



TRANSPORTATION

Building Jobs through
Transportation

FOCUS

Winter 2005

News and Information from the Rahall Transportation Institute



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RTI Hosts Regional Maritime Summit



Above left: Rep. Nick J. Rahall, II, delivers the keynote address at the Maritime Summit. Above right: Mr. Sam Bonasso speaks about maritime challenges facing the Appalachian region.

by Errin Jewell

To address the increasingly significant and complex maritime challenges and issues facing the tri-state area of West Virginia, Eastern Kentucky and Southern Ohio, RTI and the Marshall University Center for Environmental, Geo-technical and Applied Sciences recently hosted a regional Maritime Summit to address these challenges.

The summit took place January 31, through February 2, 2005, at the Radisson Hotel in

Huntington, W.Va. Representatives from academia, government institutions, private industry and other organizations traveled from eight states, Washington, D.C., and Canada to attend the conference.

Dana Robertson, director of the Inland Waterways Academy and summit chairperson, said "Huntington is the largest inland port in the nation, offering participants an opportunity to experience inland waterway operations at the Huntington port and along the Ohio River system."

Continued on 3: MARITIME SUMMIT

RSPA Presents RTI with Award, 6th Year of Funding

by Ashlee Gibson



Above: Mr. Sam Bonasso presents Rep. Nick J. Rahall, II and former MU President Dan Angel with a RSPA award.

Sam Bonasso, Deputy Administrator of the Research and Special Programs Administration (RSPA) of the United States Department of Transportation (USDOT), presented former Marshall University President Dan Angel and RTI staff with a grant for \$1.8 million Oct. 12, 2004. The amount represents the annual appropriation for the institution's sixth year of funding to continue the study of transportation and economic development in mountain regions.

The announcement took place at in Huntington, W.Va., with Congressman Nick J. Rahall, II, who helped secure \$12 to establish RTI, in attendance.

Continued on 3: ANNOUNCEMENT

Winter 2004

Visit us on the web at www.marshall.edu/rti





PLYMALE'S PERSPECTIVE

The Director's Report

Martin Luther King, Jr. once said, "All labor that uplifts humanity has dignity and importance and should be undertaken with painstaking excellence."

With everyday that passes, we at the Rahall Appalachian Transportation Institute (RTI) implement this philosophy with our mission of "Building Jobs through Transportation."

Since its inception in 1998, one of RTI's main themes has been to help influence a more diverse and equitable economy for rural Appalachia and other mountainous areas. Our staff and researchers have contributed to this immense effort by providing insights into how we can create and maintain the most cost effective enhancement to our national transportation system in rural Appalachia and rural America. As with most great endeavors, our efforts have begun in our own backyards with the hopes of eventually expanding across our nation.

Our most recent venture occurred in Huntington, W.Va., when RTI hosted the Maritime Summit. Due to the maritime challenges and issues facing the tri-state area of West Virginia,

Eastern Kentucky and Southern Ohio increasing in significance and complexity, RTI teamed up with the Marshall University Center for Environmental, Geotechnical and Applied Sciences to co-sponsor this great event. The largest inland port in the nation, which is located in Huntington, W.Va., offered maritime participants an opportunity to experience inland waterway operations at our port and along the Ohio River system.

Conferences such as the Maritime Summit allow for experts in their respective fields to gather and increase their knowledge of the transportation industry. The assembling of these great minds leads to new and innovative concepts, further advancing the mission of RTI in the tri-state area and expanding nationwide. It is with "painstaking excellence," as Dr. King stated, that we here at RTI attempt to excel in the creation of jobs and the increase of economic development for our state and nation.

Sincerely,

Robert H. Plymale

Busbee, OHV Recreation Curriculum Review Committee to Meet

Dr. Raymond L. Busbee, professor of Park Resources and Leisure Services at Marshall University, will meet with the Off Highway Vehicle (OHV) Recreation Curriculum Review Committee to discuss undergraduate and graduate courses offered by Marshall University and RTI at the fourth National Off-Highway Vehicle Conservation Council (NOHVCC) conference March 17-20, 2005, in Ontario, Canada.

A program agreement among RTI, NOHVCC and Marshall, which creates a series of courses in off-highway vehicle recreation, was officially signed at the 2004 annual conference.

These courses are designed to provide students and professional employees of planning and land management agencies with course work in all aspects of off-highway vehicle recreation, planning and construction of OHV trails and facilities, and operation and management of such facilities.

For more information about graduate or undergraduate courses or a minor in OHV management, contact Busbee at busbee@marshall.edu.



RTI Partners with Local Libraries to Celebrate Children's Book Week

by Jennifer Wedge



In celebration of Children's Book Week, which took place Nov. 15-21, 2004, RTI partnered with the libraries of Cabell County, W.Va.

Sponsored by RTI, Marshall University math instructor Linda Hamilton traveled to local libraries to assist students in building cities and intelligent transportation systems using LEGO Robotics. Hamilton traveled to Guyandotte Public Library Nov. 16, Barboursville Public Library Nov. 18 and finished the week by traveling to Milton Public Library Nov. 19. Open to all children in grades four and up, more than twenty children attended and each activity lasted for approximately two hours.

Left: Two children participate in a LEGO Robotics activity at the Guyandotte Public Library during Children's Book Week. More than 20 children learned about intelligent transportation during the week.



"Our goal for this program is to introduce children to LEGO Robotic systems as well as intelligent transportation systems. Eventually, we would like to see the libraries featuring their own LEGO cities," said Hamilton.

For more information about RTI's LEGO activities and upcoming events, visit <http://www.marshall.edu/LEGO>. To schedule a workshop for your school or organization, please contact Barbara Roberts at (304)696-7103.

Operation Lifesaver Participates at Annual Bridge Day

by Jennifer Wedge

The West Virginia Chapter of Operation Lifesaver (WVOL) was one of many booths featured at the 25th annual Bridge Day in Fayetteville, W.Va., Oct. 16, 2004. Taking place at the world-renowned New River Gorge Bridge, the one-day event was estimated to attract more than 200,000 people.

Representing RTI was Research Assistant and Operation Lifesaver volunteer LeAndria Reed. OL representatives from CSX Transportation, Inc., and Norfolk Southern Corporation, assisted Reed in attracting Bridge Day visitors to the OL booth.

Guests of the booth received important information on railroad safety by means of literature, zipper pulls, key chains, pens, pencils and other items.



"Bridge Day was a wonderful opportunity for Operation Lifesaver to reach more people. This event attracts all age

groups, which is beneficial to our mission, because railroad safety is everyone's concern," Reed said.

If you or your organization is interested in an Operation Lifesaver presentation, contact John Ball or LeAndria Reed at (304)696-2525.





Further Investment in West Virginia Transportation Network Necessary to Stimulate Economic Growth

Guest Column by Rep. Nick J. Rahall, II



Every day, hundreds of millions of Americans rely on our roads and mass transportation network to commute to work, attend school, go to the doctor's office, or travel for vacation or the holidays- often across interstate boundaries. As this winter season settles in and snow covers our roads and highways, the need for transportation and adequate highway construction funds for the Appalachian region becomes clear. A good transportation network encourages not only tourism within the state but also encourages a growth of technology along our corridor programs.

More than 30 years ago, the Appalachian Regional Commission (ARC) was created and since then, it has been a major force in the transportation system in West Virginia by focusing on reducing Appalachia's isolation by constructing the Appalachian Development Highway System. It is with organizations such as this that allow the Rahall

Transportation Institute (RTI) to continue in our mission of "building jobs through transportation."

This past year both the House and the Senate passed major national infrastructure

bills in the 108th Congress. While they have yet to reach a consensus on the two bills, they both addressed needs throughout our transportation network. Some of these needs include funding for a number of programs that are important to RTI as a University Transportation Center (UTC). The UTC program, administered by the Department of Transportation, furthers research and vocational training related to transportation, such as that at RTI whose special mission is to focus on transportation in the Appalachian region and create jobs through transportation.

I say, without hesitation, we need to significantly increase our investment in this critical national program and that it must be done at the outset of the 109th Congress, before it gets lost in the shuffle behind deficit reduction and other legislative initiatives. A sufficiently funded bill- preferably funded to the \$318 billion level that the Senate passes- would do several important things. It will fund projects spanning across multiple states; one example of this is the I-73/74 Corridor, which will run from the Great Lakes to South Carolina, passing through many states and congressional districts, including the one that I represent in southern West Virginia.

States requiring greater federal investment- such as West Virginia, one of the most difficult states in which to construct roads due to its mountainous terrain and challenging weather patterns- rely on federal backing in accordance with their greater needs. To meet current and future needs, we must enact a new Transportation and Jobs bill as quickly as possible. It is long overdue.

"I say, without hesitation, we need to significantly increase our investment in this critical national program and that it must be done at the outset of the 109th Congress, before it gets lost in the shuffle behind deficit reduction and other legislative initiatives." Rep. Nick J. Rahall, II



RTI Sponsors Students in W.Va. FIRST LEGO League Tournament

by Ashlee Gibson

Five area schools that are sponsored by RTI participated in the FIRST (For Inspiration and Recognition of Science and Technology) LEGO League (FLL) tournament Dec. 11, 2004, at the Caperton Center for Applied Technology in Parkersburg, W.Va.

The teams won a total of five awards in the competition, which was divided into four main award categories: Technical, Team Performance, Special Recognition and Judges Awards. FLL is a statewide, national and international competition that involves the planning, building and programming of LEGO robots to complete a set of fun challenges.

This year's mission was entitled "No Limits." In this challenge, the teams (consisting of two to ten students) had to find ways to help people with differing levels of physical ability that have difficulty moving, walking, seeing a sign or climbing stairs. The teams built LEGO robotics that were intended to ease problems faced by individuals in today's society who have physical challenges.

The robots are programmed using RoboLab, software that uses an icon-based, diagram building environment to write programs that control the RCX. The RCX is the programmable LEGO brick that transforms models into robots and controls their actions.

Teams then presented robotics technology solutions to help individuals in their community perform the everyday actions that many people today take for granted. Obstacles in the challenge included opening a gate and playing basketball while being confined to a wheelchair, serving dinner and feeding pets.

Linda Hamilton, pre-K-12 outreach instructor, coached the teams from Miller Elementary, Barboursville Middle, Spring Hill Elementary, Davis Creek Elementary and the Village of Barboursville, which are located in Cabell County, W.Va.



Above: Students from Miller Elementary completing the No Limits missions.



Above: Students constructing their LEGO robot prior to competition

Hamilton said that students and teachers at the competition got an opportunity to see live picture and operate components of RTI's LEGOCity over the Internet.

Hamilton, Bueno Educate Teachers at W.Va. Science Teachers Association Conference

by Ashlee Gibson

Linda Hamilton, pre K-12 Instructor, and Juan Bueno, graduate research assistant, provided hands-on LEGO Robotics training to teachers and administrators at the annual West Virginia Science Teachers Association Conference (WVSTA) Oct. 1-3, 2004, at the Radisson Hotel in Morgantown.

Hamilton said approximately 1,800 educators from West Virginia schools attended the conference. She and Bueno guided them through creating intelligent LEGO robotics vehicles and programming RCX microchips. Participants also accomplished several FIRST LEGO League No Limits challenges.

She said the training the educators received will be used to teach pre-K through college age students simple computer, science and technology skills.

The WVSTA is a statewide organization that has provided for or supported the professional development for teachers of science in West Virginia for more than 16 years. The conference featured approximately 100-125 separate presentations, demonstrations and workshops.





RTI Brings Railroad, Highway Traffic Safety Operations Seminar to Nashville, Tenn.

by Ashlee Gibson

John Ball, P.E., RTI research associate, served as an instructor/moderator for the Railroad and Highway Traffic Safety and Operations Seminar Nov. 9-10, 2004, at the Embassy Suites Hotel in Nashville, Tenn.

Ball presented information on the principles of train protection and control in addition to grade crossing safety and an Operation Lifesaver presentation.

“In addition to West Virginia, RTI has presented the seminar in Ohio and Montana. The two-day interactive format gives participants an opportunity to update skills and exchange ideas with peers for future collaborations.

RTI was invited to bring the seminar to Nashville by the Tennessee Transportation Assistance Program (TTAP), Tennessee’s Local Technical Assistance Program Center that is supported by the Federal Highway Administration, the Tennessee Department of Transportation and the University of Tennessee,” Ball said.



Charles R. Lewis, II, P.E., West Virginia Division of Highways, and Paul M. Tucker, CSX retiree, also served as instructors. All other instructors were provided by CSX, Norfolk Southern Corporation, Federal Motor Carrier Safety Administration and Operation Lifesaver.

James K. Vines, U.S. Attorney Middle District of Tennessee, served as the keynote speaker. He discussed homeland security and transportation.

The seminar sought to provide an understanding of the key aspects of design, construction and maintenance of highway and railroad industries. It also looked at temporary traffic control and the security issues that affect both industries. It provided insight into the safety for both the worker and at railroad crossings. It also looks at transportation security issues and safety at railroad crossings.

Faculty & Student Spotlight: Jamie Wolfe & Jeremy Boykin

by Jennifer Wedge



Name: Jamie Wolfe
 Education: B.S. in Ocean Engineering from the United States Naval Academy, Annapolis, Maryland. M.S. in Environmental Engineering from Marshall University Graduate College

Title: GIS Manager for the Center for Environmental, Geotechnical and Applied Sciences (CEGAS)

Birthplace: Huntington, West Virginia
 Contributions to RTI: Co-Principal Investigator on West Virginia Department of Transportation project entitled “Analysis and Exploitation of Geographic Information Systems. Wolfe also taught two classes that were partially sponsored by RTI: GEO482/582 “GIS for Transportation” and TM640 “Intelligent Transportation Systems”

E-mail: jawolfe@marshall.edu

Name: Jeremy Joseph Boykin
 Education: Marshall University-Expects to graduate May 2005 with an B.S. in Computers and Information Technology



Birthplace: Hattiesburg, MS
 Contributions to RTI: ArcGIS tools scripting, VisualBasic programming, web programming, database programming.

E-mail: boykin3@marshall.edu

Faculty and Student Spotlights *highlights a faculty or staff member and a student in each issue of Transportation Focus. If you would like to be considered for the next issue contact Errin Jewell at (304) 696-7165 or jewell4@marshall.edu.*





2004 College & Career Fair

Students Obtain Info about Training, Education Necessary for Careers in Transportation

by Errin Jewell

Representatives from RTI brought information about its partner schools, transportation-related majors, careers and other educational opportunities made possible through the institution, to high school students who attended the 2004 College & Career Fair Nov. 4, 2004, in Huntington, W.Va.

The fair, which was sponsored by The Huntington Regional Chamber of Commerce and Cabell County Schools, took place at the Veteran's Memorial Field House.

David Cartwright, research associate in engineering; Barbara Roberts, program co-ordinator; and Errin Jewell, public affairs specialist, provided information about higher education opportunities at RTI. These opportunities include technical training programs, undergraduate courses and graduate emphases and courses that have been made possible through RTI.

Several Marshall University instructors, including Dr. Mike Little, Professor; Linda Hamilton, mathematics instructor; and Dr. James Leonard, assistant professor of geography; also demonstrated projects that are possible partly through assistance from RTI. Little exhibited the "Highland Park" CD-ROM, a "virtual learning experience in which students integrate



Above: A high school student investigates careers in GIS at RTI's information table at the 2004 College and Career Day.

math functions and scientific information as they work through three forensic models."

Hamilton guided students in tele-operating intelligent LEGO robotic vehicles. Leonard displayed mapping software and literature that informed students about career opportunities in geographical information systems.

Approximately 60 institutions of higher education, technical training centers, trade organizations and businesses hosted booths that were visited by nearly 2,000 public and private school students during the event.



Above: Research associate David Cartwright informs high school students about education opportunities made possible through RTI.





MUEEC Expands Vision with Outreach Center

by Ashlee Gibson

The Marshall University Early Education Center (MUEEC) is expanding its work with the education community by launching a new Outreach Center.

The MUEEC Outreach Program is supported by RTI and it will incorporate internet resources, individual workshops and a summer institute and a helpline for similar programs.

The summer workshops and institutes will be one of the most exciting aspects of the program. These professional training opportunities will focus on child guidance, curriculum development, and implementation of hands-on projects, technology and assessment for early childhood educators who work with children ages three to eight.

A different topic will be presented each weekend in July and during the final week of July they will conduct a week long institute presenting an overview of all topics, hands-on experiences and nightly entertainment.

The workshops and institute will not only provide worthwhile opportunities for enhancement, but will also offer professional development hours for educators and child care workers. Registration for the workshops will begin in March.

Another component of the program is the MUEEC website, which includes detailed outlines and photo galleries of highlighted classroom projects from the past three years. These highlights include an investigation of the trucking industry and a study of barges on the Ohio River. The web component will also contain information on the upcoming workshops and institutes.



Right: RTI's partnership with the MUEEC allows children to learn first-hand about transportation concepts such as traffic safety, transporting goods and constructing roads and bridges.

“Over the past year we have partnered with RTI to set up the center and create something very unique for Appalachia and West Virginia,” Clayton Burch, MUEEC director, said. “Our goal is to share curriculum and guidance techniques with the early childhood community.”

For more information on the MUEEC Outreach Program, contact Burch 696-6301 or visit <http://www.marshall.edu/coehs/mueec>.

RTI Graduate Research Assistant presents Geodatabase at Conference

by Ashlee Gibson

Galina Fet, an RTI graduate research assistant, presented her work on the Fungi Biodiversity Geodatabase of the National Park in Central Asia at the Seventh Annual Society for Conservation GIS (SCGIS) Conference Sept. 27-29, 2004, at the U.S. Fish and Wildlife Service Conservation Training Center in Shepardstown, W.Va.



The database was created with ESRI and ER Mapper products and it is the topic of Fet's Physical Science graduate school thesis. Landsat 7 ETM+ software was processed with ER Mapper software using vegetation ground data. This allowed Fet and her colleagues to produce habitat classification and correlate fungi species with different types of habitats outlined as digital map categories

including conifer forest, dwarf juniper forest, savanna and sagebrush semidesert.

The processed imagery was then compressed with Enhanced Compressed Wavelet (ECW), imported in ArcGIS and linked with a species database. Tabular attributes of the map include electronic indexing fields which can greatly reduce the time correlating, comparing and reporting data. The geodatabase could be easily integrated to a wide selection of popular software including Access, Internet Explorer, Power Point and Excel. The project was developed in collaboration with the Kyrgyz Republic in the place of their national park.

The SCGIS conference discusses and promotes local and global conservation of natural and cultural resources through geospatial technologies.





by Errin Jewell

Middle and high school students interested in engineering are taking advantage of a pre-K-12 outreach program and statewide competition made possible by RTI, the American Society of Civil Engineers (ASCE) West Virginia Younger Member Forum and the West Virginia Department of Transportation.

The West Virginia Statewide ASCE West Point Bridge Design Competition and Educational Outreach Program is a high-energy, mentoring and training program that provides middle and high school students with a realistic, hands-on, engaging introduction to engineering, bridges and transportation design concepts.

“This is an exceptional program for West Virginia’s youth,” U.S. Rep. Nick Rahall (D-W.Va.) said. “This group effort will help our students get a look at the challenges that today’s engineering provides and give them an inside look at how demanding and rewarding an engineering program can be.”

Engineering students from several universities in West Virginia and young engineering professionals began visiting participating schools to serve as mentors and coaches in January. During visits, they assist teams in designing “virtual” bridges while considering factors such as cost, terrain, time constraints and environmental impact.

The “virtual” bridges are designed with free software provided by West Point. Major outreach activities, including classroom visits and mentoring, culminates during National Engineering Week in February. The first round of qualifying competition ends in March and the top West Virginia teams will

Statewide Outreach Program with ASCE, WVDOT Teaches Students Engineering Principles

Left: A student at Student Aspect Preparatory in Huntington, W.Va., use computer software to design the most cost-efficient bridges allowed within their budgets.

be contacted to compete in the statewide competition in April.

“The addition of this program greatly strengthens RTI’s ability to fulfill its pre-K-12 outreach mission to nurture a new generation of transportation professionals,” John Ball, RTI Engineer and ASCE member said, “The ASCE is in full support of RTI’s belief that integrating transportation technologies and hands-on learning during the pre-college school years will encourage students to strongly consider transportation or engineering-related careers.”

In 2004, fourteen middle and high schools from ten counties in West Virginia participated in the competition. This year, the goal is to increase the number to 30-40 schools with an emphasis on rural schools in southern West Virginia.

ASCE’s major partners include the West Virginia Department of Transportation, Marshall University College of Information Technology and Engineering, West Virginia University, West Virginia University Institute of Technology, Fairmont State College, Bluefield State College, Federal Highway Administration – Charleston Division, West Virginia Department of Education and Officers of the Younger Member Forum of the West Virginia American Society of Civil Engineers.

Teachers or other youth leaders with students who are interested in participating in future competitions may contact John Ball, P.E., research associate at the RTI, at ballje@marshall.edu or (304) 696-2525, or Lesley Rosier, P.E., director of the West Virginia State Board of Registration for Professional Engineers, at RosierL@wvnet.edu or (304) 558-3354.





Continued from 1: MARITIME SUMMIT



Above: Robertson addresses Maritime Summit attendees during a plenary session.

Rep. Nick J. Rahall, II, (W.Va. - 3rd District), Rep. Geoff Davis (Ohio - 6th District), Rep. Ted Strickland (Ky. - 4th District) and members of groups including the Appalachian Regional Commission, U.S. Army Corps of Engineers, U. S. Coast Guard, West Virginia Port Authority, American Society of Mechanical Engineers, Huntington District Waterways Council met to tackle both the challenges and the

opportunities that exist with regards to our region's intermodal transportation systems.

The summit is a direct result of conversations that took place in 2004 among Rahall, local and regional leaders concerning the importance of using Transportation, Technology and Tourism to create better jobs in the tri-state area.

"The Port of Huntington, our nation's largest inland port and the seventh largest waterway port in the entire United States, offers numerous opportunities for economic growth and job creation for the entire region," Rahall said.

"One of the primary goals of this Maritime Summit is to create a forum for promoting and protecting our region's vital contribution to the national transportation system through its rivers, ports, terminals and dedicated workforce."

A broad range of topics and issues were addressed at the conference, including:

- Transportation infrastructure issues including the locks and dams that support the region, port security initiatives, intermodal issues, containerization initiatives and opportunities, foreign and domestic commerce trends, and port security and waterway security.
- Recent developments in port services and operations, with a particular focus on the tri-state area and the Ohio River system.
- Passenger vessel developments and requirements.
- Education and research issues that confront the region along the Ohio River system.
- Technological advances that can be applied to enhance the economic development of the inland waterways system.
- Legislative and research updates on issues that impact the tri-state area.

In addition, Marshall University Interim President Mike Farrell, RSPA Deputy Administrator Sam Bonasso, Davis and Strickland spoke at the summit's kickoff dinner, at which Rahall served as keynote speaker. R. Barry Palmer of the Waterways Council, Inc. and Tony Vasil of AJ Vasil Associates served as

keynote speakers for the summit's luncheon and final dinner, respectively. The conference also included exhibits, demonstrations and opportunities for attendees to discuss common areas of interest.

Rahall also said he is optimistic that the summit highlighted the importance of the Huntington Region and the Ohio River to the nation's waterborne commerce. "Our region's maritime work-force and facilities are an economic asset and we must position ourselves to play an even larger role in the national and international economy of the 21st century."

Please visit RTI's website at www.marshall.edu/rti for a complete list of participating organizations, photographs and presentations from the Maritime Summit.



Above: Marshall University Interim President Mike Farrell speaks at the kickoff dinner.

Continued from 1: ANNOUNCEMENT

"We are building jobs through transportation at RTI and we'll continue to do so thanks to this grant," Rahall said, "Whether by river, road, or rail, RTI is generating jobs while improving all modes of transportation for Southern West Virginia and for our entire nation."



Above: Bonasso discusses the significance of the UTC program.

Bonasso also presented RTI Assistant Director Richard Begley and Angel with the RSPA Transportation Excellence Award.

Angel said, "We've greatly advanced both the transportation safety and the economy in our state. I want to thank Congressman Nick Joe Rahall for this rare gem."

The announcement was followed by a box luncheon during which Bonasso, Rep. Rahall and Dr. Sarah Denman, Marshall's Provost and Vice President for Academic Affairs, met with approximately 40 students from different curricula including geology, engineering, technology management, computer science and education to discuss careers in transportation. Students were given an opportunity to ask Bonasso, Rahall and Denman questions about transportation issues and careers.

"The UTC program attracts talented researchers and students and engages them in new approaches to the transportation issues of today and tomorrow," Bonasso said.





'GIS Day in West Virginia' Co-Sponsored by RTI, MU

by Errin Jewell

RTI and Marshall University co-sponsored "GIS Day in West Virginia," Nov. 17, 2004, at the Marriott Charleston Town Center in Charleston, W.Va.

The purpose of the transportation seminar series event was to brief executives, managers and senior officials on how Geographic Information Systems (GIS) can help them confront the issues that face them daily and the decisions that will affect their community and constituents. The seminar was geared toward a non-technical audience and focused on the uses and benefits of GIS technology. Topics including "What is a Geographic Information System," "Beginning Successfully: Why a Quality Base Map is Essential" and "How GIS Is Used in Local Government" were discussed.

Environmental Systems Research Institute (ESRI), one of the world's largest GIS research and development organizations, hosted the event. A second "GIS Day in West Virginia" took place Wednesday, Nov. 18, 2004, in Morgantown, W.Va., and was sponsored by the West Virginia GIS Technical Center of West Virginia University.

Marshall Looks Ahead to University's Computing Needs

by Jennifer Wedge

Members of the Marshall University community gathered November 8, 2004, for the Research Computing Conference sponsored by Marshall's Vice President for Information Technology/CIO, Dr. Jan I. Fox. The goal of the conference was to strategically plan for the next three to five years in attempts to envision the future computing needs of the university community.

The conference attracted approximately 50 attendees interested in learning how the new research computing initiatives could help their departments. A broad array of Marshall departments were represented including: Joan C. Edwards School of Medicine, the College of Science, RTI, Robert C. Byrd Institute (RCBI), Computing Services and the College of Information Technology & Engineering (CITE). Other organizations present included: WVNET, West Virginia's research computing network; West Virginia High Tech Consortium (WVHTC) Foundation; and OARNET, Ohio's research computing network.

David B. Lawson, RCBI and RTI Manager of Information Technology, was one of many participants attending the conference. "I was excited by the possibilities that working with other groups can bring to us here and the University and at RTI," said Lawson.

"The research that RTI does in transportation and economic development will be able to benefit from sophisticated data analysis techniques that require both large data stores and massively parallel algorithms. RTI has put much effort into developing its' data warehouse to contain many layers of transportation and economic data. These new initiatives into research computing may provide the platform for this analysis."

A roundtable overview was first conducted to discuss the institutional direction for the next five years along with the general outlines for research themes and information technology (IT) possibilities that tie the university together. Al Stutz from OARNET followed the roundtable overview with a presentation discussing how Ohio's research computing network has assembled a network of computing facilities at many state supported schools as well as developing partnerships with industry leaders such as Proctor and Gamble. The keynote address, titled, "Living on the Grid: An Overview of Emerging Grid Technologies Discussion of Possibilities and Campus Preparation," was given by Dr. Steve Armentrout and Amy Beaudry, who discussed the Global Grid Exchange.





Transportation Focus is a quarterly newsletter published by the Nick J. Rahall, II Appalachian Transportation Institute.

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Read *Transportation Focus* online at www.marshall.edu/ati/news/newsletter.htmlx

Transportation Professional Development Courses

Feb. 15, 2005

“Image Mapbase, GPS and Survey Integration with GIS;” Huntington, W.Va.

April 2005

“ADHS GIS Training Workshop;” Huntington, W.Va.

Transportation Seminar Series

Feb. 2005

“Geotechnical Database Seminar;” Columbus, Ohio. Co-Sponsor: ODOT.

Pre-K-12 Outreach Activities

January-Ongoing 2005

“West Point Bridge Design Contest” RTI/ASCE/WVDOT Coaching Begins; West Virginia Middle and High Schools.

Feb. 26, 2005

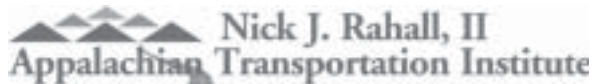
“TIPS for Extreme Fun;” ATV Safety Day, Veteran’s Memorial Field House; Huntington, W.Va.

Conferences

Aug. 3-4, 2005

“5th Annual Technical Forum, Geohazards in Transportation in the Appalachian Region;” Charleston, W.Va.

Register online at www.marshall.edu/rti or call Sandra Jones at (304) 696-7098.



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