# Laying the Foundation for a Successful Transformation



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## Laying the Foundation for a Successful Transformation

#### North Carolina Department of Transportation

McKinsey & Company is pleased to have served the North Carolina Department of Transportation (NCDOT) in its effort to lay the foundation for transforming how it delivers transportation services to North Carolinians in the 21<sup>st</sup> century. We've worked closely with NCDOT as a strategic advisor over several months to help diagnose the situation, identify priorities for transformation, and build capabilities.

This report is written as a recap of the diagnostic and transformation effort. As a backdrop, the report begins with a brief discussion of the project objective and the project approach. It then discusses the diagnostic findings that created the fact base upon which the transformation program was built; the five transformation initiatives, describing plans, progress, and next steps for each; and overall next steps. Appendix A provides additional detail on the diagnostic, and Appendix B provides additional detail on the transformation initiatives.

Considering the complexity of the NCDOT organization, it is important to note that the report must be considered in its entirety, including the two appendices. This material, while thorough, does not represent the totality of our transformation capacity building or contribution. It also reflects efforts while McKinsey was present. It does not reflect the ongoing evolution and progression of NCDOT's transformation efforts planned for the next 12 to 18 months.

We hope that what follows provides helpful input to an important and exciting transformation effort that could well be a landmark in NCDOT's history and could serve as a model for government agencies within and outside North Carolina.

#### **PROJECT OBJECTIVE**

NCDOT's purpose is to provide the citizens of North Carolina with a safe, reliable transportation network and to do so in a responsive, cost-effective manner. NCDOT is one of the largest and most complex state DOTs. It manages more

lane-miles than any state other than Texas and oversees a complex and growing transportation network that includes roads, ferries, rail, aviation, public transport, bike paths, and pedestrian walkways.

The Department, like many other state transportation agencies, faces challenges on a number of fronts. Several challenges are matters of fundamental economics. Demand for transportation is increasing during a time of rising costs and flattening revenue. North Carolina's population is expected to grow by approximately 50 percent over the next 25 years, and it is becoming significantly more expensive to meet constituent transportation-related needs. Raw material costs, for example, have increased by over 40 percent in the last 2 years. Meanwhile, federal dollars are not likely to be a source of much help. Federal funding has been relatively flat over the last several years, and the Federal Highway Trust Fund program is projected to run out of funding by 2009.

NCDOT also faces a number of internal challenges. By its own admission, the organization has remained largely stagnant with respect to building capacity and capability; has a limited ability to prioritize and fund projects; has a mixed project performance record (notably the recent high-profile I-40 issues, balanced with successful emergency responses and everyday STIP delivery); offers a less-than-attractive employee value proposition, which makes it difficult to attract and retain talented people, especially when compared to private sector opportunities; and struggles to get a balanced performance message to its constituents. In more general terms, NCDOT has not been keeping up with the best organizations in the public and private sector, which are increasing their focus on efficiency and strategy to achieve operational excellence.

In January 2007, in recognition of the Department's challenges, NCDOT's leaders embarked on a comprehensive transformation effort, with a vision of a new DOT that would be more strategic, accountable, efficient, and effective in its use of resources, focused on outcomes-based performance metrics, and ultimately, better able to provide the transportation network needed by North Carolinians in the 21st century. As part of this effort, NCDOT developed and began implementing a new strategy designed to take NCDOT solidly into the new century. The potential benefits of a comprehensive transformation are many:

- ¶ It can create a transportation infrastructure that makes North Carolina one of the most attractive states in the Southeast for citizens and businesses.
- ¶ It can establish NCDOT as a national model of efficient and effective government by prioritizing projects, programs, and services based on strategic mission and goals and by shortening project delivery time.

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Shortened project delivery time can lead to significant cost savings, particularly in a time of high construction supply inflation.

¶ It can unlock the potential of thousands of NCDOT employees to perform to higher standards with more accountability, coordination, and transparency.

Last spring, to ensure the transformation and the new strategy's success, and to learn from proven practices in the public and private sectors, NCDOT leaders asked the Governor's office, members of the North Carolina General Assembly, various constituent groups, and their own leadership team for their opinions on how to diagnose NCDOT performance and then develop, based on the diagnostic, a model for transforming the performance of the organization. Based on these discussions and a competitive RFP process, NCDOT retained McKinsey to serve as an independent advisor on the transformation.

### PROJECT APPROACH

NCDOT agreed to conduct an in-depth diagnostic built around obtaining candid employee and stakeholder input in a comprehensive and confidential manner. That diagnostic also included a review of best practices from other public sector and private sector entities and an assessment of NCDOT's organizational values.

The diagnostic identified both strengths that NCDOT should build on and weaknesses in the current organization that need to be addressed. The diagnostic results were discussed with most NCDOT Board members, several state legislators, NCDOT leadership, division engineers, and several other managers from the Department.

A Transformation Management Team (TMT) was launched to focus on specific transformation initiatives. Designed to address the challenges and opportunities identified in the diagnostic, the transformation initiatives would represent the Department's priorities over the next 12 to 18 months.

NCDOT recognized that the long-term success of any transformation effort must be rooted in the organization itself and not be dependent on ongoing outside help and asked McKinsey to help build relevant NCDOT and TMT capabilities.

Accordingly, throughout the project, the effort focused on building the Department's ability to make and sustain the proposed changes. Considerable time and attention was dedicated to coaching NCDOT's transformation leaders, individually and collectively, providing them with examples from the best public and private sector organizations and adding to existing skills in leadership,

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strategic thinking, and organizational effectiveness. The capability-building efforts also included having leading experts in fields such as strategic planning, talent management, performance metrics, organizational design, and communication share their insights with NCDOT leaders and managers. Finally, the work to develop the transformation initiatives themselves has been an active and conscious collaboration between McKinsey's project leaders and their NCDOT counterparts.

### FINDINGS FROM THE DIAGNOSTIC

The diagnostic provided in-depth quantitative and qualitative input from an unprecedented number of internal and external stakeholders. More than 70 percent of NCDOT employees (8,977 total responses) completed a quantitative survey. Managers' perspectives on strategic and organizational priorities were captured via interviews with 60 senior leaders across the organization, including the Board of Transportation, and conducting four diagnostic workshops with managers from DMV, Preconstruction and Central Highway Operations, and the Division Engineers. Fifteen deep structure interviews, probing "root causes" of employee perceptions, highlighted the perspectives of staff from all levels of the organization. Finally, members of the North Carolina General Assembly, the Governor's office, MPOs, business groups, and other state agencies were interviewed to understand concerns and priorities among NCDOT's external stakeholders. To encourage candor and openness, all surveys and interviews were conducted in a confidential, not-for-attribution manner.

The diagnostic also included a thorough review of current NCDOT processes and policies, including strategic planning, funding, project planning, design and delivery, operations and maintenance, personnel management, and communications. NCDOT's current practices in these areas were compared to best-practice examples from the private and public sector, particularly in the areas of organizational alignment, vision and goal setting, strategic planning, performance management, and talent management. A Specialist Team, composed of 17 emerging leaders from across NCDOT, contributed to this review, providing insights and supporting analyses about critical processes and issues.

Finally, the diagnostic included an explicit review of NCDOT's organizational values – both what it emphasizes today and what it seeks to emphasize in the future.

The diagnostic work painted a picture of both opportunity and challenge.

### A strong starting point for transformation

With its current leadership team prepared and willing to make real change, improved financial stability, the support of employees with both technical talent and pride in service, and the foundation of solid self-reported organizational values, NCDOT is positioning itself to embark on significant transformation efforts.

**1. Senior leadership commitment.** The diagnostic found that NCDOT's senior leaders have demonstrated significant willingness to take a proactive approach to addressing the Department's challenges.

**2. Stable near-term cash flow.** NCDOT's Cash Management Initiative has helped bring spending in line with funding, reducing a \$440 million shortfall in FY 2005 to \$2 million in FY 2006.

**3. Requisite technical skills.** The diagnostic found that engineers at NCDOT have a strong technical skill base, both through academic training and tenure with the Department.

**4. Employees committed to serve.** The diagnostic revealed dedicated employees at all levels of the organization. Many NCDOT employees are driven by a desire to serve the state of North Carolina.

**5.** Solid values foundation going forward. According to NCDOT employees, the ten most common values in today's organization are public focus, safety focus, budget focus, being of service to others, supporting diversity, environmentally responsible, job security, bureaucracy, rule-oriented, and slow-moving. Many of these current values are consistent with high performing public sector organizations, e.g., supporting diversity, while others are not, e.g., slow-moving.

Going forward, the Department is aiming to be in line with best practices. NCDOT has identified, and the employee surveys, interviews, and focus groups confirmed, 10 values that are indicative of what the organization should espouse going forward: accountability, trust, well-organized, courage to do what's right, fulfilling work, respect for people, efficiency, job security, safety focus, and environmentally responsible. These values are consistent with many successful public and private sector entities.

### Significant opportunities to improve service to North Carolinians

The strategic and organizational diagnostic also revealed opportunities for improvement that deal with setting clear direction and rebuilding or refining key organizational elements. In order to become a high-performing, 21<sup>st</sup> century Department of Transportation, it was crucial that NCDOT address the following needs identified in the diagnostic:

**1. Setting clear direction.** The diagnostic found that NCDOT could increase its alignment, focus, and effectiveness by setting a clearer direction. Neither NCDOT's vision and goals nor the Department's portfolio of projects and services were as consistent and coherent as people believed they needed to be.

**a. Vision and goals.** NCDOT had numerous and occasionally inconsistent vision and goal statements. It is important that NCDOT clarify its vision and link it more explicitly to a broader, long-term vision for North Carolina, such as the Governor's "One North Carolina." Such linkages would imply directly addressing issues such as infrastructure improvement, economic development, efficient governance, and environmental sustainability.

NCDOT's goals needed to be linked to a revised vision and be "cascaded" throughout organization. Managers should be given specific and measurable expectations for their respective roles in achieving organizational goals, and those expectations should be linked to managers' performance reviews.

**b.** Portfolio of projects, programs, and services. The diagnostic found that NCDOT's portfolio was not explicitly linked to or coordinated with NCDOT's goals. In part the result of that fact, the portfolio reflected a lack of focus, manifest in NCDOT's broad scope of activities. Internal and external stakeholders described NCDOT as trying to be "all things to all people."

NCDOT could improve its productivity through a more targeted and strategic portfolio, focused on those projects, programs, and services that are most essential to achieving its goals and long-term vision. Case examples from other state departments of transportation show explicit links between projects, programs, and services and organizational goals.

The diagnostic found NCDOT's portfolio to be near-term oriented and familiar, focused on meeting the most immediate demands rather than on long-term planning. The portfolio made limited use of innovative funding approaches, relying instead on existing sources of funds generated from the State Highway Fund, Highway Trust Fund, and federal appropriations. **2. Rebuilding or refining key organizational elements.** The diagnostic pointed to critical improvements needed in NCDOT's core processes, structure and systems, and employee mindsets.

- **a.** Core processes. Four core processes were falling short in some important ways. Specifically, the diagnostic found the following:
  - Strategic planning processes were ad-hoc and reactive, which had contributed to inconsistent and ineffective project prioritization. In addition, the process often involved too many decision-makers and could be more open. The STIP selection methodology emphasized local priorities and external stakeholder inputs at the expense of systematically addressing long-term statewide needs. The diagnostic found that NCDOT could benefit from adopting a regular process that prioritizes projects in a transparent manner at set intervals.
  - **Funding processes** were not flexible enough to enable NCDOT to align its financial resources against strategic needs. NCDOT is currently taking steps to expand its set of funding options, but more can and should be done, including more aggressively pursuing public-private partnerships and other regimes already in use by other states.
  - **Project design and delivery processes** had been slowed by a lack of prioritization, accountability, and coordination.
  - **Operational processes** could benefit from organization-wide metricsbased management. NCDOT has made early steps to increase accountability, including the Managed Maintenance System and initiatives at the DMV. Using these kinds of metrics across the organization, with linkages to talent reviews, could improve overall operational effectiveness.
- **b.** Structure and systems. Many of the challenges in the core business processes are the result of shortcomings in NCDOT's organizational structure and systems. Specifically, the diagnostic found:
  - **The organizational structure** "silos" elements of some key processes, e.g., project delivery, and lacks units to support others, e.g., intermodal, statewide, strategic planning.
  - **Talent systems** have been failing to sufficiently recruit and retain critical talent, drive employee performance, and develop top managers.

- **Internal and external communication systems** have not been sufficiently proactive and may not have the budget resources needed to be effective.
- **c. Employee mindsets.** Employees are frequently risk averse and reactive, and many have a "siloed" mentality.

As noted earlier, Appendix A provides additional detail on the diagnostic.

### THE TRANSFORMATION INITIATIVES – PLANS, PROGRESS, AND NEXT STEPS

This section describes plans, progress, and next steps for the five NCDOT transformation initiatives:

- 1. Align strategic direction with a new mission statement and goals
- 2. Streamline project design and delivery
- 3. Design a more productive organization
- 4. Increase accountability for and visibility of performance
- 5. Improve talent management.

As noted earlier, Appendix B provides additional detail on the initiatives.

### $1-Align strategic direction with a new mission statement and goals % <math display="block"> \frac{1}{2} = \frac{1}{2} \left( \frac{1}{2} + \frac{1}{2} \right) \left( \frac{1}{2}$

NCDOT has developed a new mission statement and goals and has tied them to a Department-wide dashboard of performance metrics and targets. The Department has also undertaken two major efforts to align strategic direction and decisions with the new mission and goals. The first is to link projects, programs, and services to goals; the second is to diversify funding sources and processes. Finally, the Department has designed and is beginning to implement a strategic planning process and function. These accomplishments are the initial steps in the four efforts that make up the first NCDOT transformation initiative, to align strategic direction with a new mission statement and goals.

a. Create a new mission statement and goals and communicate them throughout the organization. A clearly articulated mission statement and corresponding goals are the initial building blocks of any successful organization

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and of any transformation effort. Once articulated, the mission and goals should be cascaded throughout the enterprise.

A clear statement of mission and goals provides important context for decisionmaking, from determining which projects to pursue, to deciding how to design an organization's structure, to determining how to measure the success of a project or the performance of an individual business unit. Culturally, a clear statement of mission and goals is the glue that holds an organization together – it can attract the right talent to an organization, and it can inspire long-term commitment.

As noted earlier, the diagnostic surfaced concerns about the consistency and coherence of NCDOT's vision and goals. This lack of clear direction often meant that employees did not have a broad sense of the ends toward which they were working and managers lacked a set of Department-wide objectives that could strategically guide their unit's work.

To remedy these problems and to set a stronger, more holistic direction for the Department, the TMT first drafted a new mission statement and goals and communicated them with internal and external stakeholders.

The team was guided by four principles as it shaped the mission statement and goals: craft a mission statement with enduring purpose, not one contingent on existing conditions; craft goals that were not only closely linked to the new mission but also whose ultimate success could be gauged by quantifiable metrics; craft a mission statement and goals that would be broad enough to apply to every part of NCDOT, from the Division of Highways to DMV to ferries, and to both "line" employees and "support" employees; and craft language that was concise, clear, and that could be easily communicated to all stakeholders, within NCDOT and outside the Department.

In June and July, with input from the Executive Committee and the Board of Transportation, the TMT developed and gained agreement on the following new mission statement: "Connecting people and places in North Carolina—safely and efficiently, with accountability and environmental sensitivity."

The TMT also developed and gained agreement on five related goals:

- ¶ Make our transportation network safer
- ¶ Make our transportation network move people and goods more efficiently
- ¶ Make our infrastructure last longer
- ¶ Make our organization a place that works well

¶ Make our organization a great place to work.

In July, NCDOT communicated the new mission statement and goals to all employees via e-mail and paper memos. Feedback from employees and stakeholders has been extremely positive. The TMT has also created a graphic to capture the mission and goals and posted it prominently in the Department.

Going forward, key success factors with respect to creating and communicating the new mission statement and goals include the following.

- ¶ Ensure widespread posting of the mission and goals. This is especially important in an organization with 14,000 employees; 14 divisions; multiple smaller district offices, maintenance yards, DMV locations, ferry locations; and central Raleigh offices.
- ¶ Use a range of other vehicles for communicating the mission and goals, primarily "road shows" and "town halls." This could be an important complement to the e-mails and memos that have already been distributed. Members of NCDOT's leadership should consistently and forcefully communicate the Department's mission and goals to employees and external stakeholders. NCDOT should look at building proactive and strategic communication initiatives around its mission and goals.
- ¶ Embed the mission and goals in NCDOT's culture. This can be done, for example, by:
  - Opening every meeting with a discussion of how the meeting's objective ties back to the mission and goals, a regular practice in some well-run organizations.
  - Ensuring that managers across the organization use the mission and goals in measuring their respective units' performance and that their performance is linked to successful accomplishment of the Department-wide goals in addition to their personal ones.

**b.** Link projects, programs, and services to goals. A strong statement of mission and goals, when properly cascaded throughout an organization, give an organization strong strategic direction. Creating a process for prioritizing NCDOT's projects, programs, and services based on the Department's new mission and goals was one of the first things TMT members did to begin this critical cascading. This effort also helps address the issues raised during the diagnostic about weak linkages to NCDOT's goals and lack of focus in the current portfolio of projects, programs, and services.

Specifically, in July, the TMT began building a quantitative model to objectively compare projects, programs, and services against one another. This model, which is still in development, uses technical criteria, qualitative criteria, and a small number of discretionary points to "score" projects, programs, and services based on system-wide needs.

- ¶ Technical criteria reflect NCDOT's three external-facing goals: make the transportation network safer, make the transportation network move people and goods more efficiently, and make the transportation network last longer. Examples of criteria on each of these goals include crash severity rates, to gauge highway safety; congestion points, to gauge efficient movement of people and goods; and pavement conditions, to gauge the transportation network's durability.
- ¶ Qualitative criteria include corridor continuity, environmental stewardship, and geographic equity.
- ¶ Discretionary points are allotted for a limited degree of input from stakeholders, including the Board of Transportation. These discretionary points would never trump the other criteria.

To help it develop a long-term prioritization process, NCDOT invited 50 leaders from across the Department to participate in a Strategic Prioritization Process Summit in September. Participants at the Summit discussed specific criteria that should be used in the long-term prioritization process. They also offered feedback on a list of approximately 50 projects, programs, and services the TMT had identified as high priorities for the Department and on the methodology used to develop those lists.

Going forward, key success factors in linking projects, programs, and services to goals include the following.

- ¶ Create a Strategic Planning Office with responsibility for prioritizing projects and investments and making trade-offs with a view of the entire state's needs.
- ¶ Expand the prioritization model to better account for programs and services. Although the early version of the model enables NCDOT to compare projects against one another, it does not fully incorporate programs and services.
- ¶ Fully incorporate input from the Strategic Prioritization Process Summit into the model.

- ¶ Reduce the model's complexity. If the model requires too much data, NCDOT may not have the management and data collection resources needed to prepare for prioritization. If the method for analyzing the data is too complex, stakeholders may not understand prioritization decisions enough to provide useful input and support.
- ¶ Test the model, once it is complete, with external stakeholders, including Board of Transportation members, MPOs, and RPOs. One possibility would be to build on the format of the September Summit held with internal stakeholders and hold a follow-up Summit with external stakeholders in Spring 2008.
- ¶ Ensure that strategic and nominal prioritization translates into organizational and cultural prioritization. This would benefit from clear, detailed communication throughout the organization and high-profile reinforcement from the Secretary and other senior management about the importance of prioritization. The result of such communication should mean, in a practical example, that all professional staff in Preconstruction, Operations, and external agencies like DENR can be presented with simultaneous requests to work on two projects and know which project is higher priority and how to respond to the person/entity requesting the lower priority project.

**c. Diversify funding sources and processes.** In the face of the increasing economic pressure brought on by growing demand for NCDOT services in a time of rising costs and flattening revenue, achieving the Department's mission and goals requires new thinking about funding on NCDOT's part. It is well-established that NCDOT faces a funding shortfall over the next three decades, and it should consider diversifying both funding sources and processes to close the gap.

The TMT has identified and sized a broad set of funding sources NCDOT might consider. Going forward, key success factors in diversifying funding sources and processes include the following.

Partner with the General Assembly to request new funding sources for the state's transportation network. NCDOT is in the process of launching a series of pilots aimed at streamlining project delivery (described in a subsequent section of this report). Successful outcomes – faster implementation, at lower cost, and with higher quality – could prove to the General Assembly that NCDOT is committed to change and could help the Department make a stronger case for more funding.

- Increase the flexibility of NCDOT's funding to better align resources with goals. NCDOT has already proposed legislation to add more flexibility to the equity formula and has quantified the potential impact of directing maintenance funds to Strategic Highway Corridors. It should also review any internal funding restrictions to ensure that it has full flexibility to allocate externally unrestricted funding in line with its mission and goals.
- ¶ Tie new funding to priority investments on the statewide network and measure NCDOT performance against its delivery goals. Put simply, NCDOT should be accountable for delivering specific results against new funding.

**d.** Create a strategic planning process and function. Strategic planning is vital for public sector organizations. It is the process by which public bodies refine the near- and long-term impact they seek to have on their constituents and determine how they can achieve this impact most effectively within a given time frame.

As determined in the diagnostic, NCDOT's strategic planning is essentially an adhoc and reactive process that often involves too many decision-makers and lacks transparency.

In a best-practice strategic planning process, an initial meeting or group of meetings sets criteria for project selection; several months later, these criteria are provided to managers. Throughout the year, interim check-ins are held to ensure that business unit plans match strategic priorities. Finally, corporate and board reviews are held to validate the strategic planning process.

To address the issues identified in the diagnostic and emulate the strategic planning best practices, the TMT has taken a number of steps to create a strategic planning process and function. The TMT has designed a comprehensive 1-year, 2-year, and 8-year strategic planning process, with the intent of enabling NCDOT to turn its strategic direction into concrete financial, operating, and talent plans.

The TMT has made significant progress in establishing the Department's strategic planning function. TMT members have reviewed proven strategic planning processes and the outputs of those processes at other DOTs and other private sector and public sector agencies. They have also held input meetings with the Executive Committee and Board of Transportation members. With best practices and stakeholder input in hand, the TMT created a strategic planning calendar and aligned that calendar with the human resources planning calendar and the performance metrics quarterly business review calendar.

The TMT has also integrated new performance metrics into the Department's strategic decision-making processes, to ensure that NCDOT makes data-driven decisions about its future direction. TMT members have also recorded input from internal stakeholders at the Prioritization Summit about criteria for long-term prioritization of the Department's projects, programs, and services.

Finally, the TMT has created strategic planning manuals for unit heads and other line managers who will be responsible for participating in the strategic planning process.

NCDOT is preparing to establish a Strategic Planning Office to institutionalize the strategic planning process and the work the TMT has done to establish the strategic planning function. The TMT has written a job description for the new director of that office and has approval for posting.

Going forward, key success factors with respect to NCDOT strategic planning include the following.

- ¶ Clarify the specific functional distinctions between the Strategic Planning Office and the Program Development/TIP Programming Unit.
- ¶ Staff the Strategic Planning Office with highly competent people people who can play a strategic, not an administrative, role in the Department's direction-setting.
- ¶ Set a budget for the Strategic Planning Office that enables it to offer compensation competitive with similar public sector and private sector roles and give the director of the office a reporting line either to the Secretary of Transportation or to one of the Deputy Secretaries.
- ¶ Create communication and training materials to prepare NCDOT managers for their respective roles.

### 2 – Streamline project design and delivery

This initiative takes aim at the diagnostic finding that NCDOT project design and delivery suffers in part from a lack of project prioritization.

To remedy this problem, NCDOT has developed criteria and a set of process models to guide prioritization, with an eye toward streamlining project design and delivery.

The new process models are being tested through several pilots, which aim to streamline design and delivery of TIP and bridge projects designated as high-priority at the Prioritization Summit.

Teams working on the pilots have identified several ideas for accelerated project delivery. New delivery processes that may be piloted on TIP projects include: creating formal teams to oversee project delivery, with a single team lead; appointing a tri-party lead for end-to-end project delivery, including one person from planning, one from design, and one from operations; and instituting PEF turn-key delivery. These pilots are set to begin in early November.

A new initiative has been launched to redesign the bridge program through a number of innovations, including instituting a tiered design approach, creating standardized designs for bridges on the subregional tier, and others.

Particularly critical to managing the cost of capital-intensive projects is the reduction of delays and cost overruns. Improvements in time to deliver projects can lead to cost savings, particularly in times of high construction cost inflation. In both private and public sector organizations, pilot programs are a common approach for testing and validating solutions such as process design, reorganization, and/or outsourcing. Best-practice pilots require clear and measurable objectives, specific milestones, and designated control groups to baseline relative success. At the conclusion of a pilot run, the organization should have a quantitative basis for decisions about which changes to processes it should adopt. NCDOT pilots should reflect all these lessons.

Going forward, key success factors for streamlining project design and delivery include the following.

- ¶ Ensure that pilot performance the right schedule, cost, and quality mix – be a step-change from business as usual, not an incremental improvement. Formal tracking mechanisms are needed to measure progress against this aspiration.
- ¶ Ensure that pilot successes are widely communicated. This is critical for external stakeholder support and internal stakeholder momentum. Successful pilots should:
  - Demonstrate what will happen when important projects are designated as Department priorities
  - Show NCDOT's ability to operate at emergency-response performance levels on a daily basis and enable the Department to make a stronger case for additional legislative support.

#### 3 – Design a more productive organization

In any organization, vertical silos can reduce information-sharing, dissemination of best practices, and collaboration on important, organization-wide initiatives. In addition to missed opportunities for shared insights, economies of scale, and single-point accountability, silos also make it difficult to allocate resources efficiently. The result can be overstaffing in some areas and understaffing in others.

As noted earlier, the diagnostic showed that NCDOT's current organizational structure silos elements of some key processes, including the project delivery process. Because employees tend to focus on meeting unit-specific goals, as opposed to organization-wide goals, coordination among business units in the project delivery process is insufficient. The lack of common processes for prioritization, accountability, and coordination also contributes to project delays that lead to inefficient use of resources.

There are several examples that illustrate this trend. Within the Division of Highways, there could be wider coordination among the preconstruction, field operations, and asset management branches. Across NCDOT, there could be stronger links across units that play a critical role in project delivery – for example, between the Chief Information Officer and the Division of Highways and between the Division of Highways and other modes. These silos prevent the organization from operating its transportation network as one system.

To overcome these challenges, the TMT is analyzing NCDOT's organizational structure to ensure that it maximizes collaboration, accountability, alignment of activities with mission and goals, and efficiency. To date, the TMT has participated in multiple workshops to consider opportunities to increase organizational effectiveness. Guided by McKinsey experts, and informed by our reference set of best practices, the TMT examined alternative organizational models that would increase coordination among business units, increase coordination across geographies in the project delivery process, and instill better, more efficient decision-making processes across the Department.

The TMT has also launched a participative, bottom-up analysis of several units at NCDOT to see how their end products and activities align with their individual missions, in an effort to increase unit-to-unit effectiveness. Business cases have been written for a number of new, high-level coordinating roles that could be created within the organization.

The Strategic Planning Office discussed earlier should be designated to play a role in addressing productivity.

Going forward, key success factors in designing a more productive organization may include the following.

- ¶ Create a Chief Operating Officer position (not a political appointee) and recruit an experienced executive who has successfully run complex organizations.
- ¶ Create critical new roles with maximum consideration of their most effective level in the organization, placement/reporting lines in the organization, and compensation levels. For example, NCDOT might consider creating a strategic Human Resources role to lead workforce and leadership planning, career track management, employee value proposition management and other talent management initiatives.
- ¶ Move "boxes and lines" on an organizational chart *only* if there is a strong case to do so. Structural changes should be timed so that they do not reduce the momentum of the rest of the transformation initiatives.
- ¶ Communicate efficiency and productivity analysis as carefully as possible and in close coordination with other transformation communication. By maximizing the "grassroots" or self-generated nature of improvement opportunities, change should be rooted in each employee and business unit's existing desire and commitment to do good work for the people of the state.
- ¶ Consider developing alternative models to the current structural relationship between NCDOT and other North Carolina public transportation providers.

### 4 – Increase accountability for and visibility of performance

Successful organizations emphasize accountability for and visibility of performance so that all employees are working effectively toward corporate goals. Each person knows what he or she is responsible for and can use key performance indicators as a tool to prioritize his or her daily activities. Clear metrics also help develop employees, identifying areas of strength and needed improvement, so that supervisors can work as partners with employees to maximize their contribution to the overall mission. This not only leads to improved performance across the organization, but also to increased satisfaction for individuals, who feel rewarded and encouraged in their work.

As the diagnostic pointed out, NCDOT operations would benefit from organization-wide metrics-based management. Although some NCDOT units have introduced metrics – as noted earlier, the Division of Highways maintenance

unit and the Division of Motor Vehicles – their successes have not spread throughout the organization.

Learning from industry best practices, and following the examples of leading organizations, NCDOT has developed a suite of initiatives to increase accountability for and visibility of performance. A system of metrics was designed and introduced that includes an executive performance dashboard that cascades into metrics for business units and individuals. Performance metrics were also designed for more than 40 independent units, including the Division of Highways, the Division of Motor Vehicles, the Division of Transit (including ferries, rail, buses, and aviation), and support functions such as IT, finance, and human resources. These metrics can be used as part of the first quarter 2008 performance review and may help drive the creation of individual and business unit action plans.

NCDOT is also beginning to track individual and business unit metrics, translate that information into top-level metrics for the organization, and make that performance data visible to the public in the form of a Department-wide Performance Dashboard. This dashboard, now available on the Department's website, helps make NCDOT's ongoing performance improvements visible to the citizens of North Carolina, creating an additional layer of accountability.

As a new culture of accountability and performance visibility becomes embedded in NCDOT, it will be important to continue to actively set and manage to targets for metrics, rather than to allow metrics to become another bureaucratic, timeconsuming process.

Going forward, key success factors with respect to increasing accountability for and visibility of performance could include the following.

- ¶ Demonstrate senior management commitment to constructive, intensive dialogue during quarterly business reviews.
- ¶ Communicate metrics widely and identify the individuals and/or business units accountable for them. This increases accountability and has been shown to create friendly competition and drive performance in public agencies that are unable to attach financial rewards to performance.
- Prepare for disagreement over metrics that people feel they do not completely control. The use of shared "upside-only" incentives for hardto-attribute metrics can drive performance and teamwork on a metric that could otherwise be divisive.

- ¶ Develop an internal communication philosophy and approach that constantly reinforces mission, goals, and values and positions DOT leadership for appropriate modeling opportunities.
- ¶ Create a Marketing group with solid line authority to the Secretary, recruit someone with marketing expertise to lead the group, and charge the group with leveraging NCDOT's wide presence to collect information and input from external and internal groups and to conduct marketing to those groups regarding NCDOT projects, programs, services and initiatives.

### 5 – Improve talent management

Because, as the diagnostic showed, NCDOT's talent systems are failing to recruit and retain critical talent, drive employee performance, and retain top managers, the Department's transformation effort is giving explicit attention to improving talent management.

Talent management involves making prioritized choices about where and how to invest in human capital. It is not a different approach to HR; rather, it is a long-term plan of action, designed to achieve particular business objectives, that works hand-in-hand with traditional HR services. Talent management ensures that the right people, with the right skills, are in the right positions to do their best work – and ultimately, to help fulfill their organization's mission and goals.

In an effort to rethink talent management across all levels of the Department and then leverage those efforts with other state agencies, NCDOT has launched an "HR innovations" partnership with the Office of State Personnel.

Drawing on best practices in talent management at large public sector and private sector organizations, NCDOT has developed, and continues to refine, a comprehensive program for improving its talent management.

This program includes a new performance management system that evaluates employees against objective performance metrics and the new department values noted earlier; works with employees to plan their career and development goals; and ensures performance consequences. The Department has also begun to provide increased autonomy for employees as they work toward its mission and goals – again in the context of performance management, comprehensive performance metrics, and an overall accountability culture. The result should be unlocked employee potential, enabling and empowering people to provide excellent, innovative, and cost-effective solutions for the people of North Carolina. The TMT has also designed a new leadership planning process that identifies emerging leadership needs and gaps; reviews employees' leadership competencies to assess their potential to fill gaps; and then helps fill gaps by preparing employees to apply for newly opened leadership opportunities.

Finally, the TMT has developed a slate of specific talent management initiatives designed to significantly improve NCDOT's ability to ensure that the right people are in place to carry out the Department's mission:

- ¶ A streamlined hiring approval process, to conform to best practices; this includes removing layers of approval – matched with manager HR budget accountability – as well as moving the Department to the State Personnel Act's policy on salary increases for promotions and salaries for new hires
- ¶ Alternate work schedules to increase employee flexibility while still requiring that performance objectives be met
- ¶ Reinstated mentoring programs, building on existing models to encourage and reinvigorate employee development and retention
- ¶ An improved training culture, including a less onerous approval process for training expenses provided that strict accountability for overall training spending is maintained
- ¶ Career banding, in line with legislative approval, to bring NCDOT's existing salary structures more in line with the marketplace, helping reduce the number of employees lost to the private sector
- ¶ Reinstatement of the Professional Engineer certification bonus, as a temporary means of bringing a portion of engineering staff salaries closer to market levels.

Most of these particular initiatives have received initial approval and are being finalized for implementation in the next few months – almost all of them with appropriate partnership between existing groups within the DOT and/or with other state government entities, such as the Office of State Personnel.

Going forward, key success factors for improved talent management could include the following.

I Devote senior management time to communicating and demonstrating that the new performance management system is a tool for development and performance rather than a nominal administrative activity; ensure that persistent underperformers are terminated; and continue to recommend legislation that would allow performance-based pay, while exploring nonmonetary ways to reward strong performers.

- ¶ Align resources to ensure that appropriate strategic discussions of talent take place with regularity and at the right level.
- ¶ Begin to build a more innovative, proactive, and collaborative employee culture, reflected in individual mindsets. Members of the TMT and the NCDOT Leadership have received training on the "influence model," a proven approach for building desired mindsets and behaviors. Consistent with that model's fundamental premises, NCDOT leaders must engage in role modeling and reinforce transformation initiatives. They should also refrain from enacting policies that contradict the transformation's cultural themes.
- ¶ Develop an internal communication philosophy and approach that constantly reinforces mission, goals, and values and positions DOT leadership for appropriate role modeling opportunities.

### **OVERALL NEXT STEPS**

In addition to staffing and supporting a full-time dedicated Transformation Management Team, the Department's leaders are training members of that team in transformation-related organizational improvement tools and practices, engaging NCDOT executive leadership and nearly 30 senior managers in intensive capacitybuilding workshops and best practice presentations, and actively and continuously providing updates to and gathering input from NCDOT employees and external stakeholders.

Specific agenda items for all these parties should include the initiative-specific next steps noted in the key success factors discussions in the preceding section. Their efforts should also reflect four broader guidelines for success in a transformation effort of this breadth and complexity.

¶ Treat the next 12 months with a sense of urgency far beyond business-asusual, with the transformation as one of the highest priorities for the organization. This is an opportunity for NCDOT's leadership, employees, and external stakeholders to leave a long-lasting legacy for the organization and the state. In particular, there should be zero tolerance for delays due to politics, individual agendas, or bureaucratic inertia.

- ¶ Put new processes through at least one cycle, put all organizational changes into place, and introduce critical legislation by September 2008. This should help ensure that the transformation transcends the change in administration. The Department needs to begin transition planning as soon as possible.
- ¶ Ensure that transformation initiatives have long-term organizational owners. The TMT is critical, but changes will ultimately need to be owned by the rest of the organization. The talent management team's involvement of HR department staff as full members of its initiative teams is a good example of best-practice ownership transfer.
- ¶ Ensure that internal and external communication of the transformation is as proactive as possible. The organization has begun to change and adopt proven organizational practices, and it is important to communicate this positive change as much as possible and as proactively as possible to employees and the public.

Finally, it is important to note that NCDOT cannot successfully continue its transformation journey on its own. While the Department bears significant responsibility and should be held accountable for transforming its organization, success in developing a reliable and cost-effective transportation network for North Carolina will require close collaboration with and support from the Governor's office, the General Assembly, the NC Board of Transportation, and other external stakeholders. The issues are as complex as they are critical – and they demand that kind of collaboration.