



County Highway Report

April, 2003 – A Newsletter for the Indiana Association of County Highway Engineers and Supervisors

A Message from the President

By Steven A. Sherwood, P.E., L.S.;
President of IACHES

Spring weather has finally arrived. Although at times Mother Nature has reared up and briefly tried to draw us back into winter or so it seems. Soon summer will be here and everyone's road programs will be in full swing. We are also tempered with the thoughts of our men and women with the armed forces overseas. May God bless them and watch over them and bring a swift conclusion to the conflict and return our service men and women safely back to their families and loved ones.

Weather was ideal during the 2003 Road School. Attendance was around 1,400 for the event and I hope everyone enjoyed the programs. IACHES held its Regular Member meeting on March 26 during Road School. There were 54 members in attendance. Those members enjoyed spirited presentation by Walt Breach and Mark Deutsch from Force America. Several IACHES members were "selected" to participate in the presentation. IACHES members heard from Representatives Ruske and Scholer concerning the latest efforts on the current Gas Tax proposal. The proposal is still alive and hope still exists for action this year. It will take a concerted effort by all those involved to continue to push the issue and let the legislature hear the collective "drum beating". We thank Representative Ruske and Scholer for their supporting the bill and their continued efforts on our behalf. I would also like to thank the bill's original authors, Representatives Ron Liggett and Sue Scholer. Without this proposed increase in the gas tax, our budgets look very bleak. The increase in revenues is necessary for us to continue maintaining our current system.

IACHES also presented Tom Martin of LTAP with a "Plaque of Appreciation", recognizing Tom's outstanding dedication and work on behalf of IACHES. Tom was also bestowed with an IACHES Honorary Membership. Others recognized were Linda McCormick of LTAP, for her tireless efforts in preparing the LTAP Directory. Dustin Teachnor with Hamilton County Highway Engineering Department, for his efforts in designing the new IACHES logo, which was voted on at the last Regular Members meeting in December, 2002. A heartfelt "thank you" to both of you for an outstanding job.

The 2003 IACHES Directory was available at Road School. For those of you who did not have the opportunity to pick one up, a copy will be mailed to each Regular and Associate member. Extra copies will be available for purchase. Please view the IACHES.org website for the form.

Also during Road School IACHES presented the availability of golf shirts, T-shirts and hats with the new embroidered IACHES logo. We have received many positive comments from these eye-catching items. Several sizes and colors are available and order forms can also be found on the IACHES website. If enough orders are placed prior to the conference, items may be picked up at the registration table. Many shirts and hats of various sizes will also be available for purchase at the upcoming 2003 IACHES Summer Conference. If you have not visited

the site, I would encourage you to do so. Go to www.iaches.org. The IACHES' website has plenty of information available, including menus for access to forms, bulletin board, newsletter, Committees, Executive Board and Board of Directors. Access to Members (both Regular and Associate) is password protected for your privacy within the association as well as the Executive Room. Passwords will be issued with every annual membership renewal/application. Several links are available for your convenience. These are to IACC, LTAP, NACE and to the State of Indiana website. We encourage feedback concerning the website. We want to make the website as informative to the association as possible.

Our next Regular Member session will be at the 2003 IACHES Summer Conference. The conference is scheduled for Wednesday, June 4th and Thursday, June 5th. Mark your calendars now. Registration forms are being sent out in April. If you have not received one, please log onto the iaches.org website and print a registration form out. The conference will be held at the same location as last year, at the Embassy Suites Hotel North, Indianapolis. A block of rooms has been set aside for our use. The agenda and format will be similar to last years'. Wednesday afternoon and Thursday morning we will have sessions at the hotel. Thursday afternoon will feature the golf outing followed by dinner at the Twin Lakes Country Club. The Conference promises to be informative with several interesting sessions. You will also have a chance to relax and visit with your colleagues and friends. We have scheduled two evenings of Associate sponsored hospitality activity as well. This is our featured outing of the year so please make plans to attend. Please feel free to forward IACHES your ideas or thoughts on topics that you would like to see addressed on future conference agendas. Please remember to send in your 2003 IACHES membership renewal form. Forms are also available on the website. Changes to member contact information such as addresses, phone numbers, fax numbers, email addresses, etc. should be supplied to Cheryl at iaches@skynet.net. Membership renewal information has already been sent out to all our members. We encourage you to enroll your office staff or seek additional Associate Members to join.

IACHES is still pursuing increasing the County Engineer's Grant-in-Aid Subsidy as specified in IAC 8-17-5-10. If you recall, I previously wrote about this in earlier IACHES newsletters. I have not been successful to date. In addition, we are attempting to ask the legislature to set up a similar subsidy for Supervisors. The legislators tell us that in order to do this; we must first establish a certification program for Highway Supervisors. Without such a program, they would be hard pressed to move forward on the issue. IACHES is beginning to work with LTAP on possibly establishing such a program. I would encourage all members to address these issues with your local legislators. Please continue to contact your local legislators with letters and phone calls.

A draft on the Historic Bridge Proposal by Matt Fuller with FHWA is also available for your review on our website. IACHES has a committee actively involved in the monitoring of this proposal. The 2003 IACHES Scholarship application is available on the website. Applications are due soon and the winner will be announced at the upcoming 2003 Summer Conference.

Best wishes go out to Les Locke, former Hamilton County Highway Engineer. If my information is correct, Les has taken employment with the City of San Antonio, Texas. We wish Les the best. Les was very

instrumental in the early years of IACHES and had much involvement with IACHES. Les worked diligently with legislative issues and was a major contributing writer to the IACHES Newsletter.

Other members within IACHES please feel free to become contributing writers to the IACHES Newsletter. We are always looking for individuals to present articles or issues for discussion amongst your peers. Please take up the challenge and contact Cheryl or one of the IACHES Board members and forward us your thoughts or articles.

We ask that all IACHES Members support and participate in IACHES functions as actively as possible. We can only continue to grow and serve the association's needs with your help. In closing, I wish you all good weather and have a safe and productive construction season. I hope to see you all this June at the Summer Conference in Indianapolis this June.

May God bless us and watch over us all.

Respectfully Submitted,

Steven A. Sherwood, P.E., L.S.
Warrick County Highway Engineer
IACHES President

County Engineer Seeks Feedback from Fellow Engineers and Superintendents Jim Olson, P.E., Jefferson County Engineer

In Search of Principles to Guide the Stewardship of Public Roadways

Jim Olson, Jefferson County Highway Engineer and IACHES Southeast District Director submitted this article. This article is a condensation of thoughts that are being considered by Jefferson County roadway administrators, including the County Commissioners, Plan Commission members, and the County Highway Department Superintendent in the process of instituting new County Ordinances to implement long-range road system improvement plans.

I'm submitting this to the newsletter because I'd like your feedback and straightforward opinions. In particular, I'd like to hear: Which of these concepts don't hold water? For the concepts that you consider ok, is this presentation understandable to, and readable by, persons such as county commissioners, county council members, or plan commission members? Are these ideas controversial? Your feedback and input will help create a comprehensive set of principles for fair, logical, and effective roadway stewardship.

Two Assumptions 1) We, the elected and appointed officials performing roadway administration, are the stewards of the roadway system. 2) Good stewardship requires having a well considered, long-range plan, based on justifiable logic.

Stewardship is the careful and responsible management of something entrusted to one's care. The first step of stewardship is to study and learn the subject well enough to set appropriate **objectives**. The next step is to formulate a **game plan** for accomplishing those objectives.

The purpose of this article is to begin a discussion among IACHES members about the following. **A)** What factors should we recognize and be able to verbalize. **B)** What methods we have to implement this plan. **C)** What should be included in a well-considered, long-range plan for this stewardship. I have my own ideas, and some of them are in the following article. These concepts are not found in conventional engineering books, reports, or studies; or in training-guides for elected or appointed officials. And, because of the subtleties involved, are not widely recognized.

The bottom line of this effort is to uncover principles and logic that will lead to well-reasoned roadway system policies. This is not just an academic exercise without practical use. Putting into writing the many factors that affect the overall performance and condition of our highway system sharpens our thinking, and allows for identifying the inconsistencies and/or incomplete ideas.

Why will this be helpful? Those of us involved in making or guiding decisions that influence highways should be able to clearly state understandable, justifiable reasons for our actions, and ensure that our actions are in fact based on sound reasoning. And, it is illogical for each newly elected or appointed person to have to rediscover what is already studied and learned by others (i.e. – lets not reinvent the wheel again, and again....)

A - Factors To Surmount - These concepts are about factors that we must make allowance for in our long-range planning.

A-1) Major Formal Roadway Improvement Projects Will Not Happen On Most Local Jurisdiction Roads

Most local roads will not undergo formal improvement projects; even to achieve modest goals such as a slight widening of travel lane or shoulder widths.

The first reason is the lack of funding. Even projects making only moderate improvements are very expensive. The costs can be considered on a per-mile basis: each roadway mile will cost from one million to several million dollars per mile of roadway. If the per mile cost of formally designed and contracted projects is extrapolated over a jurisdiction's entire road system, it is readily apparent that funding on such a scale is impossible.

Second, improvement projects are often disliked and considered undesirable by nearby landowners. This creates political and social problems. When a project requires much infringing on development or, in the worst case, complete dislocation of landowners, severe personal disruption to those landowners also results.

Our long-range plans for the future should not rely on unrealistic hopes for formal roadway improvement projects.

A-2) Development Impacts Adjacent Roadways

Development greatly impacts a road and its right-of-way. This is referring to the affects on the traffic carrying ability of the road, and more importantly, the potential of a road to be improved or upgraded in the future. Closely adjoining development and uncontrolled access points lower our ability to improve a road. (This is in addition to the effect of increased volume of traffic that accompanies development.)

You that have been involved in a road improvement project where there is adjoining development will likely have personal knowledge of the limitations or additional expenses that development incurs.

Another, more detrimental impact transportation thoroughfares is the increased quantity of driveways accessing a road. Any road's ability to act as a thoroughfare for the efficient movement of traffic is lowered when more access points (driveways or roadway intersections) are allowed. No amount of engineering can reduce this impact.

Roadways are directly affected by development adjacent to a public roadway.

A-3) Land Conversion, A Pivotal Event

Land conversion is the event when any type of platting or building is done on previously undeveloped land. Undeveloped land is land that has been used for agriculture or is in a natural condition.

Land conversion is a one-time event. Once land is converted, it is never reconverted to agricultural or natural conditions (except in rare instances, for example if a brownfield were re-used as a park.) We will not see neighborhoods restored to meadows.

Land conversion is important because as land is converted, a type or style of access and development is usually being set. Any future changes to that style will be very difficult to achieve. For example, land converted to dense residential use is unlikely to later be considered for a heavy industrial use. Parcels that are allowed to convert with access directly onto a public roadway cannot later be altered to access differently, without great expense and disruption.

There is a one-time opportunity for right-of-way protection when land is converted.

B - Concepts Related to Achieving Long Range Objectives

B-1) Roadways Change via Two Methods

Roads change over time via two methods. The method that first comes to mind is the *formal* improvement process. These are formally designed and contracted construction projects that either build new roads on new rights-of-way, or improve and upgrade previously existing roads to the design standards of the day. These frequently are lengthy and expensive processes: projects are conceived, approved, and funded; then formal design plans for their construction are prepared; appropriate right-of-way is obtained; and lastly, private contracting firms construct the improvement.

The second method of road change is the *evolution* process. The evolution process is the summation of many small-scale, incremental actions. This is the more prevalent process on roads under local jurisdiction. Most roads were property lines, paths, or trails that "evolved" into roads over time through many small-scale actions, such as occasional ditching, graveling and paving. These improvements were generally the day-to-day maintenance activities of highway departments.

Most local jurisdiction roads have evolved to their present condition.

B-2) Roadway Evolution is an Important Concept and a Practical, Useful Process

Roads can be improved without incurring the huge expenses of formal projects. Important improvements can result from small-scale, incremental improvements made over the course of time. These improvements can occur during routine road maintenance activities, such as ditching.

A second, larger and more constant source of evolution improvements can be the result of the land conversion and development process, completed at very reasonable cost if done prior to or concurrent with land conversion. When land adjacent to a public right-of-way is being converted, appropriate right-of-way can be dedicated and prepared for public use very economically. It is only logical and fair that the owner of the development make this small contribution to the system of public right-of-ways, since any development increases the need for public roads and public utilities.

A realistic plan for long-range improvements to improve local roadways includes positive steps to evolve roads toward desired results via incremental changes.

C - Objectives of the Long Range Game Plan

C-1) Public Rights-of-Way Are An Essential, Irreplaceable Public Asset

We all must travel on public roadways, and/or consume goods and services that have been shipped on roadways. In modern society every person benefits from roadways. Without our system of interconnecting roadways, modern life would be impossible.

The corridors that the thoroughfare roadways occupy are irreplaceable, or rapidly becoming so. It is no longer feasible to reroute our thoroughfares on new rights-of-way, because of the subdivision of land and the construction of developments.

The rights-of-way corridors now used for roadways and public utilities will be the same rights-of-way corridors that must be used in the future. Thus, we must protect these corridors for today, and more importantly, for the future.

The system of public rights-of-way corridors is a vital, irreplaceable public asset that must be protected from the impacts of development, to maintain their capacity for future changes and improvements.

C-2) Intangible Characteristics of Roads are Our Customers' Concern

The intangible characteristics of roads, rather than tangible, physical aspects are what our customers care about. Intangibles include: ride quality (smoothness), safety, maximum safe speed, capacity (e.g. vehicles per hour), economy, maintainability (the ability to perform maintenance operations safely and economically), aesthetics ("drive-ability"- pleasantness and ease of driving, appearance), "upgradability" - allowance for future roadway improvements and upgrades, allowance for the unforeseeable changes that will inevitably occur (technology, life style, etc)

Road users want smooth and quiet riding pavement, for example. Whether pavement is asphalt or concrete is usually not an issue. However, if the choice of pavement material is an issue, probably the individual had bad experience with a particular material, and was dissatisfied with the ride quality or some other intangible characteristic of the pavement.

We, the roadway administrators must recognize that the only way to improve the intangible characteristics of roadways is by changing the appropriate tangible aspects.

C-3) Three Key Tangible Aspects of Roadways Control the Intangible Characteristics

There are three key, tangible aspects of roadways that can be controlled: **pavement; geometry; and access.** These dictate the intangible qualities of the roadway. These three tangible aspects are the means to improve the intangible aspects that our customers care about.

The three key tangible aspects of roadways are pavement, geometry, and access. These are aspects that can be directly controlled.

(The word pavement is used for simplicity, but this refers to the riding surface, whether a hard surface, or gravel.)

(For fun, and to visualize the impact of access on roadways, imagine traveling I-465 at 60 mph and INDOT had begun allowing unlimited driveway cuts for homes and businesses anywhere onto I-465.)

2002 NACE Report
Rick Pharis, Elkhart County Engineer
NACE Director

The 2003 NACE Conference in Biloxi, MS was very informative with numerous educational classes and many quality speakers. The conference was opened with the Governor of Mississippi, the Honorable Ronnie Musgrove, giving a very interesting speech on the economy of Mississippi and where they are headed in the future, and how County Engineers are important to the future of growing economic regions.

Some of the highlights that may be of interest are as follows:

1. NACE has produced a brochure on "Priority Issues for Reauthorization of the Transportation Equity Act for the 21st Century (TEA-21). Critical issues addressed in the brochure are adequacy of funding, improved efficiency and streamlining, and equity and balance. For copies of this brochure, you can e-mail NACE at nace@naco.org, or check their website at www.naco.org/affils/nace/index.htm.
2. A presentation on U.S. Communities was given. U.S. Comm. is a nonprofit group that assists public agencies in reducing the cost of purchased goods. There are no user fees and is sponsored by numerous national organizations, NACO being one. For more information, contact info@uscommunities.org, www.uscommunities.org, or call
3. toll free at 1-866-472-7467.
4. There was a session on "County Engineering Technicians: Retention through Certification." It was put on by Mr. Leonard "Bud"

Darby, P.E., and the Civil Engineering Programs Administrator of NICET. He can be reached at 1-888-476-4238, Ext. 120 or you can visit

5. Their website at www.nicet.org.

6. I did pick up a brochure on "Professional Roadway Safety Training" which lists many tools to help transportation and public works teams save lives. For more information, visit the FHWA website at www.safety.fhwa.dot.gov or contact Benjamin.gibbon@fhwa.dot.gov.

7. Next year's conference is April 4-8 in Orlando, Florida.

These are just a few of the highlights of this year's conference. Following is a copy of the State report that I submitted. I apologize for not seeking out more notable achievements from other counties; it was a last minute idea on my part. Keep in mind that I will ask for reports from your counties next year to include in my report. One final comment, please consider joining NACE if you are not already a member. Your dues go towards financing a staff and office that represents your interests on the national level. It is almost like supporting a lobbyist on your behalf. The cost seems so minimal for the value received, so I would encourage that you join.

2002 NACE ANNUAL INDIANA STATE REPORT

State Association Name: Indiana Association of County Highway Engineers and Supervisors (IACHES)

Number of Counties: 92 w/ 81 represented in IACHES

State Assoc. Members: 132 Regular; 108 Associate; 13 Affiliate

President - Steve Sherwood, P.E.

Vice President - Mike McTague, Supervisor

Secretary Treasurer - Darin Duncan, P.E.

Past President - Scott Tilden, Supervisor

Executive Secretary - Cheryl Mencsik

The State is divided into 6 districts with directors from each area, 3 being engineers and 3 being supervisors.

NACE Members: 22 (up 4 from last year)

State Annual Meeting:

Our annual meeting was held in conjunction with The Indiana Assoc. of County Commissioners (IACC) Annual Conference at Sheraton Inn at Keystone Crossing in Indianapolis, Indiana December 3 thru December 5, 2002.

Additional Meetings:

Spring - March 26 & 27, 2002 in W Lafayette at the 88th Annual Road School at Purdue University

Summer - June 5 & 6, 2002 at the Embassy Suites North in Indianapolis, IN.

Fall - Sept 23 thru Sept 26, 2002 in conjunction with The Assoc. of Indiana Counties (AIC) Annual Conference

Notable Achievements:

1. The Association continued to campaign at the State level for additional road funds. After much testimony before the House and Senate a 3 cent per gallon gas tax increase was adopted, the first increase in 17 years. However, local governments only receive 1 cent of the 3 cents, generating about \$32 M to be shared. The State Highway receives the other 2 cents, one for construction and the other for bonding.

2. Tom Stevens, P.E. from Hamilton County was named 2002 Engineer of the year. Mark Malczewski from Lake County was named Superintendent of the year.

3. Elkhart County provided a couple of projects to be included. The Indiana Ave. Bridge in Elkhart reconstruction project is the first bridge in Indiana to include an anti-icing system. The System monitors the bridge deck and sprays a chemical to keep the deck from icing. The second project was a "non-motorized vehicle" road constructed through private donations with county design and inspection to help the Amish community get their buggies off US 33. This project made national news

as the New York Times came to the ribbon cutting and was in the Houston, TX newspaper.

4. IACHES awarded its annual \$1000 college scholarship to Evan Brill who is attending Tri State University in Angola, Indiana. Evan is the son of Jeff Brill, Superintendent for Lagrange County, IN

Important Events State Association Participated In:

The association put on another excellent day of seminars pertaining to highway issues at the IACC conference in Dec. It is always helpful to have county commissioners sit in on highway classes. They do get a different perspective on our problems, which can be very helpful during budget meetings. The 88th Annual Road School was well attended. This is also another avenue to further educate elected officials on highway maintenance concerns.

State Issues:

1. Continually lobbying state legislation to increase road funding. A new gas tax bill is being offered that would actually include tying a cost of living adjustment index. This would eliminate future needs for straight gas tax increase legislation. The House and Senate are encouraging each local government to adopt its own wheel tax in order to generate funds.

2. The Indiana LTAP and IACHES are working with Indiana Dept. of Transportation (INDOT) on reconfiguring the bridge funding allocation.

3. IACHES is working toward a certification program with Indiana LTAP for county highway supervisors. The certification would open the door for State funding toward increasing each certified supervisors salary. Indiana currently sends \$20,000/yr. to each county that has a licensed county engineer. IACHES is also working towards increasing the \$20,000 as it has been that amount for quite a few years.

In conclusion, we continue to focus on increasing our regular membership and our NACE membership. We continue to support our NACE staff in Washington and appreciate all they do for our profession.

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Report submitted by:

Rick L. Pharis, P.E.

NACE Director - IACHES

NE District Director - IACHES

Elkhart County Engineer