

Transportation Operations & Safety Committee
Thursday, February 25, 2015, 10:00AM
SPC Conference Center, 4th Floor
Chatham II, Pittsburgh, PA

Attendees

Aidan Barrett, City of Pittsburgh	Jim Katsafanas, Michael Baker	Lisa Kay Schweyer, SPC
Ross Buchan, Gannett Fleming	Todd Kravits, PennDOT D11	Michael Shanshala, PennDOT D10
Paul Carafides, DVRPC	Joel MacKay, Butler County	Allie Slizofski, Drive Engineering
Frank Cippel, PennDOT D11	Adam Marshall, PennDOT D10	Doug Smith, SPC
Domenic D'Andrea, SPC	Kelly Maurer, Cranberry Twp	Joshua Spano, SPC
Brad DiCola, Gibson-Thomas	Conor McAliney, Drive Engineering	John Stahl, Pennoni
Cliff Eich, Trans Associates	Christoph Mertz, CMU	Mark Szewcow, Trans Associates
Ryan Fonzi, N. Huntingdon Twp	Mike Mudry, TPD	Jason Theakston, WACO Planning
Akshali Gandhi, Pgh City Planning	Jina O'Neill, OTMA	Scott Thompson-Graves, WRA
Jay Goldstein, Pennoni	Jim Paral, FHWA	Dave Tomaswick, PennDOT D10
Matthew Grayauskie, Pitt Give	Amanda Purcell, City of Pittsburgh	Mike Turley, N. Huntingdon Twp
Joshua Grimm, SPC	Darryl Phillips, Parsons Brickerhoff	Andy Waple, SPC
Pete Hatala, Pitt Give	Chuck Rampala, Port Authority	David Wohlwill, Port Authority
Jonathan Heilman, Gannett Fleming	Kristin Saunders, City of Pgh	

Meeting Summary

Domenic D'Andrea welcomed the attendees and initiated a round of introductions.

Planning for the Papal Visit – Lessons Learned

Robert Taylor, PA Turnpike and Paul Carafides, DVRPC

- Robert Taylor began by discussing the Turnpike's role in the planning and operations of the Pope's visit in September of 2015. Since this was classified as an NSSE (National Special Security Event) Event, most of the event was coordinated by Homeland Security, Secret Service, FBI, and FEMA officials. Mr. Taylor explained how many meetings took place before the visit and the coordination between all agencies. Overall, the visit was successful and the Turnpike had no issues from the Pope's visit.
- Paul Carafides discussed DVRPC's role in the planning process of the Pope's visit. He began by discussing how they used their mapping assistance to provide detour routes, waterway situational awareness, and other items to prepare consumers for the visit. Mr. Carafides explained the congestion analysis that they completed on the Philadelphia area throughout the Pope's visit. They found that during the days of the visit, traffic was incredibly light if not almost non-existent in most of the area.
- A question was asked where most of the planning and other money for the visit came from. Mr. Taylor responded that the Turnpike spent money from their capital budget. It costs them around \$1.5 million and about \$1.5 million was lost in revenue.
- David Wohlwill asked about SEPTA's operations and routes during the visit. Mr. Taylor responded saying that a special ticket was required to board commuter routes into the city during the visit. Otherwise there was very limited service and no bus service in the city.
- Domenic D'Andrea asked about a playbook or checklist that could be created from this event to be used in other large events. Mr. Taylor said they are developing a special events workbook with what they learned. Frank Cippel mentioned the NSSE handbook and Jim Paral mentioned

that they are currently updating the NSSE handbook. Mr. Carafides mentioned the importance of relationships when there are big events.

Low-Cost Infrastructure Monitoring with Smartphones

Courtney Ehrlichman, CMU Traffic-21 and Christoph Mertz, CMU Robotics Institute

- Courtney Ehrlichman introduced Christoph Mertz and his work and provided an overview. She stated that CMU and Christoph are looking for municipal partners on this effort.
- Christoph Mertz introduced how he is using smart phones and smart cameras. He began using cameras in 3D accident reconstruction to minimize the time it would take to recreate the scene. Mr. Mertz now uses the same technology to detect cracks in road pavement, snow conditions on roadways, and stop signs. CMU is currently testing this technology with Cranberry and the City of Pittsburgh with upcoming tests in Penn and North Huntingdon Townships. Mr. Mertz is looking for more partners in both the private and public fields; they already have a partner in AECOM.
- Rich Feder asked how it can differentiate between cracks and road marks. Mr. Mertz explained he taught the algorithm to tell the difference by showing photos of each.
- Brad DiCola asked if there was a certain condition to get the best quality data (such as speed, weather, or other driving variables). Mr. Mertz explained overcast weather is the best but overall some days are better than others. The slower you drive the better the picture will be.
- Lisa Kay Schweyer asked if there was a minimum size for a vehicle fleet or individual to participate in a trial. Mr. Mertz said that he has not thought of an optimal size but is willing to talk to anyone. He stated that having too many could be an issue as well.
- Jim Paral asked if it was brought up to the State Transportation Innovation Council for funding? Mr. Mertz said that the STIC would like to see proven results before they fund.
- Domenic D'Andrea mentioned how SPC could assist in developing connections with municipalities in SPC's region to test in private vehicles. Mr. Mertz said a concern of his is the barrier with unions (that are concerned with continuous recording and protection of equipment).

City of Pittsburgh Multimodal Improvements

Kristin Saunders and Amanda Purcell – City of Pittsburgh

- Amanda Purcell began by discussing traffic signal and pedestrian improvements in the City of Pittsburgh. She explained how there are many signals in the City that are in need of upgrade. When upgraded, the City tries to incorporate elements such as audible pedestrian signals, curb extensions, crosswalks, countdown pedestrian signals, detection, proper lighting, backplates, large street name blades, communication equipment, and black poles. Mrs. Purcell stressed how important it is to include most of these features to ensure pedestrian safety. The City is working on a intersection improvement project consisting of six signals on 18th street in the Southside. All projects go through a four step selection process; safety, pedestrian volume and transit stops, adjacent projects, and funding opportunities.
- Kristin Saunders described the bicycle project selection for the City of Pittsburgh. Crashes are first looked at, then bicycle volumes, and finally network connections. The City has recently adopted a project process that involves stakeholders and the community more effectively. Over the past few years, the City has introduced the green bicycle pavement markings, incorporated many bike lanes / connections, and also has begun to collect data on bicyclists. There are many projects in the next few years to close downtown gaps. Also, City plans to incorporate a

Complete Streets policy and approach throughout the City.

- Mark Magalotti asked if the bike plan would mesh with the complete streets policy. Ms. Saunders said that this is given heavy consideration. They already try to complete projects with the pavement schedule in order to receive appropriate pavement markings.
- Michael Shanshala asked if they had put any green pavement markings on state highways yet. Ms. Saunders said not yet in which Todd Kravits explained that they will be doing so on an East Ohio Street in the near future.
- Michael Shanshala asked if/when they add the green turn box, are they adding time to the signal to allow bicycles to turn. Mrs. Purcell explained that sometimes it is difficult based on what the signal is already requiring (such as exclusive pedestrian phases).

City of Butler Truck Access Study

Joel MacKay, Butler County, Brad DiCola, Gibson-Thomas Engineering, and Mike Mudry, Traffic Planning and Design Inc.

- Joel MacKay provided an overview and introduced the consultants who are working on the Butler Truck Access Study.
- Brad DiCola and Mike Mudry discussed together how they are studying the City of Butler for dynamic truck restrictions and truck routes. The process began by identifying stakeholders, public involvement, and by gaining public perception of the issues and problem areas. Mr. Mudry explained the data collection and how they used MioVision to complete turning movement counts throughout the City, involving less labor than the typical turning movement counts. They also completed a manual license plate origin-destination study for heavy vehicles. They found this was challenging due to the amount of trucks, different license plates, and difficulty collecting. Mr. DiCola explained the potential solutions they are considering including optimization of existing traffic signal operation, truck routes, street parking adjustment, geometric improvements, and ITS related improvements. The final report is expected to be completed by August 2016.
- Domenic D'Andrea asked if they had talked to local business about changing delivery times. Mr. DiCola explained that the hardest part of the data collection was receiving communication from the local businesses. However, there are a lot of conflicting needs and geometric improvements that may prohibit some delivery times.
- Courtney Ehrlichman asked if they were considering truck prioritization with adaptive signaling. Mr. DiCola explained that they are not to that phase yet but must consider truck movements and timing, competing movements, and the city grid system with traffic signal improvements.

Regional Traffic Signal Program – 2nd Cycle Benefits / Costs

Domenic D'Andrea, SPC

- Domenic D'Andrea began by reviewing the program background explaining selection areas and funding. The first cycle, completed in 2012, consisted of 23 projects, 251 signals, and 3.75 million dollars of improvements. The second cycle, completed in 2015, consisted of 22 projects, 250 signals, and 5 million dollars of improvements. With completion of the second cycle, there has now been at least one project in every county of the region. Mr. D'Andrea discussed each 2nd cycle project's location and improvements. The overall second cycle benefit cost ratio equals 50:1. There was an overall 30% reduction in travel time and a 53% reduction in stops from this cycle. Mr. D'Andrea concluded by showing a before and after video SPC completed to show the improvements. There is an upcoming LED conversion project taking place in economically fiscally distressed communities this summer and the third cycle of the signal

program will begin.

- Courtney Erlichman asked if the speed in the before and after videos was consistent. Mr. D'Andrea explained that when doing the videos, the driver either drives at the posted speed limit or slightly below.

Other Activities

- There are two upcoming Road Safety Audits (D11- Route 30 in North Versailles and D10 – SR 66 from Leechburg to Apollo). There is an Operations and Safety Assessment scheduled to be completed in New Castle in May.
- Josh Spano discussed the current TIM activities and updates. There was recently a TIM steering committee meeting held and the program guidelines were updated.
- Josh Grimm discussed the Congestion Management Program website updates. These include more consistent and streamlined pages as well as new mapping.
- SPC is in the process of completing the Regional ITS Architecture by sending it to the consultant for a quality assurance check. That work will be completed by June.
- AECOM was selected to complete the Regional Cashless Tolling Study and has begun their work. The final report should be ready in late June.