

Making Completer Streets More Routine

LTS Connectivity Analysis and Bike-Friendly Resurfacing Pipeline

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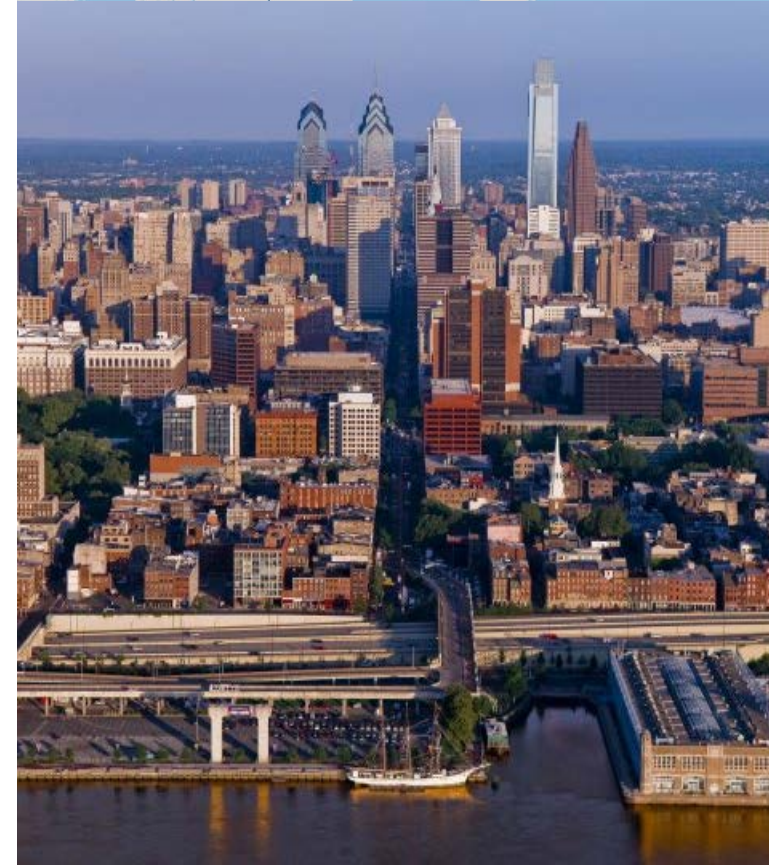


New Jersey Complete Streets Summit
October 24, 2017



Delaware Valley Regional Planning Commission (DVRPC)

- **Metropolitan Planning Organization (MPO)** for the bi-state Philadelphia region
- **Geography:** 2 States, 9 Counties (including Philadelphia), 351 Municipalities
- **Bike/pedestrian efforts:**
 - Project and network planning for member governments
 - Circuit/Regional Trails Program coordination
 - Counts and data collection
 - TAP program coordination and project management for PennDOT



LTS Categories and Rider Types

LTS	Comfortable Enough For (Cyclist Type)	Characteristics
1	Everyone	<ul style="list-style-type: none">• Relaxing• Suitable for children
2	Interested but Concerned	<ul style="list-style-type: none">• Suitable for most adults• Presenting little traffic stress
3	Enthused and Confident	<ul style="list-style-type: none">• Moderate traffic stress• Comfortable for those already riding bikes in American cities
4	Strong and Fearless	<ul style="list-style-type: none">• High traffic stress• Multilane, fast moving traffic





DVRPC LTS Connectivity Analysis

Step 1: Calculate LTS for the existing network

Step 2: Break out segments and islands by LTS category

Step 3: Map the shortest paths between every Census Block and every other Census Block using only low-stress (LTS 1 & 2) segments (if possible)

Step 4: Calculate the shortest paths between every Census Block and every other Census Block using LTS 1, 2, and 3 segments

Step 5: Compare Steps 3 & 4 — Rank all LTS 3 segments in the network for how many new low-stress connections they would enable

This is the initial priority regional network of in-street facilities





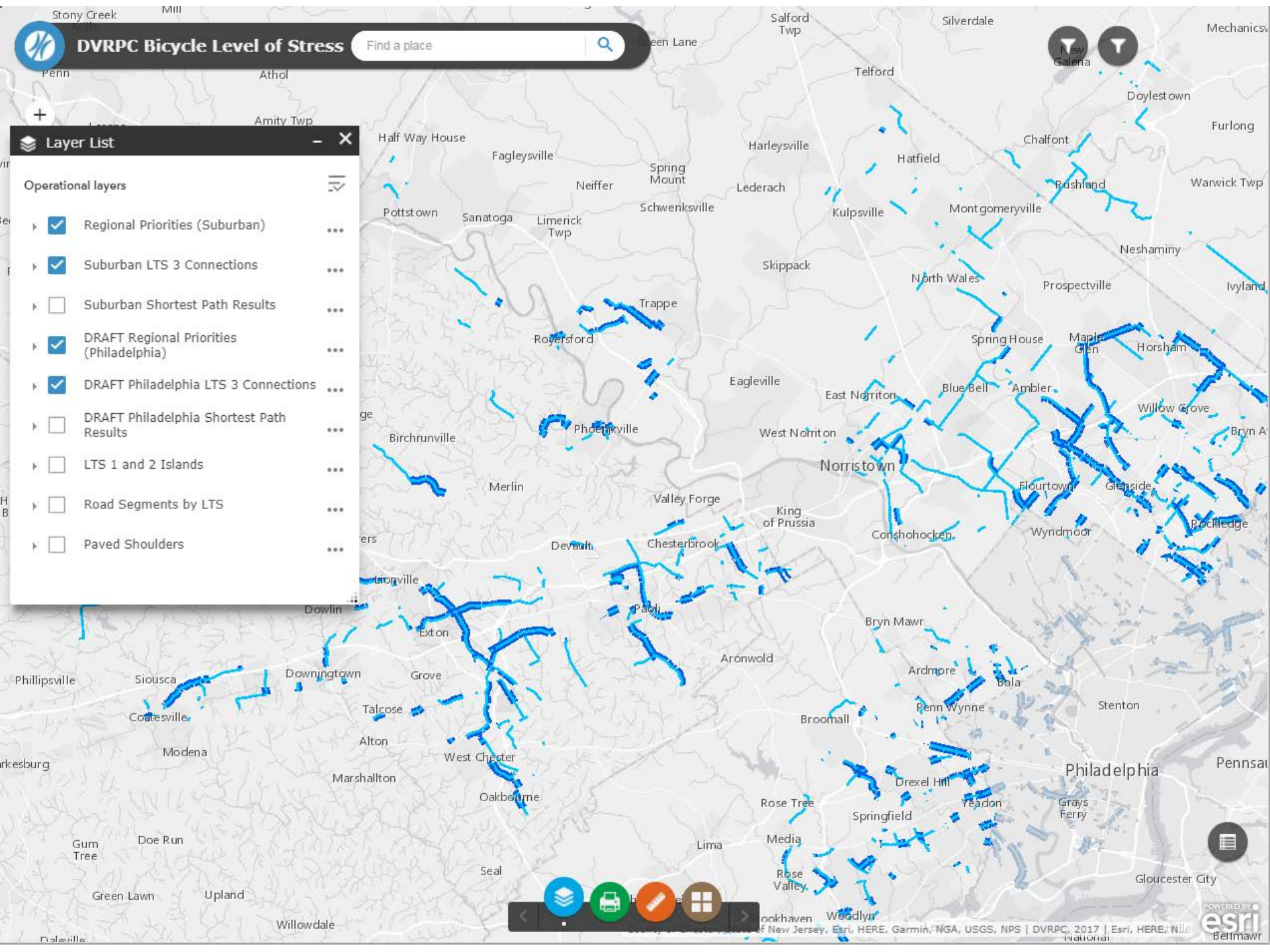
DVRPC Bicycle Level of Stress

Find a place

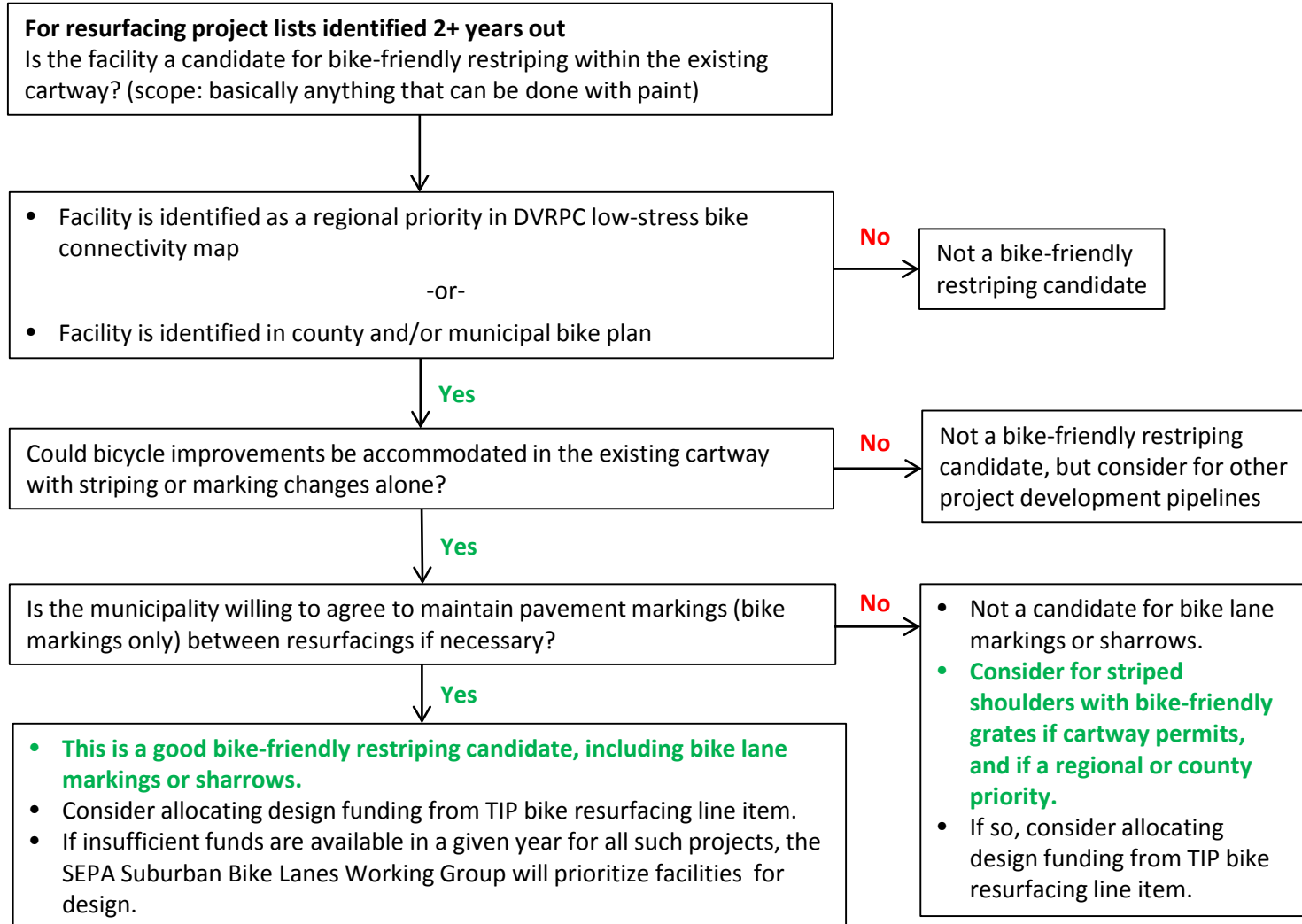
Layer List

Operational layers

- Regional Priorities (Suburban) ...
- Suburban LTS 3 Connections ...
- Suburban Shortest Path Results ...
- DRAFT Regional Priorities (Philadelphia) ...
- DRAFT Philadelphia LTS 3 Connections ...
- DRAFT Philadelphia Shortest Path Results ...
- LTS 1 and 2 Islands ...
- Road Segments by LTS ...
- Paved Shoulders ...



**PennDOT Connects bike-friendly
resurfacing program for maintenance projects**
DRAFT / Working



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