

## 2012 TRB PROJECTS TRACKING/STATUS SHEET

#	ATTENDEE NAME	SESSION TITLE & NUMBER	BENEFIT TO UDOT	IMPLEMENTATION PLAN
1	Cameron Kergaye	HOT-BCA tool to analyze feasibility of managed lanes	This tool will be available to analyze economic benefits of current and future HOT performance/revenue	Use BCA tool on I-15 Express Lanes to determine balance between performance and revenue
2	Cameron Kergaye	Light weight aggregate properties during curing	This is to determine concrete strength benefits due to additional release of moisture during curing process	Test on MVC bridge deck by BYU
3	Cameron Kergaye	SHRP 2 tools and opportunities	T-PICS, TCAPP, Underground utility locating and analyses	Take advantage of tools and pilot study opportunities
4	Cameron Kergaye	Cost of ROW acquisition	(Texas) regression model provides data to show difference in condemnation vs negotiation costs	This is information for UDOT ROW Division
5	Cameron Kergaye	Long term benefits of ATCS under varying peak hour weekday traffic demand	SCATS performs 20% better than existing TOD, and 5% better than the theoretically best TOD plan	This reinforces the use of ATCS in area of highly fluctuating traffic demand
1	Fred Doehring	244 State Dept. of Trans. High Value Research Projects	Reduce the cost of checking pavement thicknesses. Eliminate or significantly decrease the number of cores taken in new pavement	Set up a meeting with Scott Andrus and his staff to review the literature I got. If we decide to proceed, we will contact FHWA and set up a demonstration project. They have the equipment and will be happy to come to Utah .
2	Fred Doehring	100 Post Installation inspection of burried pipes	FDOT has developed a Pipe Repair Matrix which clearly states how the contractor must repair any defects identified during video inspection. This eliminates any arguments between the contractor and the RE over what the repair should be.	Work with Denis Stuhff to review FDOT's work and incorporate it into our specifications
3	Fred Doehring	244 State Dept. of Trans. High Value Research Projects	Allows UDOT to determine the proper placement of Dowel Bars in concrete pavement with far greater precision and a lower cost. Provides a more durable concrete pavement which reduces future maintenance cost.	Set up a meeting with Scott Andrus and his staff to review the literature I got. If we decide to proceed, we will contact FHWA and set up a demonstration project. They have the equipment and will be happy to come to Utah .
4	Fred Doehring	110 Signing and Marking Management: Best Practices and Safety Benefits	Longer lasting water bourn paint stripes	Review our current specifications with Iowa's. If their spec. is different we may change to their specification.
1	Bryan Adams	SHRP2 Project R10 Management Strategies For Complex Projects	Better understand and mitigate complexities and risks of a project. Staff according to complexity (put the right team members in the right seats on the bus).	Develop Guidelines & Processes to better understanding and manage complex projects (MOI, iPD, etc.). Provide training.
2	Bryan Adams	Enterprise, Program & Project Risk Management	Reduce re-work, and long term maintenance problems. Potentially reduce number of inspection hours.	Develop Risk Based Inspection practices into Construction Program (MOI, iPD, etc.). Provide training.
1	Mike Miles	Poster Session 244	More efficient use of time.	Inspectors are given an I-pad with all construction docs loaded on it.
2	Mike Miles	780 Performance Evaluations of Hot Poured Crack Sealant	Use of proper material will make treatments last longer	May require a study to corroborate the CDOT study. Looks at type II and type IV crack sealants
3	Mike Miles	NA	Increase of awareness and a difference in attitude	Send Region EM IIs to TRB
1	Rob Clayton	491: Using Field Data to Improve Model Accuracy: Application of Robertson Dispersion Model to High-Resolution Signal Event Data (#12-0061; D Bullock)	Dr. Bullock (Purdue) has developed a technique to monitor the quality of traffic signal timing in real-time. This functionality is critical to the success of UDOT's World Class signal program. UDOT currently lacks this capability.	Currently evaluating equipment and technology required to implement. Dr. Bullock has expressed interest in assisting UDOT. This will be a priority for the Traffic Management Division in 2012.

2	<b>Rob Clayton</b>	758: Reliability in Depth: Two SHRP 2 Research Projects, Part 1. (Features to Improve Travel Time Reliability; SHRP 2 Reliability Project L07; Ingrid Potts).	Non-recurrent congestion can be mitigated and minimized through effective design. The study will produce a spreadsheet analysis tool and a design guidebook.	One design feature presented that may have merit is the establishment of "Crash Investigation Sites" off the freeway, potentially on the off-ramps. This would be consistent with the new "Fender Bender move to next exit" signing recently installed in partnership with UHP.
3	<b>Rob Clayton</b>	758: Reliability in Depth: Two SHRP 2 Research Projects, Part 1. (Establishing Monitoring Programs for Travel Time Reliability; SHRP 2 Reliability Project L02; George List).	This study is generating a guidebook that the TOC could use to implement a monitoring program for Travel Time Reliability. Author indicates that it will be available in October.	Need to evaluate the guidebook once it is issued. The study sounds promising.
4	<b>Rob Clayton</b>	Numerous TRB sessions focused on Hard Shoulder Running, both domestic and abroad. Should UDOT pursue HSR, 2012 TRB info is a solid source of information to support conceptualization and planning. Of particular value was session 206, especially the Florida (Bob Edelstein, AECOM) and Washington (Jacobson, PB) presentations.		
1	<b>Keith Brown</b>	Session 155: Geologic Innovation in Subsurface Exploration	Utilize Geophysics to verify and supplement exploratory borings. This may allow us to reduce the number of borings required on a project. Geophysics has the potential to identify the depth of dense strata and bedrock. This information along with a few borings that show correlation may satisfy the exploratory needs of the project.	Identify projects where this technology is applicable. Geophysics is most useful where subsurface rock is encountered, not areas with deep soil profiles. Get Consultants in the Consultant Pool that have this capability. Reduce the number of borings required by our MOI by using geophysics.
2	<b>Keith Brown</b>	Engineering Geology Committee AFP10 committee meeting and the Panel Discussion: "Making Foundations Constructible"	Optimize pile foundation design by utilizing more of the pile capacity gained by soil set-up. Decrease the unknowns involving production pile driving during construction. This is accomplished by driving and testing piles during the design phase of a project.	Utilizing the information gained from test piles at foundation locations would optimize pile design and reduce the pile needed compared to a typical conservative design. This idea lends itself to use on large CMGC projects and/or large foundations that require many driven piles.
1	<b>Randy Park</b>	Complex Project Management Tool - SHRP2	TBD	TBD
2	<b>Randy Park</b>	Accelerated Bridge - SHRP2	TBD	TBD
3	<b>Randy Park</b>	Innovations through Workforce Development	TBD	TBD
1	<b>Shane Marshall</b>	Developing economic development performance measures.	Track and measure the impact of our work on economic development.	Have measures defined in the next year.
2	<b>Shane Marshall</b>	Incorporating economic development into the project prioritization process.	This would allow UDOT to make a more informed decision on the selection of our projects. We would be able to forward all of our final four goals.	Begin with Region Three and MAG. Refine the criteria then use it State wide.