



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

General

Transportation accidents claim more lives annually and cause more injuries than any other hazard. With rail, air, and highway transportation available all over Pennsylvania, every county in the Commonwealth is susceptible to this hazard.

Penn Valley Airport Authority is Snyder County's main aviation facility. The PA Department of Transportation's (PennDOT's) Bureau of Aviation classifies this as a general aviation facility. Several privately owned airfields also can be found in the County. The longest runway at the Penn Valley Airport is 3,800 x 75 feet and has a gross weight rating of 12,500 pounds. Services at this facility include major/minor repair, hangar rental, air taxi, charter, instructional services, and rental services. An airport expansion project undertaken by the airport's operator, Penn Valley Airport Authority, is in progress. While the airport remains operational, construction is estimated to be complete by August 2006.

Snyder County Major Transportation Corridors



Snyder County has over 850 miles of roadway: 632.49 miles (74.2%) is classified as local roads; 130.83 miles (15.3%) are collector roadways; and 86.91 miles (2.46%) are considered freeway systems. This mix of roadways makes Snyder County a "Rural Area System."

Rail service in Snyder County is limited to freight service provided by Norfolk Southern. No commuter service or inner-city passenger service is provided in the County. The closest

passenger facilities are in Lewistown and Harrisburg, PA. The primary rail line is the Bridge Route Line. This track serves business and industry in Kreamer, Selinsgrove, and Shamokin

Snyder County Roadway Network	
Freeways	These are fully controlled access highways, with no at-grade intersections or driveway connections. Freeways are arterials that do not have standard intersections requiring traffic control devices such as stop signs and traffic signals.
Arterials	This system carries long-distance major traffic flows between major activity centers such as towns and large shopping/employment centers. Arterials allow travel between regions and therefore, form the backbone of a roadway network. This class of road is designed to carry large volumes of traffic as efficiently as possible.
Collectors	This system links local streets with the arterial street system. Collectors do what their name implies; they collect traffic from local roads and streets.
Local Roads	This system serves shorter local trips. Local roads primarily function to provide access to abutting land uses. These roads generally have low speed limits and low traffic volumes.



Dam, and connects the County with Harrisburg, Sunbury, and upstate New York, Canada, and New England. The principle commodities shipped include grain, lumber, and coal.

Some hazardous materials are also shipped. According to the County's 2002 Commodity Flow Study, U.S. Route 11/15 is the road most often traveled by vehicles transporting hazardous material. Of the 355 instances recorded in the Commodity Flow Study, 319 were identified on U.S. Route 11/15. Hazardous materials are also transported on S.R.s 35 and 104, and U.S. Route 522.

The Union/Snyder Transportation Alliance (USTA) is Snyder County's public transit system. This system, which provides service to both Snyder and Union County, provides transportation service for many County agencies, including the Union/Snyder Area Agency on Aging and the Union/Snyder Foster Grandparent Program. Private transportation systems include Greyhound, Susquehanna Trailways, and Rohrer Bus Service with stops at Shamokin Dam and Selinsgrove.

History

The Penn Valley Airport in Selinsgrove has not witnessed an aviation incident since 2000. However, the 2000 incident was not a fatal crash. The last fatal crash that happened in Selinsgrove was in 1987. The pilot was conducting a demonstration flight in an overweight aircraft. Probable causes included conditions of low ceilings and fog.

Penn Valley Aviation Crash History, Selinsgrove, PA				
Event Date	Make/Model	Regist. Number	Event Severity	Type of Air Carrier Operation
4/3/2000	Beech 23	N1923L	Nonfatal	General Aviation
8/28/1987	PIPER PA-23-160	N4003P	Fatal (3)	General Aviation
12/5/1985	PIPER PA-28	N652FL	Fatal (2)	General Aviation
1/27/1974	CESSNA 172	N46119	Nonfatal	General Aviation
6/28/1967	PIPER PA-30	N7412Y	Nonfatal	General Aviation
6/24/1967	BEECH 23	N2337Q	Nonfatal	General Aviation
2/28/1967	PIPER PA-28	N4682R	Nonfatal	General Aviation
1/22/1967	BEECH 35-B33	N1785G	Nonfatal	General Aviation
12/30/1966	PIPER PA-24	N8999P	Nonfatal	General Aviation
2/13/1965	LUSCOMBE 8A	N1094K	Nonfatal	General Aviation
5/24/1964	PIPER PA22	N3048Z	Nonfatal	General Aviation

Source: FAA website



Annually, Snyder County averages 439.75 automotive crashes. Of these crashes, typically 6.5 are fatal, 249.5 are crashes with injuries only, and 183.75 are crashes with property damage only. Seat belt use in the County has remained above the state average.

Snyder County Automotive Crashes					
	1998	1999	2000	2001	County Average
Total Crashes	421	451	458	429	439.75
Fatal Crashes	6	8	6	6	6.5
Injury Crashes	242	244	263	249	249.5
Property Damage Only Crashes	173	199	189	174	183.75

Source: Pennsylvania Department of Transportation

Snyder County Percent Seat Belt Use in Crashes								
Year	1994	1995	1996	1997	1998	1999	2000	2001
Snyder County	76	77	72	76	81	80	81	76
Pennsylvania	64	64	65	64	64	65	65	67

Source: Pennsylvania Department of Transportation

Snyder County has seen some minor train derailments, however, none have caused any fatalities or injuries. Snyder County has no recorded major pipeline breaks. No significant transit accidents or terrorist activities have occurred that involved Snyder County mass transit entities. The national response center lists 25 hazardous materials instances for Snyder County. Of those, one resulted in a waterway closing and three resulted in closings of Route 522.

Vulnerability

There are over 40 aircraft based at the Penn Valley Airport which experiences over 26,000 annual operations. The odds of an aviation accident increases as the amount of aviation traffic increases.

The vulnerability for a rail or highway accident is directly related to the population and traffic density of that area. The more populated an area, the more vulnerable it is to an accident. In the County, U.S. Route 11/15, between Selinsgrove and Shamokin Dam, receives the highest volume of traffic during the year. Other segments of U.S. Route 11/15 receive high volumes of traffic, as well. U.S. Route 522, east and west of Kreamer, and State Route 104 north of Mount Pleasant Mills, do not receive as high a volume, but still see significant numbers of vehicular traffic.



Snyder County USTA Ridership Trends			
	Total Trips	65 and Over Trips	General Public Trips
1990/91	100,353	71,074	1,400
1991/92	98,604	63,446	1,793
1992/93	99,424	63,372	1,577
1993/94	98,211	58,723	1,797
1994/95	106,050	62,668	2,323
1995/96	103,351	57,912	1,649
1996/97	106,714	57,990	1,735
1997/98	103,338	55,741	2,387
1998/99	101,322	56,771	1,602
1999/00	106,210	61,000	1,600

Source: Snyder County Comprehensive Plan - 2001

Snyder County’s vulnerability to a pipeline break depends on the vulnerability to three other hazards, including floods, earthquakes, and landslides. Each of these hazards tends to be the primary hazard, while the pipeline break is the secondary hazard. Other hazards that affect pipelines not as frequent in Snyder County include hurricanes and tornadoes. Snyder County’s vulnerability to other hazards explains their vulnerability to a pipeline break. Given the location of Snyder County and its small transit system, it is unlikely that a terrorist attack will occur on USTA. However, mass transit accidents on the highways can happen. These accidents have the potential to harm many citizens.

Probability

The probability of a major transportation accident (other than automotive) is low. Automobile accidents, both minor and fatal, will occur more frequently than pipeline, rail, air, and transit accidents. These roadway accidents will occur on an annual basis.

Maximum Threat

The maximum threat to Snyder County is an airplane crashing in a populated area, a rail accident in a populated area that results in a chemical spill, a pipeline break in a populated area that spills its contents, and a fatal automobile accident. Each of these incidents can occur on both a small or large scale, depending on the number of vehicles involved.

Automobile accidents can occur on any roadway. Typically, the higher speed and more heavily traveled roadways, like U.S. Route 11/15, experience a high percentage of the County’s automobile accidents. These accidents are more common during periods of inclement weather. Airplane accidents are most common during takeoffs and landings. This is why the most vulnerable areas are in and around airports, such as the Penn Valley Airport. Pipeline accidents are not very common. The most vulnerable areas are those with pipelines along or on hillsides.



Mudslides and falling rocks can cause pipeline breaks. Rail accidents are not very common. These incidents can occur anywhere along rail lines.

Secondary Effects

Possible secondary effects of transportation accidents include chemical/hazardous material spills, fires (both urban and rural), and utility failures (depending on the accident venue).