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From: TINDALL Douglas J  
Sent: Tuesday, November 17, 2009 10:57 AM  
To: ODOT HWY STAFF - DR  
Cc: ODOT HWY STAFF - CC  
Subject: Practical Design

We're going to try a different communications strategy for Practical Design. Attached is the first of several e-mails talking about Practical Design implementation. Please share it widely with your folks.

Let me know how the reactions/feedback go on this method. We'll adapt if we can do it better.

Tindall

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At the recent Business Line Forum, several attendees asked me to communicate more directly with Highway staff regarding *Practical Design*, a new approach to delivering transportation products and services that has been receiving considerable national attention. So, this email is the first of several to help inform staff about the key principles and tools of Practical Design. I hope it will generate an ongoing conversation about incorporating Practical Design into Highway's business practices.

I envision sending a number of emails on Practical Design over the next several months. This will keep information in "bite size" pieces and give you time to think about it before the next installment. Here's my tentative list of topics to cover.

- Philosophy and Values – why we're doing practical design and what it involves
- Background – what's happening nationally, our recent peer exchange, how practical design fits into our evolving project delivery culture
- Web site – offering information and examples regarding practical design implementation, as well as a mechanism to foster ongoing dialogue.
- Current tools and our progress in developing new tools
- Showcase new decision-making tool, with some examples applying the tool
- Training – what will be offered, when, how, and how often
- What does success look like – performance indicators
- Other topics of interest that come up as we're moving forward

Today, I'd like to focus on the Philosophy and Values associated with Practical Design as we get ready to incorporate this new tool into our project delivery toolkit.

**Philosophy:** Practical Design is a strategy adopted by several states to reduce cost and still deliver tangible benefits to the traveling public from improvements made. At a minimum, it considers safety, economic development, communities if a project passes through them, the environment, the overall transportation system (not just highways), and cost. Practical Design is a systematic approach to deliver the broadest benefits to the transportation system within existing resources by establishing appropriate projects scopes and design guidelines to deliver specific results.

Two unique features of Practical Design are that it provides flexible parameters so that design teams can be confident that a particular solution is “good enough” and sufficient to improve the transportation system, without being excessive. It allows engineers to take the concept across a system level, down to a corridor level, and then apply it to each project. It is a way to let “engineers’ engineer”...not just apply criteria by the book. It also established a clear project purpose and linkages so that all information can be available to the design team about how a project fits into a larger strategy for an area or entire corridor.

It is important to understand that Practical Design does not throw out engineering guidance and/or standards. Rather, flexibility in design typically requires more information and a higher level of analysis when defining and deciding on the most appropriate design value for a particular location. It requires maintaining focus on the project’s purpose and need and a clear process for approving and documenting the rationale for important design decisions. It requires good use of engineering judgment to assess the severity of adverse consequences, evaluate design tradeoffs, and to mitigate risks to the extent it is practical.

With this overall philosophy in mind, our approach to practical design at ODOT will be characterized by:

- Putting projects in a systems context – thinking about the whole transportation system, rather than on a project by project basis
- Designing solutions that are guided by the rest of the system
- Providing sufficient information for design teams to frame up solutions for individual projects that are aligned with corridor/system usage.

**Values:** For years ODOT has employed the ***P.L.U.S. Model*** to guide our ethical decision making. Values represented by the model’s decision making filters are universally recognized and integrated into both complex and simple deliberations. We want to achieve a similar level of recognition and integration with the five key values associated with Practical Design. Our acronym for these values is **S.C.O.P.E.**

- **Safety** – Safety will not be compromised. Every project will either make the facility safer or will maintain the existing safety level for that facility.
- **Corridor Context** – Roadways should respect the character of the community, and its current and planned land uses. We strive to understand and work with the intended corridor use. We consider the unique features of the project and how this “fix” fits with other parts of the corridor and with the natural and built environment surrounding it.
- **Optimize the System** – Adopting more of an asset management approach to managing pavements and roadway safety features allows us to assess the current state of an individual infrastructure asset and to develop specific maintenance, repair, rehabilitation and replacement strategies that optimize the lifecycle investment in that particular asset. This, in turn, can allow available funding to be allocated on a priority basis to those assets and/or combination of assets which ensure that the entire Highway system is optimized for safety, mobility and financial investment. Not every feature on every project will be addressed; rather critical features on the overall system will be addressed by multiple projects.

- **Public Support** – We recognize that public trust is a cornerstone of success. We do business in partnership with the local communities and want system improvements to be visible to the traveling public. We provide opportunities for citizens to shape the chosen solution, and consider community needs for pedestrians, bicyclists, and transit users. A key guide when working with community interests is clarity around Purpose and Need and the alignment of the proposed project with the overall plan for Oregon’s transportation system so that expectations are clear at the beginning of the project.
- **Efficient Cost** – We have limited funds to apply to our projects and we strive to stretch these funds as much as we can. We are open to considering incremental improvements, if they will satisfy the project’s purpose and need. When decision making, we use a number of filter “gates” to be sure that the value of a particular improvement justifies its cost.

**In Summary:** I want us to do this right. For some it will be easier to grasp the philosophy and principles and to see how Practical Design fits with their work. Others may be inclined to take a “wait and see” approach to upcoming changes. I want to stress that this is something that we are going to do at ODOT. And, we are moving fast.

As a high level roadmap to show the direction we’re heading and how quickly we want to get there, here’s what we’ve done to date and what the plans are for the future.

- Peer exchange with FHWA and other States (July, 2009)
- Form team to develop concept (August, 2009)
- Business Line Forum Workshop to get Highway staff input (October, 2009)
- Craft the overall implementation strategy (*We are here*)
  - Define strategy
  - Identify strategy writing and decision-making tool development teams
  - Identify specific examples to illustrate how concepts apply to our work
- Develop and implement email communication tool and strategy for responding to inquiries (Target: early December, 2009)
- Refine concepts/strategy. Fill in the gaps. (Target: begin in January, 2010 and ongoing)
- Roll-out and Training (Target February/March 2010 and ongoing)
- Legislative Report Prepared (Target July 2010)

It is simply good business for us to pursue Practical Design as an approach to stretch ourselves and our available funds in order to develop the Right Projects, at the Right Time, at the Right Cost, and in the Right Way. We owe this to ourselves and to the citizens of Oregon.