

## **Transportation – Air, Roadway, Rail, Transit, and Pipe**

### **General**

Transportation accidents claim more lives annually and cause more injuries than any other hazard. With rail, air, and highway transportation available across the Commonwealth, every county is susceptible to transportation related hazards.

There are two public airports listed in Juniata County by the PennDOT Bureau of Aviation. The Mifflintown Airport, located in the Borough of Mifflintown, is a general aviation airport with a runway length of 2,635 feet. The Stottle Memorial Airport, located in Honey Grove, is a public heliport with a runway of 100 feet.

Juniata County is serviced by two major highways: U.S. Route 22/322 runs east to west the municipalities of Delaware Township, Fermanage Township, Turbett Township, and Walker Township; and U.S. Route 11/15 running through Susquehanna Township on the eastern border of Juniata County. Major connector routes within the County include State Routes 35, 75, 104, 235, 333, and 850.

Also, Juniata County is served by two rail lines: a National RR Passenger Corporation passenger and commuter railroad and a Class 1 Norfolk Southern railway line.<sup>1</sup>

The only public transportation service in Juniata County is provided by the Mifflin-Juniata Area Agency on Aging's C.A.R.S. (Call A Ride Service)<sup>2</sup>. C.A.R.S. is a shared-ride program.

### **History**

The Federal Aviation Administration lists three crashes occurring in Mifflintown, PA between 1967-January 2008. All of these accidents occurred during general aviation, one in a Stinson model plane and two in Cessna model planes. None of the accidents was fatal.

<b>Aviation Crash Events in Mifflintown, PA</b>				
<b>Event Date</b>	<b>Make/Model</b>	<b>Registration Number</b>	<b>Event Severity</b>	<b>Type of Air Carrier Operation</b>
12/18/1976	Cessna 177B	N6678M	Nonfatal	General Aviation
7/27/1980	Cessna 172	N5757E	Nonfatal	General Aviation
6/30/2002	Stinson 108-3	N34328	Nonfatal	General Aviation

*Source: Federal Aviation Administration*

<sup>1</sup> [ftp://ftp.dot.state.pa.us/public/pdf/BPR\\_pdf\\_files/MAPS/Statewide/parail.pdf](ftp://ftp.dot.state.pa.us/public/pdf/BPR_pdf_files/MAPS/Statewide/parail.pdf) - January 2008

<sup>2</sup> [http://www.apta.com/links/state\\_local/pa.cfm#A39](http://www.apta.com/links/state_local/pa.cfm#A39) - January 2008

According to the Federal Railroad Administration, there has been one reported railroad incident in Juniata County in the last 10 years<sup>3</sup>. In 2005, there was a nonfatal incident on the Norfolk Southern Corporation line.

During the time period between the years 2002-2006, Juniata County averaged approximately 258 automotive crashes per year. The table below illustrates Juniata County’s crash statistics from 2002-2006. The most automotive crashes in the County occurred in 2005, when there were 295 recorded crash incidents. The number of crashes within the County is well behind the statewide average as, between 2002-2006, Pennsylvania averaged more than 2,000 crashes per county per year.

Deaths resulting from automotive crashes are relatively low in Juniata County. In 2006, a peak of 10 deaths was related to automotive crash incidents. This again lagged behind the statewide average of 22 deaths per county related to automotive crashes. Recorded seatbelt usage in Juniata was recorded at a relatively high level. In 2005, 82 percent of all involved in automotive crashes were wearing a seatbelt. The statewide average was 73 percent in 2005.

<b>Juniata County Automotive Crashes, 2002-2006</b>					
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Total Crashes	251	255	245	295	243
Statewide Average	2,061	2,092	2,050	1,982	1,915
Traffic Deaths	6	5	5	8	10
Statewide Average	24	23	22	24	22
Seatbelt Usage	80%	78%	78%	82%	81%
Statewide Average	67%	71%	72%	73%	73%

*Source: Pennsylvania Department of Transportation*

No major public transportation accidents have occurred in Juniata County. Similarly, Juniata County has no recorded pipeline breaks. The National Response Center lists 16 hazardous materials instances occurring in Juniata County between June 1990 and November 2005.

**Vulnerability**

Because there are very few aircraft departing and landing in Juniata County, the County’s vulnerability to an aviation accident is relatively low. However, the odds of an aviation accident increase as the amount of air traffic increases.

The vulnerability of a rail, transit, or personal automobile accident is directly related to the population and the traffic density of the area. In Juniata County, U.S. Route 22/322 presents the greatest threat of an automotive or transit accident, as this major highway is traveled by local commuters and long distance travelers. U.S. Route 11/15, which only runs through Susquehanna Township, also presents a risk. Connector roads to U.S. Route 22/322 and U.S.

<sup>3</sup> <http://safetydata.fra.dot.gov/> - January 2008

Route 11/15 also see greater traffic volumes and present higher vulnerability to transportation accidents.

Juniata County's vulnerability to pipeline incidents generally depends on the secondary effects of other hazards, including but not limited to flooding, earthquakes, landslides, and severe weather.

Given the location of Juniata County and its lack of an extensive public transit system, it is unlikely a terrorist attack would occur on the County's public transportation system. However, mass transit accidents on highways or secondary roads have a high probability of injuring many citizens.

### **Probability**

The probability of a transportation accident occurring in Juniata County is high. However, the probability of a **major** transportation accident (other than a routine transportation accident) is low. Automobile accidents, both minor and fatal, will occur more frequently than a pipeline incident or a significant mass transit accident. Roadway accidents occur annually, often with limited impact.

### **Maximum Threat**

The maximum transportation-related threat to Juniata County is when the incident occurs in or near a heavily populated area. Each mode of public transit experiences accidents on an annual basis. Each of these incidents can occur on both small and large scales, depending on the number of vehicles involved.

Automobile accidents can occur on any roadway. Typically, the higher speeds and more heavily traveled roads, such as U.S. Route 22/322 and U.S. Route 11/15, experience a higher percentage of Juniata County's automobile accidents. These traffic accidents are most common during periods of inclement weather. Aviation accidents are most common just after takeoff and just before landing, making the approaches to airports and the surrounding area most vulnerable. Significant pipeline accidents are not very common. The most vulnerable areas are those with pipelines running through or along hillsides. Mudslides and falling rocks can cause pipeline breaks. Rail accidents are not very common, but can occur anywhere along a rail line.

### **Secondary Effects**

Hazardous material spills are the most common secondary effect of transportation accidents. Fires (both urban and rural) and utility failures can also occur.