Traffic congestion in Delaware is managed principally by the Delaware Department of Transportation (DelDOT), which is responsible for about 85 percent of the lane-miles in the state. Also, there are two MPOs in the state: WILMAPCO and Dover / Kent County MPO. Only WILMAPCO maintains federally mandated congestion management systems (CMS) in collaboration with DelDOT.

**Traffic Impact Studies (TIS)**

Developer-funded capital projects tend to be small improvements such as turning lanes at intersections but can be larger, especially where the efforts of two or more developers can be coordinated. The need for these projects is typically identified through TIS and they are typically required as conditions for plan approval. DelDOT’s Development Coordination Section, in the Division of Planning, works with local governments to require TIS and the improvements. As shown in the table below, in calendar year 2011, DelDOT reviewed 10 TIS, 2 in New Castle County, 3 in Kent County and 5 in Sussex County. Most of these resulted in at least some off-site improvements being required of the developers whose projects were addressed in those studies.

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>New Castle</th>
<th>Kent</th>
<th>Sussex</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>11</td>
<td>7</td>
<td>19</td>
<td>37</td>
</tr>
<tr>
<td>2008</td>
<td>6</td>
<td>6</td>
<td>17</td>
<td>29</td>
</tr>
<tr>
<td>2009</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>2010</td>
<td>3</td>
<td>6</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>2011</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

The number of TIS reviewed has remained relatively constant, unchanged from calendar year 2010 and up by one from calendar year 2009, well below the 29 reviewed in calendar year 2008 (37 in calendar year 2007). The drop from 2008 to 2009, and an associated decline in the number of road improvements identified as being needed, can largely be attributed to the present economic situation. There have also been noticeably fewer scoping meetings held for TIS for proposed developments.

Another factor, however, has been changes in New Castle County’s land development regulations. To encourage the redevelopment of previously developed parcels, as opposed to the development of rural areas, the County has exempted redevelopment projects from their TIS regulations and DelDOT, in support of the County’s planning efforts has agreed to not require TIS for such projects either. In 2009, DelDOT reviewed traffic operational analyses (TOAs) for two developments in New Castle County that would have required TIS were it not for that change in the regulations. In 2010, DelDOT reviewed another such TOA. In 2011, DelDOT reviewed two more. TOAs can result in off-site improvements but are focused on operations,
e.g. sight distance and queue storage, rather than on levels of service and typically focus close to the site entrance.

On December 21, 2007, DelDOT adopted revised regulations pertaining to subdivision streets and state highway access. These regulations included revised regulations for TIS. Among other changes, DelDOT lowered the volume warrants for when a TIS should be required, from 2,100 trips per day for residential developments and 3,100 trips per day for commercial developments to 400 trips per day for any development.

To aggregate the smaller developments, those generating less than 2,000 trips per day have the option of contributing to a larger, area-wide study rather than doing a TIS of their own. In 2010, 10 developments chose this option. Two paid the area-wide study fee in New Castle County, three paid it in Kent County and five paid it in Sussex County. In 2011, two developments, both in Kent County, chose this option.

The revised regulations can be found in DelDOT’s Standards and Regulations for Subdivision Streets and State Highway Access. They are available on-line at http://www.deldot.gov/information/pubs_forms/manuals/subdivisions/pdf/standards_and_regulations_031108.pdf.

TIS are also used as the primary source of information for the (Congestion Management System (CMS) maintained by Delaware’s two MPOs; the Wilmington Metropolitan Planning Council (WILMAPCO) and the Dover Kent MPO. The CMS is used by the MPOs to identify and address congestion more comprehensively. WILMAPCO staff with DelDOT and local government participation manages the WILMAPCO CMS. Because the Dover Kent MPO has a smaller staff, DelDOT plays a greater role in helping them develop and update their CMS.

With regard to Geographic Information Systems (GIS), developments and the off-site improvements associated with them are mapped in the Planning and Development Coordination Application (PDCA) software, which was developed for the Department, and is still maintained, by Johnson, Mirmiran & Thompson, Inc. While most of the larger off-site improvements are identified through TIS, the Department uses the PDCA to track all developments that require DelDOT plan approvals, including many developments that do not warrant TIS.

TIS reviews are performed by:

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