MERAMEC REGIONAL EMERGENCY PLANNING COMMITTEE

HAZMAT Commodity Flow Study: Highway 72 ● August 2016

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1.1 Introduction

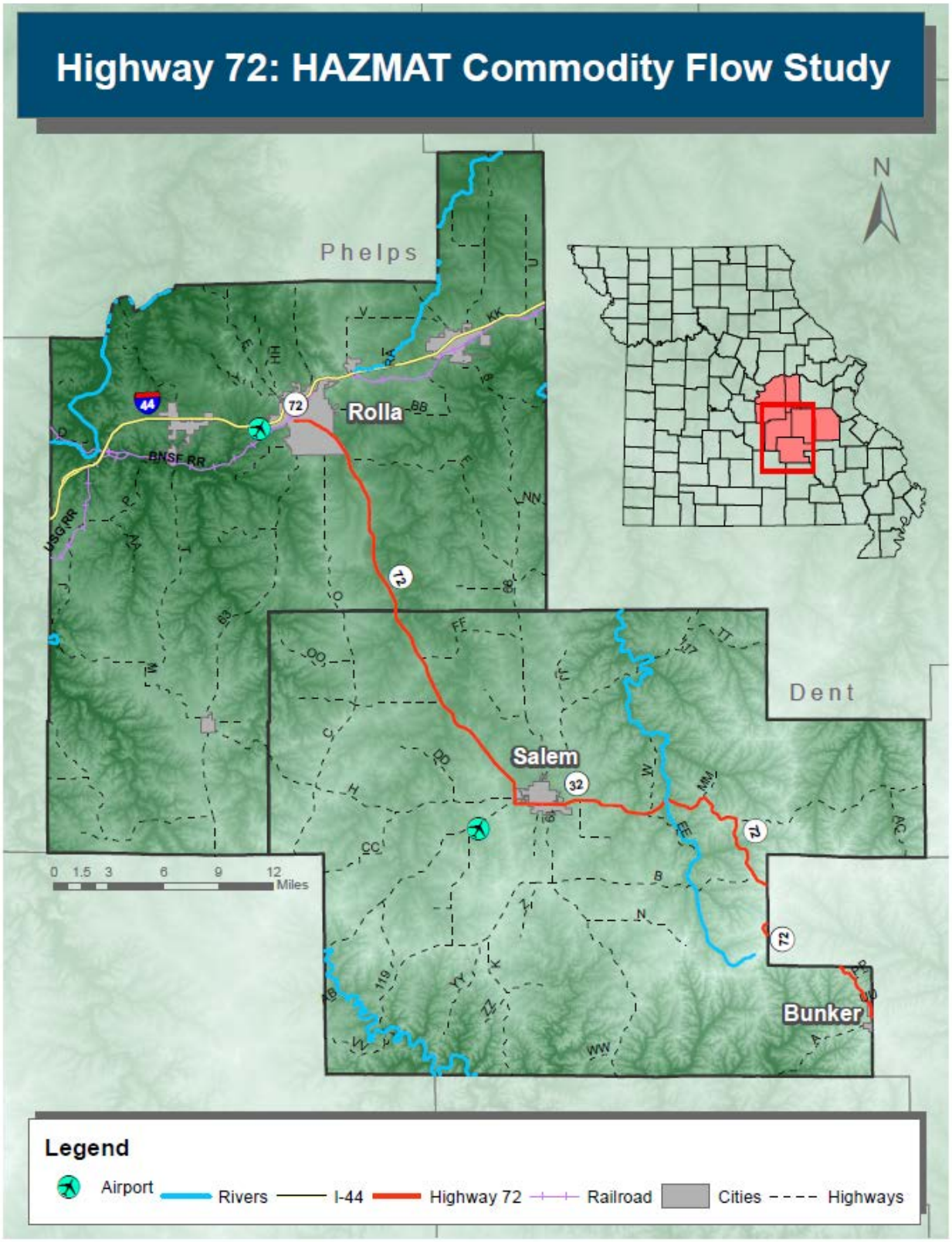
The Meramec Regional Emergency Planning Committee (MREPC) or Local Emergency Planning Committee (LEPC) was established as a result of the 1986 Emergency Planning and Community Right-to-Know Act (EPCRA), which requires local and state governments to plan for chemical emergencies. Furthermore, Missouri General Law 11CSR 10-11.210-250 requires emergency planning and emergency preparedness training on a local level. Other responsibilities of LEPCs include the preparation of offsite response plans, acquisition of response team equipment, development of public "Right-to-Know" education programs, conducting chemical industry awareness and compliance programs, and conducting pertinent training, drills and exercises[1].

The MREPC region is made up of seven rural counties (Crawford, Dent, Gasconade, Maries, Osage, Phelps, and Washington), and includes 32 municipalities. Located in the southeast-central portion of Missouri, the region covers 4,576 square miles, with abundant natural resources of ecological and economic importance. Furthermore, the region is currently home to some 148,489 people, according to 2010-2014 American Community Survey Five Year Estimates. Residing within the Ozark Mountains, the region is subdivided amongst the Salem Plateau and St. Francois Mountains. Major waterways within the region include the Missouri, Meramec, Gasconade, Current, and Bourbeuse Rivers. The region's major transportation infrastructure includes Interstate 44, U.S. 63, U.S. 50, four operating rail services (Burlington Northern Santa Fe, Union Pacific, Missouri Central, and Missouri Pacific), and seven publicly owned airports. In addition the region contains the following pipelines; MoGas, NuStar, Enbridge, Explorer, Phillip's 66, and Center Point Energy.

The MREPC area is continually vulnerable to a variety of HAZMAT related incidents, stationary or in transit. The accidental release of hazardous materials poses risks to life, property, and the environment, thus producing concern amongst the general public, first responders, and elected officials. The primary purpose of this Hazardous Materials Commodity Flow Study (HMCFS) is to address concerns by examining the transportation and movement of hazardous materials along the Highway 72, also known as the Route 72 corridor within the region.

[1] http://sema.dps.mo.gov/about/merc.php

Figure 1: Highway 72



1.2 Demographics

There are approximately 60,772 residents that reside within Phelps and Dent Counties; 19,808 of which reside in Rolla, 4,979 reside in Salem, and 432 individuals reside in Bunker. The jurisdiction with the highest percent of individuals age 65 and over is Salem at 22 percent. Bunker has the highest percent of residents under the age of 5 at 11.8 percent. The median age for Dent and Phelps Counties are 43.5 and 33.7, respectively. Phelps County has the highest number of housing units at 19,662 units, 2.7 times more units than Dent County. Phelps County also has the most number of residents without access to a vehicle. Phelps County has approximately 6,833 residents with some type of disability, while Dent County has 3,963[2] (**Table 1**).

Table 1: Highway 72 Demographics

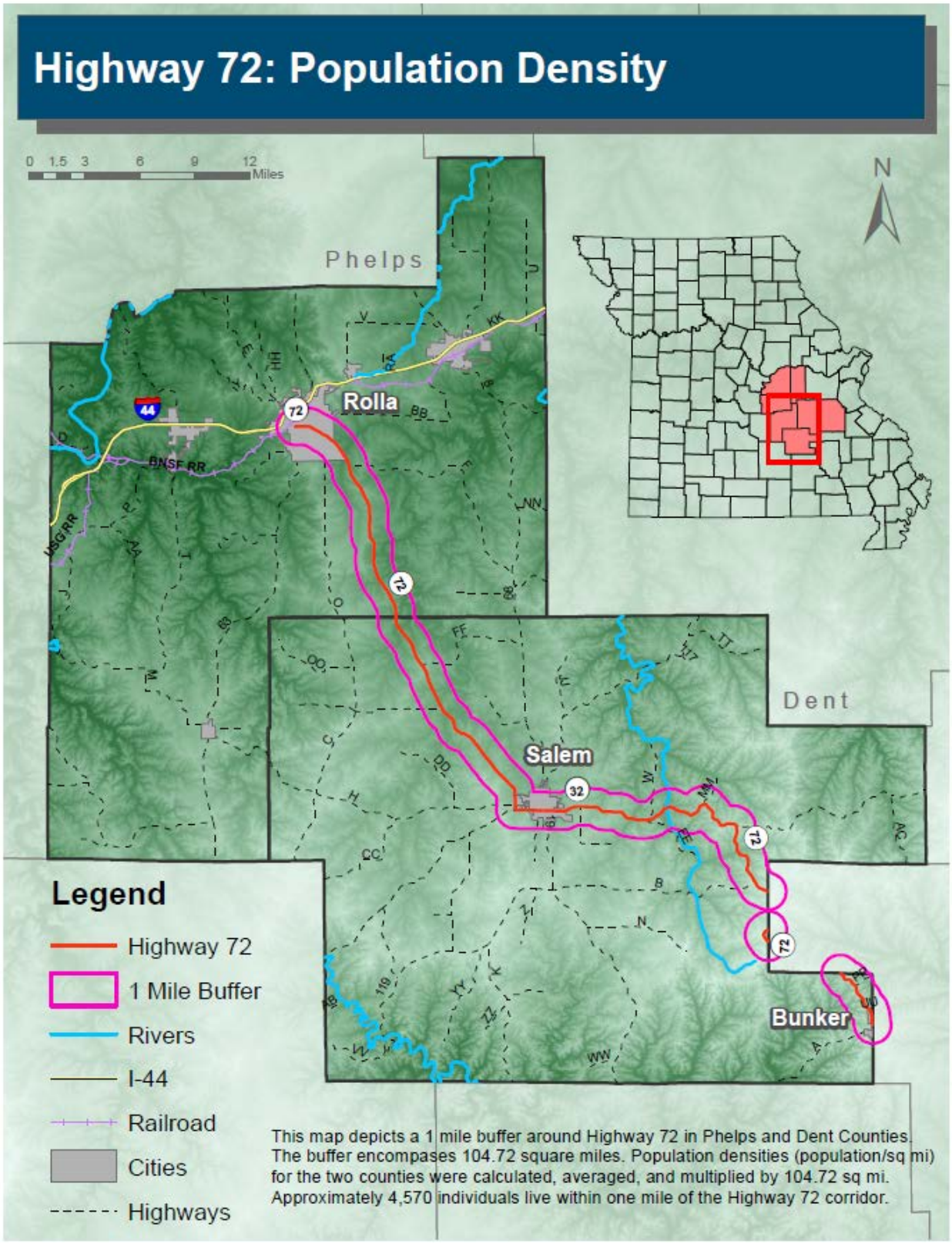
Jurisdiction	Total Population	65 and over (%)	Under 5 Years (%)	Median Age	Total Housing Units	No vehicle available	With a Disability
Phelps Co.	45,091	14.3	5.9	33.7	19,662	1,131	6,833
Rolla	19,808	11.8	5.2	26.3	8,351	660	2,399
Dent Co.	15,681	19.4	6.1	43.5	7,246	412	3,963
Salem	4,979	22.0	6.4	42.3	2,362	228	1,570
Bunker	432	12.3	11.8	29.3	177	36	126

Source: 2010-2014 ACS 5-Year Estimates

To better understand the number of residents living along the Highway 72 corridor, ESRI's ArcGIS was utilized for analysis. A one mile buffer was created around the Highway 72 corridor, which encompassed 104.72 square miles. Population densities (population/square miles) for Phelps and Dent Counties are 66.90 and 20.37, respectively. The two population densities were averaged at 43.64 and multiplied by 104.72 square miles, thus totaling approximately 4,570 individuals living within one mile of Highway 72 (**Figure 2**).

[2] 2010-2014 ACS 5-Year Estimates

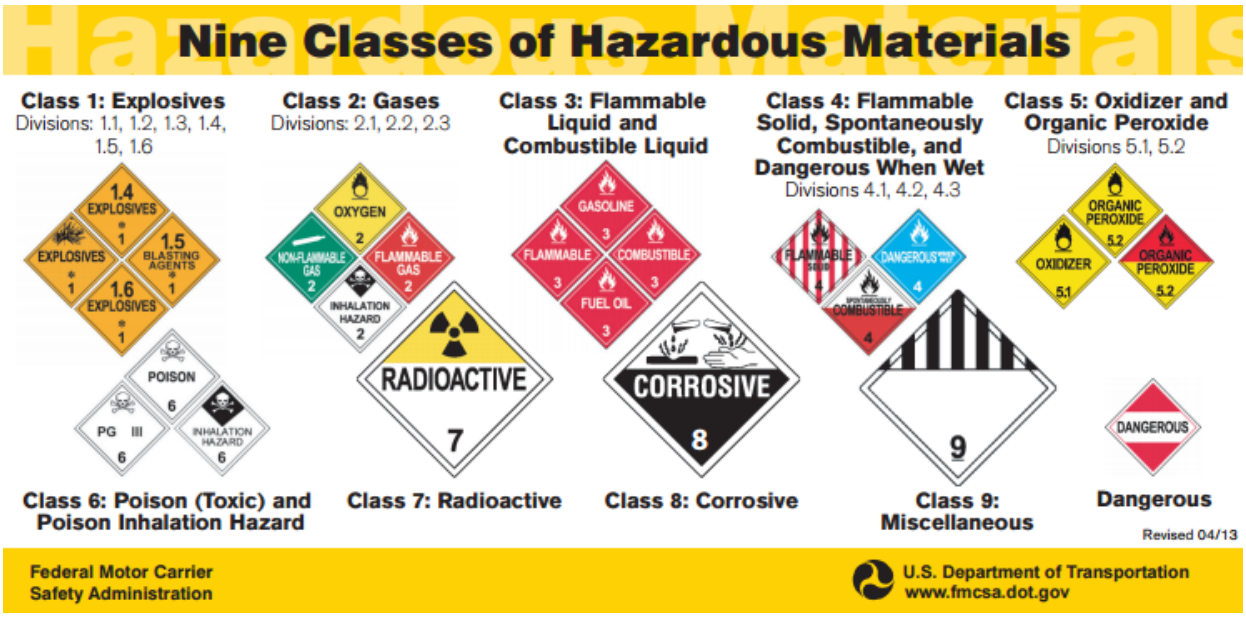
Figure 2: Population Density



1.3 Hazardous Materials

Hazardous material is defined as *any item or agent (biological, chemical, radiological, and/or physical), which has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors*[3]. There are nine classes of hazardous materials including Class 1: Explosives, Class 2: Gases, Class 3: Flammable Liquid and Combustible Liquid, Class 4: Flammable Solid, Spontaneously Combustible, and Dangerous When Wet, Class 5: Oxidizer and Organic Peroxide, Class 6: Poison (Toxic) and Poison Inhalation Hazard, Class 7: Radioactive, Class 8: Corrosive, and Class 9: Miscellaneous[4] (**Figure 3**).

Figure 3: Nine Classes of Hazardous Materials



The Hazardous Material Regulations (HMR) regulates the safe transportation of hazardous materials by setting requirements for classification, packaging, hazard communication, incident reporting, handling, and transportation[5]. The HMR are enforced by the U.S. Department of Transportation, Federal Aviation Administration, Federal Highway Administration, Federal Railway Administration, U.S. Coast Guard, U.S. Environmental Protection Agency, and state agencies. The U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration has set forth guidelines for hazardous material labeling and placarding (**Appendix B**). Additionally, the U.S. DOT mandates that placards be utilized when transporting hazardous materials

[3] http://www.ihmm.org/about-ihmm/what-are-hazardous-materials
[4] www.fmcsa.dot.gov
[5] http://ehs.okstate.edu/modules/dot/index.htm

and dangerous goods within the United States to warn of the presence of hazardous material. Examples of HAZMAT Placards can be seen in **Figure 3**.

1.4 Modes of Transportation

Hazardous materials can be transported by various modes including highway, rail, pipeline, air, or water. In 2012, the U.S. Department of Transportation along with the U.S. Department of Commerce conducted a hazardous materials commodity flow study for the United States. There were approximately 2,580,153 tons of hazardous materials transported across the County by all modes. Approximately 1,531,405 tons of hazardous material was transported by truck, making up 59.4 percent of the total. For rail, 110,998 tons of hazardous materials was transported, 4.3 percent of the total. It was also reported that only 261 tons of hazardous material was transported by air equaling less than 1 percent of the total tons transported by all modes. Moreover, 226,349 tons of HAZMAT was transported by inland water, 8.8 percent of the total. Lastly, 626,652 tons of hazardous materials or 24.3 percent of the total was transported by pipeline[6]. **Appendix C** illustrates data from the 2012 U.S. HMCFS.

For analysis, all modes of transportation except highway are excluded. The closest railroad to Highway 72 is the Burlington Northern Santa Fe, which runs parallel to I-44 (perpendicular to Highway 72) and should be included in the Interstate 44 HMCFS. Furthermore, according to the Missouri Spatial Data Information Service, there are two airports within Phelps and Dent Counties, Downtown Rolla and Salem Memorial, both are located less than three miles from Highway 72. Due to the miniscule amount of hazardous materials transported by air, FAA security regulations restricting public access to air freight data, and size of the airports transportation by air was excluded. Furthermore, the Meramec River is the only river to intersect 72 within the region and is not utilized for the transportation of hazardous materials (**Figure 1**). Lastly, the lack of data for pipelines prohibited analysis. However, 2015 incidents are summarized.

[6] http://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/ec12tcf-us-hm.pdf

1.5 Highway

State highways or routes were first designated within Missouri in 1922. Highway 72 was one of the original state highways, stretching between Centerville, MO and the Route 32 Junction. However since 1922 the Highway has been extended and widened. Within the MREPC region, Highway 72 primarily consists of two lanes, east and west bound. However, in certain areas of Rolla and Salem there are 4 lanes. The Highway spans approximately 49 miles, extending through two counties and three municipalities. The highway begins at the intersection of U.S. 63 within the City of Rolla (Phelps County) and extends southeast to the City of Salem (Dent County), merging with Highway 32. The Highway extends east, and diverges southeast again to the City of Bunker as it continues out of the region (**Figure 1**).

1.6 Pipelines

There are currently two pipelines in close proximity to 72 [7], owned and operated by MoGas LLC and NuStar. The MoGas Pipeline is a 6 inch steel line that feeds natural gas to the City of Salem. The pipeline is represented in **Figures 4** and **5** shown in blue, running parallel to 72. The maximum operating pressure (MOP) for the pipeline is 356 psi. The NuStar Pipeline is a 10 inch carbon steel line that runs approximately 2000 miles across 7 states. The pipeline starts near New Orleans, LA, and splits at the Hermann, MO pump station stretching to Indiana and Nebraska. The pipeline carries anhydrous ammonia and has a MOP of 1340 psi (average 500-600 psi). The pipeline intersects Highway 72 northwest of the City of Salem and can be seen in **Figures 4** and **5** in red. Both pipelines are marked with signs indicating emergency contact information and the type of pipeline/material it is carrying.

[7] https://www.npms.phmsa.dot.gov/

Figure 4: Phelps County Pipelines

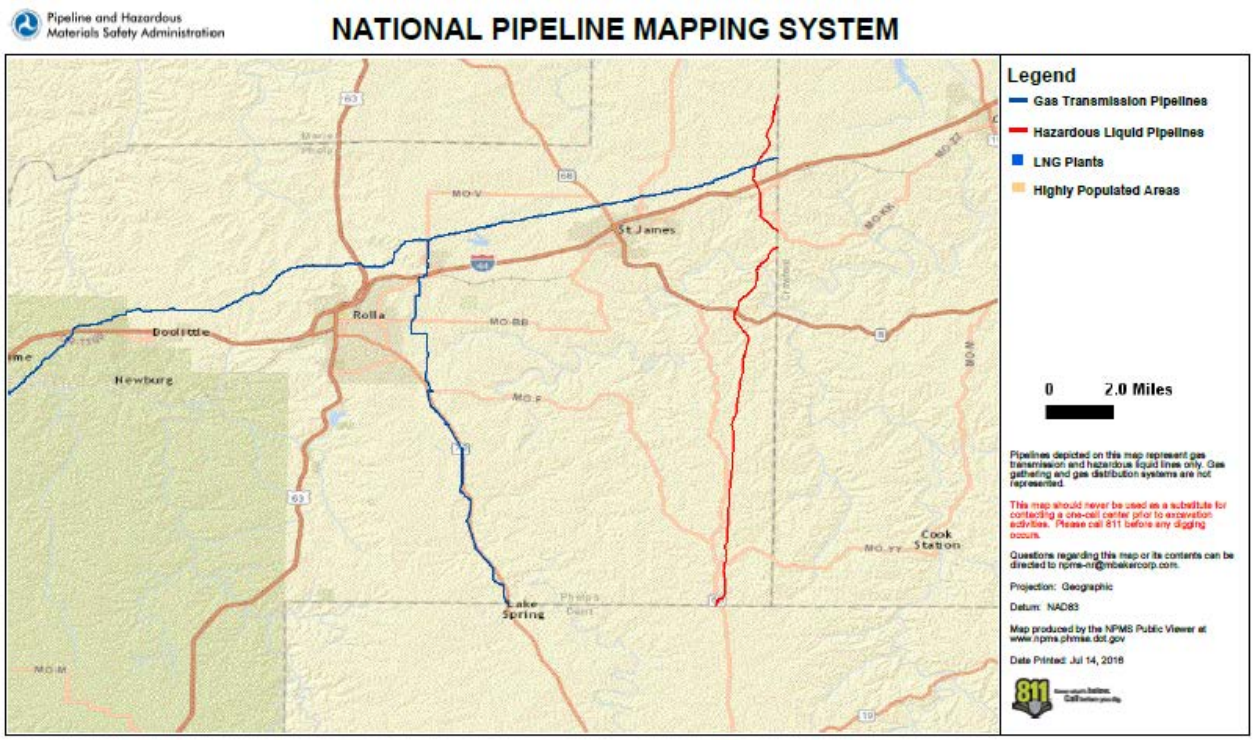
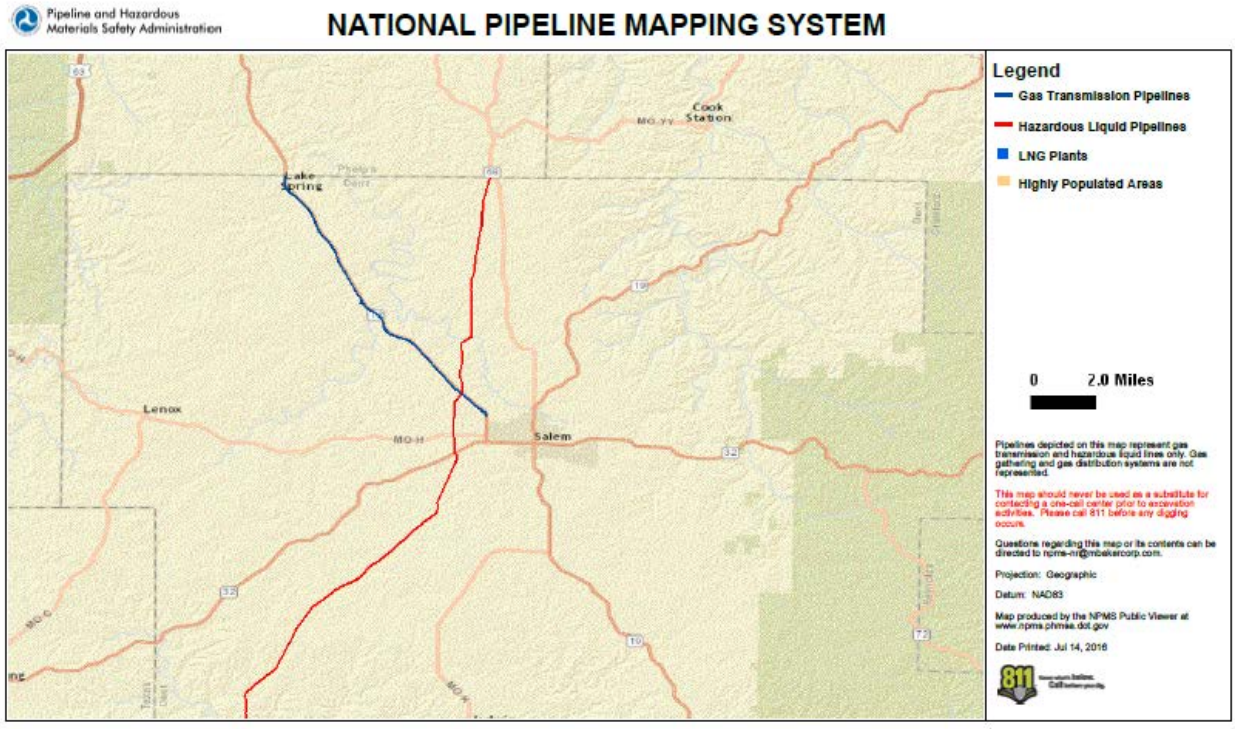


Figure 5: Dent County Pipelines



2.1 Incident History

According to the Missouri Department of Natural Resources' Missouri Environmental Emergency Response Tracking System, there have been seven recorded vehicular accidents involving hazardous materials along the Highway 72 corridor since 1997 (**Table 2**).

Table 2: Vehicular Accidents Involving Hazardous Materials

Incident Date	County	Incident Location	Incident Summary
8/6/1997	Dent	Three Miles north of Bunker along Hwy 72	Accident that resulted in the release of diesel fuel to the road ditch
1/8/1998	Phelps	6 Miles South of Route F and Hwy 72	A tractor trailer drove into a road ditch. The saddle tank was torn open on a culvert and the entire contents of the tank was released.
9/17/2002	Dent	Hwy 32 1.5 miles west of the Hwy 72 and 32 intersection	Report of the loss of asphalt sealer from a tanker truck.
1/11/2005	Phelps	17500 Hwy 72	Saddle Tank plug came out during the accident and fuel leaked to the right of way
4/18/2005	Dent	Hwy 72	Non-hazardous Slag Spill
5/7/2008	Dent	Hwy 72 Spring Lake Bridge	Accident involving a loss of diesel fuel down a ravine into a storm sewer.
9/26/2013	Dent	Hwy 32 (south of 72-32 Junction)	Overturned tanker-trailer resulted in leaking cryogenic liquid oxygen

DNR – Missouri Environmental Emergency Response Tracking System

In 2015 there were 325 significant pipeline incidents recorded in the United States, 28 of which were considered serious, including 10 fatalities and 49 injuries. Nine of the significant incidents occurred in Missouri, with 44.4 percent due to material/welding/equipment failure, 33.3 percent due to other outside force damage, and 22.2 percent due to all other causes[8].

[8] http://www.phmsa.dot.gov/pipeline/library/data-stats/pipelineincidenttrends

Fortunately, there have been no incidents reported for the MoGas Pipeline between Rolla and Salem. According to NuStar personnel, there has not been an incident reported near Highway 72 since at least 1997, if not before.

3.1 Analysis

The Missouri Department of Transportation (MoDOT) conducted traffic surveys of Highway 72 in 2015. There are twenty six highway segments, comprised of east and west bound lanes, which make up Highway 72 within the MREPC region. For the purpose of this study, east and west bound lanes within each segment were averaged together. **Appendix D** lists the segments.

Highway segments with the highest Annual Average Daily Traffic (AADT) include Highway 63 to Rucker Ave. (10,185), Rucker Ave. to Walnut (6,255), Jackson St. to Highway 19 (6,048), Walnut to Highway O (5,721), Highway HH to Jackson St. (5,626), and Highway 19 to Doss Rd. (5,661).

To determine the Annual Average Daily Traffic (AADT) for the entire corridor within the MREPC region, all highway segments were averaged together for an AADT of 2,825; which includes all modes of highway transportation (passenger car, motorcycle, bus, and truck). The Annual Average Weekday Traffic (AAWDT) was 2,958. The Peak Travel Hour on 72 varied by segment, however 5:00 pm was the time that appeared most often (mode). The averaged Peak Hour Volume for the entire corridor was 252.

For the entire corridor an average of 730 PU/panel trucks, 106 single unit trucks, and 227 combination semi-trailers travel Highway 72 on a daily basis, equaling 1,063 trucks with the potential to be transporting some type of hazardous materials.

According to the U.S. DOT, 7 percent of trucks carrying all commodities were associated with the transportation of hazardous materials[9]. When applied to the truck traffic on the 72 corridor, an estimated 74 trucks are carrying some type of hazardous material on a daily basis.

Furthermore, the 2012 U.S. HMCFS analyzed hazardous material shipment characteristics by hazard class and mode of transportation. Truck ton-miles provided for each hazard class were calculated as a percent of the truck ton-miles shipped (**Table 3**).

[9] http://ops.fhwa.dot.gov/publications/fhwahop08058/20.htm

Table 3: Hazardous Material Shipment Characteristics by Hazard Class for the U.S	
Hazard Class	**Tons (Percent)**
2012	
Total	**100.00**
Class 1	0.96
Class 2	14.19
Class 3	59.76
Class 4	1.06
Class 5	2.07
Class 6	0.67
Class 7	0.03
Class 8	14.53
Class 9	6.69

Source: 2012 US Hazardous Material Commodity Flow Study

Utilizing the data above, and if 74 trucks are carrying hazardous materials on Highway 72 on a daily basis, then the following represents the number of trucks transporting each hazard class daily (**Table 4**).

Table 4: Number of Trucks Transporting Each Hazard Class	
Hazard Class	**Number of Trucks**
Total	**74 Trucks**
Class 1	0.71
Class 2	10.5
Class 3	44.22
Class 4	0.78
Class 5	1.53
Class 6	0.49
Class 7	0.02
Class 8	10.75
Class 9	4.95

Source: 2012 US Hazardous Material Commodity Flow Study

According to **Table 4,** 44 out of 74 trucks transporting hazardous materials on Highway 72 are carrying Hazard Class 3 materials (Flammable and Combustible Liquids). It is also estimated that the second highest amount of hazardous materials transported belongs to Hazard Class 8, with Hazard Class 2 coming in at third.

In comparison, based on the 2002 Vehicle Inventory and Use Survey, a total of 2.3 percent of U.S. miles are driven by trucks while requiring a Class 3 placard. According to the 2007 U.S. HMCFS, Hazard Class 3 corresponds to 4.2 percent of all truck ton-

miles shipped for all commodities. Using these estimates and assuming that all trucks on the roadway section are driven the same distance through the jurisdiction, Highway 72 might expect to have between 24 and 45 trucks per day with a Hazard Class 3 Flammable Liquids placard on the highway segment[10].

3.2 Field Observation

On August 9th, 2016 (10:30 am to 3:00 pm) and August 25th, 2016 (8:00 am to 10:30 am; 3:00 pm to 6:00 pm) field observations were conducted at the intersection of Highway O and 72, one of Highway 72's highest traveled segments. Truck counts and placard data were collected from 8:00 am to 6:00 pm over the course of two days. Survey sheets can be found in **Appendix E.** There were approximately 295 trucks that traveled 72, of which 142 were traveling west bound and 153 were traveling east bound. Of the 295 trucks, 28 displayed a hazardous material placard, or 9.49 percent which is higher than the national average.

Of the 28 trucks displaying a hazardous material placard seventeen were Hazard Class 2, twelve were Hazard Class 3, and two were Hazard Class 6. Three of the trucks were displaying two placards. In comparison with national statistics, Hazard Class 2 placards were observed in higher proportion than anticipated. One would expect Hazard Class 3 placards to be of the highest abundance.

Furthermore, 29.5 trucks per hour were observed at the intersection. In comparison with MoDOT data, approximately 44 trucks per hour were expected. Human error, small sample size, and timing could be the reason for the discrepancy. Other reasons for the variance from national averages could be due to the rural nature of the area; the limited number of manufacturers/end users on the corridor; and the existence of a number of lead mines on the corridor with unique industry needs.

3.3 Incidents

According to the U.S. DOT the majority of hazardous material related incidents occur on highways or in terminals. The majority of incidents that occur are due to human error. However, a small percentage of incidents are related to vehicular crashes[11].

In 2014 it was reported that 3 percent of large trucks involved in fatal crashes were transporting some type of hazardous materials, 2.6 percent resulted in injury, and 2.4 percent were considered towaway crashes. There were 35 fatal crashes that resulted in the release of a hazardous material, and 425 non-fatal crashes that resulted in the

[10] Hazardous Materials Cooperative Research Program, Report 3

[11] http://ops.fhwa.dot.gov/freight/freight_analysis/nat_freight_stats/docs/13factsfigures/table5_04.htm

release of a hazardous material. Hazard Class 3 materials comprised the largest percent of hazardous materials released[12].

Furthermore, according to the Federal Motor Carrier Safety Administration, a 20 mile interstate segment with an estimated 2000 trucks per day should expect approximately 26 or more truck accidents per year. When applied to Highway 72, there potentially could be 26 or more wrecks within the 49 mile stretch each year. If 7 percent of the 26 wrecks are carrying hazardous materials, then two HAZMAT related incidents should be expected[13].

4.1 Conclusion

The MREPC region is continually vulnerable to HAZMAT related incidents, stationary or in transit. The accidental release of hazardous materials poses risks to life, property, and the environment. This commodity flow study illustrates estimates of the movement of hazardous materials along with Highway 72 corridor. Comparisons were made for national, state, and local statistics. Approximately 1,063 trucks travel the 72 corridor each day, with an estimated 74 trucks carrying hazardous materials. The majority of the trucks are anticipated to transport Hazard Class 3 materials, however field observations were contradictory to the data, suggesting that on this particular stretch of highway, Class 2 HAZMAT may be more common. Likewise, two HAZMAT related vehicular incidents should be anticipated each year.

In addition to the Highway, the corridor is paralleled and intersected by two pipelines. Fortunately, there have not been incidents reported, yet future incidents are possible.

4.2 Response Assets

There are four fire departments/districts within the MREPC region that have jurisdiction over Highway 72 including the Rolla Fire & Rescue Department, Rolla Rural Fire Protection District, Dent County Fire Protection District, and Bunker Volunteer Fire Department. Rolla Fire & Rescue is staffed full time, while Dent County Fire Protection District's Fire Chief is the only full time personnel. The other departments are comprised of volunteer staff. Excluding Rolla Fire & Rescue, most personnel along the corridor are trained to the operations level and have access to basic equipment. Rolla Fire & Rescue has added capabilities including the Homeland Security Response Team (HSRT). Within the HSRT, a specialized team is trained and equipped specifically for HAZMAT response. Furthermore, the Rolla Fire & Rescue Department has a statewide mutual aid agreement and can deploy assets anywhere within the State.

[12] https://www.fmcsa.dot.gov/safety/data-and-statistics/large-truck-and-bus-crash-facts-2014

[13] Hazardous Materials Cooperative Research Program, Report 3

4.3 Critical Facilities

Critical facilities are important to identify along the Highway 72 corridor. During an incident, critical facilities and personnel play a crucial role throughout the emergency response, management, and recovery phases. Critical facilities typically include law enforcement headquarters, fire stations, hospitals, emergency management offices, and asset facilities. These facilities should be given special consideration when formulating emergency response plans (**Appendix F**).

4.4 Special Evacuation Needs

Another important aspect of a HMCFS is to locate nearby facilities that house special populations. During the event of a HAZMAT related incident, certain facilities need added responsiveness including schools, childcare facilities, and nursing homes. Individuals attending or residing at the facilities include adolescents and elderly, who will require evacuation assistance. **Appendix G** depicts special evacuation needs along the Highway 72 corridor.

Appendix A: References

1. U.S. Census Bureau 2010-2014 5-Year ACS Estimates

2. U.S. Census Bureau, 2002 Vehicle Inventory and Use Survey

3. Bierling, H., Rogers, G.O., and Jasek, D.L., 2011, Hazardous Materials Cooperative Research Program, Report 3, Guidebook for Conducting Local Hazardous Materials Commodity Flow Studies

4. Missouri Emergency Response Commission

5. Institute of Hazardous Materials Management

6. Federal Motor Carrier Safety Administration

7. Oklahoma State University, EHS Safety Training, HAZMAT Transportation

8. U.S. Department of Transportation, Office of the Assistant Secretary for Research and Technology, Bureau of Transporation Statistics

9. National Pipeline Mapping System

10. U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration

11. U.S. Department of Transportation, Federal Highway Adminsitration

12. Missouri Department of Transportation

13. 2016 Emergency Response Guidebook

14. 2015 Springfield – Greene County Hazardous Materials Flow Study

15. 2015 Meramec Region Hazardous Materials Emergency Plan

Appendix B: Placarding Guidelines

General Guidelines on Use of Warning Labels and Placards

LABELS

See 49 CFR, Part 172, Subpart E, for complete labeling regulations.

- The Hazardous Materials Table [§172.101, Col. 6] identifies the proper label(s) for the hazardous material listed.
- Any person who offers a hazardous material for transportation MUST label the package, if required [§172.400(a)].
- Labels may be affixed to packages when not required by regulations, provided each label represents a hazard of the material contained in the package [§172.401].
- For labeling mixed or consolidated packages, see §172.404.
- The appropriate hazard class or division number must be displayed in the lower corner of a primary and subsidiary hazard label [§172.402(b)].
- For classes 1,2,3,4,5,6, and 8, text indicating a hazard (e.g., "CORROSIVE") is NOT required on a primary or subsidiary label. The label must otherwise conform to Subpart E of Part 172 [§172.405].
- Labels must be printed on or affixed to the surface of the package near the proper shipping name marking [§172.406(a)].
- When primary and subsidiary labels are required, they must be displayed next to each other [§172.406(c)].
- For a package containing a Division 6.1, PG III material, the POISON label specified in §172.430 may be modified to display the text PG III instead of POISON or TOXIC. Also see §172.405(c).
- The ORGANIC PEROXIDE label [§172.427] indicates that organic peroxides are highly flammable. Use of the ORGANIC PEROXIDE label eliminates the need for a flammable liquid subsidiary label. The color of the border must be black and the color of the flame may be black or white.

PLACARDS

See 49 CFR, Part 172, Subpart F, for complete placarding regulations.

- Each person who offers for transportation or transports any hazardous material subject to the Hazardous Materials Regulations must comply with all applicable requirements of Subpart F [§172.500].
- Placards may be displayed for a hazardous material, even when not required, if the placarding otherwise conforms to the requirements of Subpart F of Part 172 [§172.502(c)].
- For other than Class 7 or the DANGEROUS placard, text indicating a hazard (e.g., "FLAMMABLE") is not required. Text may be omitted from the OXYGEN placard only if the specific ID number is displayed on the placard [§172.519(b)(3)].
- For a placard corresponding to the primary or subsidiary hazard class of a material, the hazard class or division number must be displayed in the lower corner of the placard [§172.519(b)(4)].
- Except as otherwise provided, any bulk packaging, freight container, unit load device, transport vehicle or rail car containing any quantity of material listed in Table 1 must be placarded [§172.504].
- When the aggregate gross weight of all hazardous materials in non-bulk packages covered in Table 2 is less than 454 kg (1,001 lbs), no placard is required on a transport vehicle or freight container when transported by highway or rail [§172.504(c)].
- Notes: See §172.504(f)(10) for placarding Division 6.1, PG III materials.
- Placarded loads require registration with USDOT. See §107.601 for registration regulations.
- The new ORGANIC PEROXIDE placard became mandatory 1 January 2011 for transportation by rail, vessel, or aircraft and becomes mandatory 1 January 2014 for transportation by highway. The placard will enable transport workers to readily distinguish peroxides from oxidizers [§172.552].

PLACARDING TABLES

[§172.504(e)]

TABLE 1

Category of material (Hazard Class or division number and additional description, as appropriate)	Placard name
1.1	EXPLOSIVES 1.1
1.2	EXPLOSIVES 1.2
1.3	EXPLOSIVES 1.3
2.3	POISON GAS
4.3	DANGEROUS WHEN WET
5.2 (Organic peroxide, Type B, liquid or solid, temperature controlled)	ORGANIC PEROXIDE
6.1 (Materials poisonous by inhalation (see §171.8))	POISON INHALATION HAZARD
7 (Radioactive Yellow III label only)	RADIOACTIVE[1]

[1] RADIOACTIVE placard also required for exclusive use shipments of low specific activity material and surface contaminated objects transported in accordance with §173.427(b)(4) and (5) or (c) of the subchapter.

TABLE 2

Category of material (Hazard Class or division number and additional description, as appropriate)	Placard name
1.4	EXPLOSIVES 1.4
1.5	EXPLOSIVES 1.5
1.6	EXPLOSIVES 1.6
2.1	FLAMMABLE GAS
2.2	NON-FLAMMABLE GAS
3	FLAMMABLE
Combustible Liquid	COMBUSTIBLE
4.1	FLAMMABLE SOLID
4.2	SPONTANEOUSLY COMBUSTIBLE
5.1	OXIDIZER
5.2 (Other than organic peroxide, Type B, liquid or solid, temperature controlled)	ORGANIC PEROXIDE
6.1 (Other than materials poisonous by inhalation)	POISON
6.2	(None)
8	CORROSIVE
9	Class 9 (See §172.504(f)(9))
ORM-D	(None)

IDENTIFICATION NUMBER DISPLAYS

§172.332

Appropriate placard must be used with orange panel.

IDENTIFICATION NUMBER MARKINGS ON ORANGE PANELS OR APPROPRIATE PLACARDS MUST BE DISPLAYED ON: (1) Tank Cars, Cargo Tanks, Portable Tanks, and other Bulk Packagings; (2) Transport vehicles or freight containers containing 4,000 kg (8,820 lbs) in non-bulk packages of only a single hazardous material having the same proper shipping name and identification number loaded at one facility and transport vehicle contains no other material, hazardous or otherwise; and (3) transport vehicles or freight containers containing 1,000 kg (2,205 lbs) of non-bulk packages of materials poisonous by inhalation in Hazard Zone A or B. See §§172.301(a)(3), 172.313(c), 172.326, 172.328,172.330, and 172.331.

§172.527

Square white background required for placard for highway route controlled quantity radioactive material and for rail shipment of certain explosives and poisons, and for flammable gas in a DOT 113 tank car (§172.507 and §172.510).

This Chart is available online at the following link:
http://phmsa.dot.gov/hazmat

U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration

USDOT/PHMSA/OHMIT/PHH-50
1200 New Jersey Avenue, SE
Washington, D.C. 20590
Phone: (202) 366-4900
Email: training@dot.gov

PHH50-0138-0413

Appendix C: 2012 HMCFS Data

Table 1b.
Hazardous Material Shipment Characteristics by Mode of Transportation for the United States: 2012 and 2007

[Estimates are based on data from the 2012 and 2007 Commodity Flow Surveys. Because of rounding, estimates may not be additive]

Mode of transportation	Value			Tons			Ton-miles[1]			Average miles per shipment		
	2012 (million dollars)	2007 (million dollars)	Percent change	2012 (thousands)	2007 (thousands)	Percent change	2012 (millions)	2007 (millions)	Percent change	2012	2007	Percent change
All modes	**2,334,425**	**1,448,218**	**61.2**	**2,580,153**	**2,231,133**	**15.6**	**307,524**	**323,457**	**–4.9**	**114**	**96**	**19.2**
Single modes	**2,304,743**	**1,370,615**	**68.2**	**2,552,868**	**2,111,622**	**20.9**	**275,628**	**279,105**	**–1.2**	**68**	**65**	**4.7**
Truck[2]	1,466,021	837,074	75.1	1,531,405	1,202,825	27.3	96,559	103,997	–7.2	56	59	–3.9
For-hire truck	870,893	358,792	142.7	882,288	495,077	78.2	62,018	63,288	–2.0	150	214	–29.9
Private truck	595,128	478,282	24.4	649,117	707,748	–8.3	34,541	40,709	–15.2	33	32	2.4
Rail	79,222	69,213	14.5	110,988	129,743	–14.5	84,850	92,169	–7.9	808	578	39.8
Water	217,816	69,186	214.8	283,561	149,794	89.3	54,902	37,064	48.1	212	383	–44.5
Inland water	170,595	57,022	199.2	226,349	124,396	82.0	27,636	22,411	23.3	S	S	S
Great Lakes	0	S	S	0	S	S	0	S	S	0	S	S
Deep sea	35,570	11,626	205.9	45,001	24,181	86.1	18,359	13,767	33.4	854	861	–0.8
Multiple waterways	11,651	X	X	12,210	X	X	8,907	X	X	S	X	X
Air (includes truck and air)	4,380	1,735	152.5	261	S	S	271	S	S	1,120	1,095	2.3
Pipeline[3]	537,304	393,408	36.5	626,652	628,905	–0.4	S	S	S	S	S	S
Multiple modes	**29,682**	**71,069**	**–58.2**	**27,285**	**111,022**	**–75.4**	**31,896**	**42,886**	**–25.6**	**654**	**834**	**–21.6**
Parcel, U.S. Postal Service, or courier	10,294	7,675	34.1	305	236	29.2	178	151	17.7	650	836	–22.2
Truck and rail	13,338	7,052	89.1	16,992	11,706	45.2	16,577	10,120	63.8	954	779	22.5
Truck and water	S	23,451	S	S	36,588	S	S	12,380	S	1,181	1,010	17.0
Rail and water	2,474	5,153	–52.0	4,589	5,742	–20.1	1,377	2,937	–53.1	S	1,506	S
Other multiple modes	0	27,739	–100.0	0	56,750	–100.0	0	17,297	–100.0	0	233	–100.0
Other modes	**0**	**6,534**	**–100.0**	**0**	**8,489**	**–100.0**	**0**	**1,466**	**–100.0**	**0**	**58**	**–100.0**

S Withheld because estimate did not meet publication standards.
X Not applicable.
[1] Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.
[2] "Truck" as a single mode includes shipments that were made by only private truck or only for-hire truck.
[3] Estimates for pipeline exclude shipments of crude petroleum (SCTG 16).
Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design and definitions. Links to this information on the Internet may be found at <www.census.gov/econ/cfs>.

Table 2a.
Hazardous Material Shipment Characteristics by Hazard Class for the United States: 2012

[Estimates are based on data from the 2012 Commodity Flow Survey. Because of rounding, estimates may not be additive]

Hazard class and description	Value		Tons		Ton-miles[1]		Average miles per shipment
	2012 (million dollars)	Percent of total	2012 (thousands)	Percent of total	2012 (millions)	Percent of total	
Total	**2,334,425**	**100.0**	**2,580,153**	**100.0**	**307,524**	**100.0**	**114**
Class 1, Explosives	18,397	0.8	4,045	0.2	1,012	0.3	840
Class 2, Gases	125,054	5.4	164,794	6.4	33,157	10.8	57
Class 3, Flammable and combustible liquid	2,016,681	86.4	2,203,490	85.4	204,573	66.5	93
Class 4, Flammable solid; spontaneously combustible material; dangerous when wet material	5,415	0.2	11,321	0.4	5,804	1.9	565
Class 5, Oxidizers and organic peroxides	7,562	0.3	12,025	0.5	5,479	1.8	437
Class 6, Toxic materials and infectious substances	15,196	0.7	7,612	0.3	3,607	1.2	513
Class 7, Radioactive material	12,288	0.5	S	S	39	Z	34
Class 8, Corrosive material	75,850	3.2	125,287	4.9	37,784	12.3	264
Class 9, Miscellaneous hazardous material	57,981	2.5	51,006	2.0	16,068	5.2	530

S Withheld because estimate did not meet publication standards.
Z Rounds to zero.
[1] Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.
Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design and definitions. Links to this information on the Internet may be found at <www.census.gov/econ/cfs>.

Table 4.
Hazardous Versus Nonhazardous Material Shipment Characteristics by Mode of Transportation for the United States: 2012

[Estimates are based on data from the 2012 Commodity Flow Survey. Because of rounding, estimates may not be additive]

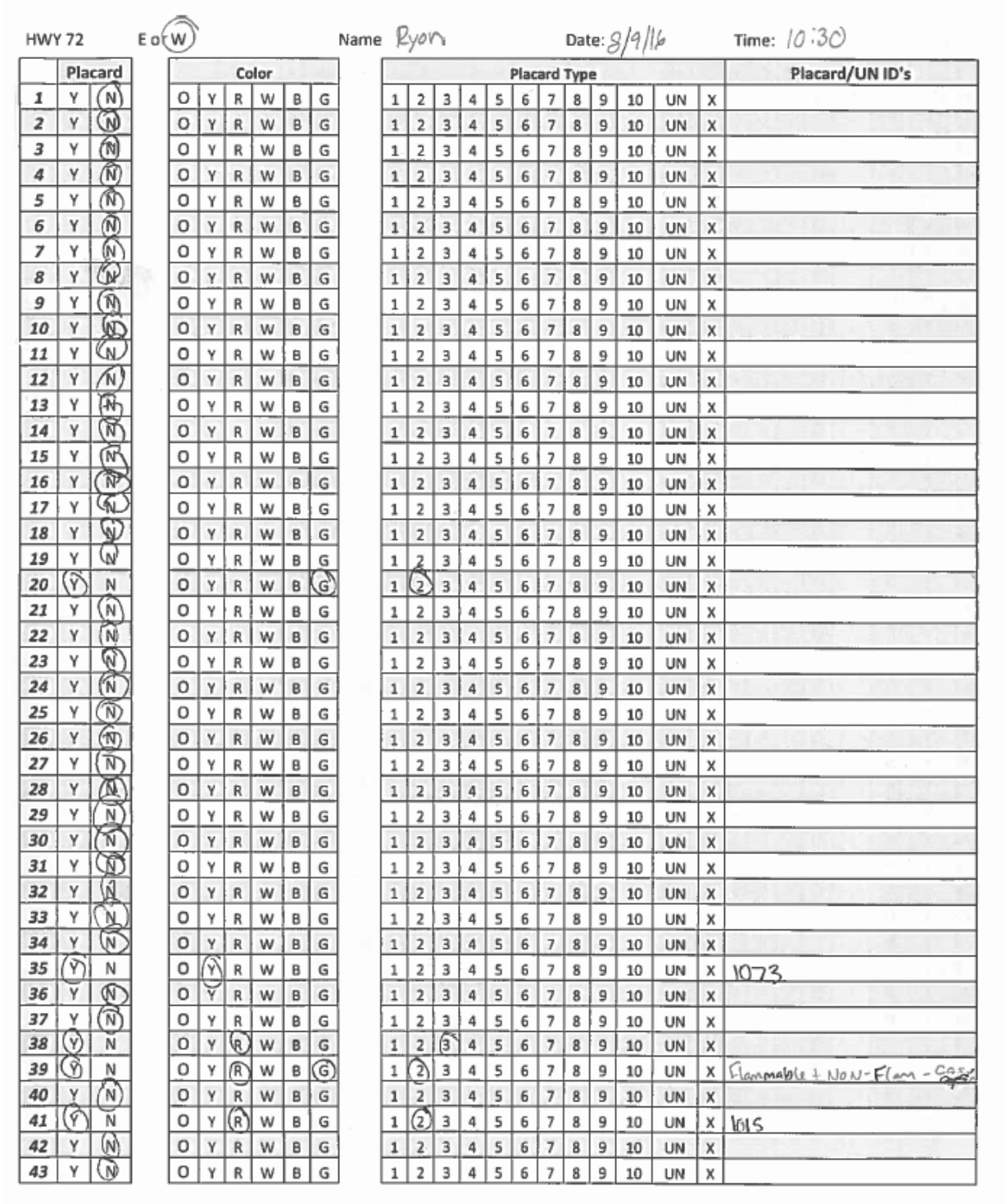
Mode of transportation	Tons					Ton-miles[1]				
		Hazardous		Nonhazardous			Hazardous		Nonhazardous	
	Total (thousands)	2012 (thousands)	Percent of total	2012 (thousands)	Percent of total	Total (thousands)	2012 (millions)	Percent of total	2012 (millions)	Percent of total
All modes	**11,299,409**	**2,580,153**	**22.8**	**8,719,256**	**77.2**	**2,969,506**	**307,524**	**10.4**	**2,661,982**	**89.6**
Single modes	**10,905,518**	**2,552,868**	**23.4**	**8,352,651**	**76.6**	**2,697,418**	**275,628**	**10.2**	**2,421,790**	**89.8**
Truck[2]	8,060,166	1,531,405	19.0	6,528,761	81.0	1,247,717	96,559	7.7	1,151,158	92.3
For-hire truck	4,298,693	882,288	20.5	3,416,405	79.5	1,050,942	62,018	5.9	988,924	94.1
Private truck	3,761,472	649,117	17.3	3,112,355	82.7	196,775	34,541	17.6	162,234	82.4
Rail	1,628,537	110,988	6.8	1,517,549	93.2	1,211,481	84,850	7.0	1,126,631	93.0
Water	575,996	283,561	49.2	292,435	50.8	192,866	54,902	28.5	137,964	71.5
Inland water	424,542	226,349	53.3	198,192	46.7	118,742	27,636	23.3	91,106	76.7
Great Lakes	31,403	0	0.0	31,403	100.0	10,959	0	0.0	10,959	100.0
Deep sea	72,987	45,001	61.7	27,985	38.3	22,130	18,359	83.0	3,771	17.0
Multiple waterways	47,064	12,210	25.9	34,854	74.1	41,035	8,907	21.7	32,127	78.3
Air (includes truck and air)	4,845	261	5.4	4,583	94.6	5,810	271	4.7	5,540	95.3
Pipeline[3]	635,975	626,652	98.5	9,323	1.5	S	S	S	S	S
Multiple modes	**357,047**	**27,285**	**7.6**	**329,762**	**92.4**	**271,832**	**31,896**	**11.7**	**239,936**	**88.3**
Parcel, U.S. Postal Service, or courier	28,490	305	1.1	28,185	98.9	22,716	178	0.8	22,538	99.2
Truck and rail	213,814	16,992	7.9	196,822	92.1	169,524	16,577	9.8	152,947	90.2
Truck and water	56,720	S	S	51,322	90.5	48,568	S	S	34,805	71.7
Rail and water	55,570	4,589	8.3	50,981	91.7	29,170	1,377	4.7	27,793	95.3
Other multiple modes	2,452	0	0.0	2,452	100.0	1,853	0	0.0	1,853	100.0
Other modes	**36,844**	**0**	**0.0**	**36,844**	**100.0**	**256**	**0**	**0.0**	**256**	**100.0**

S Withheld because estimate did not meet publication standards.
[1] Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.
[2] "Truck" as a single mode includes shipments that were made by only private truck or only for-hire truck.
[3] Estimates for pipeline exclude shipments of crude petroleum (SCTG 16).
Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design and definitions. Links to this information on the Internet may be found at <www.census.gov/econ/cfs>.

Appendix D: Highway 72 Segments (MoDOT)

1. Highway 63 to Rucker Ave.
2. Rucker Ave. to Walnut
3. Walnut to Highway O
4. Highway O to Lions Club Dr.
5. Lions Club Dr. to Highway F
6. Highway F to the Dent Co. line
7. Dent Co. line to Highway FF
8. Highway FF to Highway C
9. Highway C to Highway J
10. Highway J to Highway H
11. Highway H to 32 Junction
12. 32 Junction to Highway HH
13. Highway HH to Jackson St.
14. Jackson St. to Highway 19
15. Highway 19 to Doss Rd.
16. Doss Rd. to Craig Industrial Dr.
17. Craig Industrial Dr. to Highway P
18. Highway P to Highway EE/W
19. Highway EE/W to Highway MM
20. Highway MM to 32/72 Junction
21. 32/72 Junction to Highway B
22. Highway B to Reynolds Co. line
23. Small segment in Dent. Co.
24. Dent Co. line to Highway PP
25. Highway PP to Highway UU
26. Highway UU to Reynolds Co. Line

Appendix E: Field Observation Surveys



HWY 72 E or (W) Name Ryan Date: 8/9/16 Time: 10:30

	Placard		Color						Placard Type												Placard/UN ID's
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2	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
3	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
4	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
5	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
6	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
7	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
8	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
9	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
10	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
11	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
12	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
13	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
14	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
15	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
16	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
17	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
18	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
19	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
20	(Y)	N	(O)	Y	R	W	B	(G)	1	(2)	3	4	5	6	7	8	9	10	UN	X	
21	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
22	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
23	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
24	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
25	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
26	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
27	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
28	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
29	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
30	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
31	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
32	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
33	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
34	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
35	(Y)	N	(O)	(Y)	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	1073
36	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
37	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
38	(Y)	N	(O)	Y	(R)	W	B	G	1	2	(3)	4	5	6	7	8	9	10	UN	X	
39	(Y)	N	(O)	Y	(R)	W	B	(G)	1	(2)	3	4	5	6	7	8	9	10	UN	X	Flammable + Non-Flam - Corr
40	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
41	(Y)	N	(O)	Y	(R)	W	B	G	1	(2)	3	4	5	6	7	8	9	10	UN	X	1015
42	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
43	Y	(N)	(O)	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	

HWY 72 E or W Name Date: Time:

44	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
45	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
46	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
47	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
48	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
49	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
50	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
51	Y	(N)	O	Y	(R)	W	B	G	1	(2)	3	4	5	6	7	8	9	10	UN	X	2 +2 Flow+ Non Flow			
52	(Y)	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
53	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
54	(Y)	N	O	Y	(R)	W	B	G	1	2	(3)	4	5	6	7	8	9	10	UN	X	1993			
55	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
56	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
57	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
58	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
59	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
60	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
61	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
62	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
63	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
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66	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
67	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
68	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
69	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
70	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
71	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
72	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
73	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
74	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
75	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
76	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
77	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
78	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
79	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
80	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
81	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
82	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
83	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
84	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				
85	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X				

HWY 72 E or W Name Date: 8/9 6 Time: 10 30

	Placard		Color						Placard Type												Placard/UN ID's
1	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
2	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
3	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
4	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
5	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
6	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
7	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
8	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
9	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	2291
10	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	2291
11	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
12	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
13	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
14	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
15	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
16	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
17	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
18	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
19	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
20	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
21	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	1993
22	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
23	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
24	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
25	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
26	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
27	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
28	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
29	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	Carnitors Praxair
30	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
31	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
32	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
33	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
34	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
35	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
36	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
37	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
38	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
39	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
40	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
41	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
42	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
43	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	

HWY 72	E or W of Mine	Name	Date:	Time:

44	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	Wall to Lubrizol
45	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
46	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
47	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
48	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
49	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
50	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
51	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
52	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
53	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
54	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
55	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	MFA Trailer 2
56	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	Asphalt Tanker
57	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
58	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	1072
59	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
60	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
61	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	1075
62	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
63	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
64	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
65	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
66	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
67	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
68	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
69	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
70	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
71	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
72	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
73	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
74	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
75	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
76	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
77	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
78	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
79	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
80	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
81	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
82	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
83	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
84	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	
85	Y	N	O Y R W B G	1 2 3 4 5 6 7 8 9 10 UN X	

HWY 72 (E) or W Name Ryan Date: 8/25 Time: 8:00 - 10:30, 3:00 - 6:00

	Placard		Color						Placard Type												Placard/UN ID's
86	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
87	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
88	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
89	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
90	(Y)	N	O	Y	(R)	W	B	G	1	(2)	3	4	5	6	7	8	9	10	UN	X	1203
91	Y	(N)	O	Y	R	W	B	G	1	(2)	3	4	5	6	7	8	9	10	UN	X	
92	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
93	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
94	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
95	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
96	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
97	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
98	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
99	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
100	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
101	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
102	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
103	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
104	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
105	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
106	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
107	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
108	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
109	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
110	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
111	(Y)	N	O	Y	(R)	W	B	G	1	(2)	3	4	5	6	7	8	9	10	UN	X	1075
112	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
113	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
114	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
115	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
116	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
117	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
118	(Y)	N	O	Y	(R)	W	B	G	1	2	(3)	4	5	6	7	8	9	10	UN	X	
119	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
120	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
121	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
122	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
123	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
124	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
125	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
126	Y	(N)	O	Y	(R)	W	B	G	1	2	(3)	4	5	6	7	8	9	10	UN	X	
127	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
128	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	

HWY 72 E or W Name Date: Time:

129	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
130	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
131	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
132	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
133	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
134	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
135	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
136	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
137	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
138	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
139	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
140	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
141	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
142	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
143	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
144	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	3:00
145	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
146	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
147	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
148	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
149	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
150	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
151	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
152	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	1993
153	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
154	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
155	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
156	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
157	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
158	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
159	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
160	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
161	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
162	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
163	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
164	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
165	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	1203
166	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
167	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
168	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
169	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
170	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	

HWY 72 (E) or W Name Date: Time:

	Placard		Color						Placard Type												Placard/UN ID's
171	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
172	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
173	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
174	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
175	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
176	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
177	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
178	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
179	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
180	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
181	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
182	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
183	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
184	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
185	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
186	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
187	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
188	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
189	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
190	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
191	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
192	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
193	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
194	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
195	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
196	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
197	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
198	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
199	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
200	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
201	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
202	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
203	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
204	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
205	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
206	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
207	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
208	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
209	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
210	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
211	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
212	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
213	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	

HWY 72 E or W Name Date: Time:

214	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
215	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
216	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
217	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
218	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
219	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
220	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
221	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
222	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
223	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
224	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
225	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
226	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
227	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
228	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
229	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
230	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
231	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
232	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
233	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
234	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
235	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
235	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
237	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
238	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
239	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
240	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
241	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
242	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
243	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
244	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
245	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
246	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
247	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
248	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
249	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
250	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
251	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
252	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
253	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
254	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
255	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			

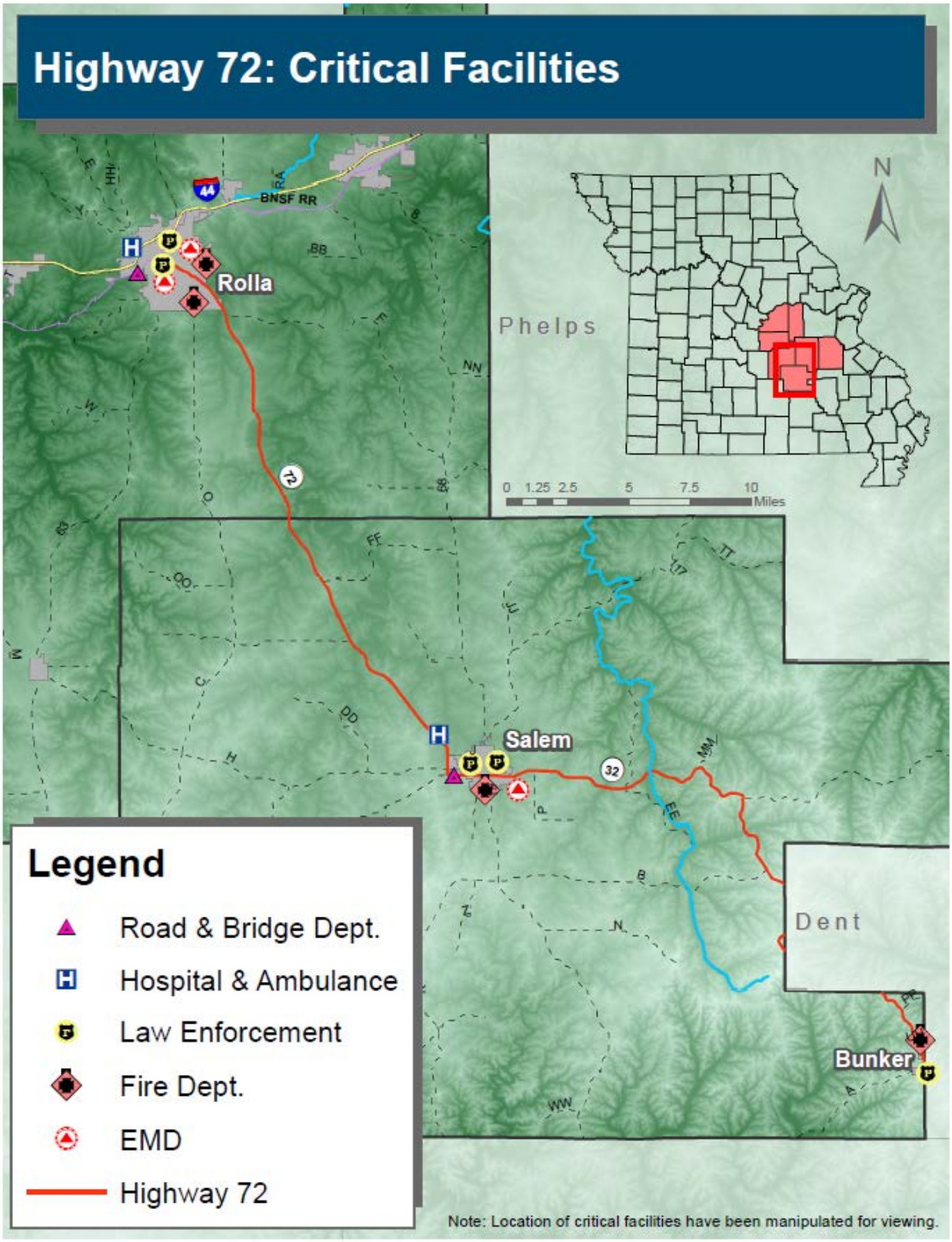
HWY 72 E or (W) Name Ryan Date: 8/25 Time: 8:00 - 10:30, 3:00 - 6:00

	Placard		Color						Placard Type												Placard/UN ID's
86	(Y)	N	O	Y	(R)	W	B	G	1	(2)	3	4	5	6	7	8	9	10	UN	X	1075
87	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
88	(Y)	N	O	Y	R	W	B	(G)	1	(2)	3	4	5	6	7	8	9	10	UN	X	2187
89	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
90	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
91	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
92	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
93	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
94	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
95	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
96	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
97	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
98	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
99	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
100	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
101	(Y)	N	O	Y	(R)	W	B	G	1	(2)	3	4	5	6	7	8	9	10	UN	X	Propane
102	(Y)	N	O	Y	(R)	W	B	G	1	(2)	3	4	5	6	7	8	9	10	UN	X	
103	Y	(N)	O	Y	R	W	B	G	1	(2)	3	4	5	6	7	8	9	10	UN	X	1075
104	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
105	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
106	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
107	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
108	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
109	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
110	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
111	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
112	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
113	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
114	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
115	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
116	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
117	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
118	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
119	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
120	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
121	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
122	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
123	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
124	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
125	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
126	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
127	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	
128	Y	(N)	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	

HWY 72 E or W Name Date: Time:

129	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
130	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
131	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
132	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
133	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X	3:00		
134	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
135	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
136	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
137	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
138	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
139	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
140	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
141	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
142	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
143	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
144	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
145	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
146	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
147	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
148	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
149	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
150	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
151	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
152	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
153	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
154	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
155	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
156	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
157	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
158	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
159	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
160	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
161	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
162	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
163	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
164	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
165	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
166	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
167	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
168	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
169	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			
170	Y	N	O	Y	R	W	B	G	1	2	3	4	5	6	7	8	9	10	UN	X			

Appendix F: Critical Facilities



Appendix G: Special Evacuation Needs