CHAPTER 6: Mapping Application and Listings Overview

Mapping Application and Geographic Information Systems (GIS)

As with the current FY2021 TIP, the Draft FY2023 TIP does not contain printed static project location maps in the document. Due to the ever-changing nature of the TIP, the maps are out of date by the time the final version of the TIP is printed and distributed. For this reason, DVRPC suggests using the TIP Web Search Tool, <u>www.dvrpc.org/TIP (or www.dvrpc.org/TIP/Draft)</u>, as the primary mapping function to show the location of mappable projects for the highway, transit, and Interstate projects.

Different types of projects, such as intersection improvements, bridge replacements, or transit facilities, are shown using various colors and symbols in the TIP Web Search Tool. Certain types of projects, such as roadway landscaping, lease payments for the use of railroad tracks, or preliminary studies, are not mapped. These projects are listed on the right-hand side of the application along with the mapped projects. Only the mapped projects will show up in the map pane on the left-hand side of the application.

As with the previous TIP update, the TIP Web Search Tool has been enhanced. It is more user friendly, and is able to be used on mobile devices. Just like the current TIP Web Search Tool, not just TIP projects are shown, but also overlays of Planning Centers, Freight Centers, CMP Corridors, and IPD, as well as a "search by address or location" function. To go along with the enhanced TIP Web Search Tool, DVRPC has made TIP GIS data available as well. GIS is an important planning tool that supports state, regional, county, and local planning and technical efforts. Nearly all planning activities incorporate GIS technology, whether it is for data collection and storage, or analysis and presentation. GIS allows planners to view and query spatial data; perform advanced analysis to discover relationships, patterns, and trends; and effectively present information to decision makers and the public.

Downloadable GIS point, line, and polygon location features for TIP projects in the current adopted Pennsylvania and New Jersey TIPs, as well as formal TIP Actions that the DVRPC Board approve are available via the Transportation section of DVRPC's GIS Data webpage, <u>www.dvrpc.org/Mapping/Data</u>. This webpage also contains links to DVRPC's GIS Portal, interactive maps, and a map gallery, in addition to other data resources. The GIS Portal contains boundaries, demographic, planning, and transportation data which is helpful for obtaining data that provides context for the TIP.

DVRPC Regional Highway and Transit Project Listings

This document includes various project listings. The project listings are drawn from the Pennsylvania Highway, Transit, and Interstate Management programs, which are thoroughly explained in the following paragraphs.

The project listings are grouped by county and transit operator. The first section includes highway projects for Bucks, Chester, Delaware, and Montgomery counties; the City of Philadelphia; and a listing of projects that apply to various counties. The second section includes transit projects for PART, PennDOT, and SEPTA. The third section applies to the Interstate Management Program.

Within each county grouping, individual highway and transit projects are listed numerically by Pennsylvania Department of Transportation ID number (MPMS). Each project listing provides information on total program period cost, cost by FY, phase of work, and funding source. Costs are shown in thousands of dollars. Also included are project location, project description, air quality code, DVRPC Planning Center, CMP category, IPD rating, and a variety of other information. See the "Project Roadmap" found on page 113, for a detailed explanation of all the information contained in a project listing.

All projects within the four years of the Draft TIP period (FY23–FY26) are considered funded and are able to be federally authorized for funding. By federal regulation, the TIP is the four-year constrained program for which revenues are reasonably expected to be available. However, the region has worked to develop a 12-year constrained programming horizon for highway and transit projects in order to provide more realistic expectations and timeframes in which to expect advancement of TIP projects with more realistic costs. Many projects that have phases within the four years also have phases (such as construction) that may be out in LFY 27–34. This 12-year constrained programming horizon is illustrated on the project listings within the TIP document. Project phases that fall beyond the four-year TIP are technically "unfunded," but they are listed, as they represent the region's planned commitment to fund these phases in the future as funds become available