

Engineers' News

February 2019

Vol. 81 No. 6

[www.FortWayneEngineersClub.org](http://www.FortWayneEngineersClub.org)



Find us on 

## February Tour



[Franke Plating Works Inc](http://www.FrankePlatingWorks.com)

[2109 E Washington Blvd, Fort Wayne, IN 46803](http://www.FrankePlatingWorks.com)

Thursday, February 21, 4:30 pm

Franke Plating Works, Inc. Thursday, February 21, 4:30 PM. 2109 E Washington Blvd, Fort Wayne, IN 46803 (2 blocks east of Anthony Blvd.)

FOR SAFETY REASONS, WE MUST ENFORCE MINIMUM INDUSTRIAL REQUIREMENTS: BRING YOUR OWN PROTECTIVE EYEWEAR, WEAR LONG PANTS/SLACKS, SHIRTS WITH SLEEVES (LONG SLEEVES SUGGESTED), SOCKS COVERING AT LEAST ANKLES, SHOES OR BETTER FOOTWEAR WHICH COVER TOES AND HEELS, AND A MINIMUM AGE OF 18.

**RSVP by e-mail to [Treasurer@FortWayneEngineersClub.org](mailto:Treasurer@FortWayneEngineersClub.org), or phone 260-456-0809.**

Competitors of Franke Plating Works should NOT attend.

Visit a family business in operation continuously since 1930. They have progressively expanded and updated an array of options for anticorrosion, appearance, and other

features of iron, steel, copper, aluminum, and more. This should help our understanding of metal durability in daily life.

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## **Northeast Indiana DiscoverE**

### **Engineers Week Banquet**



The Northeast Indiana DiscoverE Engineers Week banquet will be held on Saturday, February 23rd, 2019 at Parkview Field's Lincoln Financial Event Center.

6:00 PM – Doors open

6:45 PM – Dinner served

The Northeast Indiana DiscoverE banquet features:

- Keynote speaker - Raytheon's Jeff Clark: The Impact of Engineers and the Shortage
- Academic Award presentations to engineering students
- Citizen Engineer presentation
- High School and Middle School Bridge Building Contest highlights
- Future City program highlights
- Student/Engineer visitation program highlights

Dinner Entree Selections:

- Chicken, peppers, onions and water chestnuts in a garlic sauce. Served over steamed rice
- Crispy fried pork, sweet peppers, and red onions sautéed with a savory sauce. Served over steamed rice
- Portabella mushroom ravioli served with marinara

Entrees include a choice of a cup of soup or a salad, vegetable, starch, rolls, and butter.

### **Purchase Tickets**

Banquet tickets are \$30 per person. Please RSVP ASAP so we can meet the deadline to place the orders with the caterer.

Reservations are made to Nancy Burkey (nancy@rlguimont.com or (260) 422-7081)

Please include:

- Name and organization or company
- Meal entree selection
- Payment method: Checks payable to **Northeast Indiana DiscoverE** can be mailed:  
R.L. Guimont Co., Inc.  
Attention: Nancy Burkey  
923 Spring St.  
Fort Wayne IN 46808

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## **January Tour Summary**



Northeast Indiana Regional Coordinating Council (NIRCC)

(Coordinates long term transportation planning)

January 24, 2019

Our January "tour" was an indoor presentation by Dan Avery, Executive Director of the Council, who spoke about transportation and related engineering in our "Fort Wayne Urbanized Area". NIRCC's activity extends far beyond the urbanized area. It exists to coordinate plans and desires for sidewalks, trails, local public streets, interstates, economic development, mobility, public transit, and expenditures from now through 25 years into the future on an incessantly updating basis. This process began in the late 1960's and issued an initial transportation capital improvements program for our urban area in 1972. Their current publication (May, 2018) provides various plans (roads, trails, and more) out to 2040 and is intended for ongoing public comment as well as political and commercial planning. Experience indicates that NIRCC takes informed public input seriously.

Total vehicle miles in our area steadily increased 68% from 1985 through 1998, but only 10% overall from 1999-2017. The total miles cycled up and down three times during 1999-2017 due to recessions.

The distribution and nature of vehicle trips changed constantly during 1985-2017.

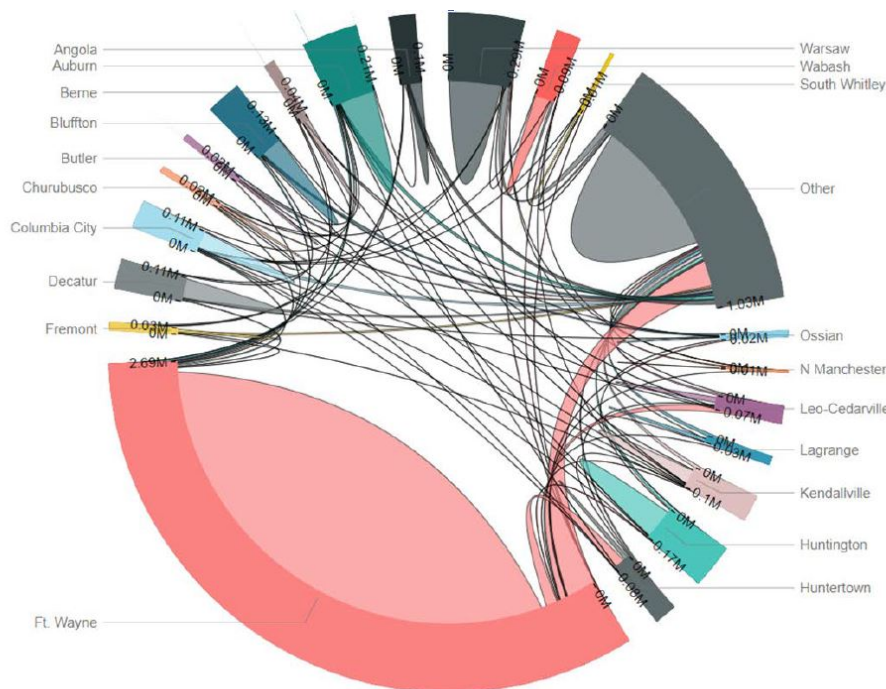
Significant factors have been NIRCC's updating of Fort Wayne's radial (hub and spokes) road legacies towards: a coordinated grid system; connecting short road segments into continuous arterial routes (such as the Maplecrest Road and Hillegas-Ardmore extensions); and increasingly providing trucks with routes around rather than through

urbanized areas (such as improved access to I-69, and conceiving/leading the planning and building of I-469).

Continual monitoring and re-evaluation have included safety indicators, all crash and incident reports, traffic patterns, traffic characteristics, land use changes, and evolving political objectives. The human and political complexity of this coordination is reflected by listing some, but not all, of the formal entities involved even within our immediate "Urbanized Area": Department of Planning Services - Fort Wayne and Allen County; New Haven Planning Department; Allen County Division of Economic Development; New Haven Economic Development; Fort Wayne Department of Planning and Policy; Fort Wayne Department of Economic Development; Allen County Redevelopment Commission; Fort Wayne City Utilities; New Haven Board of Works; Fort Wayne Board of Works; The Alliance (Fort Wayne-Allen County Economic Development Alliance); Greater Fort Wayne Chamber of Commerce; Allen County Highway Department; INDOT; Fort Wayne-Allen County Airport Authority; and various railroads. Citizen and commercial "shareholders" are additional vested interests.

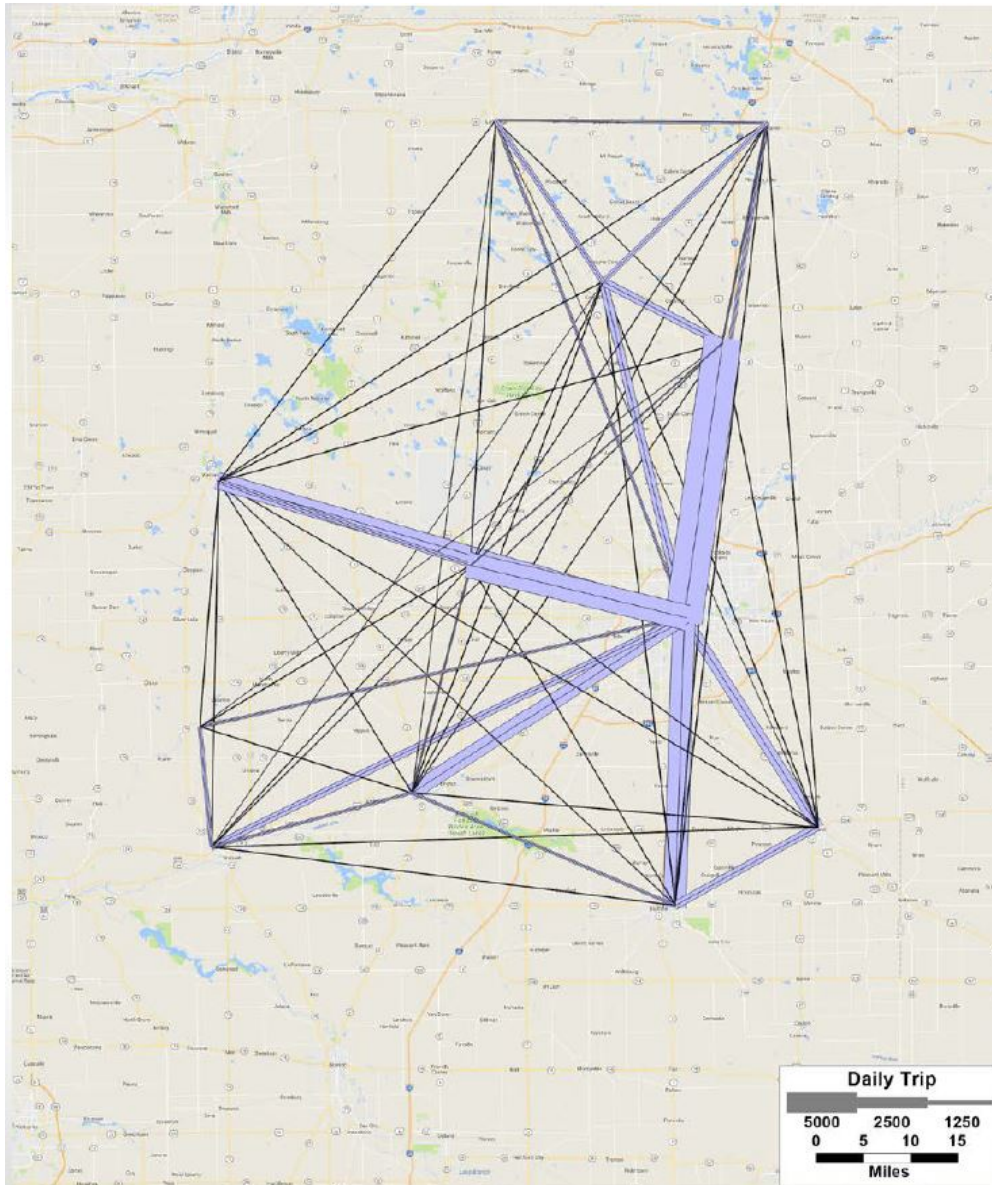
Goals of NIRCC's planning process include elimination and anticipation of deficiencies.

The illustration (below) was one of many examples of "big data analytic" information obtained from vendors who are involved for various reasons with electronic devices which can be tracked. These devices include real-time routing devices for trucks and everyday cell phones. This chart depicts the relative numbers of vehicle trips involving our region, including short local trips:

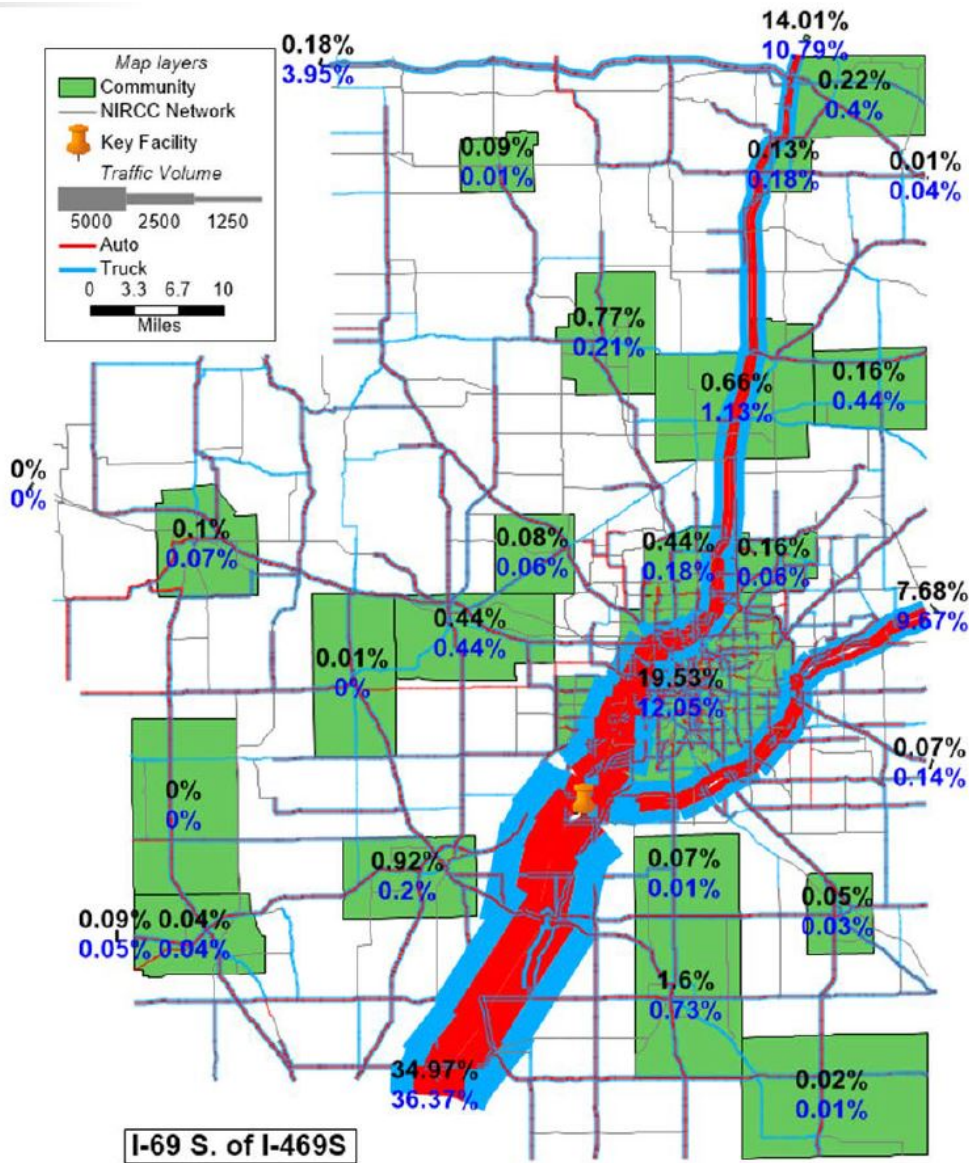


"Big data analytics" may be sorted by many parameters including vehicle type, routes used, time of day, origin (percentages), destination (percentages), and much more. The

next illustration is another way of depicting the same data, without intra-district trips, to suggest preferred routes:



The illustration (below) is sorted for southbound traffic on I-69 and I-469. It shows, among other details, that building I-469 has routed southbound traffic past our local roads:

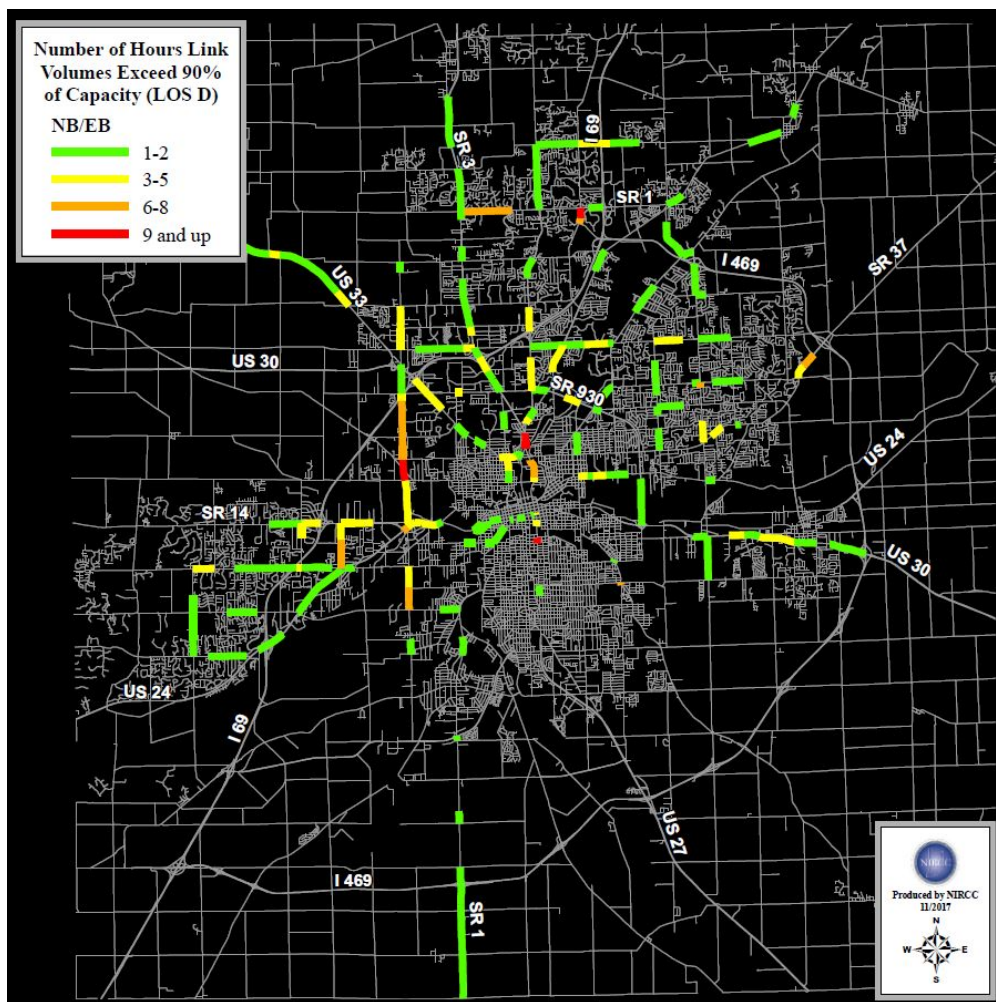


A comparable illustration depicted northbound traffic. Westbound and eastbound traffic also go around our local roads, especially using the northern segment of I-469 and portions of I-69.

Surprises occur despite good communications. Plans had been finalized for the I-469 interchange at I-69 and put out for contractors to bid on, when General Motors suddenly announced plans to actually build a long-discussed assembly plant nearby. (Ed.: I-469 may eventually connect here with I-72 at Lafayette, IN, and Champaign, IL. There are also pressures to provide a viable east-west route past the Chicago metro area, long opposed by Illinois.)

Another major limitation is that the Indiana legislature passed a law limiting INDOT to 12,000 centerline miles of state highways. So, building I-469 forced transfer of some previous local "state highways" to local responsibility and expense. The law impacts any number of ongoing roadway considerations throughout Indiana. Presumably, the law is a measure to help control growth of recurring State maintenance expenses.

All the illustrations above were obtained using expensive "big data" from outside vendors. Very useful data can be collected inexpensively by public agencies and/or local contractors using traditional methods. For example, sets of rubber tubes across traffic lanes are used extensively multiple times a year at various locations by both local agencies and INDOT. Their combined total labor, vehicle, and equipment budgets for these activities do not exceed \$150,000 annually. Data may be sorted by vehicle type, time of day, speed, and other parameters. The following is selected data from far more extensive urban and regional monitoring. It indicates bottlenecks for northbound/eastbound traffic on major arterials. Southbound/westbound data were not particularly similar except for Hillegas Road, which has therefore been prioritized for improvements:

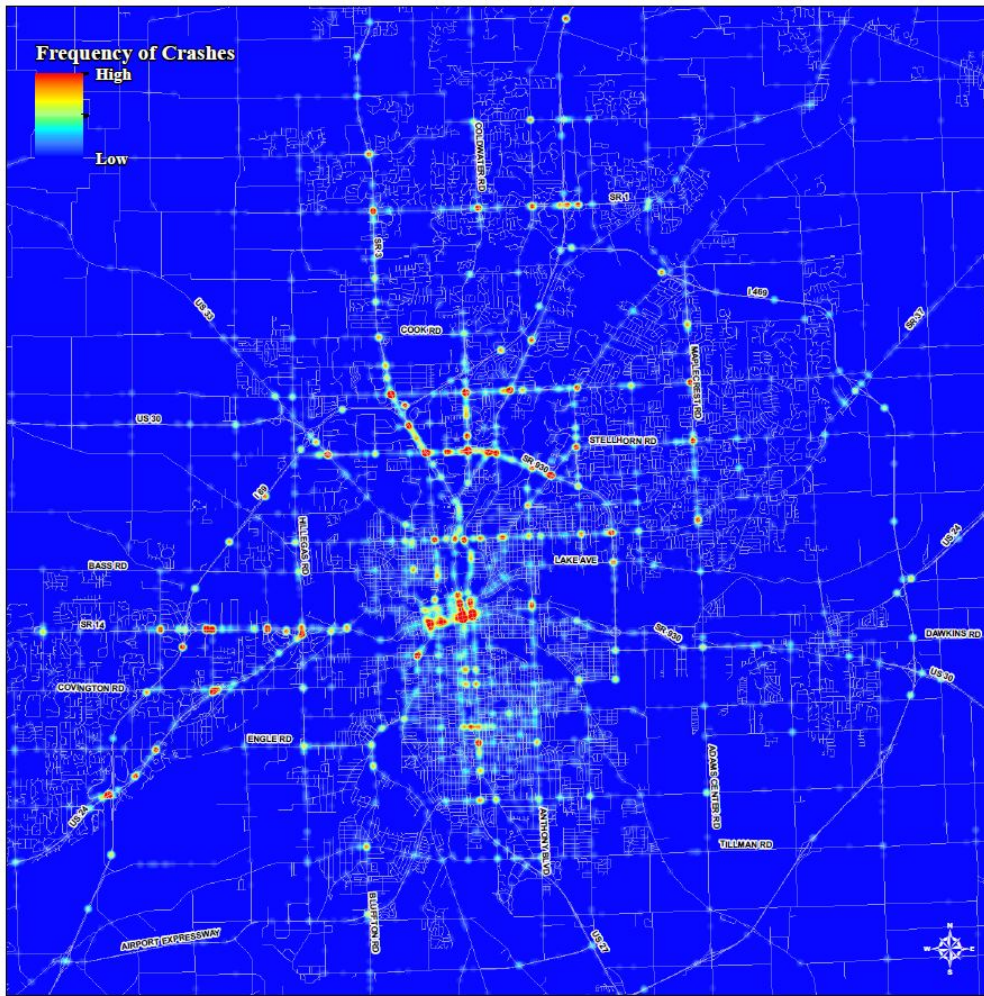


Traffic safety is a primary concern. Air pollution and consumption of time and fuel are regulated but also influence economic development. Design efficiency includes minimizing operating costs for commercial entities and individuals, minimizing project costs, and minimizing public operating costs/subsidies. On the other hand, sufficient capacity is essential to encourage growth and economic development. (Ed.: Nationally, I have observed that traffic tends to double every 10 years, all other factors being considered.)

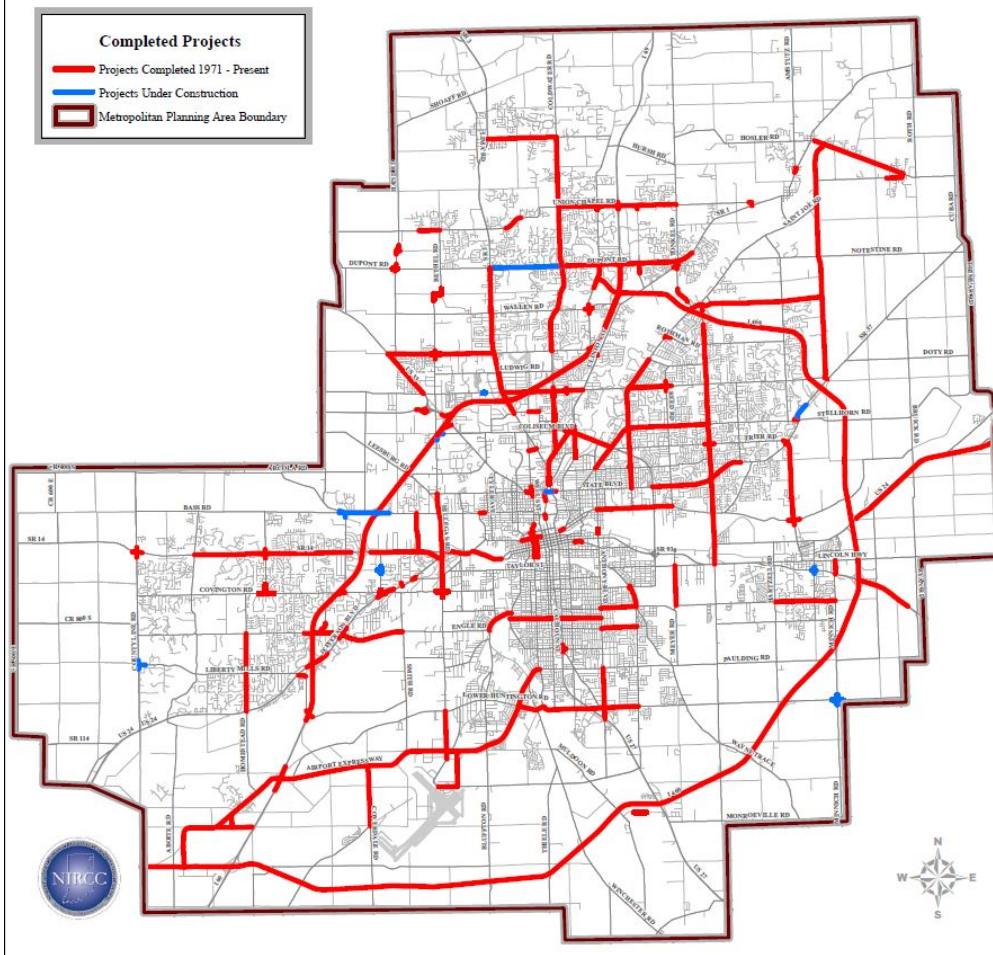


Traffic crashes and incidents are another source of data, obtained from sources such as computerized police reports. This information is useful only when used correctly. Despite claims by news media, locations associated with the highest number of crashes (such as Coldwater Road x Coliseum Boulevard) are not the most dangerous. In fact, some designs such as "roundabouts" are explicitly used to accept more low-speed side-swipes in order to design out severe high-speed "T-bone" collisions. Furthermore, police reports and similar data points legally include any event within 250 feet of a specified intersection, including parking lots and their street access points.

Our speaker (Dan Avery) declined to specify which location(s) was actually the most dangerous. It leads to a can of worms which can consume available funds but provide little benefit. For old Fort Wayne in general, ongoing safety objectives have been improving circulation, decreasing travel times, and increasing alternatives (routes, modes, etc.). The City originally developed with roads radiating from downtown. Providing the route flexibility of a grid system has been challenging. Radiating roads also create bizarre intersections, which quickly became untenable with the advent of automobiles. Our roadways were also laid out in an era of very narrow right-of-ways. Canals and then railroads initially dominated our land use. Railroads and various heavy trucking remain among the many modes and alternatives which must be considered for a viable economy, along with wheelchairs, bicycles, pedestrians, and others. All have legal rights and Federal requirements. Adequate parking in central business districts is a current priority. Disruption of existing and planned neighborhoods has been a valid perennial limitation, complicated by the fact that they also evolve. Parks, cemeteries, and historic/cultural sites tend to be permanent limitations.



These are completed roadway and Trail projects within the "urbanized zone" which NIRCC has helped conceive, fund, plan, and implement:



For a much more extensive view of vehicular and non-vehicular (such as sidewalk) projections across the Fort Wayne Metropolitan Planning Area, request NTRCC's "2040 Transportation Plan" at (260) 449-7309. They also schedule an Open House in Citizens Square each April. Public input is wanted and informed comments have a history of being utilized.

Our sincere THANK YOU to Dan Avery and the staff.

## Future Tours

**March tour:** TekVenture's new location and expanded areas of interest. March 21, 2019, at 1550 Griffin Street, near the Hosey Dam. Starting time will probably be 6:30 or 7:00 pm.

TekVenture has steadily upsized and updated since its start in a trailer downtown. Current plans for March 21 call for TekVenture's specialists to demonstrate the work areas and guidance which are available to young people and adults. A few simple projects may be available to make during our tour.

Most of TekVenture is intended for all ages. Expansions include theater, woodworking, and an active Fort Wayne Inventors Club. The FW Inventors Club is also potentially helpful if interested in patent law.

**April tour: The old GE building, now called Electric Works.**

Thursday, April 25, at 3:30 pm.

RSVP at [Treasurer@FortWayneEngineersClub.org](mailto:Treasurer@FortWayneEngineersClub.org).

Limited to 30 people. A four-page PDF file including a required waiver will be e-mailed in reply to the first 30 who RSVP. Print and complete the waiver before arriving at the tour, because daylight will be limiting our time on the site. No facilities or artificial light will be available onsite. Expect conditions of a vandalized abandoned building with some contractors working onsite.

- Participants must be able to climb multiple flights of stairs and walk over uneven surfaces, puddles, and debris.
- Mold, mildew, lead dust, broken glass, and other hazards are likely to be present where we tour.
- **Mandatory: Appropriate shoes or better footwear which cover toes and heels, plus socks covering at least ankles. No open toes, open heels, slippers, flip-flops, etc..**
- **Long pants/slacks and shirts with sleeves will also be required. No shorts, skirts, nor dresses.**
- **Dress appropriately to be out in the weather. There will be no heat or lights, some exposure to rain and wind.**
- Bring your own appropriate eye protection. Ordinary glasses are okay.
- The actual tour will vary based on building and contractor conditions at that time. Tunnels and other enclosed spaces cannot be visited.

PLEASE MONITOR FUTURE NEWSLETTERS FOR REQUIRED CLOTHING AND OTHER DETAILS.

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**Northeast Indiana Chapter Project Management Institute**



**April 24, 2019 - Running to Leadership: Team Building and Leadership Workshop**



Topic: Running to Leadership: Team Building and Leadership Workshop, Speaker: Anthony Reed, CPA, PMP

NEIC is delighted to share that we will be holding one-day Leadership Workshop "Running to Leadership". Our normal April event will take place after the workshop, followed by PFW students' touchback presentation:

Date - Wednesday, April 24, 2019,

Workshop - 8:30AM-4:30PM

April Meeting (Work-Life Balance) - 5pm-6pm

Student's Teach backs Presentations - 6:15pm-7:15pm

The workshop is capped to first 30 registrations - first come first served.

Registration Options:

Leadership Workshop + April Meeting+ Student Teach-backs: \$95

Leadership Workshop Only - \$85

April Meeting+ Student Teach-backs: \$20

Student Teach-backs: \$0

**Location:** Walb Student Union, Room G-21, Purdue University Fort Wayne [2101 E Coliseum Blvd, Fort Wayne, IN 46805](#)

**Description:**

*Did you know that there's a direct link between managers and marathoners? They're both Type T's. Managers are "mental" Type T's. And marathoners are "physical" Type T's. And Type T's are thrill seekers. They thrive off of taking calculated risks to achieve a goal.*

Companies today are struggling to maintain morale while doing more with work with fewer monetary and human resources. This isn't an easy task. Preparing for and completing a marathon is the perfect backdrop for examining the problems and challenges faced by today's business leaders. While all certified marathons are the same distance, the dangers, terrain, altitude, and weather offer unique and varying challenges. You quickly learn that hills build character.

- Running up and down 3,600 steps during the Great Wall Marathon is like managing a 3,600-task project schedule.
- Fighting through the Antarctica Marathon's bitter cold relates to setting realistic project goals and self motivation.
- Encountering predators on Kenya's Lewa SafriCom Marathon course is like managing project risks and mitigation.

Whether you're in a high pressured meeting or encountering predators on Kenya's high altitude Lewa SafriCom Marathon course, you must be a fast thinker. You won't have the luxury to conduct research on the internet, call a consultant, or read a book. You must be able to react quickly to make critical decisions with limited information. The manager should weigh the advantages of a short term sprint with finishing in the long run. You must become a marathoner, who successfully uses their knowledge to mentally and physically push towards new limits.

Successful endurance athletes and business managers exhibit the same characteristics to thrive. They manage change by taking calculated risks and gradually expanding their comfort zones. This is how a miler becomes a marathoner and an individual contributor becomes a successful manager. They must incorporate change, manage risk, and motivate people to go up hill at a time when they want to quit. All of this must be achieved in a stressful, challenging business environment.

The presenter implemented a \$12 million IT project for \$2.6 million. He shares his experiences as a corporate IT executive and finisher of over one hundred 26.2-mile marathons to show you methods to lead people using marathon techniques and strategies. He's also one of fewer than 300 people in the world to have completed a marathon on all seven continents, including Antarctica.

### **You'll learn how to**

- Motivate yourself and your team members without a budget.
- Manage stress.
- Manage the negative, victim mentality.
- Embrace fear and risk to move outside your comfort zone.
- Develop leaders and staff members.

## **Brief Biography:**

Mr. Anthony Reed, CPA, PMP is an IT professional with twenty-five years in management and executive positions for various Fortune 500 companies, governmental entities, and large consulting firms. The responsibilities included managing multi-million dollar departmental budgets and staffing blends of international, multi-generational, multi-cultural employees and consultants. He's also an international endurance athlete, who has won age group and weight division trophies. He fuses these two unique backgrounds to lead project teams.

He's been interviewed on radio and web-cast programs and featured in the business, travel, and sports sections of major newspapers and publications across the country. This includes the *PMI Today*, *Dallas Morning News*, *Runner's World*, *Southern Living*, *Ebony*, and the *Journal of Accountancy*.

He holds two graduate degrees and two undergraduate degrees. He's also taught collegiate business management courses. He's served on the Board of Directors for Running USA, the Oracle Applications Users Group (OAUG), Ft. Worth's Jubilee Theatre, the Dallas White Rock Marathon, and various local and international not-for-profit organizations.

He has spoken at national and international business conferences. This includes over 100 PMI and SIM engagements. He has five books and over 50 articles published. The articles have appeared in *ComputerWorld*, *Datamation*, *Career Focus*, and *Runner's World* magazines. His latest 208-page book, entitled [Running to Leadership: What Finishing 100+ Marathons On All Seven Continents Teaches Us About Success](#)(second edition), focuses on building stronger team members.

As a Certified Running Coach, he completed 131 marathons (26.2 miles/42.2K). He's one of about 50 people in the world, who completed the marathon hat trick. He completed (1) over 100 marathons on (2) all seven continents and (3) in 50 States. This included the frigid Antarctica, Kenya's dangerous Lewa SafriCom, and China's Great Wall Marathons. (By comparison, over 2,500 people have reached Mt. Everest's summit, including over 500 in one year.) Subsequently, his journeys were chronicled in his book, [Running Shoes Are Cheaper Than Insulin: Marathon Adventures On All Seven Continents](#).

[Register Here](#)

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## **FWEC roster for FY2018-2019**

FWEC roster for FY 2018-2019:

President: John Magsam

Vice President: Open and under discussion; comments and suggestions welcome.

Treasurer: Ryan Stark.

Treasurer Trainee: Volunteer needed.

Secretary: Marna Renteria.

First-year Board Members: Rob Cisz. Another volunteer needed.

Second-year Board Member: Dave Gordon, Morgan Miller. Another volunteer needed.

Third-year Board Member: Rod Vargo. Craig Welch.

Editor of Engineer News: Maruf Ahmad.

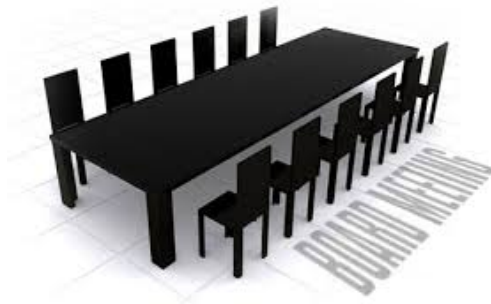
Membership and Contact Chair: Dave Schaller.

Northeast Indiana DiscoverE Chair: Rob Cisz.

PLEASE CONSIDER STEPPING UP INTO ONE OF THE OPEN POSITIONS. Most require very little time. The economy is booming, so tasks are being distributed across more people. Outgoing individuals are experiencing increased demands outside FWEC. Historically, Board Member ages range from high school through retirement. Participation tends to return more than it takes.

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## **FWEC Board Meetings**



Fort Wayne Engineers' Club board meetings are open to all FWEC members. The next FWEC board meeting will be on Tuesday, March 5th at 7:00 PM. Board meetings are held on the [Indiana Tech campus in the Academic Center](#) in room ACC-201.

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## **Advertise in the Engineers' News**

The FWEC provides advertising space within the Engineers' News. Advertisements are \$10 per issue and limited to ½ page of content. For submissions please contact [info@fortwayneengineersclub.org](mailto:info@fortwayneengineersclub.org).

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