PROPOSED AMENDMENT
OF THE I-76 INTEGRATED CORRIDOR MANAGEMENT PROJECT
TO THE CONNECTIONS 2040 PLAN FOR GREATER PHILADELPHIA

Background and Project Description
In July 2013, the Delaware Valley Regional Planning Commission (DVRPC) adopted the Connections 2040 Plan for Greater Philadelphia (www.dvrpc.org/Connections2040) as the region’s comprehensive long-range plan. Connections 2040 provides a vision for the region’s future that seeks to encourage development in existing centers, preserve open space and natural resources, build a strong economy, and modernize the transportation system. Connections 2040 also identifies strategies to attain the vision, including a fiscally-constrained set of transportation investments. The Long-Range Plan is periodically amended to incorporate changes to regionally significant projects, reflect changes to the financial plan, and to maintain fiscal constraint of the Long-Range Plan. In July 2014, the Connections 2040 Plan was amended to account for additional revenue that is being provided through Act 89. In September 2015, two additional projects (a new SEPTA 9th Street Station in Lansdale, PA; and a new PATCO Franklin Square Station in Philadelphia) were added to the set of fiscally-constrained projects that are included in the Long-Range Plan.

The I-76 Integrated Corridor Management Project will provide for the active management of transportation and demand by providing improvements on I-76 and supporting arterials between the Pennsylvania Turnpike and the US 1 interchanges with a series of measures that will allow for the ability to dynamically manage recurrent congestion based on prevailing and predicted traffic conditions by implementing the following:

- Systems and devices for variable speed limits and queue detection – Speeds will be dynamically changed based on road, traffic, and weather conditions. Warning signs will be used to dynamically display alerts to drivers that congestion and queues are present.

- Dynamic lane assignments, shoulder, and junction control improvements – The shoulders will be dynamically controlled as travel lanes for opening/closing on a temporary basis in response to increasing congestion or incidents. This work includes reconstruction of shoulders up to current standard width and depth, and may necessitate increasing pavement or bridge deck width where insufficient, and lengthening of overhead bridge spans as required. Bridge and roadway drainage and storm water management will be improved as required. It is expected that part time shoulder
use as travel lanes will be provided on I-76 in both eastbound and westbound directions from the Pennsylvania Turnpike to I-476, and on I-76 westbound from US 1 to Belmont Avenue as it relates to junction controls for I-76 westbound from City Avenue (US 1).

- Adaptive ramp metering to be used to dynamically adjust signals at the ramp entrances to proactively manage vehicle flow from access roads. The limits are from the Pennsylvania Turnpike to US 1.

- Systems and devices for continuous monitoring of the transportation network by video or other detectors to aid in traffic incident management coordination and primary/secondary crash reduction, increasing throughput, reducing speed differential in traffic flow, and increasing trip reliability. The limits are the Pennsylvania Turnpike to US 1 and it includes US 202, US 422, US 1, and access roads.

- A responsive traffic signal system to be coordinated real time with the Regional Transportation Management Center. This should include the traffic signal system network in the proximity of I-76. Arterial signals will be coordinated with ramp metering. Transit signal priority is included where applicable. Installation of communications network as required. The limits include Ridge Pike and PA 23 (Conshohocken to US 1).

- Enhanced coordination of operations with SEPTA on bus or regional rail that is parallel to the I-76 corridor, including dynamic messaging on DMS to motorists of available parking at stations and travel times of alternate modes.

**Consistency with the Long-Range Plan**

In order to receive federal transportation funding, transportation projects must be included in the region’s long-range plan. The *Connections 2040 Plan* includes a set of transportation investment priorities that will help the region achieve the vision for the year 2040. Amendments should demonstrate consistency with the goals and policy recommendations of the Plan. The I-76 Integrated Corridor Management Project is consistent with the future vision and goals set forth in the *Connections 2040 Plan*, as described below:

- **Consistency with the Land Use Vision and Goals**
  A key principle for future transportation projects is to only make investments in areas that are currently developed or have been identified as appropriate for development over the life of the Plan. I-76 is consistent with the 2040 Land Use Vision and will serve areas that are currently developed on the Land Use Vision Map.

- **Invest in Designated Plan Centers**
  The *Connections 2040 Plan* identifies over 120 designated Centers in the region that provide a focal point for future investment. By concentrating future growth in centers, the region can both preserve open space and reduce infrastructure costs. The proposed project will serve multiple regional Plan Centers, specifically connecting the Metropolitan Center of Philadelphia and Metropolitan Subcenter of King of Prussia/Valley Forge. Other areas directly served include the
Conshohocken Town Center, City Avenue Corridor Suburban Center, and Roxborough/Manayunk Neighborhood Center.

- **Create a Safer Transportation System**
  This stretch of I-76 contains four high-crash locations from PennDOT’s 2015 Statewide High Crash Location List. Safety is a major concern on all of the region’s roads and is a consideration in all transportation projects, and a safer transportation system is a key vision and goal of the *Connections 2040* Long-Range Plan. This project provides secondary safety benefits through queue warning devices, ramp metering, and incident management. Part time shoulder use projects may enhance safety when congestion has been reduced. A full safety analysis will be conducted and implemented as part of the project development.

- **Improve Mobility and Accessibility**
  Mobility refers to the movement of people and goods, and accessibility refers to the ability to reach desired destinations within the region. Mobility is heightened when the transportation system is multimodal and provides connections between various modes. SEPTA bus routes 124 and 125 travel on I-76 from Center City Philadelphia to the King of Prussia/Valley Forge area. These bus routes carry 3,500 passengers each day. This project will improve transit operations on these and parallel routes. I-76 is a major freight corridor in the region, supporting movements between the ports of Philadelphia and South Jersey and points to the west of the region. On average, 4,286 daily trucks (7.3 percent of volume) use this facility to move westbound each day. About 4,690 trucks (8.2 percent of volume) use this facility for eastbound movements.

- **Reduce Congestion**
  The Long-Range Plan seeks to limit new capacity to appropriate areas, as identified in the Congestion Management Process (CMP). The Congestion Management Process has conducted considerable analysis of the regional transportation network and the impact of congestion. Developed with the counties, state departments of transportation, transit operators, and other regional stakeholders; the CMP has identified a subset of Priority Subcorridors for transportation investment with specific strategies for mitigating congestion. This criterion also considers Congested Subcorridors as a secondary rating factor. I-76 is located within two Priority Subcorridors in the CMP. Integrated Corridor Management is included as a very appropriate strategy to reduce congestion in both subcorridors. This project will optimize the efficiency of the existing transportation system through incident management, signal system improvements, and needed highway improvements, and focus construction of new capacity on priority bottlenecks.

Federal transportation legislation in Moving Ahead for Progress in the 21st Century (MAP-21) and subsequent Fixing America’s Surface Transportation (FAST) Act, requires state departments of transportation (DOTs) and metropolitan planning organizations (MPOs) to track a series of performance measures related to the safety, reliability, congestion, and condition of national highway system (NHS) facilities. Reliability is a new measure. Each of the subcorridors that make up
the broad I-76 & I-676 CMP Corridor are among the 20 percent least reliable and most congested Pennsylvania CMP subcorridors. This project will help the region to meet the Federal performance measure goals.

- **Improve Transportation Operations**
  The Long-Range Plan identifies several strategies to improve operations of the transportation system. The I-76 Integrated Corridor Management Project includes several such strategies, such as adaptive ramp metering, responsive traffic signal systems, and active monitoring of devices and systems, which will reduce traffic congestion through improved incident and traffic management.

- **Limit Transportation Impacts on the Natural Environment**
  Transportation facilities have a significant impact on the natural environment and the Connections 2040 Plan encourages the reduction in use of travel modes that contribute significantly to air pollution by promoting and increasing the use of public transit. This project will encourage transit ridership through real-time transit information as an alternative to driving along I-76, and will invest in enhancements to transit routes traveling parallel to the facility. Reduction of congestion and delay can have positive air quality benefits, especially in comparison to the stop-and-go traffic conditions that routinely exist at all hours of the day along this corridor.

- **Fiscal Constraint and Air Quality Conformity**
  Federal regulations require that the Connections 2040 Plan be fiscally-constrained. This means that total transportation expenditures identified in the long-range plan must not exceed the total revenues reasonably expected to be available for the region over the life of the Plan. The estimated cost for this project is $125 million. Including the I-76 Integrated Corridor Management Project in the Connections 2040 Plan will not impact the funding or timing of any project currently in the Plan and will maintain the Plan’s overall fiscal constraint. The project has also been included in the region’s conformity determination which indicates that the transportation projects being funded through the region’s Long-Range Plan and Transportation Improvement Program do not hinder our ability to achieve federal air quality standards.
Public Comment Period

Public comment is being sought on the proposed amendment to the Connections 2040 Plan. The public comment period opens on May 27th, 2016 and closes at 5 pm on June 27th, 2016. There will be a public meeting and information session during the public comment period:

Tuesday, June 21st, 2016 from 4 to 6 pm
DVRPC Conference Room
190 N. Independence Mall West, 8th Floor
Philadelphia, PA 19106

Web conferencing is available for the June 21st public meeting at DVRPC. Please register by June 17th, 2016 by contacting 215-592-1800 or public_affairs@dvrpc.org if you are interested in using this option.

Written comments and questions may be submitted in one of three ways:

Electronically through a web application:
• www.dvrpc.org/Connections2040/PublicComment

By Mail:
• TIP/LRP Comments
c/o DVRPC Office of Communications and Engagement
  190 N. Independence Mall West, 8th Fl.
  Philadelphia, PA 19106

By Fax:
• 215-592-9125.

Questions and comments must be submitted in writing. If you need assistance in providing a written comment, please contact the DVRPC Office of Communications and Engagement at 215-592-1800 or public_affairs@dvrpc.org.

Comments must be received no later than 5:00 p.m. on June 27, 2016. Comments received via mail must be postmarked by June 27, 2016. Responses will not be provided unless comments are submitted in writing during the public comment period.

DVRPC fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. DVRPC public meetings are always held in ADA accessible facilities and in transit-accessible locations when possible. Auxiliary services can be provided to individuals who submit a request at least seven days prior to a meeting. For more information please call (215) 592-1800.