

Strengthening a Learning Culture for Practical Solutions

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STRENGTHENING A LEARNING CULTURE FOR PRACTICAL SOLUTIONS

Technical Memo

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16. Abstract WSDOT's ability to successfully apply and benefit from Practical Solutions will involve learning – at the employee, workgroup and organizational levels. This memo explores the types of learning needs that exist, and identifies strategies that WSDOT can consider implementing in order to foster an environment that will facilitate and enable this learning to take place. The contents of this memo are based on workshops with WSDOT staff conducted as part of WSDOT's Accelerated Innovation Deployment (AID) project, " <i>Deploying Practical Solutions with Lean Techniques and Knowledge Management.</i> " (PS AID Project).			
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TABLE OF CONTENTS

- 1. Document Overview 1
- 2. What Types of Learning Are Needed for Application of Practical Solutions?..... 1
- 3. What is a Learning Culture? 4
 - Literature of Note..... 5
 - Lean Practice and Learning Culture..... 8
- 4. Strategies for a Learning Culture 8
 - Overview 8
 - Elements for Strengthening a Learning Culture..... 9
 - Workshop Participant Input 10
 - Improvement Actions to Foster a Learning Culture..... 12
- 5. Recommendations 16
 - Strategy 1: Develop and Disseminate a Clear Message About the Agency’s Vision and Expectations – “How Exactly Do We Expect People to Act?” 17
 - Strategy 2: Align the Management Team –“Demonstrate That We Mean It” 17
 - Strategy 3: Establish Ongoing Monitoring and Communication – “Make Sure We Are Making Progress” 17
 - Strategy 4: Establish a Clear Learning Cycle for Practical Solutions – “Provide Opportunities for Learning” 18
 - Strategy 5: Create and Maintain Practical Solutions Learning Resources – “Provide Resources For Learning” 18
- APPENDIX A: WSDOT MULTIDISCIPLINARY ENGAGEMENT PRINCIPLES..... 19
- APPENDIX B: WSDOT COMMUNITY ENGAGEMENT PRINCIPLES 20

LIST OF FIGURES

- Figure 1. Cynefin Framework..... 7
- Figure 2 Strengthening the Learning Culture for Practical Solutions 16

LIST OF TABLES

- Table 1. SIPOC Workshop Issues Synthesis: Implications for Learning Needs..... 1
- Table 2. PS AID Project Learning Culture Workshop Magic Wand Exercise Results..... 10

STRENGTHENING A LEARNING CULTURE FOR PRACTICAL SOLUTIONS

1. DOCUMENT OVERVIEW

WSDOT's ability to successfully apply and benefit from Practical Solutions will involve learning – at the employee, workgroup and organizational levels. This memo explores the types of learning needs that exist, and identifies strategies that WSDOT can consider implementing in order to foster an environment that will facilitate and enable this learning to take place. The contents of this memo are based on workshops with WSDOT staff conducted as part of WSDOT's Accelerated Innovation Deployment (AID) project, *"Deploying Practical Solutions with Lean Techniques and Knowledge Management."* (PS AID Project).

2. WHAT TYPES OF LEARNING ARE NEEDED FOR APPLICATION OF PRACTICAL SOLUTIONS?

The PS AID Project has involved over 100 individuals across the Department to define a vision for a future transportation development business process that embraces Practical Solutions. As part of this process, a series of workshops were held over the summer and fall of 2015 to define Suppliers, Inputs, Products, Outputs and Customers (SIPOCs) for core functions (Goal Setting, Planning, Programming, Project Development, Construction, Maintenance and Operations). During these workshops, participants raised a number of issues and challenges to be addressed to clarify and operationalize the envisioned future business process. The issues list from these discussions provided a rich resource for identifying the types of learning that will be needed to transition to the new process. Key observations and implications are synthesized in Table 1. A later workshop, held in the spring of 2015, discussed these implications – and will be covered in section 4 of this memo.

Table 1. SIPOC Workshop Issues Synthesis: Implications for Learning Needs

Observation	Implications for Learning Needs
1. Philosophical Shift. WSDOT is seeking to implement fundamental changes in the philosophy and core assumptions involved in transportation system development – from capital-focused, standards-driven to a more flexible, performance-driven and collaborative approach.	<p>Employees need to understand the new philosophy, feel comfortable enough with it to embrace it, adapt and adjust how they think and how they work. For some, this will require letting go of long-held values, procedures and assumptions. To facilitate this, it is important for the department to establish and communicate the vision for a learning culture.</p> <p>This process will take time and can be helped along by providing opportunities for open dialog about concerns, modeling and reinforcement of new thought processes, and information sharing about examples to build a comfort level with new ways of thinking.</p>

Observation

Implications for Learning Needs

2. More Analysis-Driven Decision Making.

Shifting to a data and performance-driven approach will require development and implementation of new analysis and decision making methods. Choices about what new data to collect, and what new tools to introduce will be needed. These choices will need to consider how data and tools can be integrated within decision making processes to add value.

Developing consensus around new data collection, information development and analysis methods will require tapping into external expertise and having internal conversations *across* functional areas that build a common understanding of costs, value added and implications for decision processes.

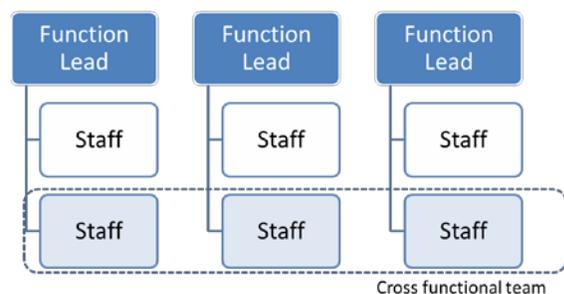
Implementing new methods will require an iterative approach to gain experience, learn and make refinements. Ongoing communication and training will need to be included in this approach so that employees stay current.

3. Moving from Concept to Practice. Many aspects of “the new approach” need to be clarified and operationalized. There is a need to move from a conceptual understanding of Practical Solutions to actual applications.

This will require experimentation, creativity and problem solving, involving multiple perspectives in the agency – and with external partners and stakeholders. There will be continual evolution – with a need to communicate changes that are occurring. Current methods for documenting and communicating processes may not be adequate. Initial training in practical solutions philosophies and methods is necessary but ongoing “on the job” learning will be required.

4. Organizational Realignment. Moving to the new business process will involve shifting roles and responsibilities.

The future process implies that roles within the agency will evolve to more of a “matrixed” approach in which various disciplines are involved at multiple points in the life cycle. This will likely require greater visibility about different experts. It will also likely require adjustments in resourcing.



Changing roles and responsibilities can be unsettling and need to be carefully managed to ensure a smooth transition. As changes are being made, open communication is essential to make sure employees understand the purpose and are on board.

The transition can be viewed as a learning process as employees adapt to their new roles and challenges are surfaced and addressed. This includes identifying and correcting situations where expectations are out of alignment with skill sets or resourcing. There may also be a need for additional mentoring arrangements and other knowledge transfer activities.

Observation	Implications for Learning Needs
<p>5. Integrated Decision Making. A more integrated and collaborative approach to solution development is envisioned. WSDOT seeks to streamline information and knowledge flow across different activities and phases involved in transportation system management and development. This implies a need for both collaboration within work teams as well as with external stakeholders (see #6 below.)</p>	<p>A more integrated approach means that employees will need a greater awareness of the entire transportation system management and development life cycle and how what they do fits in. It also means that employees will need to learn how to work productively with other groups in the agency who have different perspectives and operate under different constraints. Part of the challenge to be overcome is the lack of common terminology. A common language is needed to enable staff from different parts of the Department to communicate and collaborate effectively with each other. This will facilitate the process of knowledge sharing and transfer.</p> <p>Strengthening information flow and feedback across the solution development life cycle requires deliberate efforts and allocation of time to identify what should be communicated – and to ensure that adjustments are made (as appropriate.) It also requires leadership that supports cross-functional and evolutionary practice.</p> <p>Shifting to a more integrated and interactive decision making process will likely require multiple cycles of iteration and learning. Opportunities to periodically step back and consider course corrections will need to be built in and supported.</p>
<p>6. Stakeholder Engagement. Engagement with the community and external partners is an increasingly important part of the transportation development process.</p>	<p>More work with external partners requires development of negotiation, communication and collaboration skills. It also suggests that it will be important to provide a way for employees to pass along relationship knowledge when they leave the agency or transfer to other jobs within the agency.</p>

There are two distinct types of learning needs at WSDOT – Technical or substantive, and process related. Many are complex and will need to be addressed iteratively.

Technical/Substantive needs include development or adaptation of new processes and analysis methods for decision support including:

- Identifying performance gaps
- Analyzing impacts and cost-effectiveness of different strategies

- Making cost- performance tradeoffs
- Analyzing asset life cycle costs
- Identifying opportunities for multimodal and transportation demand management options
- Data collection & utilization for the above

Process-related needs involve addressing the following questions:

- Who at WSDOT gets involved when?
- Who makes decisions? Who sets goals? Who contributes?
- What does it mean to “harmonize” goals with RTPOs/MPOs?
- How can feedback across different stages of the transportation system management and development life cycle be strengthened?

More fundamentally, WSDOT needs to create an environment in which employees can:

- Learn how to do things differently
- Learn how to work together in new ways (internally and externally)
- Learn from what we and others have done
- Apply what they’ve learned in order to improve

Practical Solutions *training* can address many, but not all of these learning needs. Shifting ways of thinking and working requires a broader set of strategies that are embedded into the day-to-day work environment.

3. WHAT IS A LEARNING CULTURE?

A culture of learning is the opposite of a culture of knowing.

A “learning culture” is an environment that is conducive to development and sharing of knowledge. It is an environment in which:

- People are rewarded for discovering better ways of working – not penalized for deviating from set procedures.
- Questioning and creativity are encouraged.
- People are incentivized – and given the opportunity - to seek better ways of doing things, learn new techniques, and share what they know with others

A learning culture opens up possibilities for the organization to tap into the talents and perspectives of each employee. Organizations that work to cultivate a learning culture recognize that their success will be driven not only by the raw talents of the staff they are able to attract, but by how staff are motivated and encouraged to apply their talents in collaboration with others and leave the organization better off than when they started. A culture of learning is the opposite of a culture of knowing. When people are promoted or rewarded for "knowing" rather than for "learning" the organization is not likely to advance.

In a culture of “knowing”, people focus on building their individual expertise rather than sharing this expertise and helping their colleagues to develop.

A learning culture has the following characteristics:

Motivated and Engaged Employees

- People feel they're doing something that matters—to them personally and to the larger world. (I am satisfied with WSDOT as a place to work. The mission or purpose of my organization makes me feel my job is important.)
- Every individual in the organization is somehow stretching, growing, or enhancing his or her capacity to create. (Employee engagement levels)

Opportunities for Development of Shared Knowledge Base and Vision

- Employees are invited to learn what is going on at every level of the organization, so they can understand how their actions influence others;
- Employees are motivated to share what they know with their colleagues – increasing the knowledge base of the agency. The organization continually becomes more aware of its underlying knowledge base—particularly the store of tacit, unarticulated knowledge in the hearts and minds of employees;
- A shared vision is created from all levels of the organization. Visions of the direction of the enterprise emerge from all levels. The responsibility of top management is to manage the process whereby new, emerging visions become shared visions; and
- People are rewarded for "learning" – not just for “knowing”.

Environment Conducive to Inquiry and Risk Taking

- People examine their own assumptions and biases and feel free to inquire about the assumptions and biases of others. There are few, if any, sacred cows or “out-of-bounds” subjects;
- People treat each other as colleagues. Mutual respect and trust are evident in the way they talk to each other and work together, no matter what their position may be;
- People are open to learning about other perspectives and value input from other disciplines;
- People feel free to try experiments, take risks, and openly assess the results. No one is censured for making a mistake.

Characterizing the culture of an organization is not an easy task, but culture is a very significant factor to be considered when trying to make change.

LITERATURE OF NOTE

There is an extensive body of literature on organizational culture that can be used to approach cultural assessment and transformation.

Edgar Schein described organizational culture as a set of shared assumptions, values, beliefs, and unwritten rules that influence behavior¹. He observed that culture provides “a compass to people, who in turn pass this guide onto new members so they can know the correct way to perceive, think, and feel in relation to this reality”. He identified three layers of culture:

- Artifacts – things that can be observed that provide clues about the culture, such as the physical environment (cubes or open collaborative spaces), dress (casual or formal), and communication styles (hierarchical and rigid versus free-flowing); distribution of resources/budget for different functions.
- Espoused Values – Publicly stated goals, values, ideologies of the organization – for example, WSDOT’s Vision and Mission statement.
- Basic underlying assumptions – Invisible, shared understanding about “how we do things around here.”

A useful stream of inquiry based on these cultural elements is: to what extent is organization’s espoused values have been internalized – i.e. is the organization “walking the walk” or just “talking the talk”? It is also important to consider whether the underlying assumptions that exist support or inhibit the kinds of changes that the organization wishes to make.

Peter Senge’s highly influential book, The Fifth Discipline² also addresses organizational culture, with a focus on what elements need to be in place for a “learning organization” – in which “people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together.” He identified five essential “disciplines” for a learning organization:

- Personal mastery – Continual learning and development at the individual employee level
- Mental models – Surfacing and critical examination of internally held assumptions and beliefs about how things work, that provide the basis for learning
- Shared vision – Ability of employee to create a shared picture of the future together
- Team learning – Ability for teams to work together and discover new insights through collaboration that would not be available individually
- Systems thinking – Ability to understand the big picture and how each person fits in to it, recognize complexity, assess downstream consequences of actions taken, see interrelationships and feedback loops, and identify leverage points for intervention. This “fifth disciple” builds upon and integrates the other four.

¹ Schein, Edgar H. Organizational culture and leadership. Vol. 2. John Wiley & Sons, 2010.

² Senge, Peter M. The fifth discipline: The art and practice of the learning organization. Broadway Business, 2006.

Donella Meadow’s work on systems thinking provides insight into identification of leverage points³ - places where a small shift in one thing can result in big shifts in outputs or results. Notably, (in the context of organizational processes as systems), several of the relatively high leverage point that she identifies are intertwined with organizational culture:

- The rules of a system – and who makes them;
- The power to add, change, evolve, or self-organize system structure – which depends on diversity and experimentation;
- The goals of a system; and
- The paradigms of a system – which can be changed by recognizing and pointing out current anomalies and failures.

Dee Hock’s work on The Chaordic Path⁴ describes a model for managing organizations (and other complex systems) in which elements of chaos (anarchy) and order (structure) co-exist. In this model, leaders “legitimize and strengthen behavior in accordance with the sense of the community ... enable its shared purpose, values and beliefs to emerge and be transmitted.” Rather than participating in master-subordinate relationships emphasizing control, leaders focus on their own behavior first, then on leading their superiors, and then on leading their peers.

The Cynefin framework⁵, developed by Welsh scholar Dave Snowden, describes four types of environments: simple, complicated, complex, and chaotic, each of which behaves in a different manner and requires different management approaches. Organizational culture can support or inhibit application of these different approaches.

<p>Complex</p> <ul style="list-style-type: none"> • Probe-Sense-Respond • Emergent Practice • Enabling Constraints 	<p>Complicated</p> <ul style="list-style-type: none"> • Sense-Analyze-Respond • Good Practice • Governing Constraints
<p>Chaotic</p> <ul style="list-style-type: none"> • Act-Sense-Respond • Novel Practice • Crisis Mode – Relaxed Constraints 	<p>Simple</p> <ul style="list-style-type: none"> • Sense-Categorize-Respond • Best Practice • Rigid Constraints

Figure 1. Cynefin Framework

³ Donella Meadows Project: http://www.donellameadows.org/wp-content/userfiles/Leverage_Points.pdf

⁴ The Art of Chaordic Leadership by Dee Hock: http://www.meadowlark.co/the_art_of_chaordic_leadership_hock.pdf

⁵ ‘A Leader’s Framework for Decision Making’ by David J. Snowden and Mary E. Boone, Harvard Business Review: <https://hbr.org/2007/11/a-leaders-framework-for-decision-making>

LEAN PRACTICE AND LEARNING CULTURE

- Practical Solutions and Lean both support a learning culture. In fact, “learning culture” is a term commonly used in Lean training – a Lean culture emphasizes learning. Key aspects of Lean principles and practices include: Systems view of the entire value chain
- Continuous improvement involving measurement, analysis and adjustment
- Emphasis on collaborative problem solving
- Encouraging each employee to think creatively
- Focus on exposing problems so that they can be addressed, rather than blaming individuals
- Managers as coaches; employees as learners

Lean and learning cultures require the concept of “servant leadership” – in which management is put in a supportive position, allowing staff to maximize organizational effectiveness through continuous improvement.

A focus on strengthening the learning culture at WSDOT is part and parcel of supporting the agency’s application of Lean practice.

4. STRATEGIES FOR A LEARNING CULTURE

OVERVIEW

In a large organization like WSDOT, there are many subcultures, and there is variation across different work groups with respect to employee engagement, feeling of shared purpose, management support for risk taking, and opportunities for open discussion and reflection. Strengthening these elements of a learning culture agency-wide requires sustained commitment and a multifaceted approach.

A May 2016 workshop at WSDOT reviewed learning culture concepts and their application to Practical Solutions. WSDOT workshop participants included:

- Leni Oman, Knowledge Strategist
- Mike North, Assistant Secretary, Strategic, Enterprise & Employee Services
- Nancy Boyd, Director, Engineering Policy and Innovation Division
- Faris-Al-Memar, Systems Analysis & Planning Manager
- Ida Van Schalkwyk, Road Safety Engineer
- Steve Hanson, Project Control Manager
- Dacia Dunbar, Construction Analyst
- Matt Cronk, Organizational Development and Training Specialist
- Kate Severson, Practical Solutions Training Manager
- Cassandra Parlee, Lean Capacity Development Manager
- Denise Bedford (phone) – Spy Pond Partners
- Frances Harrison – Spy Pond Partners

At the workshop, key elements for strengthening a learning culture at WSDOT were presented and discussed:

- Development of a Shared Vision and Strategy
- Leadership Commitment
- Providing Opportunities for Learning
- Adoption of Methods and Tools Supporting Learning

Each of these elements is covered below, followed by a summary of participant input and ideas for improvements.

ELEMENTS FOR STRENGTHENING A LEARNING CULTURE

Shared Vision and Strategy for Learning

The foundation for developing a learning culture is a common *vision* of what a learning culture is, why it is needed, and what it would look like at WSDOT. With this vision established, an agreed-upon *strategy* for moving towards this vision is needed. The strategy includes establishing responsibilities for leading and supporting related efforts, resourcing, criteria for evaluating progress, and developing a process for improving based on feedback. Developing a strategy is important because it signifies intent to pursue a course of action.

Leadership Commitment

Leadership buy-in, modeling of desired behaviors and involvement in implementation is essential to strengthening the learning culture at WSDOT. This applies not only to executive leadership, but leaders and managers at all levels of the agency. Leaders must understand the value and communicate the importance of activities that promote the learning culture. Demonstrating commitment by setting aside time for team learning activities, and participating in these activities sets an example for others and highlights the importance of the learning efforts.

Although it is essential to have committed leadership, one resulting effect is that people who lead are often expected to have all of the answers. If they don't, there may be a negative reaction. Each person impacts the whole, so transforming this reaction to "let's work it out together" represents another strategic pathway. Leaders should recognize individual and group contributions to reflect this team approach.

Opportunities for Learning

Opportunities for learning may be informal or formal (structured). Team meetings provide an opportunity for team members to contribute to other team efforts, and learn from one another in a structured environment. Similarly, workshops and group exercises promote collaboration toward achieving a specific objective. Formal training is necessary but needs to be reinforced with ongoing coaching, mentoring and collaborative practice.

Communities of practice (CoP) provide an opportunity to develop a shared knowledge base. In this setting, employees can share different approaches and methods, and allow for additional inquiry and

knowledge development. Knowledge cafes may produce similar results. Peer reviews and after action reviews also present opportunities to learn about other approaches for both the reviewers and the reviewees.

Communities of Practice...

- Have a common domain of interest
- Develop relationships through discussion and engagement, sustained over time
- Build a shared resource base for solving problems and improving their practice further their practice

WSDOT can build these opportunities into regular business processes. For example, peer reviews could be built into the program budget cycle to provide feedback throughout the program budget development and implementation. This could inform later steps of the program budget cycle, and/or future efforts.

Methods and Tools

In order to support learning opportunities, there are a number of methods and tools that WSDOT could adopt. *Methods* that WSDOT could use include conducting structured facilitation for skillful discussions, and using training and coaching to:

- Help employees build personal mastery and mental models,
- Facilitate application of systems thinking (e.g. to identify leverage points), and
- Build understanding of how to adapt leadership approaches as needed for different situations (e.g. the Cynefin framework.)

Tools that WSDOT could adopt include knowledge repositories (e.g., lessons learned), expertise directories, collaboration tools (e.g., discussion forums), and diagnostic tools to identify gaps and areas of focus.

WORKSHOP PARTICIPANT INPUT

As a foundation for the discussion of specific recommendations, a “magic wand” exercise was conducted in which participants were asked to suggest one type of cultural change that they felt was important to make at WSDOT to support Practical Solutions. The results of this exercise, augmented with additional items based on issues raised at earlier PS AID Project meetings, are displayed in Table 2.

Table 2. PS AID Project Learning Culture Workshop Magic Wand Exercise Results

How things are now	How it would change
Business unit and individual interpretation of purpose and objectives	Shared agency purpose and objectives

How things are now	How it would change
Division-specific perspective on success and delivery	Enterprise-wide perspective
Employees understand the activities of their business unit	Culture of openness and sharing
Espoused values are not reflected in management behavior and practices; rewards are conveyed for “things”	Espoused values are reinforced through management behavior and practices. Rewards are conveyed for desired behaviors.
Self-ownership	Collaborative
Blaming Culture	We all own the solution
Change objectives and schedules are not clear – there is confusion about what path the organization is on	Change objectives and schedules are clear – the path is cleared for robust progress.
Change initiatives are managed	Change initiatives are led
Multiple change initiatives	Vital few change initiatives (or one)
Lack of awareness of word choices, meanings and metadata	Organization that makes an effort to ensure common understanding of words used
Critical conversations don’t take place in meetings, or are decisions made are undermined after meetings	Critical conversations are undertaken in meetings and decisions are supported
Conflict is avoided, uncertainty is bad	Constructive (non-corrosive) conflict is positive and needed
Decisions handed down from executive level (not informed)	People do things that they want to do (caters to their skills and interests), not because they have to
We discuss items to be heard with the intent to win our point	We dialog with the intent to listen and learn before making decisions (divergence before convergence)
Innovation is suppressed (not your role, not a priority, not enough money, not in your wheelhouse, tec.)	Innovative ideas are discussed and considered

How things are now	How it would change
Managers not bought in to their roles	Managers are engaged
Leaders that direct behavior	Leaders that model behavior
Aloof leaders	Friendly and approachable leaders
Limited space to be heard, limited time - “my way or the highway”	There is space to be heard. Leadership that listens. Compromise and discussion of issues.
Hidden power bases control success of initiatives	Power bases are transparent and in alignment with agency values and objectives
Training is expendable	Training is foundational
Employees receive minimal training to build explicit knowledge	Employees engage in situational, continual learning
Training is one-directional	The agency employs double-loop learning

While different perspectives were expressed in this exercise, it was clear that participants felt there was considerable opportunity for improvement. One participant noted that the most recent WSDOT employee survey on Multidisciplinary Engagement clearly indicated that there is a desire to foster more of a learning culture in the agency – and that it will be important to take steps to act on this feedback. Others commented that any efforts to foster a learning culture need to recognize that personality is a big driver of WSDOT’s culture – many of the current managers (at all levels of the Department) are not natural people-managers. Many of the staff have personality types that are introverted, rational, and methodical rather than outgoing, action-oriented, and creative. A related concern is that some current managers who have been promoted from primarily technical roles have not made the adjustment needed to provide leadership and represent a broader, organizational viewpoint.

Multidisciplinary Engagement Survey. An employee survey was conducted in 2015 to assess the current state of Multidisciplinary Engagement (ME) in Transportation System Development & Management at WSDOT. The survey sought to gauge employee perceptions about whether the ingredients for an engaged workforce were in place – including shared understanding of current processes and future directions, recognition of how each employee contributes to the whole strategy, and the degree to which individual employees have the skills and motivation to collaborate. The results of this survey indicated that continued work is needed to advance agency capabilities in ME.

IMPROVEMENT ACTIONS TO FOSTER A LEARNING CULTURE

Participants discussed the four learning culture elements presented above (Shared Vision and Strategy, Leadership Commitment, Opportunities for Learning, and Methods and Tools.) Their comments about issues and needs are summarized below, along with suggested improvement strategies.

Shared Vision and Strategy for Learning

Issues and Needs:

- It is hard to learn when we don't know where we are going – there is a need to clearly articulate the future direction, develop a curriculum for what people need to learn, and create a learning strategy that supports this. This work is currently in progress.
- WSDOT has a nine page Executive Order that states the “espoused values” of the organization. However, these values are not yet visibly reflected in employee behavior. Making progress in this area will require leadership action – but cannot be a completely “top down” process.
- Part of developing a shared vision is having shared, commonly understood vocabulary, so that when someone uses a term, others in the room all interpret that term in the same way. WSDOT is currently working on getting agreement and endorsement of some core terminology related to practical solutions (e.g. “strategy”, “need”, “project”, etc.)
- There is an apparent disconnect between WSDOT Headquarters and Regions –workshop participants observed that some field staff do not feel that Headquarters is sufficiently in tune with the delivery side of the organization. Additional communication could be helpful here to create a shared understanding of respective roles and value-added.

Strategies for Consideration:

- Shared Vision: Conduct facilitated sessions to develop and socialize a shared vision.
- Messaging: Create speak points for WSDOT leadership to articulate the future vision for the agency that will resonate with people (more than the current nine page document does). Link to the emphasis areas and actions in the Practical Solutions work plan.
- Communication: Ensure regular face-to-face communication between WSDOT leadership and Regions – both in the Regions and at Headquarters.

Leadership Commitment

Issues and Needs:

- Change must be led rather than managed – leaders need to “walk the walk” – that is the only way to get from “espoused values” to “lived values.”
- Leaders need to make it clear that they are not there to give orders and provide all of the answers – but to facilitate ways of working out problems and issues together. They need to be engaged in the process of dialog, starting with ideas and suggestions that may not yet be fully developed and ready to be advanced.

- There is a need for greater clarity of roles in the decision making process: who is responsible for making the decision, who is consulted, and who is informed. Specifically clarity is needed on what decisions employees are empowered to make on their own.
- Leaders must be willing to support certain type of risk taking in order to achieve improvements.
- Some employees may feel intimidated in interactions with their superiors; there needs to be more of an emphasis on relational authority (based on trust and respect) rather than positional authority (based on title or position in the organization.) At the same time, employees need to be coached on how to take responsibility for making their viewpoints heard.
- There is a need for better alignment between what the agency says it supports (e.g. Transportation Demand Management) versus what it rewards (e.g. highway project delivery)
- Leaders and managers must actively reinforce desired behaviors and ensure accountability for unproductive behaviors.
- Some WSDOT leaders have adopted a mindset conducive to a learning culture (in some cases, facilitated by existing training); others have not. Without a clear goal and path to get there, results will vary.

Strategies for Consideration:

- **Leadership Training:** Pursue leadership training to ensure that the leadership team is modeling the kinds of behaviors that are needed for a learning organization (see the Magic Wand exercise). Leadership training should reflect learning culture expectations and adaptive management practices. Note that leadership training should cover multiple levels of the organization – not just senior managers.
- **Management Training:** Provide training for managers to gain skills in motivating employees and working in teams.
- **Interactive Sessions:** Schedule regular opportunities for leaders to interact with a variety of staff members and have two-way conversations about how to accomplish desired changes
- **Coalition Building:** Convene a group of WSDOT managers that have an appreciation for the importance of a learning culture to share management approaches that they have taken and discuss ways to promote these approaches across the organization. This group could discuss, for example, techniques for encouraging employee initiative in solving problems, enabling employees to better understand how what they does fits in to the bigger picture, and how to make each employee feel responsible for contributing to a positive and productive work environment.

Opportunities for Learning

Issues and Needs:

- It is difficult for people to make time for learning and creative work when they are stretched thin and encumbered with expectations.

- There needs to be recognition of the fact that there is a payoff to making time for creative work. WSDOT needs to see that managing an organization requires a different approach from managing a project.
- There is a need to build in ways to reflect on and capture knowledge about what works and what doesn't during work activities – rather than waiting until the end.

Strategies for Consideration:

- Feedback Sessions: Encourage managers at all levels to schedule feedback sessions that provide opportunities for honest discussion about employee concerns. Provide mentoring and training as needed to build management skills that enable them to conduct this type of session effectively.
- Communities: Pilot communities of practice, learning labs, knowledge cafes and other for solving problems and developing new processes and techniques. Note that these are not the same as meetings or group visits in which the goal is to inform or coordinate.

Methods and Tools

Issues and Needs:

- There is a need for recognition of the value of facilitation at WSDOT as integral to successful project management and delivery.
- There is a need for skillful facilitation and coaching to help people to learn how to talk about mistakes in a productive way and engage in collaborative problem solving.
- There is a need to broaden the base of participation in rolling out Practical Solutions – identify additional WSDOT who could contribute in useful ways.
- There is a need to build skills and experience for community and multidisciplinary engagement, particularly with respect to developing a common vision based on outcomes (as opposed to specific solutions), listening to different perspectives, and taking these perspectives into account in solution development.

Strategies for Consideration:

- Change Models: Explore further use of organizational change models – for example, SCARF⁶, ADKAR⁷ - the SCARF model is based on neuroscience research related to perceptions of threats and rewards. It can be used to teach managers how to take stock of perceived threats and rewards related to five key domains prior to a group interaction: status (sense of worth), certainty (clarity about the future), autonomy (sense of control), relatedness (social relationships), and fairness.

⁶ Rock, David. "SCARF: A brain-based model for collaborating with and influencing others." *NeuroLeadership Journal* 1.1 (2008): 44-52.

⁷ Hiatt, Jeff. *ADKAR: a model for change in business, government, and our community*. Prosci, 2006.

- Expertise Directory: Develop an expertise directory to share information on skills and interests
- Collaboration Sites: Make greater use of intranet tools to provide asynchronous opportunities for information sharing and collaboration
- Hiring Practice Evaluation: Conduct an examination of hiring practices to determine whether changes are needed to ensure that WSDOT’s workforce has the right mix of skills, abilities and personality types to foster a learning culture. This evaluation should consider whether WSDOT is adapting to changing needs rather than replacing positions in kind.
- Employee Suggestion Program: Continue to build on the success of WSDOT’s current IdeaWorks program, a good example of encouraging employee engagement and creative problem solving.

5. RECOMMENDATIONS

Based on the identified learning needs associated with WSDOT’s implementation of Practical Solutions and the issues and suggestions raised at the workshop, the following strategies and actions are recommended for consideration. Following WSDOT review, these will be refined and further expanded as appropriate. Key elements of the recommendations are illustrated in Figure 2.



Figure 2. Strengthening the Learning Culture for Practical Solutions

STRATEGY 1: DEVELOP AND DISSEMINATE A CLEAR MESSAGE ABOUT THE AGENCY’S VISION AND EXPECTATIONS

- This Strategy can also be posed as the Question “How Exactly Do We Expect People to Act?”
- Building on Executive Order 1096.00 - WSDOT 2015-17: Agency Emphasis and Expectations, as well as the Multidisciplinary Engagement Principles (see Appendix A), and the Community Engagement Principles (Appendix B), produce a series of easily digestible messages about expectations for managers and employees.
- Identify and address areas where the vision and expectations may be threatening or difficult for some employees to embrace.
- Develop and execute a dissemination plan to ensure broad understanding of the messages.

Expectations for Employees at all Levels:

- **Time** - Understand that learning cannot happen without time dedicated to that activity.
- **Questions** - Encourage and expect questioning and creativity at all levels.
- **Incentives** - Provide incentives and opportunities for innovation and sharing knowledge.
- **Respect** - Treat each other as colleagues with mutual respect evident in the way we talk and work together.
- **Teamwork** - Always work in cooperation with one another to help achieve a shared goal.
- **Reflection** – Reflect upon your assumptions and biases and encourage others to do the same.

STRATEGY 2: ALIGN THE MANAGEMENT TEAM

This strategy can also be stated as “DEMONSTRATE THAT WE MEAN IT”.

- Establish a single point of accountability for making sure that agency managers are “walking the walk” when it comes to expected behaviors.
- Incorporate discussion of the messaging into management meetings – devote a portion of the agenda to identifying issues and specific improvement actions.
- Set up one-on-one meetings or facilitated sessions (as appropriate) to allow for honest feedback on challenges and barriers to change.
- Engage facilitation and leadership coaching services to teach and reinforce desired ways of working.

STRATEGY 3: ESTABLISH ONGOING MONITORING AND COMMUNICATION

This strategy strives to “MAKE SURE WE ARE MAKING PROGRESS”

- Identify and gain agreement on tangible measures of progress – for example, employee ratings of engagement, reduction of re-work in the transportation development life cycle, successful examples of cost reduction, etc.
- Integrate measurement of progress into periodic employee surveys and proactively address

areas of concern. Conduct more focused surveys to understand the underlying issues and root causes of employee dissatisfaction in order to develop actionable information.⁸

- Review current employee performance review processes to determine how to strengthen management and leadership competency development and evaluation/follow-up on progress.
- Establish regular (e.g. quarterly) updates for employees about activities being pursued to address identified issues and suggestions.

STRATEGY 4: ESTABLISH A CLEAR LEARNING CYCLE FOR PRACTICAL SOLUTIONS

This strategy can also be stated as “Provide Opportunities for Learning”.

- Designate a Practical Solutions Community of Practice (CoP), charged with identifying, disseminating and applying lessons learned. The Practical Solutions Working Group may be the logical starting point for this CoP.
- Develop a charter for the CoP that includes support for a cycle involving identification of lessons and successful practices, vetting and validation, dissemination and feedback.
- Establish a set of focus areas representing high leverage points for progress – for example, interactive scoping, community engagement, and identification of alternative strategies.
- Designate a coordinator for the CoP (from the Practical Solutions Core Team) to set up meetings and manage agendas.
- Identify an initial project for the CoP and designate a CoP member as the business lead.

STRATEGY 5: CREATE AND MAINTAIN PRACTICAL SOLUTIONS LEARNING RESOURCES

- This strategy can also be stated as “PROVIDE RESOURCES FOR LEARNING”
- Design a single “home base” for Practical Solutions learning resources, with links to:
 - WSDOT Training Materials
 - WSDOT Lessons Learned
 - WSDOT Application Examples
 - National and other State DOT resources
 - Resource people
 - Link to expertise directory (see below)
 - Link to discussion forum (see below)
- Pilot an online discussion forum for Practical Solutions – involving active moderation to facilitate productive participation.
- Pilot an online Expertise Directory supporting Practical Solutions – that enables individual employees to populate information about their areas of expertise and interests – use this effort to build a communication list for engaging a broader set of people in developing WSDOT’s Practical Solutions capabilities.

⁸ The US Military has a practice of conducting *Unit Climate Surveys*, designed to gather anonymous feedback to the unit commanders on the organization’s climate and culture. See example:

https://deocs.net/docdownloads/sampledeocs_2014jan.pdf

APPENDIX A: WSDOT MULTIDISCIPLINARY ENGAGEMENT PRINCIPLES

- 1. Connect and engage with the experts in the functional areas affected by your work.**
Understand your part in developing and managing the multimodal transportation system and how your actions affect the whole.
- 2. Seek out and understand opinions and perspectives different from your own.**
Engage with others early in the process to gain insight, foster agreement, and avoid delays.
- 3. Listen, value and consider the input of others, and incorporate as appropriate.**
Focus on hearing what people are sharing before responding. Confirm that the intended message is understood before you act.
- 4. Be intentional with communication**
Use effective methods and styles as you and your co-workers deliver, receive and act on information. Be flexible in your approach to maximize understanding. Tell others of your actions and why you chose them. 'If in doubt, don't hit send.'
- 5. Help each other succeed.**
Do everything you can to help others succeed; your success depends on it.
- 6. Foster a safe environment for creative ideas to emerge.**
Be engaged and try new ideas and opportunities. Seek out creative ideas and innovative solutions. Respect creativity and innovation in each other.
- 7. Foster inclusiveness by sharing access to resources and data.**
Keep the big picture in mind. Provide access to people, data, information, current processes, and knowledge, to facilitate trust and collaboration.

APPENDIX B: WSDOT COMMUNITY ENGAGEMENT PRINCIPLES

- 1. Connect and engage.** Become active members of communities and go to the places they gather. Take advantage of opportunities to work with community members, volunteers and leaders and find out their priorities and perspectives. Reach out to interested parties that cannot attend meetings and receive their feedback. Seek out voices not traditionally heard, including people who are traditionally unable to participate due to age, disability, income or national origin.
- 2. Listen and act.** Focus on hearing what people are sharing before responding. Confirm that the intended message is understood. We receive and act on feedback.
- 3. Facilitate communications.** Help groups listen to each other and explore new ideas. Solicit input by encouraging everyone to speak up. Check in with the group as a whole, as well as with individual participants, to gauge their comfort levels.
- 4. Help each other succeed.** Share resources and information with the various WSDOT regions, divisions, and offices to achieve success. Be aware that success is defined in different terms and outcomes. Be creative in defining work teams and understand how team members define success.
- 5. Maximize creativity and innovation.** Seek out and use successful community engagement tools and techniques when conducting outreach. Prevent requirements from being the only focus of outreach.
- 6. Blend diverse inputs.** Be sensitive to commenters' perspectives when receiving input. Understand that how we evaluate and respond to comments from governments, stakeholders and the public is critical, especially if there are opposing viewpoints. Consider the commenter's perspective when reviewing comments. Remember that all comments are considered, even if they are not directly incorporated.
- 7. Provide access to the process and foster inclusiveness.** Rely on effective one-way and two-way communication throughout the process. Strive for transparent conversations that include diverse people, opinions, ideas, and information. Remember that what works for one process or group may not be as effective for others.
- 8. Be a wise steward of the public's money.** Be mindful of the use of everyone's time and money while ensuring adequate time and funding for community involvement in planning and project development. Achieve effective two-way engagement without exceeding limited budgets.
- 9. Consider the needs of the multimodal system.** There are a variety of ways to move people and goods on Washington's transportation system. Consider all modes and offer choices and opportunities. Do not focus on just the goals of individual modes.
- 10. Be clear and open about the process.** Inform and, involve users of the transportation system in planning, construction, maintenance and stewardship of the transportation system. Encourage input at decision points, and involve interested parties throughout the process. Continue to exhibit a high level of integrity.

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