A Center of Excellence in Asphalt Pavement Technology

North Central Superpave Center Marketing Plan and Strategy



North Central Superpave Center 1205 Montgomery Street West Lafayette, IN 47906

NCSC Mailing Address: P.O. Box 2382 West Lafayette, IN 47996-2382

> (765) 463-2317 phone (765) 497-2402 fax

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North Central Superpave Center Marketing Plan and Strategy

Marketing Subcommittee

Chairman

Michael Heitzman

Iowa Department of Transportation

Members

Lloyd Bandy Asphalt Pavement Association of Indiana

> Noël Fortier Payne & Dolan, Inc.

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> Gerry Huber Heritage Research Group

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Marketing and Communications Technical Assistance

Judith Johnson Federal Highway Administration



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Table of Contents

I. EXECUTIVE SUMMARY	4
A. Overview	
B. SITUATIONAL ANALYSIS	
C. SWOT ANALYSIS	5
D. MARKETING GOALS	
E. Marketing Strategies	
F. MARKETING BUDGET AND RESOURCES	
G. FUTURE DIRECTION	
II. OVERVIEW OF THE CENTER	8
A. Background	8
B. Staffing	8
C. Funding	
D. Programs	11
III. SITUATIONAL ANALYSIS	12
A. Marketing Challenges	12
B. TARGET MARKETS	
C. CURRENT MARKETING STRATEGY AND PERFORMANCE	15
IV. SWOT ANALYSIS	15
A. Strengths	15
B. Weaknesses	
C. Opportunities	16
D. Threats	
E. MATCHING STRENGTHS TO OPPORTUNITIES	
F. VISION AND MISSION	18
V. MARKETING GOALS	19
A. Marketing Goals	19
B. Market Behaviors	
VI. MARKETING STRATEGIES	24
A. Target Markets	24
B. STRATEGIES AND TACTICS	
C. MARKETING ROADMAP AND ACTION ITEMS	25
VII. MARKETING BUDGET AND RESOURCES	33
A. THE BUDGET PROCESS	33
B. Budget Overview	
C. PERSONNEL RESOURCES	
D. PROGRAM BUDGET	35

North Central Superpave Center Marketing Plan and Strategy

I. EXECUTIVE SUMMARY

A. Overview

The North Central Superpave Center (NCSC) in West Lafayette, Indiana is a premier testing laboratory and research facility, recognized for excellence in the implementation of the Superpave performance-based system for designing asphalt pavements. In addition, the NCSC's expanding role in the highway community includes addressing all issues related to Hot Mix Asphalt (HMA) technology. The NCSC is a regional organization, primarily serving the departments of transportation in 10 states in the north central region of the United States and the highway ministries in 2 provinces in Canada.

Initiated in 1995 to support the technology transfer of Superpave, the NCSC has accomplished this goal, and today the center is moving forward, exploring new directions and broadening its scope of services. The NCSC is poised to revitalize the center, launch new products, strengthen customer relations, and to become a leader in HMA technology. The NCSC is morphing into a central information resource and clearinghouse, serving the north central region and expanding its reach to introduce national programs.

B. Situational Analysis

The NCSC will continue to address concerns of the north central region, building upon its current reputation, leadership, and relationships within the locality. In addition, the center plans to adopt a national perspective to concentrate on targeted issues and programs of importance to advancing HMA technology.

In the past year, the NCSC has been working diligently to develop a marketing strategy to complement its change in focus and business objectives. The major marketing challenges facing the NCSC are as follows:

- The NCSC is in transition, and in a state of re-energizing its organization.
- At the same time, the NCSC faces low awareness of the center, its changing direction, and its current shift from Superpave to new and innovative programs and services in HMA technology.

The NCSC should establish a business model to deliver value to customers. To retain its business position in its current regional market and to define a new direction in a national market, the NCSC will implement the following strategies:

- *Innovation and New Program Development*. Develop a technology focus, program or service, unique to the HMA community—that meets the specific needs of its primary target market in the north central region.
- *Increase National Focus*. Extend outreach to universities, national research centers, and international entities. Continue to foster joint ventures with partners, such as the Federal Highway Administration (FHWA). Develop alliances with potential competitors, including other asphalt research and testing facilities or organizations.
- Manage Customer Loyalty and Relationships. Retain its current customer base of state DOT's and Canadian highway ministries. Reach out to prospective customer groups, which can provide additional revenue, such as contractors, associations, and local agencies.

C. SWOT Analysis

An evaluation of the NCSC's internal strengths and weaknesses and external opportunities and threats serves as the foundation for this strategic marketing analysis, which has evolved into a comprehensive plan. The marketing plan provides the NCSC a roadmap, focusing on the center's transition from a Superpave center to a resource in HMA technology, and other emerging technologies related to asphalt pavement. To prioritize goals, define strategies, and analyze gaps in service, it was necessary to first examine the current situation of the NCSC:

- *Strengths*. The center has expertise, knowledge, and facilities to continue valued technology transfer, research, and training. The NCSC possesses a recognized and respected knowledge base, in addition to a highly respected staff.
- Weaknesses. The NCSC is at a crossroads. The focus to implement Superpave is decreasing, and the NCSC's current customer base of transportation agencies is becoming self-sufficient in the deployment and training of the Superpave system.
- Opportunities. Performance testing is the emerging HMA technology. There is limited equipment and expertise to perform these tests, and the need and demand for performance testing is growing. An opportunity exists for the NCSC to fill this gap, and the center has the potential to become a leader in performance testing. In addition, the NCSC has established partnerships and strong collaborative relationships.
- *Threats*. The initial emphasis to deploy Superpave technology provided an overwhelming need for transportation agencies to call upon and use the services of the NCSC. The NCSC no longer has this clearly defined single product or program, which is easily recognizable and visible to customers.

D. Marketing Goals

The NCSC has established six marketing goals to achieve success and to focus its business direction:

1. Review and evaluate the goals and objectives of the NCSC. Develop a strategic planning approach, employing an annual assessment of the center's performance to strengthen future strategies and action plans.

- 2. Establish a new image and identity for the NCSC. Increase awareness of the NCSC by promoting the center as the north central region's premier resource for HMA technology.
- 3. Increase customer relations and retention through a customer management and loyalty program.
- 4. Determine appropriate programs and services to meet the needs of the NCSC's target market(s). Become a customer-focused organization.
- 5. Build awareness and create interest in the NCSC through promotions and communication.
- 6. Increase the visibility of the NCSC through a public relations program.

E. Marketing Strategies

In addition, the NCSC has corresponding strategies and tactics for each of the six marketing goals. These strategies and tactics are designated action items and activities to be completed over time in the following three phases:

- Phase 1: Determine what the customer wants, and create the identity of the center.
- Phase 2: Establish plan to market the NCSC and its programs to the customers.
- Phase 3: Implement the marketing strategies and tactics.

The NCSC has identified five groups of customers as organizations with needs or wants that can be met with the products or services from the center. These customer groups are defined as the following target markets (in priority order) for the NCSC:

- Priority 1:
 - o North Central Agencies:
 - State DOT's
 - Canadian Ministries
- Priority 2:
 - o Federal Highway Administration
- Priority 3:
 - o Contractors
 - Asphalt Paving Associations
 - Local Agencies
- Priority 4:
 - Universities
 - o International Entities
 - National Research Centers
- Priority 5:
 - o Public

The NCSC will promote to the target markets through customer visits, direct mail, and e-mail. Customers also will be reached through the Internet using the NCSC web site and placement of links and web stories or announcements on related web sites. This includes government, transportation centers, associations, universities, and consultant/contractor sites. The NCSC will provide a regional clearinghouse of technical and research information on developments and issues in HMA technology. The NCSC also will disseminate information through a newsletter, and several promotional and public relations communications. The NCSC's recognizes the

importance of customer feedback, and will conduct surveys and focus group sessions to gather marketing and customer research.

F. Marketing Budget and Resources

At minimum, it will take an estimated 1,000 hours a year to market the NCSC. Marketing the center must involve leadership and key staff members, including the Director, Technical Director, and Communications Specialist. It is also recommended to add to the current staff, a dedicated marketing resource to administer the program. The NCSC may consider employing a business or marketing manager, or contracting a marketing consultant or firm.

Vital to the NCSC's future is a marketing and communications program, designed to retain current customers and to attract new customers—and to ensure a funding base that allows the center to continue to operate and contribute significantly to the HMA community and the transportation industry:

- *Marketing Budget*. The average marketing and communications program budget ranges from 9 to 12 percent of the annual organizational budget. This program budget covers the costs of the various strategies, tactics, and activities of marketing, including newsletters, web site, research, tradeshows, direct marketing, and other events.
- *Personnel Resources*. To employ a marketing manager, an annual salary can range from \$60,000 to \$120,000. An annual contract for a marketing firm for approximately 500 hours may range from \$50,000 to \$100,000.

However, in the next year, the NCSC will embark upon new strategies and tactics to reinvent the center's direction and focus. These new approaches in the initial phases of the NCSC's marketing plan may require the center to spend more aggressively in the coming year (beyond the 9 to 12 percent range) to establish its marketing goals.

In addition to the NCSC staff, the center also may obtain marketing assistance from the Federal Highway Administration, Purdue University, and other partners and stakeholders.

G. Future Direction

The NCSC is progressing beyond the initial challenges of Superpave implementation, and the center's programs and services are evolving to engage an advancing transportation technology. This vision of tomorrow's potential keeps the center on the cutting edge of research, technology, and training—allowing the NCSC to focus on emerging technologies and specific concerns of the north central highway agencies, the HMA community, and the transportation industry. Such issues include tire pavement noise control, frictional characteristics of surfaces, ignition oven reliability, and regional test standardization.

II. OVERVIEW OF THE CENTER

A. Background

The NCSC was created in 1995 as one of five Superpave Regional Centers. The five centers had the single purpose to assist agencies and the transportation industry in the implementation of the Superpave performance-based system for designing asphalt pavements. The NCSC is a joint effort of Purdue University, the Indiana Department of Transportation (INDOT), and the Federal Highway Administration (FHWA). Two branches of the NCSC were established to serve the needs of the region:

- The Mixture Branch of the NCSC is located at INDOT's Office of Research and Development in West Lafayette, in close proximity to Purdue University.
- The Binder Branch is located at INDOT's Office of Materials Management in Indianapolis.

B. Staffing

The Mixture Branch serves as the main headquarters of the NCSC. To assist with research and development work, the Mixture Branch is equipped with advanced mixture analysis tools including the Superpave Shear Tester (SST) and the Indirect Tensile Tester (IDT). The Headquarters staff consists of the following NCSC personnel:

- NCSC Director (part-time position). Jan Olek is a Professor of Civil Engineering and Head of the Engineering Materials area of the School of Civil Engineering at Purdue University. He is also the Director of the North Central Superpave Center. He received an M.S. degree from Cracow Technical University, Poland, in 1978, an M.S. degree from the University of Texas-Austin in 1985, and his Ph.D. from Purdue University in 1987. He is a professional registered engineer in Indiana.
- NCSC Technical Director (full-time position). Becky McDaniel is the Technical Director of the North Central Superpave Center. Prior to that appointment in 1995, she served for 10 years as a research engineer and manager with the Indiana Department of Transportation, specializing in pavements and materials. McDaniel holds Bachelors, Masters and Ph.D. degrees in Civil Engineering from Purdue University, and a bachelors degree in English from Indiana University.
- Research Engineer (full-time position). Ayesha Shah is the Research Engineer for the North Central Superpave Center. She received her Ph.D. in Civil Engineering from Purdue University. Her area of specialization is bituminous pavements and materials. Shah holds a bachelors degree in Civil Engineering from Andhra University in Visakhapatnam, India and a master's degree in Civil Engineering from Iowa State University at Ames, Iowa.
- **Technician (part-time position). Steve Bowman** is the North Central Superpave Center's Technician. Bowman has over 15 years of experience as an electronics technician working with the Indiana Department of Transportation, Division of Research,

where he gained an appreciation of asphalt pavements, research and sophisticated test equipment. Bowman's electronic background is put to good use dealing with the complexities of the Superpave Shear Tester (SST) and Indirect Tensile Tester (IDT). As the laboratory technician, Bowman is responsible for the SST and IDT.

The Binder Branch is staffed by experienced INDOT personnel. Two sets of binder equipment, including different brands of dynamic shear rheometers, pressure aging vessels and bending beam rheometers, make this an ideal training facility. The Binder Branch is staffed by experienced personnel who have been involved in implementation of the Superpave binder and volumetric mix design specifications and procedures at the state level.

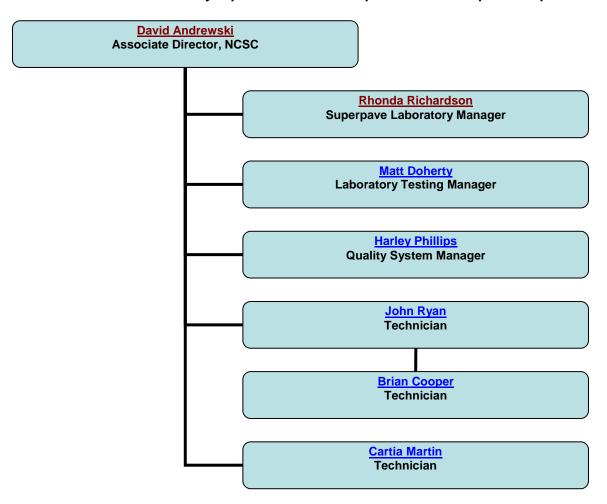
Following are organizational charts for staffing in the Mixture Branch and the Binder Branch for the NCSC.

North Central Superpave Center Mixture Branch

The Mixture Branch serves as the Headquarters and consists of NCSC personnel. Jan Olek, Ph.D., P.E. **NCSC Director and Professor of Civil Engineering** olek@purdue.edu e-mail (765) 494-5015 phone Rebecca McDaniel, Ph.D., P.E. **NCSC Technical Director** rsmcdani@purdue.edu (765) 463-2317 extension 226 phone Ayesha Shah, Ph.D. **Research Engineer** bano@purdue.edu (765) 463-2317 extension 227 phone **Communications Specialist** ncsc@ecn.purdue.edu (765) 463-2317 extension 224 phone (vacant) **Steve Bowman** Technician bowmansp@purdue.edu

North Central Superpave Center Binder Branch Staff

The Binder Branch is staffed by experienced Indiana Department of Transportation personnel.



C. Funding

Funding support for the NCSC is provided through a regional pooled fund study from states and Canadian provinces in the north central region. Approximately 50 percent of the NCSC's current funding is generated from the DOT's and highway ministries. This list consists of the following:

- Illinois*
- Indiana*
- Iowa*
- Kansas*
- Manitoba#
- Saskatchewan

- Michigan*
- Minnesota*
- Missouri*
- Nebraska#
- Ohio
- Wisconsin*

^{*}States that have been funding the center from the beginning and are currently funding the center.

[#] States/provinces that did participate in the pooled fund in the past.

The remainder of the budget is income from national and local research, training, and communication activities:

- Additional State Research Funding from Participating States (Minnesota, Iowa, Indiana, Illinois, Missouri, Michigan, and Wisconsin).
- State Research Funding from Other States (Ohio/OSU and South Dakota).
- National Cooperative Highway Research Program (Projects: RAP, RAP Video, F-SHRP, and Superpave History).
- Industry Research and Testing (FiberPave, Thermafiber, Brown and Brown, Abatech, East Jordan Iron Works, Fugro BRE, Koch Materials, Reith-Riley, and Brooks Construction).
- Other funding Newsletter (Auburn University; past PennState, University of Nevada at Reno, and University of Texas); Institute for Safe, Quiet and Durable Pavements, and Joint Transportation Research Program.

D. Programs

The NCSC is ideally suited to assist agencies, transportation industry, and the HMA technology community with current and future challenges, providing the following core benefits and services:

- Research
 - o Conducting New Research Projects
 - o Providing Expertise as Research Advisor
 - Technical Support
 - o Providing Testing Services
 - o Answering Information Requests
 - o Conducting Literature Searches
 - o Examining New Equipment and Technology
- Providing Technology Transfer
 - Technical Assistance
 - o Disseminating Information
 - o Participating in conferences in speaking engagements
 - o Providing Expertise as members of committees
- Training
 - o Creating On-line Training
 - o HMA Mix Design
 - o Binder Testing
 - o Noise
 - o Recycled Asphalt Pavements (RAP)
 - o Producing Technical Videos
 - o Developing New Training Courses in Emerging Technology
 - o Providing Interactive Training

Through these core benefits, the NCSC delivers programs, bringing solutions and technical expertise in the following:

- General HMA Materials Testing
- Pavement Performance Testing
 - o Dynamic Modulus
 - o Flow Number
 - o Master Curves
 - o Indirect Tensile Testing
 - o Flow Time
- Environment
 - o Recycled Asphalt Pavements (RAP)
 - o Noise
- Safety
 - o Friction

In addition, the center offers the following expertise and augmented program services:

- Provides technical solutions and input on national issues.
- Disseminates technical information through the following means:
 - o National Newsletter
 - o Web Site
 - Web HMA Searchable Database
 - o Training Courses
 - Visits to agencies and organizations.
 - o Provides preliminary literature searches for agency and ministry research projects.

III. SITUATIONAL ANALYSIS

A. Marketing Challenges

- 1. Competitive forces. The NCSC will continue to serve the north central region, building upon its current reputation, leadership, and relationships within the region. The competition in the Hot Mix Asphalt technology community includes private, academia, and government resources. To remain competitive in the transportation industry, the NCSC should establish a business model to deliver value to customers. Past success for the NCSC involved deploying an innovative technology, Superpave, to customers across the north central region. To retain its business position in its current market and to define a new direction in a national market, the NCSC will implement the following strategies:
 - Innovation and New Program Development. Develop a technology focus, program or service, unique to the HMA community—that meets the specific needs of its primary target market in the north central region.
 - *Increase National Focus*. Extend outreach to universities, national research centers, and international entities. Continue to foster joint ventures with

partners, such as the Federal Highway Administration (FHWA). Develop alliances with potential competitors, including other asphalt research and testing facilities or organizations.

Manage Customer Loyalty and Relationships. Retain its current customer
base of state DOT's and Canadian highway ministries. Establish and maintain
customer relationships. Create customer loyalty. Reach out to prospective
customer groups, which can provide additional revenue. Develop alliances or
joint ventures with partners and potential competitors.

Competition within the transportation industry includes other centers, associations, private firms, training organizations, and testing/research laboratories dedicated to asphalt technology. Such organizations, as the National Center for Asphalt Technology (NCAT), the National Association of Asphalt Pavement (NAPA), Asphalt Institute, and the states asphalt pavement associations disseminate information on Hot Mix Asphalt through research, training, web sites, video information, and publications. Universities across the country sponsor a variety of Transportation Research Centers. In addition, education, research, and technology transfer resources are available in the transportation industry through the American Association of State Highway and Transportation Officials (AASHTO), Transportation Research Board (TRB), and the FHWA.

The NCSC is an acknowledged leader in the areas of noise, Recycled Asphalt Pavements (RAP), and friction. The center is recognized as a part of an elite group of asphalt centers. The center also offers a complete range of Superpave binder and mixture test equipment. Other unique testing equipment is available, such as the following:

- Accelerated Pavement Tester (APT), a device for simulating traffic on pavement sections for rutting or fatigue evaluations.
- Purwheel, a loaded wheel tester.
- Superpave Performance Test (SPT), for estimating resistance to rutting, fatigue.
- Tire/Pavement Test Apparatus (TPTA), a device for measuring tire/pavement noise.
- 2. Other Considerations. Many factors in the business arena of the transportation industry and the highway community are constantly changing, sometimes in the NCSC's favor, and sometimes not. The implementation of a marketing plan can vary or benefit or suffer from timing issues. A plan may be affected positively or negatively by the actions of competitors, changes in government policies, or innovations in technology.

Forces outside of the NCSC can directly or indirectly influence opportunities or pose threats to the center. For example, in analyzing legal and political forces, is the government (local, state, national, or international) about to make a law or begin

regulation of something that will affect the center by offering a new opportunity or problem? Or, when considering technological forces, are there technological changes that will make your products obsolete, or are there changes that will present opportunities? Technological changes in the market are pushing the NCSC to shift its emphasis on Superpave to HMA technology. A broad awareness of emerging technologies is needed as any innovative technology may conceivably impact an industry.

As the NCSC gathers additional marketing research and customer information, the center should address such factors and trends, which may affect its business strategy and marketing goals.

B. Target Markets

The NCSC's success derives from its exclusive position in the transportation industry, as one of five regional Superpave centers, allowing the NCSC to market and promote one product, along with a suite of complementary services linked to that product. The NCSC also had the advantage of serving a specific region, enjoying a built-in customer base, target market, and base funding source.

As the NCSC transitions from a Superpave center to a leader in HMA technology, the center will establish a niche differentiation strategy—defining the center as a premier resource in the north central region for HMA technology. The center will initially focus its marketing efforts in the north central region, bolster customer relations and service, deploy technology, and deliver quality programs. The program(s) or service(s) must be innovative and directly targeted to the needs of the center's primary customers:

• Primary customers of the NCSC are transportation agencies and ministries, followed by the FHWA, contractors and asphalt paving associations.

As the NCSC broadens its national program, the center will further address the needs of its secondary customers:

• Secondary customers consist of universities, national research centers, and international entities, followed by the public. In addition, a potential secondary customer includes local government agencies. Local agencies may not have funding, but NCSC may reach this customer group through state DOT's.

Each group of customers requires customized strategies for the NCSC to ensure continued financial contributions. The base funding from the agencies is soft funding with no particular associated program, while research dollars are dedicated funds. The question remains that if funding from the states or provinces begins to dwindle, where will funding come from and will the center's focus have to be narrowed? Base funding from the agencies has allowed the NCSC to do some creative work in unique areas, which the center might not have had the flexibility to do without continued support.

Customer groups that may generate additional revenue in the future include the following:

• Additional state DOT's across the Northern region

- Consultants
- Contractors
- Equipment manufacturers
- Asphalt suppliers
- Aggregate suppliers
- Independent labs
- Asphalt associations

C. Current Marketing Strategy and Performance

The NCSC currently markets itself as a center providing research, technology transfer, communication, training, and technology support, based on goals from a Strategic Program review in 2005. Marketing communications include a newsletter, web site, and presentations at national meetings. The NCSC also has a searchable database for publications and information of interest in asphalt technology. The NCSC reaches out to its regional customers through its partnership with the North Central Asphalt User/Producer Group (NCAUPG).

IV. SWOT ANALYSIS

To prioritize goals, define strategies, and analyze gaps in service, it was necessary to first examine the current situation of the NCSC. This was accomplished by listing and discussing the strengths, weaknesses, opportunities, and threats (SWOT) to the center.

A. Strengths

The DOT's in the north central region have indicated that they want the NCSC to continue its existence, develop a market in the north central region, retain its ability to attract funding, and increase outreach to its customers. The center has expertise, knowledge, and facilities to continue valued technology transfer, research, and training. The NCSC is pushing forward in developing products, bringing new features and benefits to customers in HMA technology and branching out into other activities to reach out to customers. The NCSC remains as the only initial Superpave center of the five regional centers established around the nation operating as an independent center, and to its full original capacity. The NCSC was one of five regional centers established around the country.

The NCSC also has advantages, working in partnership with Purdue University:

- The funding the NCSC receives from the agencies and ministries comes through INDOT and the Joint Transportation Research Program at reduced or no overhead.
- Purdue University's Business Office takes care of many administrative tasks, including payroll and other financial accountability activities.
- Purdue University supports the NCSC's computer network and equipment.

Strengths: What is the center's appeal to various customers?

- Acknowledged leadership in areas of noise, RAP and friction.
- Recognized by national organization as part of an elite group of HMA researchers.
- Recognized and respected knowledge base, in addition to a highly-respected staff.
- Completed and on-going research on state, regional, and national levels.
- Provides expertise and training.
- Provides access to experts in the region.
- Experienced technical writers and researchers.
- Acknowledged as an independent third party—a viable regional third party technical resource.

B. Weaknesses

The NCSC is at a crossroads. The focus to implement Superpave is decreasing, and the NCSC's current customer base of agencies is becoming self-sufficient in the deployment and training of the Superpave system. Technology transfer to the states has been addressed through an extensive training program, and the majority of people in the field have been trained. Superpave expertise has been developed, and little need remains or exists for basic Superpave training.

Weaknesses: Why customers might choose not to work with the center?

- NCSC is not accredited due, in part, to time and expense.
- Funding agencies are not aware of the NCSC Technology Center and its capabilities/expertise.

C. Opportunities

Performance testing is the emerging HMA technology. There is limited equipment and expertise to perform these tests. The need and demand for performance testing is growing.

- 1) The NCSC has the potential to become a leader in performance testing.
- 2) The NCSC has established partnerships and strong collaborative relationships:
 - (1) **Purdue University**. The center's association with Purdue University has advantages:
 - The NCSC collaborates with specialized noise center at Purdue University, School of Mechanical Engineering. The university operates an Institute for Safe, Quiet and Durable Highways (SQDH), which is accessible to the NCSC.
 - Purdue University graduate and undergraduate students, along with postdoctoral researchers are available for staff flexib
 - (2) **Indiana Department of Transportation**. INDOT laboratory facilities and staff are available to NCSC.
 - (3) North Central Asphalt User/Producer Group (NCAUPG). The NCSC provides services to NCAUPG, planning and coordinating annual meetings, along with other communications and technical assistance activities strengthening

regional ties. The NCAUPG is a regional group of state governments, industry and Federal Highway representatives from 12 states in the central and north-central United States and two Canadian Provinces.

Opportunities: Why is center unique-what are technology focus areas?

- Training
 - o Mix Design for Noise Reduction
 - o Mix Design for Heavy Loads
 - Airport Pavements
 - Recycling
- Performance Testing
 - o Repeatability
 - Modification Testing
 - Simple Performance Tests
 - Binder Testing
 - o PG Plus
 - Repeated Load Testing
 - o Creep Testing
- Warranties
- Research

D. Threats

The initial emphasis to deploy Superpave technology provided an overwhelming need for the agencies to call upon and use the services of the NCSC, creating a built-in customer base. These agencies now are questioning whether to continue funding to the center. The NCSC no longer has a clearly defined single program or product, along with complementary services, that is easily recognizable and visible to customers. New agency people do not know about the NCSC. Remaining technical staff and champions, who know and value the center, need the NCSC to develop a program(s) or product(s) to sell to the agencies—providing services that the agencies can continue to support with base funding.

Threats: What threats must the NCSC consider?

- States have in-state universities, transportation centers, testing facilities, and research laboratories to support.
- The NCSC is one of five Superpave centers, originally initiated in 1995. Today, each center is evolving and establishing new direction. Centers may be viewed as a competitive threat, or a partnering opportunity.

E. Matching Strengths to Opportunities

- The transition of the NCSC from a Superpave center to a center of asphalt technology, allows NCSC to re-invent its role and to re-introduce the organization to customers, and to explore new markets.
- 2) From its inception, the NCSC has had a regional focus, reaching out to states and provinces in the north central area. These established relationships, and regional focus, may be the avenue for the NCSC to develop its future role in the HMA community. The center can

localize national issues for its north central target market. The NCSC's communications and clearinghouse of information can be targeted to the region, or to individual states or provinces.

- 3) The NCSC can remain a third party neutral resource for customers. However, it should position itself as an independent resource, clearly defining its relationship, role, and partnership with other organizations, such as NCAUPG, DOT's, FHWA, and Purdue University. These partnerships are essential and valuable. However, the center's strength may lie in defining itself as an independent testing and research laboratory.
- 4) Who owns the center? The NCSC is an independent organization, with strategic partners. These partners offer complementary products and services, benefiting the NCSC and the center's customers.
- 5) Within the transportation industry and the HMA community, the NCSC may want to invest in furthering partnerships in joint ventures with organizations, which may pose competition.

For example, the NCSC may want to partner with the FHWA in a new deployment, similar to Superpave, as developments arise in HMA technology. The center may want to collaborate in research projects with national centers and associations. Or, the NCSC may collaborate with individual transportation centers, testing facilities, or research laboratories in states and provinces, or with other universities within the region.

- 6) The NCSC also may want to partner with other organizations to further marketing outreach; the NCSC may be able to piggyback on the promotional or public relations efforts of national organizations in joint ventures or collaborative projects, such as information or educational campaigns in deploying new technology or programs.
- 7) As a resource, the NCSC may be in a position to "broker" relationships between states, provinces, universities, or associations.

For example, the NCSC may be the liaison to bring universities together to research an issue of interest to all parties. Or, the NCSC may become the central resource to share success stories, best practices, or new processes from one state to another state.

F. Vision and Mission

The NCSC is in the business of helping transportation agencies achieve success in the application of HMA technology, and in improved pavement performance. The center is an industry resource to form sound decisions, to choose appropriate programs or products, to test performance, and to find solutions for the next generation of challenges. The following vision and mission define the goals of the NCSC:

- Vision: Be a Recognized Source of Hot Mix Asphalt (HMA) expertise
- *Mission*: To provide Services to Advance and Transfer HMA Technology

The NCSC should establish marketing measures to increase funding and its customer base:

For example, the NCSC could establish a measure to achieve cumulative growth in funding of at least 25 percent over the next five years. At least half of this 50 percent should come from new customers (outside of the primary customer base of agencies and ministries) and from new research contracts or new products.

And/or

The NCSC should create new products that can use its current equipment, technology, and knowledge base. Conduct marketing research and analyses with a goal toward developing specialty products or a technology focus for the center.

To accomplish its marketing goals, the NCSC should develop benchmarks to measure progress. Regular reviews of these measures will provide feedback and possible corrective actions on a timely basis. The major marketing goal is to gain a better understanding of the needs and satisfaction of current customers. NCSC can use the knowledge of its successes with current customers to market to new customers. To capitalize on its success with current customers, benchmarks should be established to learn how the NCSC can improve the programs it now offers through knowledge of its customers' needs and specific opportunities for new program offerings.

V. MARKETING GOALS

A. Marketing Goals

1. Review and evaluate the goals and objectives of the NCSC. Develop a strategic planning approach, employing an annual assessment of the center's performance to strengthen future strategies and action plans.

The NCSC is in a state of major change, and essentially, can draw upon the lessons of a "start-up" organization or business. Review existing goals and develop a revitalization plan. The NCSC should build on the existing strength to develop the best organizational model that will allow it to align strategic goals, capabilities, and technical needs of the stakeholders. The main elements of that development include the following:

- Assessment (and endorsement) of the key functions of the center
- Quantification of benefits
- Development of improved ways of communicating the center's role
- Ongoing evaluation program

In this process, advantage should be taken of the existing attributes, including association with strong engineering program, diversified research experience and portfolio, national presence and recognition, recognized expertise in binder testing, RAP friction, and noise research.

The NCSC can build upon goals from the center's 1) 2005 Strategic Planning session, 2) background from marketing SWOT, and 3) other organizational information to focus

business strategy for the NCSC. The NCSC also can use this process to decide what is the unique focus of the NCSC. (Is it research, testing, technology transfer, or training? Is it pavement performance, environment, or safety?)

Through this process, the NCSC may conclude that a new organizational structure is required. The Marketing Subcommittee of the NCSC put forth four options for reorganizing the NCSC to address marketing and customer outreach in its January 2006 presentation to the Steering Committee. A new structure should be considered after the NCSC's determines its business strategy and focus.

(Note: The Certified Quality Manager Handbook provides a generic approach to strategic planning, which may be of assistance to the NCSC. The handbook addresses issues such as establishing future goals; uncovering gaps and needs; tracking and measuring progress; and evaluating results.)

2. Establish a new image and identity for the NCSC. Increase awareness of the NCSC by promoting the center as the north central region's premier resource for HMA technology.

Many customers still view the NCSC as a center dedicated to the implementation of Superpave. The NCSC must re-invent itself, and educate its customers concerning its revamped goals, products, services, and benefits. The NCSC must become visible, conveying its unique expertise. The NCSC is a visionary organization, with a mission to provide customers with state-of-the-art research, technology, information, and training. The NCSC may choose to re-name the center, considering the following:

- Choosing a name/title with vision that will carry the center into the future. The center also may revise logo to address change in name.
- The center can choose to develop a tagline to emphasize new identity and focus. For example, the current name can become the tagline or subhead, as the center transitions. Using this method, current customers will still recognize the NCSC.
- The name also should embrace a key topic word or term, which customers can use to easily find the center via the internet or search engines.

3. Increase customer relations and retention through a customer management and loyalty program.

Marketing is the process of initiating and building mutually beneficial relationships. The NCSC's first priority should be building and establishing customer relationships with its primary customer base. Building customer relationships can begin immediately, even as the center considers its focus, products, and services. The center must make customers aware of its transition from Superpave, and its current listing of products and services.

For example, the center's Director may want to conduct customer meetings, which should involve decision makers in each state and province. (Agency decision maker is key official, who makes decision whether to fund the NCSC or not.) Follow-up customer visits and

contacts can be assigned to staff, a designated Customer Manager, or a member of the Steering Committee.

Establish a program that allows effective feedback from customers and partners. Improve customer service. Inform potential customers, states, provinces, associations, universities, contractors, consultants, universities, FHWA, and others, of products and services available from the NCSC. Respond effectively to new and emerging customers needs. Conduct periodic customer surveys.

What personal communication will achieve:

- Visitations and face-to-face conversations will build a more personal relationship.
- It will allow the customers to see a face behind the voice that they are use to talking to on the phone.
- The center learns what customers need and want, gathering valuable customer feedback and developing two-way communications.
- Allows an opportunity for improvement on customer satisfaction.
- Lets the customers know that someone is available to help them in a time of need.

What is purpose of surveys and customer research:

- Listen to customers for opportunities.
- Look for dramatic improvement areas.
- Benchmark for best practices—discover break-through approaches.

4. Determine appropriate products and services to meet the needs of NCSC's target market. Become a customer-focused organization.

Through market research and customer feedback, the NCSC must determine the needs of its target market. The NCSC requires additional survey data, along with in-depth interviews and focus group sessions to gather customer information. This information will allow the center to identify the appropriate program(s) to develop and to target services to specific customer groups. For example, focus groups can be accomplished through several methods:

- Convene a panel of customers from across the region in diverse organizations and
 positions. Conduct a focus group session to discuss customer needs, or program
 features and benefits. Use group to learn what is working with the NCSC, what
 current products are valued, and what future products are desired. Conduct a series of
 sessions with current customer groups and prospective customers across the region,
 reaching out to agencies, ministries, associations, contractors, and universities.
- Use web conferencing to conduct focus group session(s). Questions and results from the original 2005 survey can be used to facilitate the on-line discussion.
- Arrange to conduct a focus group session at a major upcoming meeting, such as an association meeting, an annual conference, etc.
- Use focus group session(s) to serve two purposes: 1) to educate customers and 2) to learn what value the NCSC can bring to customers.

What is purpose of marketing intelligence gathered through surveys, interviews, and focus group sessions? Use data and information to define problem areas, gaps in the industry, and trends across the region to deliver customer value and customer solutions:

- Anticipate customer needs.
- Be proactive.
- Influence change in the transportation industry and the HMA community.
- Lead customers.
- Manage competitors.
- Manage alliances.
- Create new product-market spaces.

Tailor marketing efforts to ensure the NCSC's offerings satisfy the most sought after benefits, and communicate to the market in a way that differentiates the NCSC's programs and services from competitors.

- Is the NCSC developing and marketing products that meet customer needs?
- Are current products in line with the NCSC's business model and marketing goals?
- Are any changes in products or marketing strategies required?

5. Build awareness and create interest in NCSC through promotions and communication.

Moving a customer from awareness of a product to making a purchase can present a significant challenge. Customers must first recognize they have a need before they actively start to consider a purchase. The focus on creating messages that convince customers that a need exists has been the hallmark of marketing for a long time with promotional appeals. Promotions for the NCSC will involve the following: 1) Building Awareness, 2) Creating Interest, 3) Providing Information, 4) Stimulating Demand, and 5) Reinforcing the Brand.

For example, use the NCSC web site to build awareness. Gather customer feedback about the web site in focus group sessions, or through customer surveys:

- Develop a commercial look to the web site.
- Establish an independent identity, promoting the NCSC.
- Place information about partners in separate web page.
- Emphasize NCSC's programs and services.
- Emphasize the NCSC's research and testing.
- Incorporate a training page—how to obtain training, what training is available.
- Incorporate a page for all publications and other media produced through the NCSC.
- Publish success stories on the web site.
- Target information to specific customer groups.
- Incorporate a speakers' bureau.
- Establish a section on the NCSC website, "Ask an Expert." This would be a service to customers to provide questions and answers, and advice.
- Incorporate a page on the pooled fund; how can states contribute.
- Use web site for two-way communication and capturing customer information.
- Become the "go to" place for information on HMA technology in the north central region.

• Establish a clearinghouse for information. Emphasize products/programs of the NCSC.

6. Increase the visibility of the NCSC through a public relations program.

The NCSC can use public relations to generate attention and awareness through media placements and special events. Whether a public relations placement is a short product article or is included with other products in "round up" article, stories in the media can help entice a targeted audience to try the product. Public relations can be used to provide customers with more in depth information about products and services. Through articles, collateral materials, newsletters and websites, public relations delivers information to customers that can help them gain understanding of the product. For example, use customer feedback to determine and place stories of interest. Always include a success story for the NCSC. Other stories can feature customer stories or achievements, along with industry news. The right event can place the NCSC in front of a good target audience and offers networking opportunities for generating customer leads.

B. Market Behaviors

The NCSC anticipates a continuous need for the services of the center:

- 1. To serve those who recognize the need for constant improvement of HMA technology and see an advantage in pooling together resources for the purpose of addressing broader issues.
- 2. To those who need objective help with an HMA question or problem—the NCSC's research capabilities and knowledgeable staff appeal to many who are aware of the center's expertise.
- 3. To the leader in research and innovation, as the center becomes responsive to the needs of the HMA community.
- 4. To those who recognize that the NCSC helps in whatever way necessary, such as training, looking up answers to questions, helping with research, or other special projects or requests.
- 5. To those who recognize the NCSC provides access to unique, one-of-the-kind equipment in the area of noise and mechanistic design research; active interdisciplinary collaboration.
- 6. To those who acknowledge the NCSC as a neutral third party technical resource. The NCSC has not been absorbed into part of another large transportation center, and the center does its own research and testing—making it a very neutral source for help to the transportation industry, HMA community, or agencies.
- 7. To those who view the NCSC as a mature and experienced entity with specific expertise and flexible operational framework that is adaptable to local needs, provides technical expertise for testing and training, and employs knowledgeable staff and top-notch facilities for most aspects of HMA research and testing.
- 8. To those who require important and timely information, and use the NCSC for invited speakers, collaborators on research, or other special needs.

9. To the users of the NCSC's communication and information services, including the center's newsletter, web page, or searchable database.

VI. MARKETING STRATEGIES

A. Target Markets

Target Marketing involves breaking a market into segments and then concentrating the NCSC's marketing efforts on one or a few key segments. Target marketing can be the key to the NCSC's business success. Target marketing provides focus to marketing activities.

The target market is the specific group of customers that a company or organization aims to capture. The target market is a defined segment of the market that is the strategic focus of a business or a marketing plan. It is the group of customers identified as people with needs or wants that can be met with the products or services from the NCSC. The NCSC has defined five target markets of customer groups in the following priority order.

Target Group	Priority	Customers	Service	Examples
1	High	North Central Agencies: State DOT's Canadian Ministries	1) Customized program for each agency 2) Regional programs	Training, testing Performance testing
2	High	Federal Highway Administration	National outreach	Noise Friction RAP
3	High	Contractors Asphalt Paving Associations Local Agencies	1) Customized program for each association 2) Regional programs	Third party testing Test standardization
4	Medium	Universities International Entities National Research Centers	National outreach	Noise Friction RAP
5	Low	Public	Expertise	Technology database

B. Strategies and Tactics

This Marketing Plan provides a roadmap to accomplish the NCSC's marketing goals. To implement this roadmap, a table of action items follows in the form of strategies and tactics for each of the NCSC's six marketing goals. The action items will be accomplished over time and are divided into priorities of Phase 1, 2, and 3:

- Phase 1: Determine what the customer wants, and create the identity of the center.
- Phase 2: Develop a marketing plan to sell to the customers.
- Phase 3: Implement the plan.

C. Marketing Roadmap and Action Items

GOAL/Strategy	PHASE 1	PHASE 2	PHASE 3
Marketing Goal 1: Review a	and evaluate the goals and o	bjectives of the NCSC.	
Strategy 1. Develop a Business Model for Driving Value via Innovation and New Product Development.	Tactic 1. Examine the NCSC's core competencies.		
	Tactic 2. Decide what is the unique focus of the NCSC.		
Strategy 2. Long term: Develop a process for strategic planning that the NCSC will use consistently.		Tactic 1. Revamp organizational structure to drive business strategy.	Tactic 2. Establish an annual process to establish and review business goals, objectives, and actions.

GOAL/Strategy	PHASE 1	PHASE 2	PHASE 3
Marketing Goal 2: Establish	a new image and identity for	the NCSC.	
Strategy 1. Develop a brand for the NCSC. Conduct customer research to determine what that brand should be.	of the center. Tactic 2. Revise overall corporate look for the center. Ensure that all logos, media communications, including web site and e-communications, are consistent in design, colors,		
	tone, and content. Tactic 3. Determine the brand promise to customers. Tactic 4. Develop marketing messages. These messages will ensure that all media, presentations, and any communications are consistent. The marketing messages will reflect the business model and strategies of the NCSC and clearly define the NCSC's role in the transportation		
	industry, HMA community, and relationship to key partners.		

GOAL/Strategy PHASE 1 PHASE 2 PHASE 3

Marketing Goal 3: Increase customer relations and retention through a customer management and loyalty program.

Strategy 1. Enhance Communication between the NCSC and State DOT's and Canadian Highway Ministries. Identify customer needs through market research, customer research, and existing information.

Tactic 1. Develop a customer relationship management database to track information concerning the agency and ministry customers, and other primary customers. Include the following: 1) funding from each state or ministry, 2) testing or research conducted, 3) technical assistance requests, 4) training requests, and 5) customer feedback from customer visits, along with thank you letters, testimonials, etc.

Tactic 2. Develop an action plan of customer contact visits. The first strategy is to visit primary customers in Target Market 1. However, while in a state visiting agency or ministry officials, the NCSC may consider adding visits to other primary customers from Target Market 3 or 4. Visit Target Market 1 to retain the current customer base and to ensure base funding commitment. This visit also is to encourage additional research requests from the agencies and ministries. Visit Target Market 3 or 4 to encourage partnerships, alliances, and joint ventures.

Tactic 3. Determine who will be the champion for the NCSC, and the primary contact to conduct customer visits. These visits also will require follow-up meetings; determine who makes the follow-up contacts.

Tactic 4. Prior to customer visits, develop and send an introductory letter. Send letter to the decision maker and key technical/research specialist in each state and province, introducing the new NCSC. Enclose an individual one-page fact sheet with success bullets about the NCSC and specific achievements for each state or province. Use information from the database and the customer/marketing maps. Emphasize product features and benefits of interest to that targeted state or province.

Tactic 5. Visit each state and province. Meet with the decision maker and key staff, provide a brief history of the NCSC, and introduce the new NCSC, products, and services. Emphasize what the NCSC can do for that specific state or province. Discuss partnerships and alliances. Discuss current customer needs. Leave an informational package about NCSC.

Tactic 6. From the database, develop individual color-coded maps. Indicate what agencies provide funds, what agencies have requested research, and what agencies have requested technical assistance or information. Develop map to indicate what agencies are requesting training. These maps will assist in development of an action plan for customer visits/contacts.

GOAL/Strategy P	HASE 1 PHASE 2	PHASE 3
Marketing Goal 3: Increase cu	stomer relations and retention through a customer n	nanagement and loyalty
program.		
Strategy 2. Implement Point of Contact (POC) approach to ensure all customers are contacted on a routine basis.	Tactic 1. Identify a technical/research champion or focal point in each state and province, or primary organization. Collaborate with this contact to develop an action plan for its state or province. Identify technical assistance or research requests, and opportunities to customize or localize products, services or information. Tactic 2. Conduct a follow-	
	up meeting (face to face, teleconference, web conference or video conference). (Meetings may be scheduled according to state or province; follow up may be twice a year, or quarterly.)	
Strategy 3. Consider an annual or bi-annual conference of champions or key focal points. Or an alternative: Consider establishing a customer board or panel.		Tactic 1. Institute a process for consistent customer feedback. 1) This conference will allow cross discussions of customer issues, sharing knowledge and information across the region. 2) A customer board or panel can meet one to two times a year as a group to advise on products, services, and other customer concerns. This conference or meeting can be a web conference or video conference.

GOAL/Strategy		HASE 2	PHASE 3
Marketing Goal 3: Increase	customer relations and reter	ntion through a customer	management and loyalty
Strategy 4. Consider establishing an incentive or rewards program.	pr ar pa cu cu sig Ta inc pa su	actic 1. Institute a rogram to acknowledge and thank customers, articularly repeat ustomers and those ustomers providing ignificant funding. actic 2. Consider using acticipation in customer urveys or focus group essions.	
Strategy 5. Conduct customer surveys.			Tactic 1. Conduct comprehensive customer survey every two years. This is a formal survey to assess the NCSC's overall performance, along with product and service evaluation. Tactic 2. Conduct customer satisfaction survey. 1) This is a short survey issued following a customer purchase, a service provided, a customer visit—in general following any customer contact. 2) This survey can be e-mailed to customers. The survey can be placed on the NCSC's web site.

GOAL/Strategy	PHASE 1	PHASE 2	PHASE 3
Marketing Goal 4: Determin	ne appropriate products and	services to meet the needs	of NCSC's target
marketing Goal 4: Determine market(s). Strategy 1: Conduct focus group sessions to gather marketing intelligence and product information. Learn what features and benefits appeal to customers.	Tactic 1: Conduct follow-up interviews to the customer survey sent out in 2005. 1) Response was limited to the survey. Conduct telephone follow-up calls to those who responded and those who did not respond. 2) Follow-up calls can add value to this survey, gathering significant information.	services to meet the needs	or NCSC's target
	Tactic 2: Use information from the 2005 survey, and follow-up calls, to initiate focus group sessions to gather in-depth information about customer needs.		
Strategy 2. Document and understand what research services, testing facilities, products, and services are available in the transportation industry and the HMA community.	Tactic 1. Conduct an assessment of the competition. Use this assessment to evaluate the following: 1) Determine the NCSC's technology focus areas. 2) Determine where the NCSC can partner, collaborate, piggyback, or recommend a joint venture. 3) Evaluate what products and services are not available in the north central region, and compare different needs in each state and province. 4) Differentiate the NCSC's product and services from its competitors.		
Strategy 3. Evaluate how customers perceive the NCSC's product(s) in relation to competitor's products or to other solutions they use to solve their problems.	Tactic 1. Evaluate the center's current products and services. Tactic 2. Clearly define product(s); educate and market product(s) to targeted customers. Develop marketing plan and strategies for each product.	i s i i	Factic 3. Use customer nformation, assessments, survey results, focus group nformation to formulate deas for new product development.

GOAL/Strategy	PHASE 1 PHASE 2	PHASE 3
	areness and create interest in NCSC through promotic	
Strategy 1. Develop an informational package, showcasing new name and corporate identity.	Tactic 1. Develop brochure, with product, services, training, and technical support listed.	
	Tactic 2. Include folder, staff directory of expertise, catalog of training, catalog of publications, video and any other information.	
	Tactic 3. Develop product fact sheets.	
Strategy 2. Develop an exhibit display for special events and trade shows.	Tactic 1. Depending on number of events a year and budget, a full size exhibit or table top exhibit should be designed. If funds are available, produce one in each size.	
Strategy 3. Use product showcases to demonstrate features and benefits, and to create interest.		Tactic 1. Use demonstrations to showcase new technology. Include product showcase, site demonstrations in a particular state or province, or experimental pilot or test projects.
Strategy 4. Totally revamp the NCSC's web site.	Tactic 1. Redesign website in consistent style with brand, new name, and corporate look. Redesign web site for the customer, and what the customer is seeking. Tactic 2. Redesign web site to be consistent with business strategy,	
Otrotomo 5 Donomo de del	emphasizing innovation and product development.	
Strategy 5. Document and disseminate successful innovations and best practices.	Tactic 1 . Establish a clearinghouse on the web site.	
	Tactic 2. Localize information from national sources for regional applications in states, provinces.	

GOAL/Strategy	PHASE 1	PHASE 2	PHASE 3
Marketing Goal 6: Increase	the visibility of the NCSC	through a public relations	program.
Strategy 1. Use public relations to support marketing by building product and the NCSC's image.			Tactic 1. Employ media relations to advance the NCSC. Develop information/press kit. Include written information such as a news release, organization background, key spokesperson biographies and other supporting materials that provide information.
			Tactic 2. Place success stories and technical/research articles about the NCSC's innovations and product development in government, association, and trade media.
Strategy 2. Use newsletters to heighten awareness of NCSC.			Tactic 1. Establish a monthly e-bulletin. This should be a one-page newsletter distributed through e-mail, with short stories with updates to research projects, testing, training, new products, etc. This bulletin will keep customers informed and provide exposure to the NCSC.
			Tactic 2. Retain the current newsletter, published three times a year. Revised design style as needed to reinforce brand and consistent corporate identity. This is a newsletter of more detailed, technical articles.

GOAL/Strategy	PHASE 1	PHASE 2	PHASE 3
Marketing Goal 6: Increase			
Strategy 3. Demonstrate expertise to potential customers.			Tactic 1. Attend major, significant conferences, trade shows, and events. Exhibit in trade shows, when a significant number of customers are present. Develop database of regional meetings, conferences, and trade show events.
			Tactic 2. Initiate a speakers' bureau. Use these events to make presentations on research, products, and technical support. Serve as moderators on panels.
			Tactic 3. Treat special events as an opportunity to talk on a topic of interest to potential customers. Events serve to highlight the speaker's expertise in a field.
Strategy 4. Consider trends for the future, or long-term planning.			Tactic 1. Develop a community of practice, or information forum, for customers to share information about products, services, training, or issues in HMA Technology. This can be a regional forum, or a forum discussion on the specific products or research produced through the NSCS—provides customer feedback, forum for questions and answers.
			Tactic 2. Join national communities of practice, sponsored by other organizations for brand exposure and for customer leads. Tactic 3. Use new distribution channels: Podcasting, web seminars, and on-line training.

A. The Budget Process

A comprehensive, realistic budget is a critical component of an annual marketing and communications plan and, like the marketing roadmap and actions, serves as a guide to ensure the NCSC reaches its goals. The budgeting process helps to determine whether the overall marketing plan is realistic, and will enable the NCSC to adjust the plan or budget to focus on ultimate priorities. What companies and organizations allocate in marketing dollars varies depending on annual marketing activities and the type of business, for example:

- In the for-profit world, it is fairly standard to determine a marketing budget by allocating 10 to 20 percent of projected gross revenues to marketing and communications.
 - Consumer packaged goods companies may spend 50 percent of net sales for introductory marketing programs in the first year, subsequently lowering the percentage spent to a stable 8 to 10 percent within a few years.
 - Retail stores that advertise and promote spend an average of 4 to 6 percent of net sales for marketing support.
- In the nonprofit world, the average allocation may range from 9 to 12 percent of an annual organizational budget.

The NCSC may choose to use a percentage approach, or establish a flat dollar approach. As the NCSC finalizes its plan, the center can refine the budget process to establish a detailed marketing and communications budget prior to the start of each fiscal year, and track costs (by strategy and program or project) and results, so the center can analyze cost versus benefit. The percentage approach provides that marketing and communications expenditures directly reflect an organization's evolution and the size of its budget—communications spending grows as does the organization. A simple example of an annual marketing budget may follow this formula:

- 2 percent for promotions
- 4 percent for producing and printing communications
- 2 percent for special events
- 3 percent for consultants and freelancers

However, exceptions in the percentage approach are required for special needs such as the launch of a new program, introducing new leadership, or in the case of the NCSC—reinventing the center's direction and focus. In the next year, the NCSC will embark upon new strategies and tactics. Priorities in the first phase of the NCSC's marketing plan may require the center to spend more aggressively to establish its marketing goals.

For this reason, the NCSC may want to consider a flat approach to establish a budget in the initial phase of the marketing plan. In addition, the NCSC can create a history of costs and expenditures and develop a baseline budget. The NCSC will gain insight on what to spend to reach the center's goals and, via tracking results, will gain a sense of what strategies work best to achieve which goals.

B. Budget Overview

Separate budgets are proposed for the NCSC's marketing and communications program: 1) A *Personnel* budget, and 2) a *Program* budget.

- Personnel include costs associated with the designated marketing team: salaries, benefits, training, and travel. In the case of the NCSC, the personnel may include NCSC staff delegated to lead or accomplish the marketing program, consultants or freelancers contracted to manage marketing or to produce products, or university staff or students providing services to the cent
- The Program budget covers the costs of the various strategies, tactics, and activities of marketing (things that the Marketing team does), including newsletters, web site, research, tradeshows, direct marketing, and other events.

C. Personnel Resources

Vital to the NCSC's future is a marketing and communications program, designed to retain current customers and attract new customers, and to ensure a funding base that allows the center to continue to operate and contribute significantly to the HMA technology community. Adequate resources and budget are required for success. The NCSC may consider employing a business or marketing manager to administer the program, however, marketing the center also must involve leadership and key staff members. The NCSC's marketing team should consist of the center director, technical director, communications manager, and marketing manager. The marketing manager may be a new staff position, consultant, and/or marketing and public relations firm. In addition, the marketing team may obtain assistance from the Federal Highway Administration, Purdue University, and other partners and stakeholders.

To employ a marketing manager, the salary can range from \$60,000 to \$120,000:

- According to the American Marketing Association, in 2004 the median salary for a marketing coordinator was \$41,700; a marketing specialist earned \$51,300; and a marketing manager earned \$88,500.
- To employ a marketing firm, the General Services Administration (GSA) lists the hourly rate for marketing and analysis services for a director or senior-level manager from \$90 to \$146 an hour. The hourly rate for a mid-level manager can range from \$65 to \$70.

For example, an annual contract for a marketing firm for approximately 500 hours may range from \$50,000 to \$100,000. Sample rates from the GSA listed government hourly rates for a marketing research and analysis firm in 2005 are as follows:

Communications Director	\$145.69
Communications Program Manager	109.33
Communications Project Manager	95.63
Principal Market Analyst	145.69
Senior Market Analyst	92.71
Mid-level Market Analyst	72.86
Data Specialist	76.43
Sr. Writer	78.73
Mid-level Writer	59.02
Office Support	46.50

At minimum, it will take an estimated 1,000 hours a year to market the NCSC. The breakdown of time and responsibilities for the marketing team is as follows:

Team Member	Hours Per Year	Responsibilities
Director	5% (50 hours)	User groups Industry meetings and presentations Stakeholder and partner meetings
		Customer visits
Technical Director	10% (100 hours)	User groups Industry meetings and presentations Stakeholder and partner meetings Customer visits Technology product demonstrations
0	000((000 h)	Seminars
Communications Specialist	30% (300 hours)	Quarterly Newsletter Monthly E-Bulletin Web clearinghouse Success stories Speaker's bureau
Marketing Manager (staff position, consultant, and/or marketing firm)	55% (550 hours)	Corporate folder Corporate brochure Program, product, & services fact sheets Annual or quarterly reports, case studies, and/or white papers Web site Brand/corporate identity Trade shows Customer and market research Customer management (database, surveys, feedback) Public relations Technology product demonstrations
Total	100% (1000 hours)	

D. Program Budget

This formal marketing plan sets the NCSC's goals for the next 12 to 18 months, and the marketing strategies and tactics to achieve. The goal of the marketing programs budget is to support the plan and to develop the costs to execute the marketing activities. The following table presents the proposed costs for designated marketing activities and the month in which the activities initiate.

PHASE 1						
Marketing Programs Budget	Jan 07	Feb 07	March 07	April 07	May 07	June 07
Corporate Identity						
Name Change		0 (in-house)				
Revise logo design		\$2500-\$5000 (marketing firm)				
Revise web site and other materials for name change and new logo only.		0 (in-house)				
Frent						
Event	A					
Celebratory	\$500 to \$2500					

PHASE 1						
Marketing Programs Budget	Jan 07	Feb 07	March 07	April 07	May 07	June 07
Event to Announce New Name, and Success of Accomplishing Superpave Deployment						
Announcement to Customers of New Name and Direction	0, (in-house) Letter to customers.					
Market Research		\$10,000 to \$50,000 for all tasks (marketing firm)				
Customer Survey Follow-up						
Customer Database Focus Groups						
Assessment of Competition						

PHASE 2						
THACE Z						
Marketing Programs Budget	July 07	August 07	September 07	October 07	November 07	December 07
Collateral						
Folder, Design and Printing	\$2500-\$5000 (marketing firm)					
Brochure, Design and Printing	\$2500-\$5000 (marketing firm)					
Data/Fact Sheet Template Design	\$500-\$1000 (marketing firm) Fact sheets					
Design	can be completed inhouse from design template.					
Web Site					+	
Initial web site development (total revision)	\$30,000 (marketing firm)					
	Note: This may be completed in-					

PHASE 2						
Marketing Programs Budget	July 07	August 07	September 07	October 07	November 07	December 07
	house by Purdue University staff.					
Maintenance	\$1500 (marketing firm)					
Customer Visits						
Face-to-Face Meetings in States & Provinces				\$28,0002 days, at \$1200 per visit, per person2 persons visiting north central states & provinces		
Exhibit Display						
Design and Fabrication (design firm)						8 by 10 pop- up, \$2500 table top, \$500
Structure						8 by 10 pop- up, \$2500
						table top, \$300-\$500

PHASE 3						
Marketing Programs Budget	Jan 08	Feb 08	March 08	April 08	May 08	June 08
Trade Shows						
Space/Booth Rental	\$300-\$2000, per show					
Staffing	\$1200, 2 days travel, 1 person, per show					
Set up, logistics, shipping	Up to \$500 for full size exhibit.					
	0 for table top, if carried as luggage.					