



KOKOMO-HOWARD COUNTY
PUBLIC LIBRARY

DISCOVER KOKOMO:

Engineering in Our Community

Places to Go and
Things to Know



Clean Water is Essential

Wastewater Treatment Plant 1501 W. Markland Ave., Kokomo, IN 46901

Water is important to our daily lives, and we have the operation of the city's Wastewater Treatment Plant to thank for this valuable resource. The original wastewater treatment plant was constructed in 1936. Between the years of 1974 and 1978, the city did a major renovation of the system. Today the facility can process as much as 40 million gallons of water per day during significant rain storms.

MORE INFO!

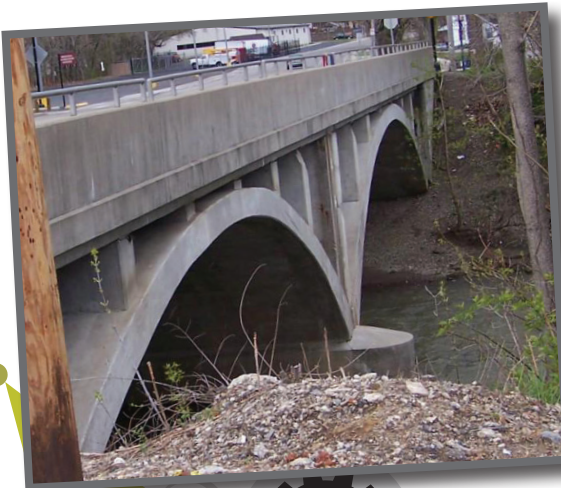
www.cityofkokomo.org/departments/wastewater_treatment



Image courtesy of City of Kokomo

Why Do Arches Stay Up?

- Apperson Way Bridge over Wildcat Creek
- Webster Street Bridge over Kokomo Creek



The arch has been around for over 2000 years, and we are still using it to build bridges today. We are fortunate enough to have these two arch bridges in Kokomo. Visit these bridges today!

Apperson Way Bridge

Photo by James Norwood courtesy of Bridgehunter.com



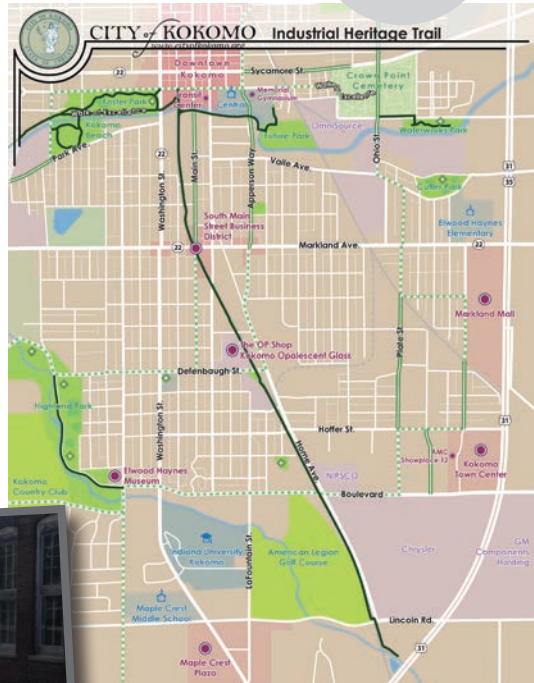
Grand Challenges

Solutions for Longer, Healthier Lives



Industrial Heritage Trail North/south from Superior Street past Lincoln along the rail line

Engineering, history, and a nice walk all on one unique trail. The Industrial Heritage Trail is a local rail-with-trail that links together historic industrial sites in Kokomo's history. While navigating this trail, you will **see several Kokomo industrial sites marked by historical markers** detailing the significance of the location.



MORE INFO!

www.cityofkokomo.org

DID YOU KNOW? Several former rail lines in Indiana have been converted from railroads to trails thanks to projects like the Rails to Trails Conservancy. The Nickle Plate Trail, which runs from Kokomo, Ind. to Rochester, Ind. is an example of a Rails to Trails project. It was purchased from the Norfolk Southern as part of the Federal Railbank program and turned into a trail. For more information on the Nickle Plate Trail or Rails to Trails, visit these websites:

- www.in.gov/dnr/outdoor/4239.htm
- www.nickelplatetrail.org
- www.railstotrails.org

Sustainable Energy Future

- **Wind Turbines at Markland and Leeds**
- **Solar Project at 1201 W. Markland Ave**

Power is an essential part of our everyday lives. With our growing population and in order to be good stewards of our environment, it is important that we start seeking more sustainable energy resources. In 1986, the Continental Steel Corporation closed leaving the city with 185 acres of contaminated land. In 1989, the EPA (Environmental Protection Agency) proposed that the site be made a Superfund site so the area could be cleaned up. In 2013, the city of Kokomo took ownership of the site and now the site houses both wind turbines and a solar project.



Images courtesy of
Heartland Solutions Corp.



How Do I Stack Up? carbon footprint

Howard County Recycling District 4102 Cartwright Dr., Kokomo, IN 46902

The production of goods and services requires a lot of energy. Recycling can help reduce our carbon footprint by reducing the amount of energy needed to produce a product. The Howard County Recycling District's website states, "Making new aluminum from recycled aluminum takes 95% less energy than new aluminum from bauxite ore." Recycling is good for us and good for our environment, so visit the recycling district today!

MORE INFO! countyrecycling.org



Bewildering 'bots

Robotics Teams at local high schools

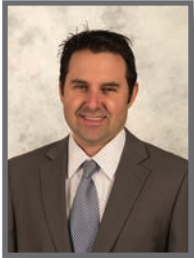
In 2016 the Kokomo High School Technokats and the Northwestern High School CyberTooth both competed in the IndianaFIRST Robotics State Championship.

We even have a retailer here in Kokomo, AndyMark, which caters to our robotic needs. Many careers are focusing on robotics these days, and if you are interested, Purdue Polytechnic Kokomo should be your next stop. It has undergraduate and graduate degrees in several majors.

Visit the website, **polytechnic.purdue.edu**, or sign up for a school visit to find out more about the exciting things Purdue is doing.



Engineering a City



Carey Stranahan

City Engineer for the City of Kokomo

City Engineers are responsible for managing and improving streets, sewers, water lines, and other public infrastructure. Engineers also manage capital building projects and approve private developments. The city of Kokomo owns and maintains 3,168,753 feet of sewer pipe, which, if stretched end-to-end, would run from Kokomo to Philadelphia, Penn.



We are fortunate to have many talented engineers in our community. Is someone you know an engineer?

FUN FACT! Did you know that Herbert Hoover was the only engineer ever to be president? He was a mining engineer.



High Impact Technology + Engineering

Delphi

Did you know that the most sophisticated electronic device you own is your vehicle? It has more computing power than the space shuttle, with up to 50 computers beneath its skin. Delphi is a leading automotive technology company that designs and manufactures those computers and their software for vehicles around the globe. Delphi's product portfolio is aligned with the megatrends of Safe, Green and Connected. Delphi, is driven by meaningful innovation. It sees the future of driving and are making it possible today.

“ We envision a society with zero road fatalities, zero injuries, and zero accidents. ”

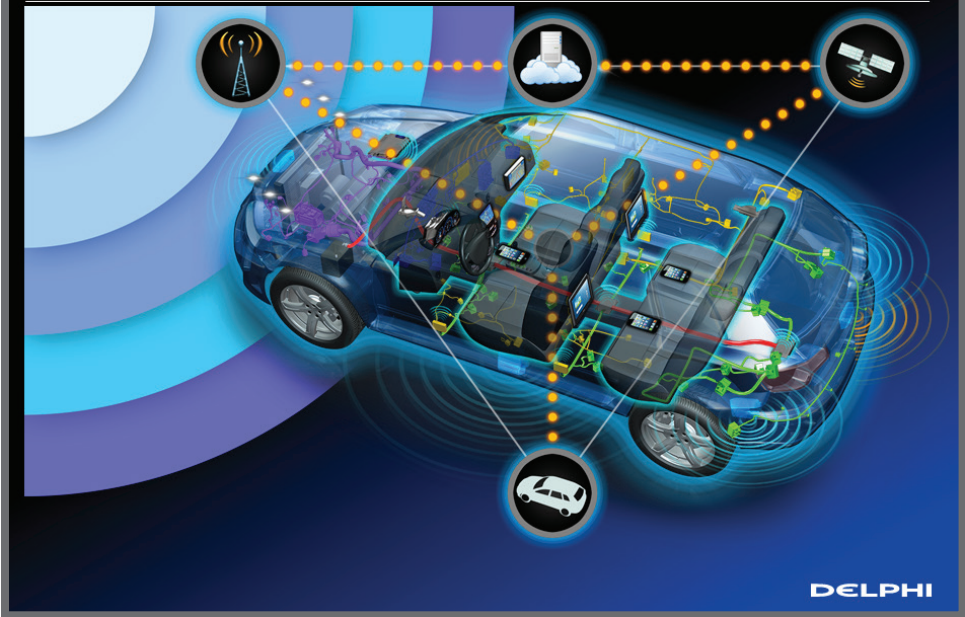
Today, there are more vehicles on the road, stricter fuel economy regulations, and rapid growth in both active safety and autonomous vehicle technologies. Delphi employs state-of-the-art methods and solutions to help make today's roads safer. It's developed innovative and high-performance active safety systems to enable safety systems such as rear end collision warning, auto park assist, and side swipe detection, to name a few. Delphi is North America's largest producer of hybrid and electric vehicle components and has a proven quality and safety record. Delphi helps automakers navigate the requirements and regulations of next-generation hybrid and electric vehicle systems. The products

manufactured in our Kokomo facility utilize green technologies to enable vehicle electrification, which improves fuel consumption and significantly reduces CO2 emissions.

Delphi is also developing smart infotainment systems to connect to the cloud and the vehicle's safety systems to mitigate driver distraction. Delphi technologies are creating a world with fewer accidents, lower emissions, and better fuel economy for the smarter vehicles of your future.

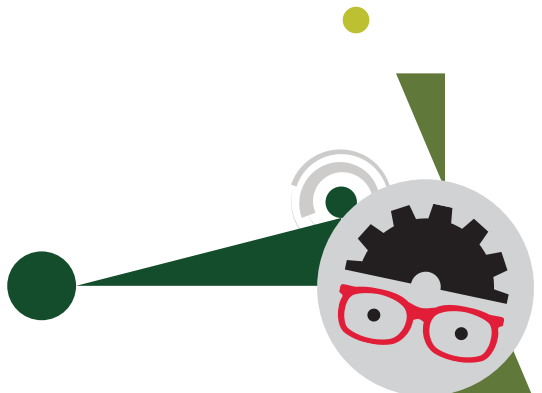


Essential elements of automated driving



Delphi annually invests over \$1.5B in research and development, with 20,000 engineers and scientists in 14 global technology centers around the world. Delphi's superior engineering and manufacturing capabilities create quality products, services, and solutions to meet the needs of global transportation customers.

MORE INFO! www.delphi.com



Engineering in Your Community



The work of engineers surrounds us every day of our lives.

- **Civil engineers** make sure our buildings and the structures that surround us are safe and well designed.
- **Traffic engineers** help us move around our community safely.
- **Aeronautical engineers** design aircraft.
- **Biomedical engineers** design technologies that help keep us healthy.

There are many types of engineers, more than can be listed in this brochure. Engineers help make our lives better, easier, and healthier and, even though you may not see them day to day, you touch and use their work on a daily basis. Look around you; see what you can find that was designed by an engineer!

ACTIVITY:

Think about everything you did today and name three things an engineer might have designed.

1. _____
2. _____
3. _____

Hint: How did you get to the library today? Did you walk on a sidewalk or use a road? Did you ride a bus, drive a car, or ride a bike?



Discover Tech: Engineers Make a World of Difference, a traveling exhibition for libraries, is part of the STAR Library Education Network (STAR_Net) led by the Space Science Institute's National Center for Interactive Learning. Exhibit partners include the Lunar and Planetary Institute, the National Girls Collaborative Project, and the American

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