



Transportation Vanguard Award Nomination Form

2014

INFORMATION ON NOMINEE:

Last Name: Dykstra	First Name: Lisa	Date: September 26, 2014	
Email: lisa.dykstra@dot.state.fl.us		Position Title: SIS and Concept Development Coordinator	
Department: Florida Department of Transportation		Phone: 954-777-4360	
Street Address: 3400 West Commercial Boulevard	City: Ft. Lauderdale	State: Florida	Zipcode: 33309
AASHTO Committee Membership (optional) Click here to enter text.			

NOMINATOR INFORMATION:

Last Name: Byron	First Name: Tom	Date: September 26, 2014	
Email: tom.byron@dot.state.fl.us		Position Title: Chief Engineer	
Department: Florida Department of Transportation		Phone: 850-414-5242	
Street Address: 605 Suwannee Street	City: Tallahassee	State: Florida	Zipcode: 32399
Endorsement of Member Department Secretary/Director: Ananth Prasad			

INSTRUCTIONS:

Using a maximum of 2 additional single-sided pages, please provide reasoning as to why this individual should be selected as the Transportation Vanguard Award recipient. Please include as much specific information about the candidate as possible, including special projects, personal attributes, dedication, etc.

Send nominations by **Friday, September 26, 2014**, via e-mail to mvitale@ashto.org. Nominations must be submitted as a single file in MS Word format using ***TVA2014_Nomination_Nominee_Name.doc*** as the file name.

AASHTO Transportation Vanguard Award Nomination
Lisa Dykstra
FDOT – District 4

The Florida Department of Transportation would like to nominate Lisa Dykstra for the AASHTO Transportation Vanguard Award. Ms. Dykstra, an excellent young leader in this organization, exemplifies a commitment to excellence in the implementation of innovative technologies and processes.

The following is a summary of her key bold, innovative and inspirational contributions to the agency and transportation industry:

Strategic Intermodal System / Concept Development:

Ms. Dykstra is the supervisor for the Strategic Intermodal System (SIS) /Concept Development (CD) Unit in the Planning & Environmental Management Office. The Unit's mission is to expeditiously develop and facilitate innovative multimodal concepts for implementation, as well as manage the District's SIS program. Under Lisa's leadership, the SIS/CD Unit stepped up to carry out this mission by delivering a remarkable number of accomplishments that resulted in the programming of numerous projects to take advantage of new funding and to maintain production levels for District 4 staff.

The SIS/CD Unit stepped up to quickly complete projects to be ready for advanced production funding opportunities with a focus on interstate interchange operational improvements. The team members proactively analyzed options that do not require right-of-way and developed effective concepts to improve operational, access, and safety issues at several interchanges. Coordination and review was completed by the Design Office, Traffic Operations Office, Office of Modal Development, and Planning & Environmental Management sections, and the required approvals by the District and FHWA of the Interchange Access Requests.

In addition, the SIS/CD Unit managed the I-95 Palm Beach and Broward Interchange Master Plan Studies covering over 30 interchanges in the two highly urbanized and congested counties. These two Master Plan contracts were funded as the means to identify and program short and long-term interchange projects. The result of these studies has been the advancement of projects to implement needed improvements. The "concept development" functions have been extremely successful and have been acknowledged as a best practice approach to implementing needed projects that may not have been recognized through other processes. The effort of this unit has been acknowledged through several Davis Productivity Awards over recent years.

The success of this unit fulfilled the intent of the Director's on-going challenge to the Unit to provide implementable projects to the work program and is a commendable contribution to the Governor's goal of growing and retaining jobs in Florida and to the Department's mission of providing a safe transportation system that ensures the mobility of people and goods and enhances economic prosperity.

Developed Standard K Factors for Transportation Planning and Design:

Another notable contribution by Ms. Dykstra, prior to her position leading the SIS/CD unit, was her development and implementation of Standard K Factors for Transportation Planning and Design. Her work produced profound benefits to the State by putting into practice a more simplified and rational approach for developing traffic forecasts for roadway planning and design.

The approach greatly reduces the production costs of Design Traffic Reports and Design Traffic Technical Memoranda for traffic studies interchange proposals, and pavement design reports. This practice has been adopted statewide, has gained national recognition, and will make the Department better, faster, and smarter by producing consistent, predictable, and repeatable inputs to roadway design decisions. The K Factor is one of the most critical traffic parameters used in roadway planning and design. It is used to develop "design hour traffic" and can have significant ramifications on decisions on the number of lanes needed on roadways and at intersections to accommodate future traffic demand. Ms. Dykstra worked closely with Central Office to analyze the variation of K Factors throughout the state under various conditions. Based on her analysis, a set of "Standard K Factors" by different types of roadway and land development patterns was determined. Subsequently, the District 4 Planning and Environmental Office initiated a one year trial, applying the Standard K Factors on active projects. Based on the success of the pilot project, this approach has subsequently been adopted statewide.

The benefit of applying Standard K Factors is not limited to Florida. The practice was presented to the Transportation Research Board's Highway Capacity and Quality of Service Committee, and earned favorable consideration for adoption into the next version of the Highway Capacity Manual. Further, Ms. Dykstra co-authored a paper on the entire conceptualization, factor selection, pilot test, and the adoption of the Standard K Factors, which was promptly accepted by the Institute of Transportation Engineers (ITE) for publication in the November 2011 issue of ITE Journal.

Within FDOT, Ms. Dykstra is recognized for her diligence in delivering key projects, implementing process improvements, and a strong work ethic and commitment to the transportation industry.