00 p.m.			23	91	45	49	125	127
4:00 p.m.			122	77	59	84	83	89
5:00 p.m.			74	96	80	105	138	96
6:00 p.m.			105	104	56	99	107	112
7:00 p.m.			74	41	40	80	58	52
8:00 p.m.			29	33	32	51	45	43
9:00 p.m.			45	22	25	29	28	21
10:00 p.m.			19	8	12	19	15	17
11:00 p.m.			11	5	8	9	5	13
ADT			907	959	664	950	1131	1034
% Cars			93.64%	94.19%	81.52%	94.88%	93.96%	93.96%
% Unclassified % Heavy Vehicles			1.54%	0.97%	1.71%	1.05%	1.21%	1.52%
			4.81%	4.83%	16.78%	4.07%	4.83%	4.52%

Table A1.5 Waverly Road near Gardner Edgerton High School: Southbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.			4	3	3	3	4	3
1:00 a.m.			1	0	2	3	1	1
2:00 a.m.			0	1	1	0	3	1
3:00 a.m.			0	2	2	3	1	2
4:00 a.m.			1	2	3	4	5	5
5:00 a.m.			2	11	11	15	15	17
6:00 a.m.			5	33	24	35	35	29
7:00 a.m.			20	95	39	59	112	91
8:00 a.m.			139	91	32	64	100	72
9:00 a.m.			115	21	25	26	28	32
10:00 a.m.			29	27	26	37	27	33
11:00 a.m.			23	43	32	39	56	40
12:00 p.m.			44	32	37	70	42	41
1:00 p.m.			40	27	31	32	31	33
2:00 p.m.			25	28	38	39	40	39
3:00 p.m.			33	117	43	36	136	144
4:00 p.m.			117	83	47	66	81	81
5:00 p.m.			62	74	59	96	112	93
6:00 p.m.			99	69	48	65	76	53
7:00 p.m.			77	47	33	52	60	54
8:00 p.m.			44	61	29	36	53	48
9:00 p.m.			37	16	21	45	23	14
10:00 p.m.			18	5	6	11	10	16
11:00 p.m.			12	3	6	6	5	9
ADT			947	891	598	843	1057	949
% Cars			94.47%	92.78%	88.41%	94.74%	93.85%	85.79%
% Unclassified			1.44%	1.38%	1.45%	0.79%	2.18%	1.63%
% Heavy Vehicles			4.08%	5.83%	10.14%	4.47%	3.97%	12.59%

Table A1.6 Waverly Road near Gardner Edgerton High School: All Traffic										
Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009		
12:00 a.m.			6	5	4	7	6	7		
1:00 a.m.			3	2	3	5	3	2		
2:00 a.m.			1	2	4	2	3	1		
3:00 a.m.			1	2	3	4	2	3		
4:00 a.m.			2	3	5	4	6	8		
5:00 a.m.			5	18	14	23	21	23		
6:00 a.m.			17	57	39	58	60	52		
7:00 a.m.			47	244	69	119	284	216		
8:00 a.m.			221	175	61	146	196	138		
9:00 a.m.			241	45	61	52	52	57		
10:00 a.m.			50	57	54	78	58	62		
11:00 a.m.			47	88	65	82	94	82		
12:00 p.m.			89	73	78	123	89	81		
1:00 p.m.			78	53	68	68	69	74		
2:00 p.m.			45	72	84	83	83	99		
3:00 p.m.			56	208	88	86	261	271		
4:00 p.m.			239	160	106	150	164	170		
5:00 p.m.			135	170	139	202	250	189		
6:00 p.m.			204	173	104	165	183	165		
7:00 p.m.			151	89	73	132	118	106		
8:00 p.m.			74	95	61	87	99	90		
9:00 p.m.			82	37	46	74	51	35		
10:00 p.m.			37	13	19	29	25	33		
11:00 p.m.			23	9	14	14	10	22		
ADT			1854	1850	1262	1793	2187	1983		

Table A1.7 US 56 East of Four Corners: Eastbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.			6	7		8	8	4
1:00 a.m.			2	5		5	9	4
2:00 a.m.			3	5		5	5	5
3:00 a.m.			6	14		8	8	7
4:00 a.m.			9	21		18	17	20
5:00 a.m.			67	90		77	84	60
6:00 a.m.			157	201		188	200	99
7:00 a.m.			312	326		219	294	145
8:00 a.m.			189	162		161	169	99
9:00 a.m.			97	105		105	117	68
10:00 a.m.			104	91		123	111	53
11:00 a.m.			115	105		145	102	62
12:00 p.m.			93	94		127	108	64
1:00 p.m.			90	103		132	97	57
2:00 p.m.			106	111		126	117	59
3:00 p.m.			132	106		127	135	98
4:00 p.m.			124	137		148	131	105
5:00 p.m.			144	161		161	161	165
6:00 p.m.			128	118		143	122	126
7:00 p.m.			79	78		84	88	64
8:00 p.m.			59	49		103	69	48
9:00 p.m.			43	54		61	43	41
10:00 p.m.			25	27		39	28	35
11:00 p.m.			10	16		14	11	18
ADT			2097	2181		2327	2235	1505
% Cars			89.89%	81.90%		91.85%	87.16%	89.49%
% Unclassified Heavy Vehicles			2.43%	7.09%		2.21%	4.15%	3.11%
			7.67%	11.01%		5.94%	8.69%	7.40%

Table A1.8 US 56 East of Four Corners: Westbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.			25	16		17	10	14
1:00 a.m.			8	8		8	6	5
2:00 a.m.			9	8		5	5	9
3:00 a.m.			4	9		5	5	13
4:00 a.m.			12	12		5	6	11
5:00 a.m.			9	18		20	16	17
6:00 a.m.			36	41		58	54	99
7:00 a.m.			82	94		98	73	164
8:00 a.m.			86	85		106	63	120
9:00 a.m.			72	85		90	64	97
10:00 a.m.			87	88		95	72	141
11:00 a.m.			90	96		121	100	145
12:00 p.m.			92	106		148	111	158
1:00 p.m.			94	107		120	101	171
2:00 p.m.			120	136		158	120	164
3:00 p.m.			179	235		191	194	261
4:00 p.m.			256	269		249	233	283
5:00 p.m.			274	280		262	245	233
6:00 p.m.			214	184		167	183	162
7:00 p.m.			128	128		131	122	125
8:00 p.m.			118	101		129	117	102
9:00 p.m.			73	68		90	83	65
10:00 p.m.			44	40		55	47	53
11:00 p.m.			27	27		37	26	34
ADT			2135	2237		2367	2054	2647
% Cars			89.22%	68.22%		90.06%	92.68%	83.00%
% Unclassified			2.83%	10.60%		1.76%	3.50%	6.86%
% Heavy Vehicles			7.95%	21.17%		8.18%	3.81%	10.14%

Table A1.9 US 56 East of Four Corners: All Traffic									
Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009	
12:00 a.m.			31	22		25	18	19	
1:00 a.m.			9	13		12	15	9	
2:00 a.m.			11	12		10	10	15	
3:00 a.m.			10	23		13	13	20	
4:00 a.m.			21	33		23	23	31	
5:00 a.m.			76	108		97	100	77	
6:00 a.m.			192	242		246	254	199	
7:00 a.m.			394	420		317	367	309	
8:00 a.m.			275	247		267	232	219	
9:00 a.m.			169	190		195	180	164	
10:00 a.m.			191	179		219	183	194	
11:00 a.m.			205	201		266	203	206	
12:00 p.m.			185	200		276	219	222	
1:00 p.m.			185	210		253	199	228	
2:00 p.m.			226	246		284	238	223	
3:00 p.m.			312	342		318	329	359	
4:00 p.m.			380	405		397	363	388	
5:00 p.m.			418	440		423	406	398	
6:00 p.m.			342	301		310	304	288	
7:00 p.m.			207	206		215	210	189	
8:00 p.m.			177	150		232	186	150	
9:00 p.m.			116	122		151	126	106	
10:00 p.m.			69	67		94	75	88	
11:00 p.m.			36	42		51	37	52	
ADT			4232	4419		4694	4290	4151	

Table A.1.10 US 56 West of Four Corners: Eastbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.		8	11	5	10	22	4	4
1:00 a.m.		5	6	4	5	8	6	4
2:00 a.m.		5	4	4	5	8	3	6
3:00 a.m.		11	2	10	12	12	7	7
4:00 a.m.		14	5	18	19	23	16	20
5:00 a.m.		65	12	81	58	91	77	60
6:00 a.m.		174	78	182	182	230	185	105
7:00 a.m.		325	171	344	202	292	292	232
8:00 a.m.		171	357	165	135	231	145	156
9:00 a.m.		111	155	100	123	157	99	112
10:00 a.m.		109	108	88	117	169	105	66
11:00 a.m.		114	105	101	126	189	105	124
12:00 p.m.		100	115	96	125	181	110	134
1:00 p.m.		95	90	96	133	178	100	112
2:00 p.m.		117	110	108	128	187	123	121
3:00 p.m.		154	114	137	117	184	140	160
4:00 p.m.		136	160	132	139	234	135	164
5:00 p.m.		154	146	150	156	244	166	155
6:00 p.m.		147	166	118	146	202	124	129
7:00 p.m.		96	132	65	83	160	89	66
8:00 p.m.		73	85	49	72	188	72	51
9:00 p.m.		49	58	43	42	148	46	41
10:00 p.m.		32	42	26	34	89	30	37
11:00 p.m.		12	27	15	23	48	11	18
ADT		2278	2258	2135	2192	3475	2191	2083
% Cars		71.04%	86.56%	88.00%	90.01%	56.73%	92.87%	90.27%
% Unclassified		0.61%	2.04%	1.89%	1.66%	32.54%	1.23%	3.01%
% Heavy Vehicles		28.35%	11.39%	10.10%	8.33%	10.74%	5.90%	6.72%

Table A1.11 US 56 West of Four Corners: Westbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.		18	21	15	21	7	14	14
1:00 a.m.		6	18	6	11	5	8	5
2:00 a.m.		8	6	10	7	2	5	9
3:00 a.m.		5	8	11	9	3	5	13
4:00 a.m.		7	4	10	9	2	8	12
5:00 a.m.		11	9	15	20	13	18	17
6:00 a.m.		41	11	41	47	35	74	101
7:00 a.m.		97	47	106	82	53	114	96
8:00 a.m.		108	100	103	78	64	100	83
9:00 a.m.		86	104	85	94	59	88	86
10:00 a.m.		89	72	88	94	70	85	66
11:00 a.m.		102	97	93	113	95	103	112
12:00 p.m.		114	110	104	126	114	113	118
1:00 p.m.		115	107	103	126	99	102	161
2:00 p.m.		125	100	127	157	134	124	135
3:00 p.m.		214	133	205	186	166	208	245
4:00 p.m.		273	198	260	256	190	241	250
5:00 p.m.		264	277	258	254	216	257	248
6:00 p.m.		197	287	180	166	133	188	166
7:00 p.m.		127	234	132	129	71	128	125
8:00 p.m.		131	147	97	113	56	114	102
9:00 p.m.		98	119	70	72	23	83	66
10:00 p.m.		62	53	39	46	12	47	54
11:00 p.m.		27	48	27	30	6	27	35
ADT		2326	2308	2179	2247	1630	2256	2319
% Cars		87.29%	78.85%	80.85%	90.55%	1.39%	93.79%	83.19%
% Unclassified		1.07%	2.84%	1.74%	1.32%	97.22%	1.23%	8.44%
% Heavy Vehicles		11.64%	18.31%	17.40%	8.13%	1.39%	4.98%	8.38%

Table A1.12 US 56 West of Four Corners: All Traffic										
Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009		
12:00 a.m.		26	32	20	31	29	18	18		
1:00 a.m.		11	24	10	16	13	14	9		
2:00 a.m.		13	10	14	12	11	8	15		
3:00 a.m.		15	10	20	21	15	12	20		
4:00 a.m.		21	8	28	27	25	24	32		
5:00 a.m.		77	21	95	78	104	95	77		
6:00 a.m.		215	89	222	229	266	259	206		
7:00 a.m.		422	218	450	284	345	406	328		
8:00 a.m.		279	457	268	214	294	245	239		
9:00 a.m.		197	259	185	216	216	187	197		
10:00 a.m.		199	180	175	211	239	190	132		
11:00 a.m.		216	202	193	239	284	208	236		
12:00 p.m.		214	225	201	251	295	223	252		
1:00 p.m.		210	197	198	259	277	202	273		
2:00 p.m.		242	210	234	286	321	248	256		
3:00 p.m.		368	247	342	303	350	348	405		
4:00 p.m.		409	358	392	395	424	376	414		
5:00 p.m.		418	423	407	410	460	422	403		
6:00 p.m.		344	453	298	312	335	312	295		
7:00 p.m.		224	366	197	212	231	217	191		
8:00 p.m.		204	232	146	185	244	187	153		
9:00 p.m.		147	177	113	114	171	130	107		
10:00 p.m.		94	95	65	80	100	77	91		
11:00 p.m.		39	75	42	53	54	39	54		
ADT		4603	4566	4313	4439	5105	4447	4402		

Table A1.13 US 56 North of Four Corners: Northbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.							0	
1:00 a.m.							1	
2:00 a.m.							0	
3:00 a.m.							0	
4:00 a.m.							0	
5:00 a.m.							1	
6:00 a.m.							8	
7:00 a.m.							40	
8:00 a.m.							8	
9:00 a.m.							5	
10:00 a.m.							7	
11:00 a.m.							5	
12:00 p.m.							4	
1:00 p.m.							5	
2:00 p.m.							9	
3:00 p.m.							12	
4:00 p.m.							12	
5:00 p.m.							18	
6:00 p.m.							9	
7:00 p.m.							4	
8:00 p.m.							5	
9:00 p.m.							4	
10:00 p.m.							3	
11:00 p.m.							1	
ADT							165	
% Cars							84.21%	
% Unclassified							6.07%	
% Heavy Vehicles							9.72%	

Table A1.14 US 56 North of Four Corners: Southbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.							0	
1:00 a.m.							0	
2:00 a.m.							0	
3:00 a.m.							0	
4:00 a.m.							0	
5:00 a.m.							0	
6:00 a.m.							4	
7:00 a.m.							22	
8:00 a.m.							19	
9:00 a.m.							3	
10:00 a.m.							10	
11:00 a.m.							6	
12:00 p.m.							7	
1:00 p.m.							5	
2:00 p.m.							11	
3:00 p.m.							21	
4:00 p.m.							15	
5:00 p.m.							21	
6:00 p.m.							14	
7:00 p.m.							12	
8:00 p.m.							3	
9:00 p.m.							3	
10:00 p.m.							2	
11:00 p.m.							3	
ADT							180	
% Cars							79.04%	
% Unclassified							8.91%	
% Heavy Vehicles							12.06%	

Table A1.15 US 56 North of Four Corners: All Traffic									
Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009	
12:00 a.m.							0		
1:00 a.m.							1		
2:00 a.m.							0		
3:00 a.m.							0		
4:00 a.m.							1		
5:00 a.m.							2		
6:00 a.m.							12		
7:00 a.m.							62		
8:00 a.m.							27		
9:00 a.m.							8		
10:00 a.m.							17		
11:00 a.m.							11		
12:00 p.m.							11		
1:00 p.m.							10		
2:00 p.m.							20		
3:00 p.m.							33		
4:00 p.m.							27		
5:00 p.m.							39		
6:00 p.m.							23		
7:00 p.m.							16		
8:00 p.m.							8		
9:00 p.m.							7		
10:00 p.m.							6		
11:00 p.m.							4		
ADT							344		

Table A1.16 US 56 South of Four Corners: Northbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.					1			0
1:00 a.m.					0			0
2:00 a.m.					1			0
3:00 a.m.					0			0
4:00 a.m.					2			1
5:00 a.m.					4			1
6:00 a.m.					9			3
7:00 a.m.					17			12
8:00 a.m.					19			3
9:00 a.m.					14			4
10:00 a.m.					11			3
11:00 a.m.					14			2
12:00 p.m.					20			3
1:00 p.m.					17			5
2:00 p.m.					19			5
3:00 p.m.					20			5
4:00 p.m.					26			7
5:00 p.m.					27			9
6:00 p.m.					15			3
7:00 p.m.					16			5
8:00 p.m.					6			4
9:00 p.m.					5			3
10:00 p.m.					4			2
11:00 p.m.					4			0
ADT					271			79
% Cars					69.13%			87.37%
% Unclassified					20.79%			4.69%
% Heavy Vehicles					10.09%			7.94%

Table A1.17 US 56 South of Four Corners: Southbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.					3			0
1:00 a.m.					1			0
2:00 a.m.					0			0
3:00 a.m.					2			0
4:00 a.m.					1			0
5:00 a.m.					1			0
6:00 a.m.					17			3
7:00 a.m.					23			5
8:00 a.m.					13			6
9:00 a.m.					15			4
10:00 a.m.					7			2
11:00 a.m.					18			6
12:00 p.m.					16			5
1:00 p.m.					13			4
2:00 p.m.					13			5
3:00 p.m.					19			10
4:00 p.m.					28			9
5:00 p.m.					19			6
6:00 p.m.					30			4
7:00 p.m.					8			6
8:00 p.m.					10			5
9:00 p.m.					6			2
10:00 p.m.					3			1
11:00 p.m.					3			1
ADT					270			84
% Cars					52.03%			88.23%
% Unclassified					44.51%			5.22%
% Heavy Vehicles					3.45%			6.54%

Table A1.18 US 56 South of Four Corners: All Traffic									
Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009	
12:00 a.m.					4			1	
1:00 a.m.					1			0	
2:00 a.m.					2			0	
3:00 a.m.					3			0	
4:00 a.m.					3			1	
5:00 a.m.					6			1	
6:00 a.m.					26			6	
7:00 a.m.					40			17	
8:00 a.m.					32			9	
9:00 a.m.					29			9	
10:00 a.m.					18			4	
11:00 a.m.					32			7	
12:00 p.m.					36			8	
1:00 p.m.					30			9	
2:00 p.m.					33			9	
3:00 p.m.					39			15	
4:00 p.m.					54			16	
5:00 p.m.					46			15	
6:00 p.m.					45			8	
7:00 p.m.					24			11	
8:00 p.m.					16			9	
9:00 p.m.					11			5	
10:00 p.m.					7			2	
11:00 p.m.					6			1	
ADT					541			163	

Table A1.19 Moonlight South of Santa Fe: Northbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.			45	13	23	32	14	
1:00 a.m.			25	11	16	21	9	
2:00 a.m.			13	12	14	14	10	
3:00 a.m.			12	16	17	18	14	
4:00 a.m.			15	38	22	26	31	
5:00 a.m.			34	142	108	139	106	
6:00 a.m.			115	392	320	413	263	
7:00 a.m.			322	415	359	464	465	
8:00 a.m.			380	334	298	396	314	
9:00 a.m.			352	236	252	289	204	
10:00 a.m.			227	191	250	289	195	
11:00 a.m.			202	233	257	272	239	
12:00 p.m.			233	238	267	294	251	
1:00 p.m.			247	229	247	257	215	
2:00 p.m.			225	207	232	276	237	
3:00 p.m.			212	300	240	291	292	
4:00 p.m.			276	292	269	314	315	
5:00 p.m.			288	357	322	351	354	
6:00 p.m.			278	300	294	346	302	
7:00 p.m.			308	217	251	308	235	
8:00 p.m.			231	154	181	261	173	
9:00 p.m.			193	112	139	179	119	
10:00 p.m.			113	65	87	106	71	
11:00 p.m.			71	37	45	59	37	
ADT			4419	4540	4510	5416	4463	
% Cars			84.94%	69.89%	91.88%	69.60%	92.64%	
% Unclassified			11.23%	13.03%	6.20%	24.32%	4.23%	
% Heavy Vehicles			3.84%	17.07%	1.92%	6.09%	3.13%	

Table A1.20 Moonlight South of Santa Fe: Southbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.			83	45	58	62	35	
1:00 a.m.			51	19	28	30	15	
2:00 a.m.			25	26	29	21	14	
3:00 a.m.			22	12	13	11	9	
4:00 a.m.			12	8	15	11	6	
5:00 a.m.			11	42	31	28	42	
6:00 a.m.			24	79	66	69	60	
7:00 a.m.			63	205	102	124	185	
8:00 a.m.			178	212	147	170	217	
9:00 a.m.			218	138	149	159	143	
10:00 a.m.			146	151	183	185	162	
11:00 a.m.			151	225	227	264	222	
12:00 p.m.			209	248	255	279	232	
1:00 p.m.			242	212	253	249	212	
2:00 p.m.			231	237	265	288	242	
3:00 p.m.			235	368	349	345	389	
4:00 p.m.			356	489	416	468	417	
5:00 p.m.			411	518	480	503	505	
6:00 p.m.			509	457	430	444	380	
7:00 p.m.			493	346	362	354	321	
8:00 p.m.			361	311	303	350	282	
9:00 p.m.			329	200	234	278	186	
10:00 p.m.			242	139	164	174	101	
11:00 p.m.			147	77	94	100	59	
ADT			4747	4765	4654	4963	4436	
% Cars			85.45%	81.91%	92.64%	78.09%	91.38%	
% Unclassified			7.50%	9.18%	5.73%	9.16%	3.57%	
% Heavy Vehicles			7.05%	8.91%	1.63%	12.75%	5.05%	

Table A1.21 Moonlight South of Santa Fe: All Traffic										
Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009		
12:00 a.m.			128	58	81	93	49			
1:00 a.m.			77	30	44	51	24			
2:00 a.m.			38	39	43	35	23			
3:00 a.m.			34	28	30	29	22			
4:00 a.m.			27	46	37	37	37			
5:00 a.m.			45	184	139	167	149			
6:00 a.m.			138	471	385	482	322			
7:00 a.m.			385	620	461	587	651			
8:00 a.m.			558	547	445	566	531			
9:00 a.m.			570	374	401	448	347			
10:00 a.m.			373	342	432	474	357			
11:00 a.m.			353	457	484	536	461			
12:00 p.m.			442	486	522	573	482			
1:00 p.m.			489	442	501	506	427			
2:00 p.m.			456	444	496	564	479			
3:00 p.m.			447	668	589	635	681			
4:00 p.m.			632	781	686	783	732			
5:00 p.m.			699	875	802	854	859			
6:00 p.m.			786	757	724	790	682			
7:00 p.m.			801	563	613	662	556			
8:00 p.m.			593	465	484	611	455			
9:00 p.m.			522	312	373	457	305			
10:00 p.m.			355	204	251	279	172			
11:00 p.m.			218	114	139	159	95			
ADT			9166	9305	9163	10379	8899			

Table A1.22 Four Corners Road South of 191st, Northbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.			0	0	1	2	0	1
1:00 a.m.			0	0	0	0	0	0
2:00 a.m.			0	0	0	0	1	0
3:00 a.m.			0	0	0	1	1	0
4:00 a.m.			1	1	1	2	0	0
5:00 a.m.			0	1	5	7	1	0
6:00 a.m.			4	1	9	16	3	1
7:00 a.m.			4	10	18	19	13	5
8:00 a.m.			6	3	19	21	3	5
9:00 a.m.			3	2	12	13	2	4
10:00 a.m.			5	2	12	13	8	1
11:00 a.m.			9	4	11	15	3	4
12:00 p.m.			5	4	19	19	2	4
1:00 p.m.			7	4	17	19	3	7
2:00 p.m.			5	4	17	23	5	5
3:00 p.m.			9	13	18	23	6	11
4:00 p.m.			9	5	28	27	8	8
5:00 p.m.			8	5	25	34	7	8
6:00 p.m.			11	6	14	19	5	6
7:00 p.m.			5	5	16	16	3	3
8:00 p.m.			2	4	6	7	2	5
9:00 p.m.			2	2	5	8	2	3
10:00 p.m.			1	1	3	4	0	0
11:00 p.m.			0	0	5	2	0	1
ADT			96	80	263	310	79	79
% Cars			87.54%	76.76%	69.11%	61.45%	86.86%	78.74%
% Unclassified % Heavy Vehicles			2.42%	3.73%	0.63%	2.10%	8.90%	4.35%
			10.03%	19.50%	30.25%	36.45%	4.24%	16.91%

Table A1.23 Four Corners Road South of 191st: Southbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.			0	1	2	3	0	0
1:00 a.m.			0	0	0	0	0	0
2:00 a.m.			0	0	1	0	1	0
3:00 a.m.			0	0	1	1	0	0
4:00 a.m.			0	0	1	2	0	1
5:00 a.m.			2	2	1	2	0	1
6:00 a.m.			1	4	11	14	2	2
7:00 a.m.			16	21	19	18	6	11
8:00 a.m.			12	5	9	16	4	3
9:00 a.m.			5	7	13	10	1	3
10:00 a.m.			5	3	6	12	3	2
11:00 a.m.			8	4	14	15	3	5
12:00 p.m.			6	3	15	17	4	4
1:00 p.m.			7	4	11	15	4	6
2:00 p.m.			5	4	12	24	3	6
3:00 p.m.			7	7	17	21	12	5
4:00 p.m.			4	8	22	23	5	5
5:00 p.m.			7	6	17	27	6	11
6:00 p.m.			6	8	25	21	7	5
7:00 p.m.			2	3	8	12	4	3
8:00 p.m.			0	2	10	12	3	1
9:00 p.m.			1	1	5	9	3	2
10:00 p.m.			1	0	3	6	1	1
11:00 p.m.			0	0	3	2	2	1
ADT			96	91	225	281	75	77
% Cars			57.99%	74.82%	79.82%	81.28%	25.45%	82.99%
% Unclassified			3.13%	4.38%	1.48%	1.40%	0.89%	8.25%
% Heavy Vehicles			38.89%	20.80%	18.69%	17.33%	73.66%	8.76%

Table A1.24 Four Corners Road South of 191 st : All Traffic										
Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009		
12:00 a.m.			0	1	3	5	0	1		
1:00 a.m.			0	0	1	1	0	0		
2:00 a.m.			0	1	1	1	2	0		
3:00 a.m.			0	0	1	1	1	0		
4:00 a.m.			1	1	2	3	0	1		
5:00 a.m.			3	2	6	10	2	1		
6:00 a.m.			4	5	21	30	5	3		
7:00 a.m.			20	31	37	37	19	16		
8:00 a.m.			18	8	28	37	7	8		
9:00 a.m.			8	9	25	23	3	7		
10:00 a.m.			10	6	18	25	11	3		
11:00 a.m.			16	8	25	29	6	8		
12:00 p.m.			11	7	34	37	5	7		
1:00 p.m.			14	9	28	34	7	13		
2:00 p.m.			10	8	29	46	9	11		
3:00 p.m.			16	20	35	44	18	15		
4:00 p.m.			14	13	50	50	13	13		
5:00 p.m.			15	11	42	61	13	19		
6:00 p.m.			18	14	39	40	11	11		
7:00 p.m.			7	8	24	28	7	6		
8:00 p.m.			2	6	16	19	5	6		
9:00 p.m.			4	3	10	17	5	5		
10:00 p.m.			2	1	7	9	1	1		
11:00 p.m.			0	0	8	4	2	2		
ADT			192	172	488	591	153	156		

Table A1.25 Gardner Road North of I-35: Northbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.		37	34	22	40	34	33	33
1:00 a.m.		21	21	14	20	23	20	19
2:00 a.m.		14	14	7	13	16	13	23
3:00 a.m.		10	11	11	13	15	9	15
4:00 a.m.		13	8	18	13	18	20	22
5:00 a.m.		35	13	56	49	65	57	52
6:00 a.m.		101	41	142	109	149	147	115
7:00 a.m.		141	118	269	155	192	292	230
8:00 a.m.		178	209	252	150	189	242	219
9:00 a.m.		158	221	137	161	160	148	149
10:00 a.m.		161	125	128	149	141	153	171
11:00 a.m.		173	135	172	187	184	195	141
12:00 p.m.		186	155	184	191	211	217	215
1:00 p.m.		169	174	176	201	207	188	196
2:00 p.m.		177	141	228	232	220	268	268
3:00 p.m.		230	189	356	317	306	378	356
4:00 p.m.		250	273	465	404	413	491	466
5:00 p.m.		218	346	535	500	507	592	530
6:00 p.m.		230	437	313	340	326	358	350
7:00 p.m.		254	325	190	211	228	230	214
8:00 p.m.		191	182	161	181	190	209	172
9:00 p.m.		167	176	124	135	156	146	167
10:00 p.m.		101	111	67	87	99	75	100
11:00 p.m.		58	67	34	43	53	36	59
ADT		3273	3527	4061	3900	4103	4515	4283
% Cars		82.54%	85.67%	84.13%	86.50%	89.80%	75.54%	68.70%
% Unclassified % Heavy Vehicles		9.17%	9.68%	7.90%	6.78%	4.23%	7.48%	5.56%
		8.29%	4.65%	7.97%	6.72%	5.96%	16.99%	25.74%

Table A1.26 Gardner Road North of I-35: Southbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.		16	23	11	16	15	18	17
1:00 a.m.		9	10	11	14	7	11	12
2:00 a.m.		5	5	6	9	9	13	17
3:00 a.m.		8	7	12	12	13	12	14
4:00 a.m.		18	11	26	31	22	25	32
5:00 a.m.		66	22	125	103	103	135	113
6:00 a.m.		252	88	398	313	241	408	343
7:00 a.m.		359	222	644	474	368	689	588
8:00 a.m.		318	398	393	310	216	413	377
9:00 a.m.		216	302	227	223	160	222	213
10:00 a.m.		180	143	179	215	137	188	203
11:00 a.m.		183	148	195	221	148	210	146
12:00 p.m.		182	165	200	207	160	204	209
1:00 p.m.		183	142	179	210	146	192	196
2:00 p.m.		165	133	227	228	152	251	229
3:00 p.m.		243	145	331	252	168	343	321
4:00 p.m.		210	191	319	310	106	312	359
5:00 p.m.		150	214	286	305	102	326	309
6:00 p.m.		169	202	239	253	94	281	256
7:00 p.m.		173	177	113	157	51	173	169
8:00 p.m.		144	113	118	125	45	131	115
9:00 p.m.		102	104	76	90	48	89	89
10:00 p.m.		71	71	49	59	14	58	69
11:00 p.m.		37	47	30	25	11	30	40
ADT		3458	3081	4394	4162	2538	4734	4435
% Cars		70.49%	75.73%	82.47%	84.77%	81.12%	83.33%	86.77%
% Unclassified		16.97%	18.50%	12.41%	13.11%	16.37%	13.27%	10.77%
% Heavy Vehicles		12.54%	5.77%	5.12%	2.11%	2.51%	3.40%	2.46%

Table A1.27 Gardner Road North of I-35: All Traffic										
Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009		
12:00 a.m.		53	57	34	56	49	51	50		
1:00 a.m.		29	32	25	34	30	31	31		
2:00 a.m.		20	19	13	22	25	26	40		
3:00 a.m.		18	18	23	25	28	21	29		
4:00 a.m.		31	19	44	44	40	45	54		
5:00 a.m.		101	35	181	152	169	191	165		
6:00 a.m.		353	129	540	422	390	555	458		
7:00 a.m.		500	339	913	628	560	981	818		
8:00 a.m.		496	608	645	459	405	655	596		
9:00 a.m.		374	523	364	385	320	370	362		
10:00 a.m.		342	268	307	363	278	340	374		
11:00 a.m.		356	282	367	408	332	405	287		
12:00 p.m.		368	320	384	398	371	421	423		
1:00 p.m.		352	316	355	411	353	380	392		
2:00 p.m.		342	275	455	460	373	519	497		
3:00 p.m.		473	334	687	569	474	721	677		
4:00 p.m.		460	464	784	713	519	804	825		
5:00 p.m.		368	560	821	805	608	918	839		
6:00 p.m.		399	639	552	593	420	639	606		
7:00 p.m.		426	501	303	369	279	402	384		
8:00 p.m.		335	295	279	305	235	340	287		
9:00 p.m.		269	279	201	225	204	235	256		
10:00 p.m.		172	182	116	146	114	133	169		
11:00 p.m.		95	114	64	68	64	66	100		
ADT		6730	6608	8455	8061	6641	9249	8718		

Table A1.28 Gardner Road South of I-35: Northbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.			5	4	7		8	4
1:00 a.m.			2	3	7		5	4
2:00 a.m.			2	3	4		7	2
3:00 a.m.			2	5	6		4	4
4:00 a.m.			6	13	10		14	7
5:00 a.m.			29	46	34		51	42
6:00 a.m.			101	154	107		175	127
7:00 a.m.			247	339	172		370	282
8:00 a.m.			260	251	130		274	206
9:00 a.m.			100	112	111		127	108
10:00 a.m.			74	103	90		116	113
11:00 a.m.			106	130	108		141	133
12:00 p.m.			98	122	109		133	118
1:00 p.m.			75	93	93		98	90
2:00 p.m.			78	128	96		140	121
3:00 p.m.			182	175	116		233	203
4:00 p.m.			140	197	135		258	199
5:00 p.m.			132	164	129		217	176
6:00 p.m.			93	99	112		160	103
7:00 p.m.			56	43	78		115	53
8:00 p.m.			56	50	59		100	45
9:00 p.m.			28	25	39		53	28
10:00 p.m.			9	15	23		30	25
11:00 p.m.			7	10	12		19	19
ADT			1888	2282	1786		2850	2211
% Cars			81.41%	85.61%	87.36%		64.97%	87.37%
% Unclassified % Heavy Vehicles			4.31%	3.53%	3.08%		28.47%	4.69%
			14.28%	10.85%	9.56%		6.56%	7.94%

Table A1.29 Gardner Road South of I-35: Southbound

Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009
12:00 a.m.			4	11	10		2	11
1:00 a.m.			3	5	7		4	5
2:00 a.m.			0	4	5		6	7
3:00 a.m.			6	4	6		4	7
4:00 a.m.			3	6	7		6	5
5:00 a.m.			8	15	13		13	16
6:00 a.m.			70	92	42		75	78
7:00 a.m.			130	213	106		155	165
8:00 a.m.			191	185	78		138	154
9:00 a.m.			58	86	74		69	84
10:00 a.m.			73	85	89		72	83
11:00 a.m.			94	114	93		117	109
12:00 p.m.			87	108	103		110	91
1:00 p.m.			72	95	102		106	61
2:00 p.m.			92	146	106		158	144
3:00 p.m.			158	194	138		209	232
4:00 p.m.			177	213	168		150	225
5:00 p.m.			171	210	207		182	187
6:00 p.m.			152	150	143		125	137
7:00 p.m.			95	86	101		81	118
8:00 p.m.			75	83	73		67	74
9:00 p.m.			52	56	58		44	60
10:00 p.m.			34	27	30		19	47
11:00 p.m.			15	17	22		13	28
ADT			1819	2207	1781		1922	2128
% Cars			83.89%	86.72%	88.45%		66.58%	88.23%
% Unclassified			5.00%	3.63%	2.34%		5.22%	5.22%
% Heavy Vehicles			11.11%	9.65%	9.21%		28.20%	6.54%

Table A1.30 Gardner Road South of I-35: All Traffic										
Time	November 2007	May 2008	September 2008	November 2008	March 2009	June 2009	September 2009	November 2009		
12:00 a.m.			10	15	17		10	14		
1:00 a.m.			5	8	14		9	9		
2:00 a.m.			3	7	9		12	9		
3:00 a.m.			8	9	12		9	10		
4:00 a.m.			9	19	17		20	12		
5:00 a.m.			38	62	47		65	58		
6:00 a.m.			171	246	149		250	206		
7:00 a.m.			377	553	278		524	447		
8:00 a.m.			450	436	208		412	360		
9:00 a.m.			158	198	185		196	192		
10:00 a.m.			147	188	179		187	196		
11:00 a.m.			200	244	201		258	242		
12:00 p.m.			185	231	211		243	209		
1:00 p.m.			147	188	195		204	151		
2:00 p.m.			170	274	202		298	265		
3:00 p.m.			340	370	253		442	435		
4:00 p.m.			316	410	303		408	424		
5:00 p.m.			303	374	336		399	363		
6:00 p.m.			245	249	255		285	240		
7:00 p.m.			152	129	178		196	171		
8:00 p.m.			130	133	132		167	119		
9:00 p.m.			79	81	97		98	89		
10:00 p.m.			43	42	53		49	73		
11:00 p.m.			22	27	34		31	47		
ADT			3707	4489	3567		4772	4339		

Appendix A2 Traffic Data

Table A2.1 Traffic Data November 2007

Location	Date	Date	Date	Date
	Time	Time	Time	Time
	Count	Count	Count	Count
Center Street & Park	11/12/2007	11/13/2007	11/15/2007	11/19/2007
	2:05 p.m.	5:30 p.m.	4:35 p.m.	3:20 p.m.
	0	822	1199	2574
Center Street & Main	11/12/2007	11/13/2007	11/15/2007	11/19/2007
	2:33 p.m.	5:15 p.m.	4:28 p.m.	3:25 p.m.
	0	20154	29156	65518
Gardner/Edgerton High School	11/12/2007	11/13/2007	11/15/2007	11/19/2007
	2:42 p.m.	5:06 p.m.	4:23 p.m.	3:12 p.m.
	0	6382	9173	17763
US56 at Four Corners Road, East side of Intersection	11/12/2007	11/13/2007	11/15/2007	11/19/2007
	3:00 p.m.	4:52 p.m.	4:07 p.m.	2:55 p.m.
	0	6617	1161	30833
US56 at Four Corners Road, South side of Intersection	11/12/2007	11/13/2007	11/15/2007	11/19/2007
	3:10 p.m.	4:54 p.m.	4:10 p.m.	2:52 p.m.
	0	761	1027	2105
US56 at Four Corners Road, North side of Intersection	11/12/2007	11/13/2007	11/15/2007	11/19/2007
	3:20 p.m.	4:46 p.m.	4:05 p.m.	2:49 p.m.
	0	1023	1423	2843
US56 at Four Corners Road, West side of Intersection	11/12/2007	11/13/2007	11/15/2007	11/19/2007
	3:30 p.m.	4:56 p.m.	4:14 p.m.	3:00 p.m.
	0	5879	8475	18269
Four Corners Road, South of 191st Street	11/12/2007	11/13/2007	11/15/2007	11/19/2007
	3:41 p.m.	4:43 p.m.	4:00 p.m.	2:42 p.m.
	0	185	ERROR	ERROR
191st at Waverly, West of Intersection	11/12/2007	11/13/2007	11/15/2007	11/19/2007
	3:55 p.m.	4:36 p.m.	3:47 p.m.	2:23 p.m.
	0	633	852	1938
191st at Waverly, North of Intersection	11/12/2007	11/13/2007	11/15/2007	11/19/2007
	3:55 p.m.	4:36 p.m.	3:48 p.m.	2:22 p.m.
	0	ERROR	80	444
191st at Waverly, East of Intersection	11/12/2007	11/13/2007	11/15/2007	11/19/2007
	4:05p.m.	4:36 p.m.	3:51 p.m.	2:25 p.m.
	0	639	909	1952

191st at Waverly, South of Intersection	11/12/2007	11/13/2007	11/15/2007	11/19/2007
	4:05p.m.	4:36 p.m.	3:50 p.m.	2:26 p.m.
	0	314	464	1095
SB I-35 On Ramp	11/12/2007	11/13/2007	11/15/2007	11/19/2007
	4:20 p.m.	4:25 p.m.	3:39 p.m.	2:09 p.m.
	0	2977	3847	ERROR
Gardner Road North of I-35	11/12/2007	11/13/2007	11/15/2007	11/19/2007
	4:45 p.m.		Replaced	2:04 p.m.
	0	ERROR	ERROR	34143
SB I-35 Off Ramp	11/12/2007	11/13/2007	11/15/2007	11/19/2007
	4:20 p.m.	4:22 p.m.	3:30 p.m.	1:59 p.m.
	0	10716	15349	35507
NB I-35 On Ramp	11/15/2007	11/13/2007	11/15/2007	11/19/2007
				1:44 p.m.
	0	ERROR	ERROR	10796
NB I-35 Off Ramp	11/15/2007	11/13/2007	11/15/2007	11/19/2007
			3:11 p.m.	1:52 p.m.
	0	ERROR	2360	11402
Gardner Road South of I-35	11/15/2007	11/13/2007	11/15/2007	11/19/2007
			3:08 p.m.	1:42 p.m.
	0	ERROR	4579	21035

NOTE: "ERROR" means there was an equipment malfunction in the field.

Table A2.2 Traffic Data May 2008

Location	Date	Date	Date	Date	Date
	Time	Time	Time	Time	Time
	Count	Count	Count	Count	Count
Center Street & Park	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	1:40 p.m.	11:45 a.m.	2:53 p.m.	3:18 p.m.	5:14 p.m.
	0	445	991	1263	1591
Center Street & Main	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	2:15 p.m.	11:30 a.m.	2:45 p.m.	3:04 p.m.	5:23 p.m.
	0	OK	OK	OK	OK
Gardner/Edgerton High School	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	2:30 p.m.	11:53 a.m.	4:16 p.m.	3:11 p.m.	5:07 p.m.
	0	ERROR	ERROR	1543	3828
US56 at Four Corners Road, East side of Intersection	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	3:20 p.m.	12:00 p.m.	3:51 p.m.	2:46 p.m.	4:40 p.m.
	0	3556	9054	13132	18545
US56 at Four Corners Road, South side of Intersection	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	3:30 p.m.	12:02 p.m.	3:57 p.m.	2:48 p.m.	4:46 p.m.
	0	144	568	806	1054
US56 at Four Corners Road, North side of Intersection	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	3:10 p.m.	11:58 a.m.	3:50 p.m.	2:45 p.m.	4:35 p.m.
	0	256	719	1002	1434
US56 at Four Corners Road, West side of Intersection	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	3:50 p.m.	12:05 p.m.	4:01 p.m.	2:55 p.m.	4:51 p.m.
	0	OK	OK	OK	OK
Four Corners Road, South of 191st Street	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	3:05 p.m.	12:11 p.m.	3:43 p.m.	2:35 p.m.	4:28 p.m.
	0	129	450	602	793
191st at Waverly, West of Intersection	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	2:50 p.m.	12:21 p.m.	3:32 p.m.	2:29 p.m.	4:20 p.m.
	0	141	316	511	701

191st at Waverly, North of Intersection	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	2:50 p.m.	12:21 p.m.	3:31 p.m.	2:28 p.m.	4:20 p.m.
	0	ERROR	127	253	394
191st at Waverly, East of Intersection	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	2:50 p.m.	12:21 p.m.	3:30 p.m.	2:27 p.m.	4:17 p.m.
	0	275	608	915	1221
191st at Waverly, South of Intersection	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	2:50 p.m.	8:00 p.m.	3:29 p.m.	2:26 p.m.	4:17 p.m.
	0	319	445	614	807
SB I-35 On Ramp	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	1:15 p.m.	12:38 p.m.	3:23 p.m.	2:21 p.m.	3:59 p.m.
	0	1120	2380	3352	4683
Gardner Road North of I-35	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	1:25 p.m.		3:18 p.m.	2:18 p.m.	4:10 p.m.
	0	OK	OK	OK	OK
SB I-35 Off Ramp	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	1:00 p.m.	12:39 p.m.	3:15 p.m.	2:15 p.m.	3:53 p.m.
	0	2927	6377	9396	13079
NB I-35 On Ramp	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	12:45 p.m.	12:33 p.m.	3:03 p.m.	2:03 p.m.	3:47 p.m.
	0	3194	6644	9945	13608
NB I-35 Off Ramp	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	12:40 p.m.	12:32 p.m.	3:06 p.m.	2:05 p.m.	3:37 p.m.
	0	ERROR	1012	1910	3050
Gardner Road South of I-35	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	12:30 p.m.	12:30 p.m.	3:01 p.m.	2:01 p.m.	3:42 p.m.
	0	5292	10901	16029	22128
Moonlight between Main and Santa Fe	5/12/2008	5/13/2008	5/14/2008	5/15/2008	5/16/2008
	11:40 a.m.		2:36 p.m.	1:53 p.m.	3:20 p.m.
	0	OK	OK	OK	ERROR

NOTE: "ERROR" means there was an equipment malfunction in the field;
"OK" means that a directional tube counter was field checked and found to be functioning correctly at the reported date and time.

Table A2.3 Traffic Data September 2008

Location	Date	Date	Date	Date	Date
	Time	Time	Time	Time	Time
	Count	Count	Count	Count	Count
Center Street & Park	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	5:40 p.m.	12:18 p.m.	11:02 a.m.	9:23 a.m.	1:36 p.m.
	0	155	434	681	994
Center Street & Main	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	5:30 p.m.	12:23 p.m.	11:00 a.m.	9:39 a.m.	
	0	OK	OK	OK	OK
Gardner/Edgerton High School	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	5:00 p.m.	12:31 p.m.	11:10 a.m.	11:00 a.m.	
	0	OK	OK	OK	OK
US56 at Four Corners Road, East side of Intersection	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	4:15 p.m.	11:58 a.m.	11:18 a.m.	10:40 a.m.	1:58 p.m.
	0	ERROR	OK	OK	OK
US56 at Four Corners Road, South side of Intersection	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	4:25 p.m.	12:10 p.m.	11:17 a.m.	10:44 a.m.	1:53 p.m.
	0	OK	OK	ERROR	233
US56 at Four Corners Road, North side of Intersection	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	3:55 p.m.	11:56 a.m.	11:17 a.m.	10:38 a.m.	1:49 p.m.
	0	64	431	820	1226
US56 at Four Corners Road, West side of Intersection	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	4:35 p.m.	12:37 p.m.	11:17 a.m.	11:08 a.m.	2:06 p.m.
	0	OK	OK	OK	OK
Four Corners Road, South of 191st Street	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	3:42 p.m.	11:47 a.m.	11:20 a.m.	10:32 a.m.	2:16 p.m.
	0	OK	OK	OK	OK
191st at Waverly, West of Intersection	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	3:20 p.m.	11:37 a.m.	11:28 a.m.	10:24 a.m.	2:29 p.m.
	0	ERROR	196	284	478

191st at Waverly, North of Intersection	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	3:20 p.m.	11:36 a.m.	11:28 a.m.	10:24 a.m.	2:29 p.m.
	0	87	151	260	351
191st at Waverly, East of Intersection	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	3:20 p.m.	11:34 a.m.	11:27 a.m.	10:22 a.m.	2:29 p.m.
	0	204	492	716	1128
191st at Waverly, South of Intersection	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	3:20 p.m.	11:32 a.m.	11:26 a.m.	10:21 a.m.	2:29 p.m.
	0	114	260	308	594
SB I-35 On Ramp	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	2:47 p.m.	11:24 a.m.	11:46 a.m.	10:15 a.m.	3:30 p.m.
	0	586	1535	2304	3468
Gardner Road North of I-35	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	2:20 p.m.	11:20 a.m.	11:41 a.m.	10:08 a.m.	3:13 p.m.
	0	OK	OK	OK	OK
SB I-35 Off Ramp	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	2:40 p.m.	11:22 a.m.	11:47 a.m.	10:11 a.m.	3:23 p.m.
	0	1417	4075	6500	9761
NB I-35 On Ramp	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	1:55 p.m.	11:10 a.m.	11:38 a.m.	9:56 a.m.	3:03 p.m.
	0	2607	4870	7138	10214
NB I-35 Off Ramp	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	2:01 p.m.	11:14 a.m.	11:37 a.m.	10:01 a.m.	2:58 p.m.
	0	767	1561	2191	3125
Gardner Road South of I-35	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	1:40 p.m.	11:01 a.m.	11:29 a.m.	9:50 a.m.	2:48 p.m.
	0	OK	OK	OK	OK
Moonlight between Main and Santa Fe	9/1/2008	9/2/2008	9/3/2008	9/4/2008	9/5/2008
	1:15 p.m.	10:51 a.m.	10:55 a.m.	9:18 a.m.	3:44 p.m.
	0	OK	OK	OK	OK

NOTE: "ERROR" means there was an equipment malfunction in the field;
"OK" means that a directional tube counter was field checked and found to be functioning correctly at the reported date and time.

Table A2.4 Traffic Data November 2008

Location	Date	Date	Date	Date	Date
	Time	Time	Time	Time	Time
	Count	Count	Count	Count	Count
Center Street & Park	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008
	5:41 p.m.	11:11 a.m.	11:42 a.m.	9:51 a.m.	4:56 p.m.
	0	125	365	578	967
Center Street & Main	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008
	5:30 p.m.	11:16 a.m.	12:07 p.m.	9:53 a.m.	5:03 p.m.
	0	OK	OK	OK	OK
Gardner/Edgerton High School	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008
	4:55 p.m.	11:33 a.m.	12:10 p.m.	11:04 a.m.	5:16 p.m.
	0	OK	OK	OK	OK
US56 at Four Corners Road, East side of Intersection	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008
	4:18 p.m.	11:45 a.m.	11:00 a.m.	9:06 a.m.	3:28 p.m.
	0	OK	OK	ERROR	OK
US56 at Four Corners Road, South side of Intersection	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008
	4:35 p.m.	11:47 a.m.	11:01 a.m.	9:08 a.m.	3:34 p.m.
	0	OK	OK	OK	OK
US56 at Four Corners Road, North side of Intersection	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008
	3:51 p.m.	11:43 a.m.	11:05 a.m.	8:59 a.m.	3:24 p.m.
	0	189	538	831	1156
US56 at Four Corners Road, West side of Intersection		11/18/2008	11/19/2008	11/20/2008	11/21/2008
		9:25 a.m.	12:15 p.m.	11:09 a.m.	3:41 p.m.
		0	OK	OK	OK
Four Corners Road, South of 191st Street	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008
	3:40 p.m.	9:36 a.m.	11:08 a.m.	9:15 a.m.	3:51 p.m.
	0	OK	OK	OK	OK
191st at Waverly, West of Intersection	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008
	3:10 p.m.	9:48 a.m.	11:13 a.m.	9:24 a.m.	4:04 p.m.
	0	107	252	398	591
191st at Waverly, North of Intersection	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008
	3:10 p.m.	9:49 a.m.		9:23 a.m.	4:04 p.m.
	0	99	206	320	460

191st at Waverly, East of Intersection	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008
	3:18 p.m.	9:45 a.m.	11:12 a.m.	9:22 a.m.	4:01 p.m.
	0	160	406	638	962
191st at Waverly, South of Intersection	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008
	3:18 p.m.	9:44 a.m.	11:12 a.m.	9:22 a.m.	4:01 p.m.
	0	97	258	426	618
SB I-35 On Ramp	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008
	1:59 p.m.	10:16 a.m.	11:36 a.m.	9:45 a.m.	4:41 p.m.
	0	836	1917	2952	4603
Gardner Road North of I-35	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008
	2:25 p.m.	10:10 a.m.	11:34 a.m.	9:42 a.m.	4:57 p.m.
	0	OK	OK	OK	OK
SB I-35 Off Ramp	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008
	2:08 p.m.	10:12 a.m.	11:33 a.m.	9:39 a.m.	4:34 p.m.
	0	2424	5522	8369	12652
NB I-35 On Ramp	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008
	1:33 p.m.	9:58 a.m.	11:24 a.m.	9:35 a.m.	4:20 p.m.
		2372	5426	8115	11855
NB I-35 Off Ramp	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008
	1:43 p.m.	10:02 a.m.	11:27 a.m.	9:33 a.m.	4:15 p.m.
	0	603	1433	2206	3404
Gardner Road South of I-35	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008
	1:20 p.m.	9:57 a.m.	11:22 a.m.	9:30 a.m.	4:26 p.m.
	0	OK	OK	OK	OK
Moonlight between Main and Santa Fe	11/17/2008	11/18/2008	11/19/2008	11/20/2008	11/21/2008
	12:45 p.m.	10:28 a.m.	12:03 p.m.	9:59 a.m.	5:29 p.m.
	0	OK	OK	OK	OK

NOTE: "ERROR" means there was an equipment malfunction in the field;
"OK" means that a directional tube counter was field checked and found to be functioning correctly at the reported date and time.

Table A2.5 Traffic Data March 2009

Location	Date	Date	Date	Date	Date
	Time	Time	Time	Time	Time
	Count	Count	Count	Count	Count
Center Street & Park	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	8:27 p.m.	4:21 p.m.	10:16 a.m.	1:09 p.m.	3:42 p.m.
	0	302	555	999	1535
Center Street & Main	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	8:06 p.m.	4:18 p.m.	10:13 a.m.	1:16 p.m.	4:09 p.m.
	0	OK	OK	OK	OK
Gardner/Edgerton High School	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	10:00 p.m.	4:10 p.m.	12:36 p.m.	12:57 p.m.	3:36 p.m.
	0	OK	OK	OK	OK
US56 at Four Corners Road, East side of Intersection	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	7:00 p.m.	3:57 p.m.	12:21 p.m.	3:45 p.m.	11:24 a.m.
	0	OK	OK	OK	OK
US56 at Four Corners Road, South side of Intersection	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	7:12 p.m.	4:01 p.m.	12:29 p.m.	3:46 p.m.	11:30 a.m.
	0	OK	OK	OK	OK
US56 at Four Corners Road, North side of Intersection	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	6:48 p.m.	3:47 p.m.	12:18 p.m.	3:43 p.m.	11:15 a.m.
	0	185	381	661	848
US56 at Four Corners Road, West side of Intersection	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	7:45 p.m.	4:30 p.m.	1:34 p.m.	3:49 p.m.	11:40 a.m.
	0	OK	OK	OK	OK
Four Corners Road, South of 191st Street	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	6:37 p.m.	3:41 p.m.	12:13 p.m.	3:39 p.m.	3:21 p.m.
	0	OK	OK	OK	OK
191st at Waverly, West of Intersection	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	6:13 p.m.	3:32 p.m.	12:06 p.m.	3:32 p.m.	3:10 p.m.
	0	95	189	372	486

191st at Waverly, North of Intersection	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	6:16 p.m.	3:32 p.m.	12:06 p.m.	3:32 p.m.	3:10 p.m.
	0	59	131	234	332
191st at Waverly, East of Intersection	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	6:10 p.m.	3:34 p.m.	12:05 p.m.	3:31 p.m.	3:08 p.m.
	0	272	487	876	1080
191st at Waverly, South of Intersection	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	6:10 p.m.	3:34 p.m.	12:05 p.m.	3:30 p.m.	3:07 p.m.
	0	141	256	440	532
SB I-35 On Ramp	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	5:01 p.m.	3:21 p.m.	11:57 a.m.	3:22 p.m.	2:37 p.m.
	0	783	1605	2772	3775
Gardner Road North of I-35	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	5:42 p.m.	3:24 p.m.	11:59 a.m.	3:24 p.m.	2:42 p.m.
	0	OK	OK	OK	OK
SB I-35 Off Ramp	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	5:09 p.m.	3:25 p.m.	11:54 a.m.	3:09 p.m.	2:30 p.m.
	0	2179	4482	7782	10609
NB I-35 On Ramp	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	4:47 p.m.	3:14 p.m.	11:41 a.m.	3:09 p.m.	2:15 p.m.
	0	2593	5051	8319	11180
NB I-35 Off Ramp	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	4:34 p.m.	3:16 p.m.	11:47 a.m.	3:01 p.m.	2:10 p.m.
	0	???	1515	2561	3483
Gardner Road South of I-35	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	4:25 p.m.	3:11 p.m.	11:40 a.m.	2:58 p.m.	2:20 p.m.
	0	OK	OK	OK	OK
Moonlight between Main and Santa Fe	3/16/2009	3/17/2009	3/18/2009	3/19/2009	03/20/2009
	3:55 p.m.	2:56 p.m.	11:10 a.m.	2:45 p.m.	1:49 p.m.
	0	OK	OK	OK	OK

NOTE: "ERROR" means there was an equipment malfunction in the field;
"OK" means that a directional tube counter was field checked and found to be functioning correctly at the reported date and time.

Table A2.6 Traffic Data May 2009

Location	Date	Date	Date	Date	Date	Date
	Time	Time	Time	Time	Time	Time
	Count	Count	Count	Count	Count	Count
Center Street & Park	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
		2:30 p.m.	3:58 p.m.	3:22 p.m.	2:56 p.m.	2:31 p.m.
	0	0	320	567	857	1119
Center Street & Main	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
		2:26 p.m.	4:00 p.m.	3:27 p.m.	3:00 p.m.	2:37 p.m.
	0	0	OK	OK	OK	OK
Gardner/Edgerton High School	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
		2:44 p.m.	4:05 p.m.	4:30 p.m.	4:33 p.m.	2:51 p.m.
	0	0	OK	OK	OK	OK
US56 at Four Corners Road, East side of Intersection	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
		11:47 a.m.	3:16 p.m.	2:26 p.m.	2:08 p.m.	12:04 p.m.
	0	0	OK	OK	OK	OK
US56 at Four Corners Road, South side of Intersection	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
		11:57 a.m.	3:09 p.m.	2:29 p.m.	2:10 p.m.	12:11 p.m.
	0	0	853	1358	2241	3188
US56 at Four Corners Road, North side of Intersection	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
		11:34 a.m.	3:07 p.m.	2:24 p.m.	2:06 p.m.	11:57 a.m.
	0	0	433	643	ERROR	276
US56 at Four Corners Road, West side of Intersection	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
		12:12 p.m.	3:14 p.m.	2:32 p.m.	2:15 p.m.	12:17 p.m.
	0	0	OK	OK	OK	OK
Four Corners Road, South of 191st Street	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
		12:27 p.m.	3:20 p.m.	2:29 p.m.	2:21 p.m.	12:27 p.m.
	0	0	OK	OK	OK	OK
191st at Waverly, West of Intersection	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
	9:24 a.m.	12:37 p.m.	3:31 p.m.	2:50 p.m.	2:27 p.m.	12:40 p.m.
	0	91	298	430	580	722

191st at Waverly, North of Intersection	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
	9:26 a.m.	12:38 p.m.	3:31 p.m.	2:50 p.m.	2:27 p.m.	12:40 p.m.
	0	52	175	247	358	420
191st at Waverly, East of Intersection	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
	9:26 a.m.	12:35 p.m.	3:29 p.m.	2:47 p.m.	2:27 p.m.	12:38 p.m.
	0	130	447	665	897	1144
191st at Waverly, South of Intersection	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
	9:26 a.m.	12:35 p.m.	3:29 p.m.	2:47 p.m.	2:27 p.m.	12:38 p.m.
	0	68	197	325	442	576
SB I-35 On Ramp	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
	8:34 p.m.	1:00 p.m.	3:52 p.m.	3:15 p.m.	2:50 p.m.	2:11 p.m.
	0	439	1626	2531	4045	5746
Gardner Road North of I-35	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
	8:55 p.m.	12:57 p.m.	3:50 p.m.	3:12 p.m.	2:48 p.m.	2:18 p.m.
	0	OK	OK	OK	OK	OK
SB I-35 Off Ramp	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
	8:25 p.m.	12:56 p.m.	3:48 p.m.	3:09 p.m.	2:46 p.m.	1:39 p.m.
	0	962	4412	7020	10027	13027
NB I-35 On Ramp	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
	8:11 p.m.	12:50 p.m.	3:42 p.m.	2:58 p.m.	2:41 p.m.	2:02 p.m.
	0	2160	5593	8445	11606	14671
NB I-35 Off Ramp	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
	8:06 p.m.	12:48 p.m.	3:39 p.m.	3:02 p.m.	2:39 p.m.	1:57 p.m.
	0	519	1562	2364	3313	4328
Gardner Road South of I-35	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
	7:58 p.m.	12:45 p.m.	3:44 p.m.	2:56 p.m.	2:35 p.m.	1:46 p.m.
	0	OK	OK	OK	OK	OK
Moonlight between Main and Santa Fe	5/31/2009	6/1/2009	6/2/2009	6/3/2009	6/4/2009	6/5/2009
	7:32 p.m.	1:32 p.m.	4:28 p.m.	3:39 p.m.	3:36 p.m.	3:58 p.m.
	0	OK	OK	OK	OK	OK

NOTE: "ERROR" means there was an equipment malfunction in the field;

"OK" means that a directional tube counter was field checked and found to be functioning correctly at the reported date and time.

Table A2.7 Traffic Data September 2009

Location	Date	Date	Date	Date	Date
	Time	Time	Time	Time	Time
	Count	Count	Count	Count	Count
Center Street & Park	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	8:11 a.m.	11:58 a.m.	11:38 a.m.	10:57 a.m.	1:54 p.m.
	0	102	361	620	953
Center Street & Main	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	8:23 a.m.	11:57 a.m.	11:42 a.m.	11:00 a.m.	2:15 p.m.
	0	OK	OK	OK	OK
Gardner/Edgerton High School	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	8:41 a.m.	12:03 p.m.	1:17 p.m.	11:30 a.m.	2:05 p.m.
	0	OK	OK	OK	OK
US56 at Four Corners Road, East side of Intersection	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	6:15 p.m.	10:43 a.m.	10:24 a.m.	10:11 a.m.	11:35 a.m.
	0	OK	OK	OK	OK
US56 at Four Corners Road, South side of Intersection	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	6:26 p.m.	10:44 a.m.	10:28 a.m.	10:13 a.m.	11:27 a.m.
	0	81	278	447	673
US56 at Four Corners Road, North side of Intersection	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	6:38 p.m.	10:32 a.m.	10:20 a.m.	10:03 a.m.	11:45 a.m.
	0	OK	OK	OK	OK
US56 at Four Corners Road, West side of Intersection	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	6:53 p.m.	10:52 a.m.	10:34 a.m.	10:16 a.m.	11:52 a.m.
	0	OK	OK	OK	OK
Four Corners Road, South of 191st Street	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	5:51 p.m.	11:00 a.m.	10:40 a.m.	10:21 a.m.	12:03 p.m.
	0	OK	OK	OK	OK
191st at Waverly, West of Intersection	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	5:27 p.m.	11:08 a.m.	10:48 a.m.	10:30 a.m.	12:12 p.m.
	0	67	231	375	575
191st at Waverly, North of Intersection	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	5:27 p.m.	11:08 a.m.	10:48 a.m.	10:30 a.m.	12:12 p.m.
	0	74	185	336	476
191st at Waverly, East of Intersection	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	5:27 p.m.	11:07 a.m.	10:46 a.m.	10:28 a.m.	12:11 p.m.
	0	150	498	873	1176
191st at Waverly, South of Intersection	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	5:27 p.m.	11:07 a.m.	10:46 a.m.	10:28 a.m.	12:11 p.m.
	0	70	245	399	570

SB I-35 On Ramp	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	4:17 p.m.	11:28 a.m.	11:09 a.m.	10:51 a.m.	12:53 p.m.
	0	746	1697	2706	3909
Gardner Road North of I-35	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	5:03 p.m.	11:27 a.m.	11:14 a.m.	10:49 a.m.	1:00 p.m.
	0	OK	OK	OK	OK
SB I-35 Off Ramp	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	4:07 p.m.	11:26 a.m.	11:16 a.m.	10:47 a.m.	12:47 p.m.
	0	2290	6043	8242	11663
NB I-35 On Ramp	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	3:44 p.m.	11:17 a.m.	11:03 a.m.	10:42 a.m.	12:34 p.m.
	0	2595	5702	8833	12263
NB I-35 Off Ramp	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	3:50 p.m.	11:20 a.m.	11:00 a.m.	10:38 a.m.	12:39 p.m.
	0	653	1474	2344	3381
Gardner Road South of I-35	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	3:33 p.m.	11:15 a.m.	10:55 a.m.	10:36 a.m.	12:25 p.m.
	0	OK	OK	OK	OK
Moonlight between Main and Santa Fe	8/31/2009	9/1/2009	9/2/2009	9/3/2009	9/4/2009
	2:48 p.m.	11:36 a.m.	11:47 a.m.	11:06 a.m.	2:35 p.m.
	0	OK	OK	OK	OK

NOTE: "ERROR" means there was an equipment malfunction in the field;
"OK" means that a directional tube counter was field checked and found to be functioning correctly at the reported date and time.

Table A2.8 Traffic Data November 2009

Location	Date	Date	Date	Date	Date	Date
	Time	Time	Time	Time	Time	Time
	Count	Count	Count	Count	Count	Count
Center Street & Park	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	7:23 a.m.	5:57 p.m.	3:05 p.m.	5:45 p.m.	3:15 p.m.	11:38 a.m.
	0	343	619	1553	1790	2006
Center Street & Main	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	9:11 a.m.	5:25 p.m.	4:02 p.m.	5:42 p.m.	3:12 p.m.	11:28 a.m.
	0	OK	OK	OK	OK	OK
Gardner/Edgerton High School	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	6:32 p.m.	6:10 p.m.	3:13 p.m.	5:51 p.m.	12:55 a.m.	11:46 a.m.
	0	OK	OK	OK	Ok	OK
US56 at Four Corners Road, East side of Intersection	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	2:31 p.m.	5:12 p.m.	1:24 p.m.	5:14 p.m.	2:22 p.m.	9:53 a.m.
	0	ERROR	OK	OK	OK	OK
US56 at Four Corners Road, South side of Intersection	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	2:37 p.m.	3:17 p.m.	1:26 p.m.	5:17 p.m.	2:33 p.m.	10:00 a.m.
	0	OK	OK	OK	OK	OK
US56 at Four Corners Road, North side of Intersection	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	1:46 p.m.	5:20 p.m.	1:21 p.m.	5:12 p.m.	2:25 p.m.	9:46 a.m.
	0	426	674	1500	1762	1973
US56 at Four Corners Road, West side of Intersection	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	2:57 p.m.	5:32 p.m.	1:31 p.m.	5:21 p.m.	2:36 p.m.	10:07 a.m.
	0	OK	OK	OK	OK	OK
Four Corners Road, South of 191st Street	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	5:51 p.m.	5:04 p.m.	1:39 p.m.	5:08 p.m.	2:21 p.m.	10:19 a.m.
	0	OK	OK	OK	OK	Ok
191st at Waverly, West of Intersection	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	5:26 p.m.	4:53 p.m.	1:50 p.m.	5:01 p.m.	2:13 p.m.	10:31 a.m.
	0	ERROR	139	451	549	562
191st at Waverly, North of Intersection	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	5:26 p.m.	4:53 p.m.	1:50 p.m.	5:01 p.m.	2:13 p.m.	10:13 a.m.
	0	108	195	521	585	679

191st at Waverly, East of Intersection	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	5:27 p.m.	4:53 p.m.	1:49 p.m.	5:01 p.m.	2:13 p.m.	10:30 a.m.
	0	196	320	645	735	830
191st at Waverly, South of Intersection	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	5:27 p.m.	4:53 p.m.	1:48 p.m.	5:01 p.m.	2:13 p.m.	10:30 a.m.
	0	144	276	754	886	1002
SB I-35 On Ramp	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	4:54 p.m.	4:28 p.m.	2:49 p.m.	4:49 p.m.	2:00 p.m.	11:09 a.m.
	0	935	1927	4978	5814	6696
Gardner Road North of I-35	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	4:39 p.m.	4:21 p.m.	2:45 p.m.	4:35 p.m.	2:03 p.m.	11:16 a.m.
	0	OK	OK	OK	OK	OK
SB I-35 Off Ramp	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	4:10 p.m.	4:24 p.m.	2:38 p.m.	4:53 p.m.	2:05 p.m.	11:04 a.m.
	0	3088	5858	14021	16265	18862
NB I-35 On Ramp	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	3:58 p.m.	4:07 p.m.	2:30 p.m.	4:37 p.m.	1:56 p.m.	10:54 a.m.
	0	3230	6167	14632	17331	19904
NB I-35 Off Ramp	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	3:50 p.m.	4:10 p.m.	2:33 p.m.	4:39 p.m.	1:53 p.m.	10:51 a.m.
	0	941	1873	4852	5630	6451
Gardner Road South of I-35	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	3:41 p.m.	4:00 p.m.	1:57 p.m.	4:35 p.m.	1:50 p.m.	10:40 a.m.
	0	OK	ERROR	OK	OK	OK
Moonlight between Main and Santa Fe	11/18/2009	11/19/2009	11/20/2009	11/23/2009	11/24/2009	11/25/2009
	7:44 a.m.	3:50 p.m.	3:24 p.m.	4:24 p.m.	1:35 p.m.	12:12 p.m.
	0	5699	14225	39218	46216	54117

NOTE: "ERROR" means there was an equipment malfunction in the field;
"OK" means that a directional tube counter was field checked and found to be functioning correctly at the reported date and time.

Appendix B Railroad Data

The railroad data herein presented is a summary of railroad activity at the double tracked crossing south of the intersection of Main (US 56) and Moonlight Streets in Gardner, Kansas. Unlike the traffic data in Appendices A1 and A2, this data is an hour-by-hour average of all weekday traffic (Monday-Friday) that was observed.

Table B.1 May 2008 Railroad Data

	Trains Observed	Hours Observed	Avg. Trains per Hour	Avg. Cars per Train	Avg. Locomotives per Train	Avg. Crossing Gate Closure Time (min.)
12:00 a.m.	18	4.00	4.50	46.44	2.56	0.94
1:00 a.m.	11	4.00	2.75	85.27	3.09	1.45
2:00 a.m.	7	4.00	1.75	78.29	3.00	1.11
3:00 a.m.	11	3.43	3.20	100.64	3.27	1.60
4:00 a.m.	10	3.00	3.33	77.10	4.20	1.23
5:00 a.m.	10	3.00	3.33	88.30	3.00	1.38
6:00 a.m.	7	3.00	2.33	104.86	3.00	1.54
7:00 a.m.	4	3.00	1.33	103.50	3.50	1.33
8:00 a.m.	5	3.00	1.67	85.60	3.00	1.22
9:00 a.m.	4	3.13	1.28	103.25	3.75	1.57
10:00 a.m.	6	3.03	1.98	73.67	3.00	1.30
11:00 a.m.	5	3.00	1.67	84.60	2.40	1.27
12:00 p.m.	9	2.13	4.22	71.78	2.78	1.19
1:00 p.m.	7	1.00	7.00	107.86	3.71	2.90
2:00 p.m.	3	1.00	3.00	91.33	4.00	1.61
3:00 p.m.	1	1.27	0.79	70.00	2.00	1.65
4:00 p.m.	4	2.00	2.00	123.00	2.75	1.88
5:00 p.m.	9	2.00	4.50	70.22	3.67	1.28
6:00 p.m.	2	2.00	1.00	122.00	3.00	2.05
7:00 p.m.	7	2.00	3.50	88.43	3.29	1.62
8:00 p.m.	6	2.00	3.00	93.83	2.83	1.62
9:00 p.m.	6	3.17	1.89	100.50	4.00	1.28
10:00 p.m.	17	4.00	4.25	95.35	3.29	1.43
11:00 p.m.	16	4.00	4.00	87.50	3.44	1.33

Table B.2 September 2008 Railroad Data

		Table B.2 September 2008 Railroad Data						
	Trains Observed	Hours Observed	Avg. Trains per Hour	Avg. Cars per Train	Avg. Locomotives per Train	Avg. Crossing Gate Closure Time (min.)		
12:00 a.m.	-	-	-	-	-	-	-	
1:00 a.m.	-	-	-	-	-	-	-	
2:00 a.m.	-	-	-	-	-	-	-	
3:00 a.m.	-	-	-	-	-	-	-	
4:00 a.m.	-	-	-	-	-	-	-	
5:00 a.m.	-	-	-	-	-	-	-	
6:00 a.m.	-	-	-	-	-	-	-	
7:00 a.m.	-	-	-	-	-	-	-	
8:00 a.m.	-	-	-	-	-	-	-	
9:00 a.m.	1	1.00	1.00	73.00	2.00	1.40		
10:00 a.m.	6	1.87	3.21	108.33	4.83	3.54		
11:00 a.m.	8	3.00	2.67	67.75	3.00	2.12		
12:00 p.m.	7	3.00	2.33	73.14	3.29	1.86		
1:00 p.m.	6	3.00	2.00	96.50	3.50	2.22		
2:00 p.m.	6	3.00	2.00	80.83	2.83	1.71		
3:00 p.m.	4	3.95	1.01	96.75	2.75	2.25		
4:00 p.m.	4	2.57	1.56	77.50	3.00	1.85		
5:00 p.m.	3	2.00	1.50	105.33	2.67	2.00		
6:00 p.m.	9	2.00	4.50	82.22	2.89	2.13		
7:00 p.m.	9	2.00	4.50	98.33	2.89	2.33		
8:00 p.m.	8	2.12	3.78	73.00	2.38	1.74		
9:00 p.m.	4	1.00	4.00	105.75	3.25	2.19		
10:00 p.m.	3	0.70	4.29	88.33	3.33	2.01		
11:00 p.m.	-	-	-	-	-	-	-	

Table B.3 November 2008 Railroad Data

Table B.3 November 2008 Railroad Data						
	Trains Observed	Hours Observed	Avg. Trains per Hour	Avg. Cars per Train	Avg. Locomotives per Train	Avg. Crossing Gate Closure Time (min.)
12:00 a.m.	14	3.00	4.67	105.86	2.86	1.86
1:00 a.m.	11	3.00	3.67	96.64	3.36	2.00
2:00 a.m.	14	3.00	4.67	103.57	3.21	2.25
3:00 a.m.	12	3.00	4.00	95.17	3.67	1.96
4:00 a.m.	10	3.00	3.33	90.50	2.90	2.05
5:00 a.m.	5	3.00	1.67	102.40	3.60	1.96
6:00 a.m.	6	3.00	2.00	47.17	2.33	1.87
7:00 a.m.	1	3.00	0.33	100.00	3.00	1.63
8:00 a.m.	6	3.00	2.00	51.83	3.00	1.61
9:00 a.m.	4	3.00	1.33	59.75	1.75	1.01
10:00 a.m.	6	3.08	1.95	41.17	3.33	1.90
11:00 a.m.	6	3.63	1.65	64.67	3.50	1.76
12:00 p.m.	10	4.00	2.50	83.70	3.10	1.59
1:00 p.m.	12	4.00	3.00	93.67	3.42	1.74
2:00 p.m.	11	4.00	2.75	89.82	3.27	2.90
3:00 p.m.	6	4.00	1.50	87.00	3.67	2.14
4:00 p.m.	6	3.00	2.00	102.00	2.83	1.15
5:00 p.m.	11	3.00	3.67	104.09	2.91	1.75
6:00 p.m.	6	3.00	2.00	101.33	2.67	4.13
7:00 p.m.	7	3.00	2.33	112.57	3.14	1.80
8:00 p.m.	9	3.00	3.00	102.56	3.11	2.17
9:00 p.m.	11	3.00	3.67	92.18	2.73	2.22
10:00 p.m.	10	3.00	3.33	99.80	3.70	1.96
11:00 p.m.	11	3.00	3.67	111.73	3.18	1.93

Table B.4 March 2009 Railroad Data

		Table B.4 March 2009 Railroad Data						
	Trains Observed	Hours Observed	Avg. Trains per Hour	Avg. Cars per Train	Avg. Locomotives per Train	Avg. Crossing Gate Closure Time (min.)		
12:00 a.m.	9	4.00	2.25	98.22	3.33	1.26		
1:00 a.m.	9	4.00	2.25	98.89	3.44	1.17		
2:00 a.m.	13	4.00	3.25	92.85	3.23	1.32		
3:00 a.m.	9	4.00	2.25	110.22	2.78	1.74		
4:00 a.m.	8	4.00	2.00	111.13	2.63	2.25		
5:00 a.m.	7	4.00	1.75	113.14	3.00	1.73		
6:00 a.m.	5	4.00	1.25	86.20	4.00	1.51		
7:00 a.m.	6	4.00	1.50	107.33	3.33	1.53		
8:00 a.m.	3	4.00	0.75	107.33	4.33	1.76		
9:00 a.m.	5	4.00	1.25	122.80	3.60	1.56		
10:00 a.m.	3	3.92	0.77	90.00	3.67	1.39		
11:00 a.m.	12	4.00	3.00	77.25	3.00	1.86		
12:00 p.m.	11	4.00	2.75	62.82	4.36	1.81		
1:00 p.m.	9	4.00	2.25	75.78	3.00	1.13		
2:00 p.m.	8	3.68	2.17	46.50	3.63	1.35		
3:00 p.m.	6	4.85	1.24	52.83	3.00	1.85		
4:00 p.m.	9	4.20	2.14	79.67	3.11	1.32		
5:00 p.m.	10	4.00	2.50	97.20	3.10	1.50		
6:00 p.m.	9	4.00	2.25	90.56	3.22	1.65		
7:00 p.m.	10	4.00	2.50	94.30	3.10	2.58		
8:00 p.m.	7	4.00	1.75	108.71	3.57	2.05		
9:00 p.m.	13	4.00	3.25	85.46	3.54	1.34		
10:00 p.m.	9	4.00	2.25	119.56	3.44	1.61		
11:00 p.m.	11	4.00	2.75	95.18	3.55	1.49		

Table B.5 June 2009 Railroad Data							
	Trains Observed	Hours Observed	Avg. Trains per Hour	Avg. Cars per Train	Avg. Locomotives per Train	Avg. Crossing Gate Closure Time (min.)	
12:00 a.m.	2	1.00	2.00	95.00	2.00	1.18	
1:00 a.m.	4	1.00	4.00	111.25	2.00	1.52	
2:00 a.m.	2	1.00	2.00	99.00	3.00	1.28	
3:00 a.m.	0	1.00	0.00	-	-	-	
4:00 a.m.	1	1.00	1.00	104.00	3.00	1.30	
5:00 a.m.	3	1.00	3.00	75.33	2.67	1.01	
6:00 a.m.	1	1.00	1.00	83.00	1.00	1.37	
7:00 a.m.	6	1.00	6.00	80.00	3.00	1.03	
8:00 a.m.	0	1.00	0.00	-	-	-	
9:00 a.m.	4	1.00	4.00	95.75	5.00	1.18	
10:00 a.m.	0	1.00	0.00	-	-	-	
11:00 a.m.	3	1.00	3.00	115.67	3.00	1.04	
12:00 p.m.	2	1.00	2.00	92.00	3.00	1.43	
1:00 p.m.	3	1.00	3.00	45.67	2.67	0.91	
2:00 p.m.	4	1.23	3.24	83.00	3.00	1.42	
3:00 p.m.	1	2.00	0.50	104.00	4.00	1.13	
4:00 p.m.	2	1.43	1.40	133.00	4.50	1.80	
5:00 p.m.	3	1.00	3.00	67.00	2.00	1.17	
6:00 p.m.	2	1.00	2.00	98.00	2.50	1.28	
7:00 p.m.	0	1.00	0.00	-	-	-	
8:00 p.m.	2	1.00	2.00	70.00	2.00	0.99	
9:00 p.m.	1	1.00	1.00	129.00	4.00	1.58	
10:00 p.m.	4	1.00	4.00	105.50	3.50	1.18	
11:00 p.m.	2	1.00	2.00	96.00	3.50	1.26	

Table B.6 November 2009 Railroad Data

		Trains Observed	Hours Observed	Avg. Trains per Hour	Avg. Cars per Train	Avg. Locomotives per Train	Avg. Crossing Gate Closure Time (min.)
12:00 a.m.	3	2.00	1.50	76.33	2.67	0.62	
1:00 a.m.	1	2.00	0.50	113.00	2.00	1.37	
2:00 a.m.	0	2.00	0.00	-	-	-	
3:00 a.m.	2	1.82	1.10	129.50	2.50	1.66	
4:00 a.m.	0	1.00	0.00	-	-	-	
5:00 a.m.	0	1.00	0.00	-	-	-	
6:00 a.m.	0	1.00	0.00	-	-	-	
7:00 a.m.	0	1.00	0.00	-	-	-	
8:00 a.m.	0	1.00	0.00	-	-	-	
9:00 a.m.	0	1.00	0.00	-	-	-	
10:00 a.m.	0	1.00	0.00	-	-	-	
11:00 a.m.	0	1.00	0.00	-	-	-	
12:00 p.m.	0	1.00	0.00	-	-	-	
1:00 p.m.	0	1.00	0.00	-	-	-	
2:00 p.m.	5	1.00	5.00	78.80	6.00	0.86	
3:00 p.m.	0	1.00	0.00	-	-	-	
4:00 p.m.	3	1.00	3.00	81.00	2.67	1.44	
5:00 p.m.	7	1.83	3.82	118.29	3.14	1.70	
6:00 p.m.	6	2.00	3.00	69.33	2.83	1.94	
7:00 p.m.	2	2.00	1.00	68.50	3.00	1.37	
8:00 p.m.	4	2.00	2.00	87.50	2.50	1.58	
9:00 p.m.	4	2.00	2.00	108.75	3.50	1.42	
10:00 p.m.	5	2.00	2.50	66.20	2.60	7.28	
11:00 p.m.	1	2.00	0.50	75.00	3.00	1.22	

Appendix C Impacted Kansas At-Grade Highway-Railroad Crossings

FRA Crossing Code	County	Owner	Notes
011581F	Barber	BNSF	Railroad Abandonment
011582M	Barber	BNSF	Crossing Actively Used
011583U	Barber	BNSF	Crossing Actively Used
014275Y	Barber	BNSF	Crossing Actively Used
014276F	Barber	BNSF	Crossing Actively Used
014277M	Barber	BNSF	Crossing Actively Used
014280V	Barber	BNSF	Crossing Actively Used
014281C	Barber	BNSF	Crossing Actively Used
014282J	Barber	BNSF	Crossing Actively Used
014283R	Barber	BNSF	Crossing Actively Used
014284X	Barber	BNSF	Crossing Actively Used
014285E	Barber	BNSF	Crossing Actively Used
014286L	Barber	BNSF	Crossing Actively Used
014287T	Barber	BNSF	Crossing Actively Used
014288A	Barber	BNSF	Crossing Actively Used
014290B	Barber	BNSF	Crossing Actively Used
014291H	Barber	BNSF	Crossing Actively Used
014292P	Barber	BNSF	Crossing Actively Used
009533R	Butler	BNSF	Crossing Actively Used
009534X	Butler	BNSF	Crossing Actively Used
009535E	Butler	BNSF	Crossing Actively Used
009536L	Butler	BNSF	Crossing Actively Used
009537T	Butler	BNSF	Crossing Actively Used
009538A	Butler	BNSF	Crossing Actively Used
009539G	Butler	BNSF	Crossing Actively Used
009540B	Butler	BNSF	Crossing Actively Used
009541H	Butler	BNSF	Crossing Actively Used
009542P	Butler	BNSF	Crossing Actively Used
009543W	Butler	BNSF	Crossing Actively Used
009566D	Butler	BNSF	Crossing Actively Used
009568S	Butler	BNSF	Crossing Actively Used
009575C	Butler	BNSF	Crossing Actively Used
009576J	Butler	BNSF	Crossing Actively Used
009579E	Butler	BNSF	Crossing Actively Used
009580Y	Butler	BNSF	Crossing Actively Used
009581F	Butler	BNSF	Crossing Actively Used
009583U	Butler	BNSF	Crossing Actively Used
009585H	Butler	BNSF	Crossing Actively Used
009586P	Butler	BNSF	Crossing Actively Used
009587W	Butler	BNSF	Crossing Actively Used

009588D	Butler	BNSF	Crossing Actively Used
009589K	Butler	BNSF	Crossing Actively Used
009592T	Butler	BNSF	Crossing Actively Used
009593A	Butler	BNSF	Crossing Actively Used
009595N	Butler	BNSF	Crossing Actively Used
009596V	Butler	BNSF	Crossing Actively Used
009597C	Butler	BNSF	Crossing Actively Used
009598J	Butler	BNSF	Crossing Actively Used
009599R	Butler	BNSF	Crossing Actively Used
009600H	Butler	BNSF	Crossing Actively Used
009603D	Butler	BNSF	Crossing Actively Used
009605S	Butler	BNSF	Crossing Actively Used
009606Y	Butler	BNSF	Railroad Abandonment
009608M	Butler	BNSF	Crossing Actively Used
009611V	Butler	BNSF	Crossing Actively Used
009612C	Butler	BNSF	Crossing Actively Used
009613J	Butler	BNSF	Crossing Actively Used
009615X	Butler	BNSF	Crossing Actively Used
009617L	Butler	BNSF	Crossing Actively Used
009618T	Butler	BNSF	Crossing Actively Used
009619A	Butler	BNSF	Crossing Actively Used
009621B	Butler	BNSF	Crossing Actively Used
009622H	Butler	BNSF	Crossing Actively Used
009623P	Butler	BNSF	Crossing Actively Used
009624W	Butler	BNSF	Crossing Actively Used
009625D	Butler	BNSF	Crossing Actively Used
009626K	Butler	BNSF	Crossing Actively Used
009628Y	Butler	BNSF	Crossing Actively Used
009736V	Butler	BNSF	Crossing Actively Used
009737C	Butler	BNSF	Crossing Actively Used
009747H	Butler	BNSF	Crossing Actively Used
009753L	Butler	BNSF	Crossing Actively Used
009757N	Butler	BNSF	Crossing Actively Used
009761D	Butler	BNSF	Crossing Actively Used
009763S	Butler	BNSF	Crossing Actively Used
009764Y	Butler	BNSF	Crossing Actively Used
009765F	Butler	BNSF	Road Closed
009766M	Butler	BNSF	Crossing Actively Used
009767U	Butler	BNSF	Crossing Actively Used
009771J	Butler	BNSF	Crossing Actively Used
670033K	Butler	BNSF	Tracks Removed, Crossing Closed
670047T	Butler	BNSF	Tracks Removed, Crossing Closed
670048A	Butler	BNSF	Tracks Removed, Crossing Closed
670070M	Butler	BNSF	Tracks Removed, Crossing Closed
670072B	Butler	BNSF	Tracks Removed, Crossing Closed

670073H	Butler	BNSF	Tracks Removed, Crossing Closed
670074P	Butler	BNSF	Tracks Removed, Crossing Closed
670075W	Butler	BNSF	Tracks Removed, Crossing Closed
670076D	Butler	BNSF	Tracks Removed, Crossing Closed
670077K	Butler	BNSF	Tracks Removed, Crossing Closed
670078S	Butler	BNSF	Tracks Removed, Crossing Closed
670079Y	Butler	BNSF	Tracks Removed, Crossing Closed
670082G	Butler	BNSF	Tracks Removed, Crossing Closed
670083N	Butler	BNSF	Tracks Removed, Crossing Closed
670084V	Butler	BNSF	Tracks Removed, Crossing Closed
670086J	Butler	BNSF	Tracks Removed, Crossing Closed
670087R	Butler	BNSF	Tracks Removed, Crossing Closed
670088X	Butler	BNSF	Tracks Removed, Crossing Closed
670089E	Butler	BNSF	Tracks Removed, Crossing Closed
670090Y	Butler	BNSF	Tracks Removed, Crossing Closed
670091F	Butler	BNSF	Tracks Removed, Crossing Closed
670094B	Butler	BNSF	Tracks Removed, Crossing Closed
670095H	Butler	BNSF	Tracks Removed, Crossing Closed
670096P	Butler	BNSF	Tracks Removed, Crossing Closed
008729G	Chase	BNSF	Crossing Actively Used
008730B	Chase	BNSF	Crossing Actively Used
008731H	Chase	BNSF	Crossing Actively Used
008732P	Chase	BNSF	Crossing Actively Used
008733W	Chase	BNSF	Crossing Actively Used
008738F	Chase	BNSF	Crossing Actively Used
008740G	Chase	BNSF	Crossing Actively Used
008743C	Chase	BNSF	Crossing Actively Used
008744J	Chase	BNSF	Crossing Actively Used
008752B	Chase	BNSF	Crossing Actively Used
008758S	Chase	BNSF	Crossing Actively Used
008764V	Chase	BNSF	Tracks Removed, Crossing Closed
008765C	Chase	BNSF	Crossing Actively Used
008766J	Chase	BNSF	Crossing Actively Used
008768X	Chase	BNSF	Crossing Actively Used
008775H	Chase	BNSF	Crossing Actively Used
008779K	Chase	BNSF	Crossing Actively Used
008780E	Chase	BNSF	Crossing Actively Used
008785N	Chase	BNSF	Crossing Actively Used
008788J	Chase	BNSF	Crossing Actively Used
008792Y	Chase	BNSF	Crossing Actively Used
008793F	Chase	BNSF	Crossing Actively Used
009490A	Chase	BNSF	Crossing Actively Used
009491G	Chase	BNSF	Crossing Actively Used
009496R	Chase	BNSF	Crossing Actively Used
009498E	Chase	BNSF	Crossing Actively Used

009502S	Chase	BNSF	Crossing Actively Used
009504F	Chase	BNSF	Crossing Actively Used
009505M	Chase	BNSF	Crossing Actively Used
009508H	Chase	BNSF	Road Closed
009509P	Chase	BNSF	Road Closed
010771F	Chase	BNSF	Tracks Removed, Crossing Closed
010776P	Chase	BNSF	Tracks Removed, Crossing Closed
010778D	Chase	BNSF	Tracks Removed, Crossing Closed
010779K	Chase	BNSF	Tracks Removed, Crossing Closed
010784G	Chase	BNSF	Tracks Removed, Crossing Closed
010785N	Chase	BNSF	Tracks Removed, Crossing Closed
919013U	Chase	BNSF	Crossing Actively Used
009418J	Cowley	BNSF	Crossing Actively Used
009420K	Cowley	BNSF	Crossing Actively Used
009421S	Cowley	BNSF	Crossing Actively Used
009423F	Cowley	BNSF	Crossing Actively Used
009424M	Cowley	BNSF	Crossing Actively Used
009425U	Cowley	BNSF	Crossing Actively Used
009426B	Cowley	BNSF	Crossing Actively Used
009428P	Cowley	BNSF	Crossing Actively Used
009430R	Cowley	BNSF	Crossing Actively Used
009431X	Cowley	BNSF	Crossing Actively Used
009433L	Cowley	BNSF	Crossing Actively Used
009434T	Cowley	BNSF	Crossing Actively Used
009435A	Cowley	BNSF	Crossing Actively Used
009436G	Cowley	BNSF	Crossing Actively Used
009437N	Cowley	BNSF	Crossing Actively Used
009438V	Cowley	BNSF	Crossing Actively Used
009442K	Cowley	BNSF	Crossing Actively Used
009443S	Cowley	BNSF	Crossing Actively Used
009451J	Cowley	BNSF	Crossing Actively Used
009452R	Cowley	BNSF	Crossing Actively Used
009453X	Cowley	BNSF	Crossing Actively Used
009455L	Cowley	BNSF	Crossing Actively Used
009456T	Cowley	BNSF	Crossing Actively Used
009459N	Cowley	BNSF	Crossing Actively Used
009461P	Cowley	BNSF	Crossing Actively Used
009462W	Cowley	BNSF	Crossing Actively Used
009463D	Cowley	BNSF	Crossing Actively Used
009464K	Cowley	BNSF	Crossing Actively Used
009476E	Cowley	BNSF	Crossing Actively Used
009478T	Cowley	BNSF	Crossing Actively Used
009480U	Cowley	BNSF	Crossing Actively Used
009481B	Cowley	BNSF	Crossing Actively Used
009482H	Cowley	BNSF	Crossing Actively Used

009779N	Cowley	BNSF	Crossing Actively Used
009782W	Cowley	BNSF	Crossing Actively Used
009786Y	Cowley	BNSF	Crossing Actively Used
009788M	Cowley	BNSF	Crossing Actively Used
009791V	Cowley	BNSF	Crossing Actively Used
009792C	Cowley	BNSF	Crossing Actively Used
009793J	Cowley	BNSF	Crossing Actively Used
009794R	Cowley	BNSF	Crossing Actively Used
009795X	Cowley	BNSF	Crossing Actively Used
009797L	Cowley	BNSF	Crossing Actively Used
009798T	Cowley	BNSF	Crossing Actively Used
009799A	Cowley	BNSF	Crossing Actively Used
009800S	Cowley	BNSF	Crossing Actively Used
009801Y	Cowley	BNSF	Crossing Actively Used
011251A	Cowley	BNSF	Crossing Actively Used
011252G	Cowley	BNSF	Crossing Actively Used
011260Y	Cowley	BNSF	Crossing Actively Used
011264B	Cowley	BNSF	Crossing Actively Used
011268D	Cowley	BNSF	Crossing Actively Used
011269K	Cowley	BNSF	Road Closed
011270E	Cowley	BNSF	Crossing Actively Used
011271L	Cowley	BNSF	Crossing Actively Used
011272T	Cowley	BNSF	Railroad Abandonment
011273A	Cowley	BNSF	Railroad Abandonment
011274G	Cowley	BNSF	Railroad Abandonment
011276V	Cowley	BNSF	Railroad Abandonment
011277C	Cowley	BNSF	Railroad Abandonment
011278J	Cowley	BNSF	Railroad Abandonment
011279R	Cowley	BNSF	Tracks present but Unusable
423501Y	Cowley	BNSF	Railroad Abandonment
435250R	Cowley	BNSF	Crossing Actively Used
435251X	Cowley	BNSF	Tracks present but Unusable
435261D	Cowley	BNSF	Crossing Actively Used
435262K	Cowley	BNSF	Crossing Actively Used
670941T	Cowley	BNSF	Railroad Abandonment
670942A	Cowley	BNSF	Crossing Actively Used
670942Z	Cowley	BNSF	Tracks present but Unusable
670943G	Cowley	BNSF	Crossing Actively Used
670968C	Cowley	BNSF	Railroad Abandonment
670972S	Cowley	BNSF	Tracks present but Unusable
670980J	Cowley	BNSF	Railroad Abandonment
006192P	Franklin	BNSF	Crossing Actively Used
006195K	Franklin	BNSF	Crossing Actively Used
006196S	Franklin	BNSF	Crossing Actively Used
006197Y	Franklin	BNSF	Crossing Actively Used

006198F	Franklin	BNSF	Crossing Actively Used
006200E	Franklin	BNSF	Crossing Actively Used
006201L	Franklin	BNSF	Crossing Actively Used
006202T	Franklin	BNSF	Crossing Actively Used
006204G	Franklin	BNSF	Crossing Actively Used
006207C	Franklin	BNSF	Crossing Actively Used
006208J	Franklin	BNSF	Crossing Actively Used
006210K	Franklin	BNSF	Crossing Actively Used
006213F	Franklin	BNSF	Crossing Actively Used
006218P	Franklin	BNSF	Crossing Actively Used
006220R	Franklin	BNSF	Crossing Actively Used
006223L	Franklin	BNSF	Crossing Actively Used
006224T	Franklin	BNSF	Crossing Actively Used
006225A	Franklin	BNSF	Crossing Actively Used
006226G	Franklin	BNSF	Crossing Actively Used
006227N	Franklin	BNSF	Crossing Actively Used
006229C	Franklin	BNSF	Crossing Actively Used
006230W	Franklin	BNSF	Crossing Actively Used
006232K	Franklin	BNSF	Crossing Actively Used
006314S	Franklin	BNSF	Crossing Actively Used
006607V	Franklin	BNSF	Crossing Actively Used
006608C	Franklin	BNSF	Railroad Abandonment
006609J	Franklin	BNSF	Tracks Removed, Crossing Closed
014216W	Harper	BNSF	Crossing Actively Used
014218K	Harper	BNSF	Crossing Actively Used
014219S	Harper	BNSF	Crossing Actively Used
014221T	Harper	BNSF	Crossing Actively Used
014224N	Harper	BNSF	Crossing Actively Used
014225V	Harper	BNSF	Crossing Actively Used
014226C	Harper	BNSF	Crossing Actively Used
014227J	Harper	BNSF	Crossing Actively Used
014228R	Harper	BNSF	Crossing Actively Used
014236H	Harper	BNSF	Crossing Actively Used
014237P	Harper	BNSF	Crossing Actively Used
014238W	Harper	BNSF	Crossing Actively Used
014239D	Harper	BNSF	Crossing Actively Used
014242L	Harper	BNSF	Crossing Actively Used
014244A	Harper	BNSF	Crossing Actively Used
014246N	Harper	BNSF	Crossing Actively Used
014247V	Harper	BNSF	Crossing Actively Used
014249J	Harper	BNSF	Crossing Actively Used
014250D	Harper	BNSF	Crossing Actively Used
014251K	Harper	BNSF	Crossing Actively Used
014252S	Harper	BNSF	Crossing Actively Used
014253Y	Harper	BNSF	Crossing Actively Used

014255M	Harper	BNSF	Crossing Actively Used
014257B	Harper	BNSF	Crossing Actively Used
014261R	Harper	BNSF	Crossing Actively Used
014262Q	Harper	BNSF	Crossing Actively Used
014262X	Harper	BNSF	Crossing Actively Used
014262Z	Harper	BNSF	Crossing Actively Used
014264L	Harper	BNSF	Crossing Actively Used
014265T	Harper	BNSF	Crossing Actively Used
014266A	Harper	BNSF	Crossing Actively Used
014267G	Harper	BNSF	Crossing Actively Used
014268N	Harper	BNSF	Crossing Actively Used
014269V	Harper	BNSF	Crossing Actively Used
014270P	Harper	BNSF	Crossing Actively Used
014272D	Harper	BNSF	Crossing Actively Used
014273K	Harper	BNSF	Crossing Actively Used
014274S	Harper	BNSF	Crossing Actively Used
005678N	Johnson	BNSF	Crossing Actively Used
005806U	Johnson	BNSF	Crossing Actively Used
005809P	Johnson	BNSF	Road Closed
005810J	Johnson	BNSF	Crossing Actively Used
005814L	Johnson	BNSF	Crossing Actively Used
005815T	Johnson	BNSF	Crossing Actively Used
005818N	Johnson	BNSF	Crossing Actively Used
005823K	Johnson	BNSF	Crossing Actively Used
005826F	Johnson	BNSF	Crossing Actively Used
006128R	Johnson	BNSF	Crossing Actively Used
006134U	Johnson	BNSF	Crossing Actively Used
006135B	Johnson	BNSF	Crossing Actively Used
006140X	Johnson	BNSF	Crossing Actively Used
006141E	Johnson	BNSF	Road Closed
006143T	Johnson	BNSF	Crossing Actively Used
006144A	Johnson	BNSF	Crossing Actively Used
006145G	Johnson	BNSF	Crossing Actively Used
006146N	Johnson	BNSF	Crossing Actively Used
006148C	Johnson	BNSF	Crossing Actively Used
006149J	Johnson	BNSF	Crossing Actively Used
006150D	Johnson	BNSF	Crossing Actively Used
006151K	Johnson	BNSF	Crossing Actively Used
006152S	Johnson	BNSF	Crossing Actively Used
006153Y	Johnson	BNSF	Crossing Actively Used
006154F	Johnson	BNSF	Road Closed
006155M	Johnson	BNSF	Crossing Actively Used
006158H	Johnson	BNSF	Crossing Actively Used
006159P	Johnson	BNSF	Crossing Actively Used
006162X	Johnson	BNSF	Crossing Actively Used

006163E	Johnson	BNSF	Crossing Actively Used
006168N	Johnson	BNSF	Crossing Actively Used
006170P	Johnson	BNSF	Crossing Actively Used
006172D	Johnson	BNSF	Crossing Actively Used
006173K	Johnson	BNSF	Crossing Actively Used
006175Y	Johnson	BNSF	Crossing Actively Used
006176F	Johnson	BNSF	Crossing Actively Used
006177M	Johnson	BNSF	Crossing Actively Used
006178U	Johnson	BNSF	Crossing Actively Used
006179B	Johnson	BNSF	Crossing Actively Used
006180V	Johnson	BNSF	Crossing Actively Used
006181C	Johnson	BNSF	Crossing Actively Used
006183R	Johnson	BNSF	Crossing Actively Used
006184X	Johnson	BNSF	Crossing Actively Used
006185E	Johnson	BNSF	Crossing Actively Used
006313K	Johnson	BNSF	Crossing Actively Used
663554J	Johnson	BNSF	Crossing Actively Used
663556X	Johnson	BNSF	Crossing Actively Used
663558L	Johnson	BNSF	Crossing Actively Used
663559T	Johnson	BNSF	Crossing Actively Used
663560M	Johnson	BNSF	Crossing Actively Used
663561U	Johnson	BNSF	Crossing Actively Used
663563H	Johnson	BNSF	Crossing Actively Used
663564P	Johnson	BNSF	Crossing Actively Used
663566D	Johnson	BNSF	Crossing Actively Used
663567K	Johnson	BNSF	Crossing Actively Used
663568S	Johnson	BNSF	Crossing Actively Used
663569Y	Johnson	BNSF	Crossing Actively Used
663572G	Johnson	BNSF	Crossing Actively Used
663573N	Johnson	BNSF	Crossing Actively Used
663574V	Johnson	BNSF	Crossing Actively Used
663576J	Johnson	BNSF	Crossing Actively Used
663577R	Johnson	BNSF	Crossing Actively Used
663578X	Johnson	BNSF	Crossing Actively Used
663579E	Johnson	BNSF	Crossing Actively Used
663581F	Johnson	BNSF	Road Closed
663582M	Johnson	BNSF	Crossing Actively Used
663583U	Johnson	BNSF	Crossing Actively Used
663584B	Johnson	BNSF	Crossing Actively Used
663585H	Johnson	BNSF	Road Closed
663594G	Johnson	BNSF	Crossing Actively Used
663595N	Johnson	BNSF	Road Closed
663596V	Johnson	BNSF	Road Closed
663597C	Johnson	BNSF	Road Closed
668581X	Johnson	BNSF	Crossing Actively Used

668582E	Johnson	BNSF	Crossing Actively Used
668583L	Johnson	BNSF	Crossing Actively Used
668585A	Johnson	BNSF	Crossing Actively Used
668587N	Johnson	BNSF	Crossing Actively Used
668588V	Johnson	BNSF	Crossing Actively Used
668590W	Johnson	BNSF	Crossing Actively Used
668591D	Johnson	BNSF	Crossing Actively Used
668592K	Johnson	BNSF	Crossing Actively Used
668593S	Johnson	BNSF	Crossing Actively Used
668594Y	Johnson	BNSF	Crossing Actively Used
669527H	Johnson	BNSF	Crossing Actively Used
674144R	Johnson	BNSF	Crossing Actively Used
675361U	Johnson	BNSF	Crossing Actively Used
676280X	Johnson	BNSF	Crossing Actively Used
676281E	Johnson	BNSF	Crossing Actively Used
676282L	Johnson	BNSF	Crossing Actively Used
676283T	Johnson	BNSF	Crossing Actively Used
919876K	Johnson	BNSF	Crossing Actively Used
919876K	Johnson	BNSF	Crossing Actively Used
006042G	Lyon	BNSF	Crossing Actively Used
006043N	Lyon	BNSF	Road Closed
006044V	Lyon	BNSF	Crossing Actively Used
006045C	Lyon	BNSF	Crossing Actively Used
006046J	Lyon	BNSF	Road Closed
006047R	Lyon	BNSF	Crossing Actively Used
006048X	Lyon	BNSF	Crossing Actively Used
006049E	Lyon	BNSF	Crossing Actively Used
006050Y	Lyon	BNSF	Crossing Actively Used
006051F	Lyon	BNSF	Crossing Actively Used
006052M	Lyon	BNSF	Crossing Actively Used
006053U	Lyon	BNSF	Crossing Actively Used
006054B	Lyon	BNSF	Crossing Actively Used
006055H	Lyon	BNSF	Crossing Actively Used
006058D	Lyon	BNSF	Crossing Actively Used
006060E	Lyon	BNSF	Crossing Actively Used
006062T	Lyon	BNSF	Crossing Actively Used
006064G	Lyon	BNSF	Crossing Actively Used
006066V	Lyon	BNSF	Crossing Actively Used
006067C	Lyon	BNSF	Crossing Actively Used
006068J	Lyon	BNSF	Crossing Actively Used
006069R	Lyon	BNSF	Crossing Actively Used
006070K	Lyon	BNSF	Crossing Actively Used
006071S	Lyon	BNSF	Crossing Actively Used
006072Y	Lyon	BNSF	Crossing Actively Used
006074M	Lyon	BNSF	Crossing Actively Used

006075U	Lyon	BNSF	Crossing Actively Used
006076B	Lyon	BNSF	Crossing Actively Used
006077H	Lyon	BNSF	Crossing Actively Used
006078P	Lyon	BNSF	Crossing Actively Used
006084T	Lyon	BNSF	Crossing Actively Used
006085A	Lyon	BNSF	Crossing Actively Used
006086G	Lyon	BNSF	Crossing Actively Used
006087N	Lyon	BNSF	Crossing Actively Used
006087Z	Lyon	BNSF	Crossing Actively Used
006089C	Lyon	BNSF	Crossing Actively Used
006090W	Lyon	BNSF	Railroad Abandonment
006102N	Lyon	BNSF	Crossing Actively Used
006292U	Lyon	BNSF	Crossing Actively Used
006293B	Lyon	BNSF	Crossing Actively Used
006294H	Lyon	BNSF	Crossing Actively Used
006295P	Lyon	BNSF	Crossing Actively Used
006297D	Lyon	BNSF	Crossing Actively Used
006301R	Lyon	BNSF	Crossing Actively Used
006303E	Lyon	BNSF	Crossing Actively Used
006305T	Lyon	BNSF	Crossing Actively Used
006308N	Lyon	BNSF	Crossing Actively Used
006310P	Lyon	BNSF	Crossing Actively Used
006311W	Lyon	BNSF	Crossing Actively Used
006312D	Lyon	BNSF	Crossing Actively Used
008702X	Lyon	BNSF	Crossing Actively Used
008704L	Lyon	BNSF	Crossing Actively Used
008705T	Lyon	BNSF	Crossing Actively Used
008710P	Lyon	BNSF	Crossing Actively Used
008711W	Lyon	BNSF	Crossing Actively Used
008712D	Lyon	BNSF	Crossing Actively Used
008713K	Lyon	BNSF	Crossing Actively Used
008714S	Lyon	BNSF	Crossing Actively Used
008715Y	Lyon	BNSF	Crossing Actively Used
008718U	Lyon	BNSF	Crossing Actively Used
008719B	Lyon	BNSF	Crossing Actively Used
008720V	Lyon	BNSF	Crossing Actively Used
008721C	Lyon	BNSF	Crossing Actively Used
008722J	Lyon	BNSF	Crossing Actively Used
008723R	Lyon	BNSF	Crossing Actively Used
008726L	Lyon	BNSF	Crossing Actively Used
008727T	Lyon	BNSF	Crossing Actively Used
005790A	Osage	BNSF	Crossing Actively Used
005977V	Osage	BNSF	Crossing Actively Used
005979J	Osage	BNSF	Crossing Actively Used
005980D	Osage	BNSF	Crossing Actively Used

005982S	Osage	BNSF	Crossing Actively Used
005983Y	Osage	BNSF	Crossing Actively Used
005984F	Osage	BNSF	Crossing Actively Used
005986U	Osage	BNSF	Crossing Actively Used
005987B	Osage	BNSF	Crossing Actively Used
005988H	Osage	BNSF	Crossing Actively Used
005990J	Osage	BNSF	Crossing Actively Used
005991R	Osage	BNSF	Road Closed
005992X	Osage	BNSF	Crossing Actively Used
005994L	Osage	BNSF	Crossing Actively Used
005995T	Osage	BNSF	Crossing Actively Used
005996A	Osage	BNSF	Crossing Actively Used
005998N	Osage	BNSF	Crossing Actively Used
006003R	Osage	BNSF	Crossing Actively Used
006004X	Osage	BNSF	Crossing Actively Used
006005E	Osage	BNSF	Crossing Actively Used
006007T	Osage	BNSF	Crossing Actively Used
006008A	Osage	BNSF	Crossing Actively Used
006009G	Osage	BNSF	Crossing Actively Used
006010B	Osage	BNSF	Crossing Actively Used
006015K	Osage	BNSF	Crossing Actively Used
006016S	Osage	BNSF	Crossing Actively Used
006017Y	Osage	BNSF	Crossing Actively Used
006018F	Osage	BNSF	Crossing Actively Used
006019M	Osage	BNSF	Crossing Actively Used
006021N	Osage	BNSF	Crossing Actively Used
006022V	Osage	BNSF	Crossing Actively Used
006023C	Osage	BNSF	Crossing Actively Used
006024J	Osage	BNSF	Crossing Actively Used
006025R	Osage	BNSF	Crossing Actively Used
006026X	Osage	BNSF	Crossing Actively Used
006027E	Osage	BNSF	Crossing Actively Used
006029T	Osage	BNSF	Crossing Actively Used
006030M	Osage	BNSF	Crossing Actively Used
006031U	Osage	BNSF	Crossing Actively Used
006032B	Osage	BNSF	Crossing Actively Used
006033H	Osage	BNSF	Crossing Actively Used
006034P	Osage	BNSF	Crossing Actively Used
006037K	Osage	BNSF	Crossing Actively Used
006039Y	Osage	BNSF	Crossing Actively Used
006041A	Osage	BNSF	Crossing Actively Used
006233S	Osage	BNSF	Crossing Actively Used
006234Y	Osage	BNSF	Crossing Actively Used
006235F	Osage	BNSF	Crossing Actively Used
006236M	Osage	BNSF	Crossing Actively Used

006238B	Osage	BNSF	Crossing Actively Used
006243X	Osage	BNSF	Crossing Actively Used
006246T	Osage	BNSF	Crossing Actively Used
006247A	Osage	BNSF	Crossing Actively Used
006249N	Osage	BNSF	Crossing Actively Used
006252W	Osage	BNSF	Crossing Actively Used
006253D	Osage	BNSF	Crossing Actively Used
006255S	Osage	BNSF	Crossing Actively Used
006256Y	Osage	BNSF	Crossing Actively Used
006257F	Osage	BNSF	Crossing Actively Used
006261V	Osage	BNSF	Crossing Actively Used
006262C	Osage	BNSF	Crossing Actively Used
006271B	Osage	BNSF	Crossing Actively Used
006272H	Osage	BNSF	Crossing Actively Used
006273P	Osage	BNSF	Crossing Actively Used
006275D	Osage	BNSF	Crossing Actively Used
009231N	Sedgwick	BNSF	Crossing Actively Used
009235R	Sedgwick	BNSF	Crossing Actively Used
009236X	Sedgwick	BNSF	Crossing Actively Used
009239T	Sedgwick	BNSF	Crossing Actively Used
009242B	Sedgwick	BNSF	Crossing Actively Used
009243H	Sedgwick	BNSF	Crossing Actively Used
009244P	Sedgwick	BNSF	Crossing Actively Used
009245W	Sedgwick	BNSF	Road Closed
009246D	Sedgwick	BNSF	Crossing Actively Used
009247K	Sedgwick	BNSF	Crossing Actively Used
009248S	Sedgwick	BNSF	Crossing Actively Used
009249Y	Sedgwick	BNSF	Crossing Actively Used
009250T	Sedgwick	BNSF	Crossing Actively Used
009251A	Sedgwick	BNSF	Crossing Actively Used
009252G	Sedgwick	BNSF	Crossing Actively Used
009257R	Sedgwick	BNSF	Crossing Actively Used
009258X	Sedgwick	BNSF	Crossing Actively Used
009259E	Sedgwick	BNSF	Crossing Actively Used
009260Y	Sedgwick	BNSF	Crossing Actively Used
009261F	Sedgwick	BNSF	Crossing Actively Used
009263U	Sedgwick	BNSF	Crossing Actively Used
009264B	Sedgwick	BNSF	Crossing Actively Used
009265H	Sedgwick	BNSF	Crossing Actively Used
009266P	Sedgwick	BNSF	Crossing Actively Used
009267W	Sedgwick	BNSF	Road Closed
009268D	Sedgwick	BNSF	Crossing Actively Used
009269K	Sedgwick	BNSF	Road Closed
009270E	Sedgwick	BNSF	Road Closed
009271L	Sedgwick	BNSF	Road Closed

009272T	Sedgwick	BNSF	Road Closed
009273A	Sedgwick	BNSF	Crossing Actively Used
009279R	Sedgwick	BNSF	Crossing Actively Used
009280K	Sedgwick	BNSF	Crossing Actively Used
009281S	Sedgwick	BNSF	Crossing Actively Used
009282Y	Sedgwick	BNSF	Crossing Actively Used
009283F	Sedgwick	BNSF	Crossing Actively Used
009284M	Sedgwick	BNSF	Crossing Actively Used
009285U	Sedgwick	BNSF	Crossing Actively Used
009286B	Sedgwick	BNSF	Crossing Actively Used
009287H	Sedgwick	BNSF	Crossing Actively Used
009290R	Sedgwick	BNSF	Crossing Actively Used
009293L	Sedgwick	BNSF	Crossing Actively Used
009294T	Sedgwick	BNSF	Crossing Actively Used
009295A	Sedgwick	BNSF	Crossing Actively Used
009297N	Sedgwick	BNSF	Railroad Abandonment
009299C	Sedgwick	BNSF	Crossing Actively Used
009300U	Sedgwick	BNSF	Crossing Actively Used
009301B	Sedgwick	BNSF	Crossing Actively Used
009302H	Sedgwick	BNSF	Crossing Actively Used
009303P	Sedgwick	BNSF	Crossing Actively Used
009304W	Sedgwick	BNSF	Crossing Actively Used
009305D	Sedgwick	BNSF	Crossing Actively Used
009307S	Sedgwick	BNSF	Crossing Actively Used
009310A	Sedgwick	BNSF	Crossing Actively Used
009313V	Sedgwick	BNSF	Crossing Actively Used
009317X	Sedgwick	BNSF	Crossing Actively Used
009318E	Sedgwick	BNSF	Crossing Actively Used
009319L	Sedgwick	BNSF	Railroad Abandonment
009320F	Sedgwick	BNSF	Railroad Abandonment
009350X	Sedgwick	BNSF	Crossing Actively Used
009355G	Sedgwick	BNSF	Railroad Abandonment
009364F	Sedgwick	BNSF	Railroad Abandonment
009370J	Sedgwick	BNSF	Crossing Actively Used
009371R	Sedgwick	BNSF	Crossing Actively Used
009372X	Sedgwick	BNSF	Road Closed
009373E	Sedgwick	BNSF	Road Closed
009374L	Sedgwick	BNSF	Road Closed
009375T	Sedgwick	BNSF	Crossing Actively Used
009375Z	Sedgwick	BNSF	Tracks present but Unusable
009376A	Sedgwick	BNSF	Railroad Abandonment
009377G	Sedgwick	BNSF	Crossing Actively Used
009378N	Sedgwick	BNSF	Crossing Actively Used
009379V	Sedgwick	BNSF	Railroad Abandonment
009380P	Sedgwick	BNSF	Railroad Abandonment

009382D	Sedgwick	BNSF	Crossing Actively Used
009385Y	Sedgwick	BNSF	Crossing Actively Used
009388U	Sedgwick	BNSF	Crossing Actively Used
009389B	Sedgwick	BNSF	Crossing Actively Used
009390V	Sedgwick	BNSF	Crossing Actively Used
009392J	Sedgwick	BNSF	Crossing Actively Used
009393R	Sedgwick	BNSF	Crossing Actively Used
009394X	Sedgwick	BNSF	Crossing Actively Used
009395E	Sedgwick	BNSF	Crossing Actively Used
009396L	Sedgwick	BNSF	Crossing Actively Used
009398A	Sedgwick	BNSF	Crossing Actively Used
009401F	Sedgwick	BNSF	Crossing Actively Used
009403U	Sedgwick	BNSF	Crossing Actively Used
009631G	Sedgwick	BNSF	Crossing Actively Used
009632N	Sedgwick	BNSF	Crossing Actively Used
009634C	Sedgwick	BNSF	Crossing Actively Used
009636R	Sedgwick	BNSF	Crossing Actively Used
009637X	Sedgwick	BNSF	Crossing Actively Used
009639L	Sedgwick	BNSF	Crossing Actively Used
009640F	Sedgwick	BNSF	Crossing Actively Used
009648K	Sedgwick	BNSF	Crossing Actively Used
009649S	Sedgwick	BNSF	Crossing Actively Used
009651T	Sedgwick	BNSF	Road Closed
009652A	Sedgwick	BNSF	Crossing Actively Used
010647A	Sedgwick	BNSF	Tracks Removed, Crossing Closed
015161P	Sedgwick	BNSF	Crossing Actively Used
015186K	Sedgwick	BNSF	Tracks Removed, Crossing Closed
087255Z	Sedgwick	BNSF	Railroad Abandonment
087279Z	Sedgwick	BNSF	Railroad Abandonment
670097W	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670098D	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670099K	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670100C	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670101J	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670102R	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670103X	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670104E	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670105L	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670106T	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670107A	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670108G	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670109N	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670110H	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670113D	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670114K	Sedgwick	BNSF	Tracks Removed, Crossing Closed

670115S	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670117F	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670118M	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670118Z	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670119U	Sedgwick	BNSF	Crossing Actively Used
670120N	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670121V	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670122C	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670123J	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670124R	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670125X	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670126E	Sedgwick	BNSF	Crossing Actively Used
670127L	Sedgwick	BNSF	Crossing Actively Used
670128T	Sedgwick	BNSF	Crossing Actively Used
670129A	Sedgwick	BNSF	Crossing Actively Used
670130U	Sedgwick	BNSF	Crossing Actively Used
670131B	Sedgwick	BNSF	Crossing Actively Used
670132H	Sedgwick	BNSF	Crossing Actively Used
670134W	Sedgwick	BNSF	Crossing Actively Used
670135D	Sedgwick	BNSF	Crossing Actively Used
670136K	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670137S	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670138Y	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670141G	Sedgwick	BNSF	Crossing Actively Used
670143V	Sedgwick	BNSF	Crossing Actively Used
670144C	Sedgwick	BNSF	Crossing Actively Used
670145J	Sedgwick	BNSF	Crossing Actively Used
670146R	Sedgwick	BNSF	Crossing Actively Used
670147X	Sedgwick	BNSF	Crossing Actively Used
670149L	Sedgwick	BNSF	Crossing Actively Used
670151M	Sedgwick	BNSF	Railroad Abandonment
670152U	Sedgwick	BNSF	Railroad Abandonment
670153B	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670154H	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670155P	Sedgwick	BNSF	Railroad Abandonment
670156W	Sedgwick	BNSF	Railroad Abandonment
670157D	Sedgwick	BNSF	Railroad Abandonment
670158K	Sedgwick	BNSF	Tracks Removed, Crossing Closed
670177P	Sedgwick	BNSF	Railroad Abandonment
009406P	Sumner	BNSF	Crossing Actively Used
009407W	Sumner	BNSF	Crossing Actively Used
009408D	Sumner	BNSF	Crossing Actively Used
009409K	Sumner	BNSF	Crossing Actively Used
009410E	Sumner	BNSF	Crossing Actively Used
009411L	Sumner	BNSF	Crossing Actively Used

009413A	Sumner	BNSF	Crossing Actively Used
009414G	Sumner	BNSF	Crossing Actively Used
009657J	Sumner	BNSF	Crossing Actively Used
009661Y	Sumner	BNSF	Crossing Actively Used
009663M	Sumner	BNSF	Crossing Actively Used
009664U	Sumner	BNSF	Crossing Actively Used
009667P	Sumner	BNSF	Crossing Actively Used
009668W	Sumner	BNSF	Crossing Actively Used
009669D	Sumner	BNSF	Crossing Actively Used
009670X	Sumner	BNSF	Road Closed
009671E	Sumner	BNSF	Crossing Actively Used
009723U	Sumner	BNSF	Crossing Actively Used
009724B	Sumner	BNSF	Crossing Actively Used
009725H	Sumner	BNSF	Crossing Actively Used
009726P	Sumner	BNSF	Crossing Actively Used
009729K	Sumner	BNSF	Crossing Actively Used
009731L	Sumner	BNSF	Crossing Actively Used
009733A	Sumner	BNSF	Crossing Actively Used
009734G	Sumner	BNSF	Crossing Actively Used
014170K	Sumner	BNSF	Crossing Actively Used
014172Y	Sumner	BNSF	Railroad Abandonment
014174M	Sumner	BNSF	Crossing Actively Used
014175U	Sumner	BNSF	Crossing Actively Used
014176B	Sumner	BNSF	Crossing Actively Used
014178P	Sumner	BNSF	Crossing Actively Used
014179W	Sumner	BNSF	Crossing Actively Used
014180R	Sumner	BNSF	Crossing Actively Used
014181X	Sumner	BNSF	Crossing Actively Used
014182E	Sumner	BNSF	Road Closed
014183L	Sumner	BNSF	Crossing Actively Used
014187N	Sumner	BNSF	Crossing Actively Used
014190W	Sumner	BNSF	Crossing Actively Used
014191D	Sumner	BNSF	Crossing Actively Used
014194Y	Sumner	BNSF	Crossing Actively Used
014195F	Sumner	BNSF	Crossing Actively Used
014196M	Sumner	BNSF	Crossing Actively Used
014197U	Sumner	BNSF	Crossing Actively Used
014199H	Sumner	BNSF	Crossing Actively Used
014200A	Sumner	BNSF	Crossing Actively Used
014201G	Sumner	BNSF	Crossing Actively Used
014202N	Sumner	BNSF	Crossing Actively Used
014203V	Sumner	BNSF	Crossing Actively Used
014206R	Sumner	BNSF	Crossing Actively Used
014208E	Sumner	BNSF	Crossing Actively Used
014209L	Sumner	BNSF	Crossing Actively Used

014210F	Sumner	BNSF	Crossing Actively Used
014211M	Sumner	BNSF	Crossing Actively Used
014212U	Sumner	BNSF	Crossing Actively Used
014213B	Sumner	BNSF	Crossing Actively Used
014214H	Sumner	BNSF	Crossing Actively Used
014215P	Sumner	BNSF	Crossing Actively Used
015403H	Sumner	BNSF	Crossing Actively Used
015404P	Sumner	BNSF	Crossing Actively Used
005785D	Wyandotte	BNSF	Crossing Actively Used
005786K	Wyandotte	BNSF	Crossing Actively Used
005787S	Wyandotte	BNSF	Crossing Actively Used
005789F	Wyandotte	BNSF	Crossing Actively Used
006121T	Wyandotte	BNSF	Crossing Actively Used
006122A	Wyandotte	BNSF	Crossing Actively Used
006123G	Wyandotte	BNSF	Crossing Actively Used
006124N	Wyandotte	BNSF	Crossing Actively Used
006125V	Wyandotte	BNSF	Crossing Actively Used
006126C	Wyandotte	BNSF	Crossing Actively Used
006127J	Wyandotte	BNSF	Crossing Actively Used
006964X	Wyandotte	BNSF	Crossing Actively Used
006964Z	Wyandotte	BNSF	Crossing Actively Used
006965E	Wyandotte	BNSF	Crossing Actively Used
007131C	Wyandotte	BNSF	Crossing Actively Used
663544D	Wyandotte	BNSF	Crossing Actively Used
663546S	Wyandotte	BNSF	Crossing Actively Used
663547Y	Wyandotte	BNSF	Crossing Actively Used
663549M	Wyandotte	BNSF	Crossing Actively Used
663550G	Wyandotte	BNSF	Crossing Actively Used
663551N	Wyandotte	BNSF	Crossing Actively Used

Appendix D Listing of US Rail-Truck Intermodal Facilities

FACILITY	State
Alabama State Docks(CSX and BN Rail/Truck)	AL
Brookley Industrial Complex	AL
Burlington Northern RR Dixie Hub Center	AL
Ernest Norris RR Yards	AL
Glendale Intermodal & Auto Yard	AZ
Phoenix Intermodal & Auto Yard	AZ
Blytheville/Mississippi County Industrial and Transportation Complex	AR
Burlington Northern & Santa Fe Intermodal Terminal, Sunset	AR
River Valley Intermodal Complex, Russellville	AR
Southeast Arkansas Regional Intermodal Facility, Wilmar	AR
Union Pacific Ebony Terminal, West Memphis	AR
Union Pacific Rail/Truck Ramp, North Little Rock	AR
Union Pacific Railroad Complex, Pine Bluff	AR
City of Industry Rail Yard	CA
City of Industry Rail Yard	CA
Fresno TOPC Rail Yard	CA
LA (Nr. Union Station)	CA
LA (Nr. Union Station)	CA
LA ATSF Rail Yard	CA
LA ATSF Rail Yard	CA
LA/Vernon Facility	CA
Lathrop Rail Yard	CA
Long Beach (Carson)Rail Yard	CA
Oakland Rail Yard	CA
Richmond Rail Yard	CA
San Bernadino Rail Yard	CA
Stockton Rail Yard	CA
UPS-Richmond Terminal	CA
Burlington Northern RR Auto Transfer	CO
Burlington Northern RR Transfer Facility	CO
Southern Pacific RR Transfer Facility	CO
Union Pacific RR Auto Transfer	CO
Union Pacific RR Transfer Facility	CO
CSX Intermodal-Orlando	FL
CSXT Bulk Intermodal Facility	FL
Intermodal Rail Transport Yard	FL
Norfolk Southern Yards-Jacksonville	FL
Parsec-Ft. Lauderdale	FL
Parsec-West Palm Beach	FL

Parsec Florida East Coast Railroad-Jacksonville	FL
Parsec Miami/Parsec Automobile Terminal	FL
Parsec(North)-Miami	FL
Uceta Intermodal Yard CSX Facility	FL
Atlanta Hulsey Rail Yard	GA
Atlanta Inman Rail Yard	GA
Colonel's Island Rail Yard, Brunswick	GA
CSX Railyard, Savannah	GA
Fairfax CSX Industry Yard, Fairburn	GA
Norfolk-Southern Industry Yard, East Point	GA
26th St (Union Pacific)	IL
26th St (Union Pacific)	IL
47th Yard (Norfolk Southern)	IL
47th Yard (Norfolk Southern)	IL
63rd Yard-Conrail	IL
63rd Yard-Conrail	IL
Auto-Transload-BN/Sante Fe	IL
Bedford Park-CSX Intermodal	IL
Bedford Park-CSX Intermodal	IL
Bedford Park - CSX Intermodal	IL
Bedford Park-CSX Intermodal	IL
Bensenville (Canadian Pacific)	IL
Cicero 26th St (BN/SF)	IL
Cicero Ogden (BN/SF)	IL
Corwith (BN/SF)	IL
Corwith (BN/SF)	IL
Corwith (BN/SF)	IL
Corwith (BN/SF)	IL
CSXI 59th Street	IL
Forest Hill-CSX Intermodal	IL
Gateway	IL
Gateway	IL
Gateway	IL
Gateway Western Intermodal Yard	IL
Global One	IL
Global One	IL
Global Two	IL
Global Two	IL
IMX (Union Pacific)	IL
Iowa Interstate	IL
Landers-Norfolk Southern	IL
Moyers International (IC/UP/WC)	IL
Moyers International (IC/UP/WC)	IL

Moyers International (IC/UP/WC)	IL
Peoria & Pekin Union Intermodal	IL
Railport-Canadian National	IL
Railport-Canadian National	IL
Railport-Canadian National	IL
Rose Lake Intermodal Yard	IL
Schiller Park East	IL
Triple Crown-Norfolk Southern	IL
Union Pacific Motor Freight Intermodal Yard	IL
Western Ave (Burlington Northern)	IL
Western Ave (Burlington Northern)	IL
Willow Springs/Hodgkins (BN/S)	IL
Willow Springs/Hodgkins (BN/S)	IL
Yard Center (Union Pacific)	IL
Avon "CSX" Intermodal Facility	IN
Norfolk Southern Triple Crown RR Facility	IN
Quad Cities Container Terminal, Davenport	IA
Sante Fe Terminal, Kansas City	KS
Sante Fe Terminal, Kansas City	KS
Southern Pacific's KS City I'mdl Fac.	KS
Southern Pacific's KS City I'mdl Fac.	KS
Clark Elkhorn Coal Tipple	KY
Golden Oak Mining CO.	KY
Ivel Coal Tipple	KY
McCoy Elkhorn Coal Corp	KY
Norfolk Southern Intermodal-Georgetown	KY
Norfolk Southern Intermodal-Louisville	KY
Praise Dock Coal Tipple	KY
BNSF-Westwego Terminal	LA
CNIC-New Orleans Terminal	LA
CSX-New Orleans terminal	LA
CSX-New Orleans terminal	LA
Kansas City Southern-Metaire Terminal.	LA
KCS-Deramus Yard	LA
Norfolk Southern-New Orleans Terminal	LA
Union Pacific-Avondale Terminal	LA
Union Pacific-Reisor Terminal	LA
Auburn Intermodal Truck/Rail Transfer Facility	ME
Merrill Marine Terminal (Rail)	ME
Merrill Marine Terminal (Rail)	ME
Portland Freight Terminal District	ME
CSX Intermodal Container Facility	MD

Jessup Auto Distribution Facility	MD
Norfolk Southern Bayview Intermodal Container Transfer Facility	MD
Ayer Boston & Maine RR Yard	MA
Beacon Park Conrail RR Yard	MA
Devens Intermodal Rail Terminal	MA
W. Springfield Conrail Yard	MA
Westborough CSX Auto Yard	MA
Worcester P&WRR Wisner Ave Yard	MA
Worcester P&WRR Wisner Ave Yard	MA
Worcester P&WRR Yard-Southbridge St.	MA
Worcester P&WRR Yard-Southbridge St.	MA
Worcester TVT CSX Yard	MA
Detroit-CP Rail System Oak Yard	MI
Detroit Jct/Livernois Intermodal Ter.	MI
Ferndale-CN North America Moterm	MI
New Boston Auto Ramp	MI
Norfolk Southern-Delray	MI
Norfolk Southern-Oakwood	MI
Norfolk Southern-Triple Crown	MI
Woodhaven-APL	MI
Minneapolis Shoreham Raiyard (CP)	MN
IC Railroad	MS
IC Railroad	MS
Burlington Northern, Kansas City	MO
Burlington Northern, Kansas City	MO
Kansas City Southern, Kansas City	MO
Norfolk Southern/Triple Crown, KC	MO
Norfolk Southern/Triple Crown, KC	MO
Norfolk Southern/Triple Crown, St. Louis	MO
Norfolk Southern/Triple Crown, St. Louis	MO
Union Pacific, Kansas City	MO
BURLINGTON NORTHERN RAILROAD	NE
UNION PACIFIC RAILROAD	NE
Newark Rail Terminal	NJ
Port Elizabeth Rail Terminal	NJ
Port Newark Rail Terminal	NJ
Rail Terminal at Pulaski Skyway	NJ
Union City Rail Terminal	NJ
65th Street LIRR Bay Ridge Terminal	NY
Bronx Terminal Market	NY
Bronx Terminal Market	NY
Bronx Terminal Market	NY

CONRAIL-Selkirk Yard	NY
CONRAIL Dewitt Yard	NY
CONRAIL Dewitt Yard	NY
Harlem River Intermodal Yard	NY
Harlem River Intermodal Yard	NY
Howland Hook Marine Terminal	NY
Howland Hook Marine Terminal	NY
Hunts Point Market Truck Terminal	NY
Hunts Point Market Truck Terminal	NY
Hunts Point Market Truck Terminal	NY
Norfolk-Southern Transfer Station	NY
South Brooklyn Railroad Yard	NY
CSX Freight Intermodal Facility-Charlotte	NC
Norfolk Southern Corp.-Winston-Salem	NC
Norfolk Southern Corp.-Charlotte	NC
Norfolk Southern Corp.-Greensboro	NC
Cincinnati CSXT (Queensgate)	OH
Cincinnati Norfolk Southern (Union Station)	OH
Cincinnati Norfolk Southern (Union Station)	OH
Columbus Conrail (Buckeye Yard)	OH
CONRAIL "Airline" Trailer/Container Term	OH
CONRAIL Intermodal & Flexi-flo Bulk Term	OH
CONRAIL Interstate Terminal Warehouse	OH
CONRAIL Interstate Terminal Warehouse	OH
CSX Bulk Intermodal Distribution System	OH
Major Grain/Bulk Materials Terminal Ops	OH
Marysville Conrail	OH
Marysville Conrail	OH
Medina Supply Company & Stone Yard	OH
Norfolk Southern Discovery Park	OH
Norfolk-Southern RR Container Port	OH
Stark Intermodal Freight Facility	OH
Triple Crown Rail Transfer Facility	OH
Burlington Northern Railroad	OK
Albina Yards (UP), Portland	OR
Brooklyn Yard (SP), Portland	OR
Eugene Reload Facilities, Eugene	OR
Lake Yards	OR
Willridge Yards	OR
Allentown/Bethlehem Piggy Back Yard	PA
Conrail DB Stack Facility and Triple Crown RDRLR	PA
Conrail Double Stack Intermodal Terminal	PA

CSX Eastside Bulk	PA
CSX Twin Oaks Auto	PA
Harrisburg Intermodal Lucknow Terminal	PA
Norfolk Southern Morrisville	PA
South Philadelphia Rail Complex	PA
Charleston Rail Facility (CSX)	SC
North Charleston Rail Facility (Norfolk-Southern)	SC
Fremar Farmers Co-Op Grain Elevator, Marion	SD
Hutting Elevator Co. Grain Elevator, Canton	SD
CSX CORPORATION-KINGSPORT	TN
Forrest Yards-Memphis Norfolk Southern	TN
Forrest Yards-Memphis Norfolk Southern	TN
Forrest Yards-Memphis Norfolk Southern	TN
Johnston Yards-Memphis Illinois Centra	TN
Leewood Yards-Memphis Csx	TN
Radnor Yards-Nashville Csx	TN
Tennessee Yards-Memphis Burlington Nor	TN
A.T.S.F. Intermodal Facility	TX
Empire Truck Lines Container Yard, Houston	TX
Fort Worth Amtrak	TX
Howard Industries Inc., Houston	TX
M.P. GMAC Yard	TX
Maurice Pincoffs Co. Inc., Houston	TX
McAllen EC Dev. Corp. & Foreign Trade Zone	TX
Port of Laredo (Union Pacific RR)	TX
S.P. Barbours Cut Intermodal Terminal	TX
S.P. Houston Intermodal Hub	TX
Santa Fe Railroad Yard (El Paso)	TX
Santa Fe Railway Intermodal Facility (DFW)	TX
Southern Pacific (San Antonio)	TX
Southern Pacific RR Alfalfa Yard (El Paso)	TX
U.P. Settegast Yard (Houston)	TX
Union Pacific Intermodal Center (Arlington)	TX
Union Pacific Intermodal Facility (DFW)	TX
UPS Mykawa Road Facility, Houston	TX
UPS Stafford Facility, Houston	TX
UPS Sweetwater Lane Facility, Houston	TX
Beck Street Truck/Rail Facility	UT
Sharp Truck/Rail Facility	UT
Vermont Railway Rail Yard, Burlington	VT
Vermont Railway Rail Yard, Burlington	VT
Alexandria Intermodal-Norfolk Southern	VA

Chesapeake Intermodal-Norfolk Southern	VA
Virginia Inland Port	VA
BN-Yardley (Spokane)	WA
BN-SIG Yard (Seattle Intl Gateway)	WA
BN-South Seattle Yard	WA
BN-UP Port of Tacoma Yards	WA
Burlington Northern Interbay Yard, Seattle	WA
Union Pacific Argo Yard, Seattle	WA
Green Bay Intermodal Terminal	WI
Truck/Rail Facility, Milwaukee	WI
Truck/Rail Facility, Milwaukee	WI
Truck/Rail Facility, Milwaukee	WI