

## 2.4 ANALYZE DEVELOPMENT TRENDS

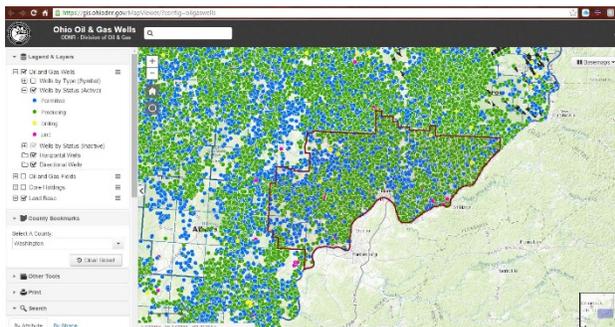
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[The plan should describe vulnerability in terms of] providing a general discussion of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.

Washington County is located in southeastern Ohio, along the West Virginia border. It is bordered by Tyler County, WV, Pleasants County, WV and Wood County, WV (across the Ohio River) to the east and southeast. In Ohio, Washington County is bordered by Noble County to the north, Monroe County to the northeast, Athens County to the southwest, and Morgan County to the northwest. The county seat is the City of Marietta, which is also the most populous municipality in the county. The majority of land use/land cover is forested, accounting for over 75% of land in the county according to the Ohio Development Services Agency. Of the remaining land, nearly 20% is used for agriculture and just under 4% is urban.

Washington County benefited greatly from the rise of railroads, with local development beginning with the Belpre and Cincinnati Railroad in 1845. By the early 20<sup>th</sup> century Marietta was being served by 24 passenger trains every day and Belpre was situated on the main B&O line between Baltimore, MD and St. Louis, MO.

Goods producing and manufacturing industries provide nearly 9,000 jobs in the county according to the Ohio Development Services Agency. The service industry provides the largest number of jobs in the county, accounting for over 15,000 of the 66,000. The Marietta Memorial Health System is the largest single employer in the county according to the Southeastern Ohio Port Authority (SeOPA) (Washington County's Economic Development Agency), employing 2,700.



Historically the oil and gas industry has been a significant presence in Washington County, and this does not seem likely to change in the future. The Ohio Department of Natural Resources (DNR)'s Division of Oil & Gas maintains an online viewer of oil and gas wells in the state (<https://gis.ohiodnr.gov/MapView/?config=oilgaswells>). A screenshot of this map is seen above. Isolating Washington County shows a large number of both permitted and producing wells. While the industry is significantly volatile in response to market forces this will typically impact new exploration much more than producing wells. A 2013



report by Bob Downing of the Akron Beacon Journal related that an industry expert was convinced that Washington County would “become the Utica hot spot” (<http://www.ohio.com/blogs/drilling/ohio-utica-shale-1.291290/utica-drillers-moving-to-the-south-to-six-ohio-counties-1.424941>).

Fracking, defined by Merriam-Webster as “the injection of fluid into shale beds at high pressure in order to free up petroleum resources (such as oil or natural gas),” is utilized to unlock oil and gas locked within rock formations with very low permeability according to the Ohio DNR. Shale is just such a rock formation and is present in all of Washington County, as shown in the map from the Ohio Environmental Protection Agency (Ohio EPA). Therefore fracking will probably continue to be prevalent in Washington County as oil and gas production continue. This technique is contentious, with environmental groups claiming it does environmental damage while others, including the Ohio DNR, state that it is a safe mining technique. The Ohio DNR states that they have “conducted well water investigations in response to citizen complaints since 1983 – none of the investigations revealed groundwater quality problems caused by hydraulic fracking” ([http://oilandgas.ohiodnr.gov/portals/oilgas/pdf/factsheets/hydraulic-fracturing\\_0815.pdf](http://oilandgas.ohiodnr.gov/portals/oilgas/pdf/factsheets/hydraulic-fracturing_0815.pdf)). This contention between environmentalists and fracking supporters may continue to grow as fracking continues or grows in the county.



Other land uses in Washington County consist of Industrial/Commercial, Residential, Farmland and Specialized land uses. Manufacturing in Washington County, which would fall under industrial/commercial zoning, accounts for 16% of employment according to the SeOPA. The SeOPA relates that industry clusters in Washington County include chemical, resins & synthetic rubber, primary metal, fabricated metal and machinery industries.

Agriculture continues to be an important sector for the Washington County economy, with nearly 139,000 acres of land in 1,122 farms according to the Ohio Development Services



Agency. This is a slight decrease in overall land since the last hazard mitigation plan update (approximately 6,000 acres) while the number of farms has increased by 142. The Ohio Development Services Agency states that total cash receipts for agriculture in Washington County was over \$30 million.

The Ohio River has long been a source of developmental and economic growth for Washington County. Beginning with the shipping yards in Marietta, the Ohio River has provided

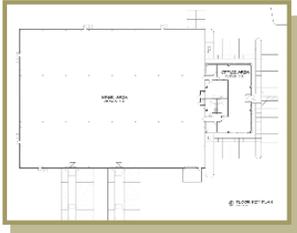
FOR LEASE | Manufacturing, Distribution & Office Space  
**Ingenuity Center**  
300 Commerce Dr., Marietta, OH 45750



**General Property/Area Highlights: Available 1st Quarter 2014**

- 5,000 sq. ft. office area
- 30,000 sq. ft. high bay manufacturing area
- Depressed freight loading dock
- Out of 100 year flood plain
- Possible river access
- 3.5 miles to Interstate 77
- 20 minutes to the Mid-Ohio Valley Regional Airport
- 5 hour drive from 50% of US population
- Next day freight service in Marietta and Parkersburg through local depots by FedEx and UPS
- Workforces with strong work ethic
- Multiple training facilities nearby
- Low crime rate/high quality of life

**Floor Plan & Construction Information**



Steel frame, masonry construction in warehouse to 48" above finished floor, insulated steel walls (exterior skin only), steel roof structure + panel, pitched room, 18' eave height at outside walls.

Office Areas: high efficiency gas forced air with air conditioning.

Manufacturing Areas: low intensity infra-red heating, code required ventilation, high efficiency, high bay, fluorescent lighting.



a major source of industrial revenue. The areas between and including Belpre and Marietta along SR 7 are particularly well developed. The Muskingum River is also a significant source for development in the county. Areas near the Village of Beverly, containing sustained agricultural development, have in the recent past seen many emerging industrial uses. While individual companies may come and go, they will generally be replaced by others. For example, the large American Electrical Power Plant that serviced Morgan and Washington County closed in May of 2015. According to a report from "The News Center," Washington County officials confirmed the sale of the site to Commercial Liability Partners LLC from

Missouri. This company "is known for redeveloping re-mediated properties and building industrial complexes in its place." (<http://www.thenewscenter.tv/home/headlines/UPDATE-AEP-Muskingum-River-Plant-Closing-Will-Affect-Local-Schools.html>)

The SeOPA works within Washington County and its municipalities to foster business development in the county. Projects that have been recently concluded includes the 35,000 square foot Ingenuity Center in Reno which included manufacturing and office space as well as a freight loading dock for distribution. A flyer for the site is seen above. The site was leased for five years in April of 2016 by a construction company. The SeOPA also recently provided the Marietta Health System with \$60 million in bond funding for facility renovations and expansions at both the Marietta and Belpre campuses. An \$11.3 million loan and bond was secured by the



Authority to construct the Good River Distribution, LLC water plant that will serve five Riverview complex industries in order to retain 500 jobs.

The SeOPA has a “plan of work” that outlines the four main goals of the organization and development in Washington County. The organization strives to attract new businesses to the area, retain current businesses and encourage/assist their expansion, engage in community leadership and stewardship, and build for the long-term to create sustainable revenue streams to assist with economic development in Washington County.

The future developmental growth and land use of Washington County is expected to follow past trends. The *Washington County Comprehensive Plan* suggested several land use possibilities for the county. Each scenario delineates specific areas for industrial, residential, commercial, and highway commercial growth. When developing a new area, it is imperative to analyze the hazards which will affect the proposed site.

Large amounts of the developed areas in Washington County are located along State Route 7, which parallels the Ohio River, including the two largest municipalities in the county: Marietta and Belpre. Industrial redevelopment or restructuring, as in the case of the Union Carbide site near Marietta, is expected to continue on existing complexes, and new sites along the Ohio River and SR 7 are expected to arise.

According to the *Comprehensive Plan*, highway commercial growth is expected to continue along I-77 north of Marietta and in Macksburg. The suggested highway commercial area in Macksburg is the portion of the town west of I-77. This is an area with moderate risk of flooding and mine subsidence. Any development, commercial or otherwise, should be aware of this significant risk.

Flooding is an ever present risk to these areas, and to the businesses that operate in them. The flood event of September 2014 was highly damaging, causing \$17 million in property damage according to the National Climatic Data Center. Large areas of Marietta were under 2-4 feet of water, which is shown in the image to the left. As development continues along the Route 7 corridor from Reno to Belpre, the vulnerability of these businesses to devastating floods cannot be understated.



Photo Taken By: Washington County Sheriff's Office - Aviation Division

