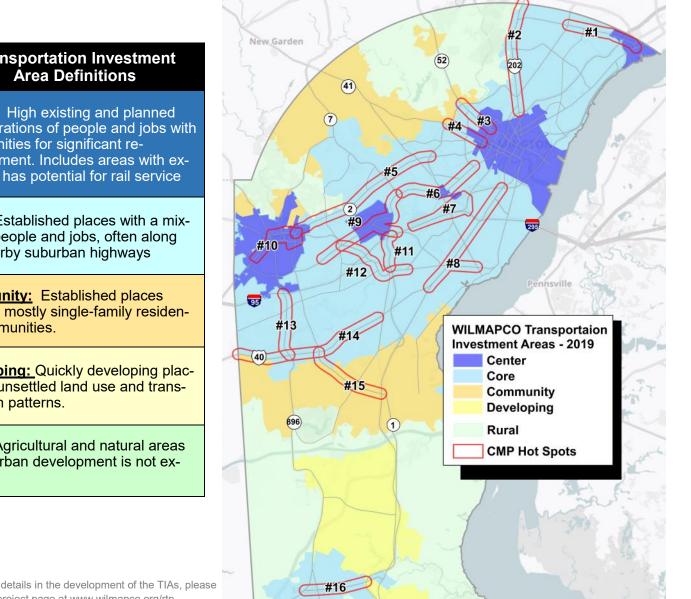
## **Congestion Mitigation Strategies Evaluation Synopsis:**

Strategies for congestion mitigation are drawn from the regional vision and goals that were developed in the WILMAPCO 2050 Regional Transportation Plan (RTP). Through the lengthy outreach process that comes with the development of the RTP, these strategies reflect what the public and stakeholders alike envision as the transportation future. These serve as a primary point of connection between the CMP and the RTP as well as how WILMAPCO goes about in meeting the targets set through the Transportation Performance Measurement (TPM) requirements.

The RTP developed a policy map which defines the region's Transportation Investment Areas (TIAs). The TIAs serve as an overarching guide for where the various types of transportation investments should go. The areas we were defined using multiple criteria but focused on recognizing transportation's close relationship with land use and how synergies between the two can be capitalized upon. The figure below illustrates the location of the CMP hotspots in relation to the TIAs. The following page contains a strategy matrix of possible (and practical) congestion solutions within each TIA and can be considered for mitigating the CMP hotspots.



# **Transportation Investment**

<u>Center:</u> High existing and planned concentrations of people and jobs with opportunities for significant redevelopment. Includes areas with existing or has potential for rail service

Core: Established places with a mixture of people and jobs, often along and nearby suburban highways

Community: Established places home to mostly single-family residential communities.

Developing: Quickly developing places with unsettled land use and transportation patterns.

**Rural:** Agricultural and natural areas where urban development is not expected.

For additional details in the development of the TIAs, please visit the RTP project page at www.wilmapco.org/rtp.

### **Mitigation Strategies Matrix:**

Based on the location of a CMP hotspot, a range of potential mitigation strategies are applicable to each. Each hot spot presents its own unique mobility challenges, so care should be taken to select the strategies that best fit the conditions, goals, and character of the area under consideration. These lists of potential solutions to congestion includes measures involving all modes of transportation as well as strategies to encourage more sensible land development.

Mitigation strategies range from efforts to better manage the transportation system with a variety of multi-modal solutions up to and including expansion of the system. Ideally the solutions should first look at trip reduction strategies as well as ways to enhance access to employment centers. In more heavily developed areas operational improvements working in tandem with other strategies designed to shift trips to other modes can also be possible solutions. Lastly, road capacity expansion can also be included in mitigating congested locations.

CMP Strategy Approach

- 1 Reduce VMT during Peak Hours
- 2 Shift Trips to other modes
- Enhances Access to Jobs / Economic 3 Development
- 4 Operational Improvements
- 5 Addition Roadway Capacity

Items on the solutions matrix on Table 3 are designed to be hotspot specific and are broken into two types, System Management and System Expansion. However, there are several strategies that are being employed region-wide that help address congestion and can be used in virtually all situations. Table 1 below lists these areawide strategies in detail and which CMP strategy they seek to address.

		Modal Impacts				
Strategy	Description	Reduce VMT dur- ing Peak Hours	Shift Trips to other modes	Enhances Ac- cess to Jobs / Economic De- velopment	Opera- tional Improve- ments	Add Road- way Capacity
Micro Transit Con- cepts	Utilization of on-demand transit services that are focused on providing more direct services between communities, employers, and commercial destinations	X	х	x		
Job Access Reverse Commute (JARC) Program	Improve access to transportation services to employment and employment related activities for welfare recipients and eligible low-income individuals and to transport residents of urbanized areas and nonurbanized areas to suburban em- ployment opportunities	x	x	X		
Transportation Man- agement Center (TMC)	Numerous ongoing programs to address congestion such as: - Installation of Bluetooth travel time and volume detection - Corridor signal re-timings - Use of artificial intelligence - Queue detection and warning systems - Incident management	x	x	x	x	
Delaware Commute Solutions	work with employers, employees, colleges, and students to improve air quality and reduce traffic congestion by champi- oning clean commute	x	x	x		
Pedal & Park	All DART fixed route buses are equipped with bike racks	X	Х	X		
Delaware Commute Solutions' Home Free Guarantee	we'll reimburse you for the cost of transportation home by taxi or ride service if an unexpected event occurs and keeps you from taking a green commute home	x	x	x		
Get a Job/Get a Ride (GaJ/GaR) Partner	Provides new employees a free 30-Day Bus Pass that allows for to and from work transportation during the first month of their new job. Open all businesses within Delaware.	x	x	x		
Subregional Studies	Work to fund and implement numerous small scale improve- ments outlined in each study/plan.	X	X	X	X	X
Transportation Im- provement Districts	Mechanism designed to achieve equitable mitigation of transportation impacts. They provide a funding mechanism to secure required, long-term improvements on a "fair-share" basis from developers to fund transportation infrastructure and facilities within that area.	x	x	x	x	x

#### Table 1: Area-wide Congestion Mitigation Strategies (Not Corridor Specific)

#### Table 2: Hot Spot Locations versus Transportation Investment Areas (TIAs)

Transportation Invest- ment Area Type	Applicable CMP Hot Spot(s)				
Center	#10: City of Newark				
Center & Core	#1: Naaman's Rd. , #3: Kennett Pike				
Center & Core	#4: Lancaster Pike, #6: DE 4: Maryland Ave. #9: DE 4 (Churchmans's Crossing)				
	#2: Concord Pike, #5: Kirkwood Hwy.				
Core (Arterials)	#8: US 13/ Hare's Corner, #12: DE 273 (Churchmans's Crossing)				
	#13: DE 896 South of Newark, #14: US 40, #16: DE 299 - Middletown				
Core (Expressways)	#7: I-95 / I-295, #11: SR 1/ Christiana Mall				
Community	#15: DE 72 (Red Lion)				
Developing	No Hot Spots				
Rural	No Hot Spots				

#### **Table 3: Transportation Investment Matrix by TIA**

I able 3: Transportation Investment Matrix by TIA										
Investment Area Type		Core	Community	Developing	Rural					
System Management										
Truck Weigh Station Facilities			X	x	х					
Intersection Capacity Improvements	x	x	x	x						
Increase/enhance park & ride facilities	x	X	X	X						
Access Management	x	X	X	X						
Minor Roadway Improvements (small-scale lane/shoulder widening)	x	x	x	x						
Enhance the movement of Freight	x	х	X							
Retro-fitting of sidewalks	x	X	X							
Transportation Alternatives	x	X	X	X						
Expand existing rail stations	x									
ITS and connected/AV facilities expansion	x	X	x	x	X					
Green Infrastructure	x	X	x	x	X					
Traffic Calming	x	X	x	x	X					
Public Parking Improvements	x	X								
Development/Enhancement of Transit Centers	x	X								
System Expansion										
Shared-Use Pathways	X	X	X	X	X					
Sidewalks	X	X	X	X	X					
Bike Lanes	x	X	X	X	X					
Pedestrian Facilities Expansion	x	X	X	X						
New Roadway Construction	x	X	x	X						
Major Roadway Widening/Addition of Capacity	x	X	x							
New Train Station Expansion	x									
Frequent Bus Service (1 bus/15 min.)	x									
Bus Rapid Transit	x									
Commuter Rail Service Expansion	x									
Amtrak Regional Rail Service Expansion	X									
Public EV Charging Stations	x	X								
Express Bus Service	X	X	x	x						
Light Bus Service (1bus/hr.)			X	X						
Interchanges/Grade Separations		x								
Intermediate Bus Service (1 bus/ 20 min.)		X								

Source: WILMAPCO Regional Transportation Plan.