GIS Tools for Displaying 4-Year Plan Projects

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Research Overview

TxDOT District Pavement Engineer develops a 4-year plan for their District each year based on PMIS data and other criteria, and usually meets with the Area Engineers to finalize the 4-year plans. A mapping tool based on ArcGIS is developed to help this process.

Methodology

Data Acquisition
- PMIS database
- 4-year plan list
- Candidate list

Data Process
- Check validation
- Calculate B-DFO and E-DFO
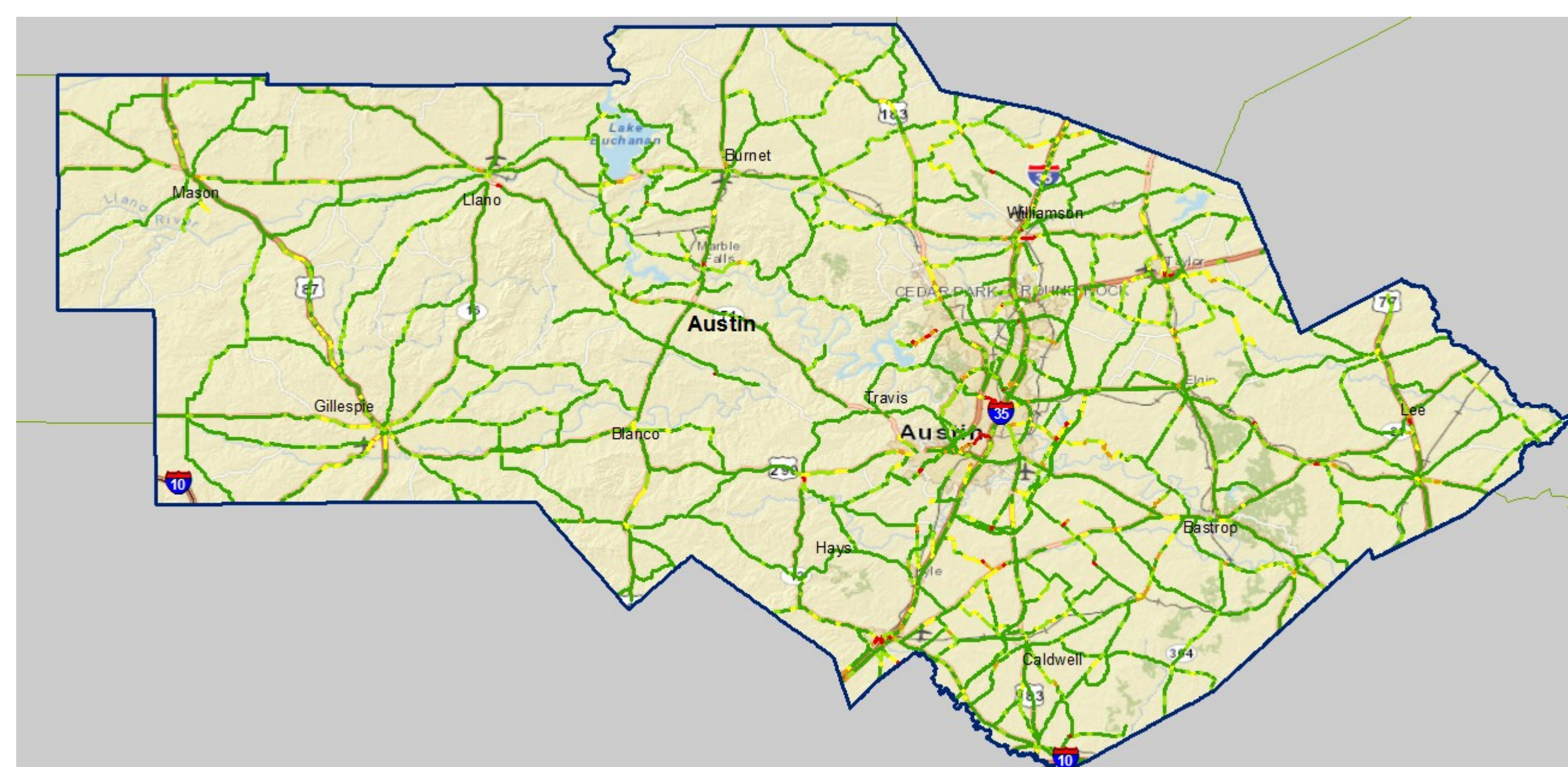- Clean data format

Data Mapping
- Desktop version
- Publish desktop version map online
- Online version

Map Demonstration — Desktop Version

The desk version tool requires ArcGIS software. The layers and corresponding category criteria are:
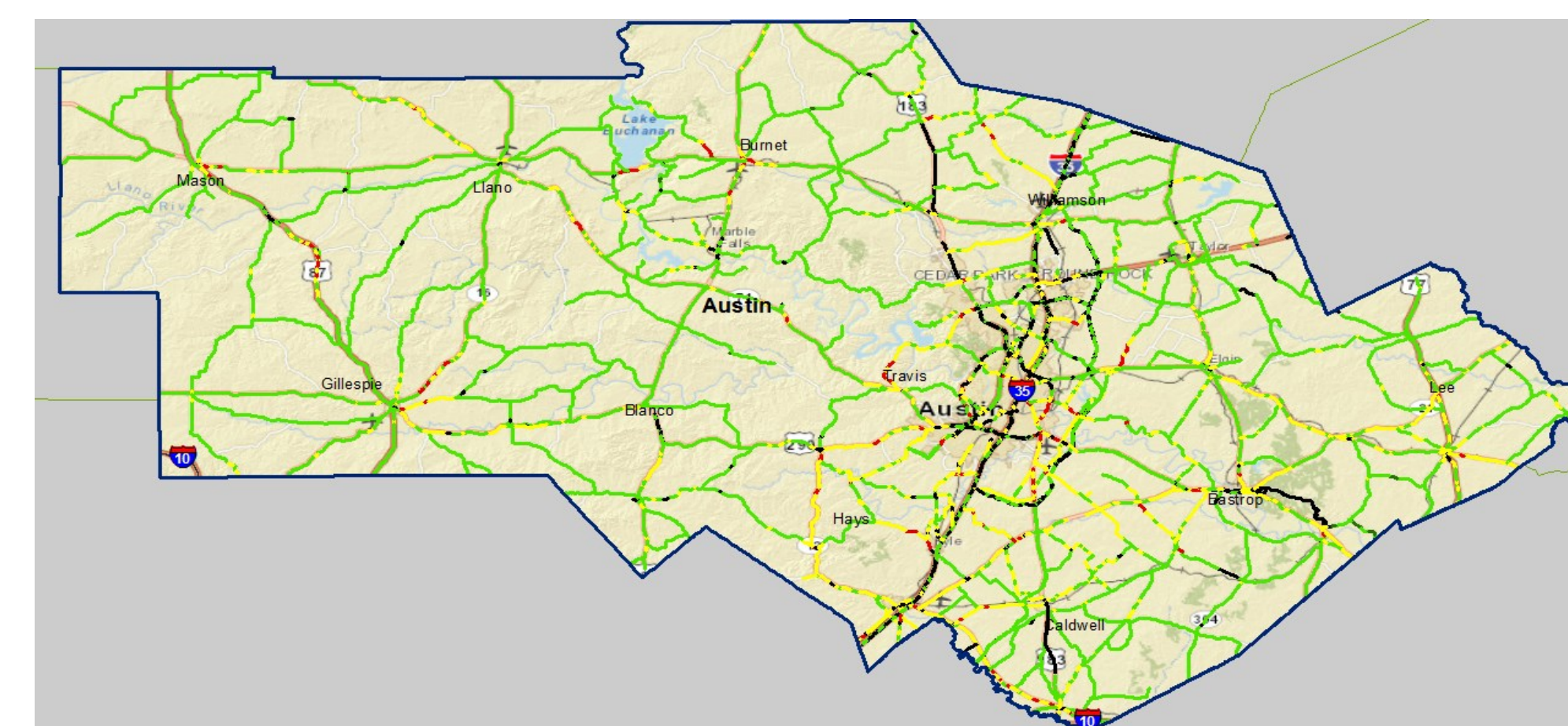
- PMIS Condition/Distress Score Layer:

- PMIS Skid Score Layer:

- PMIS Traffic Information Layer:
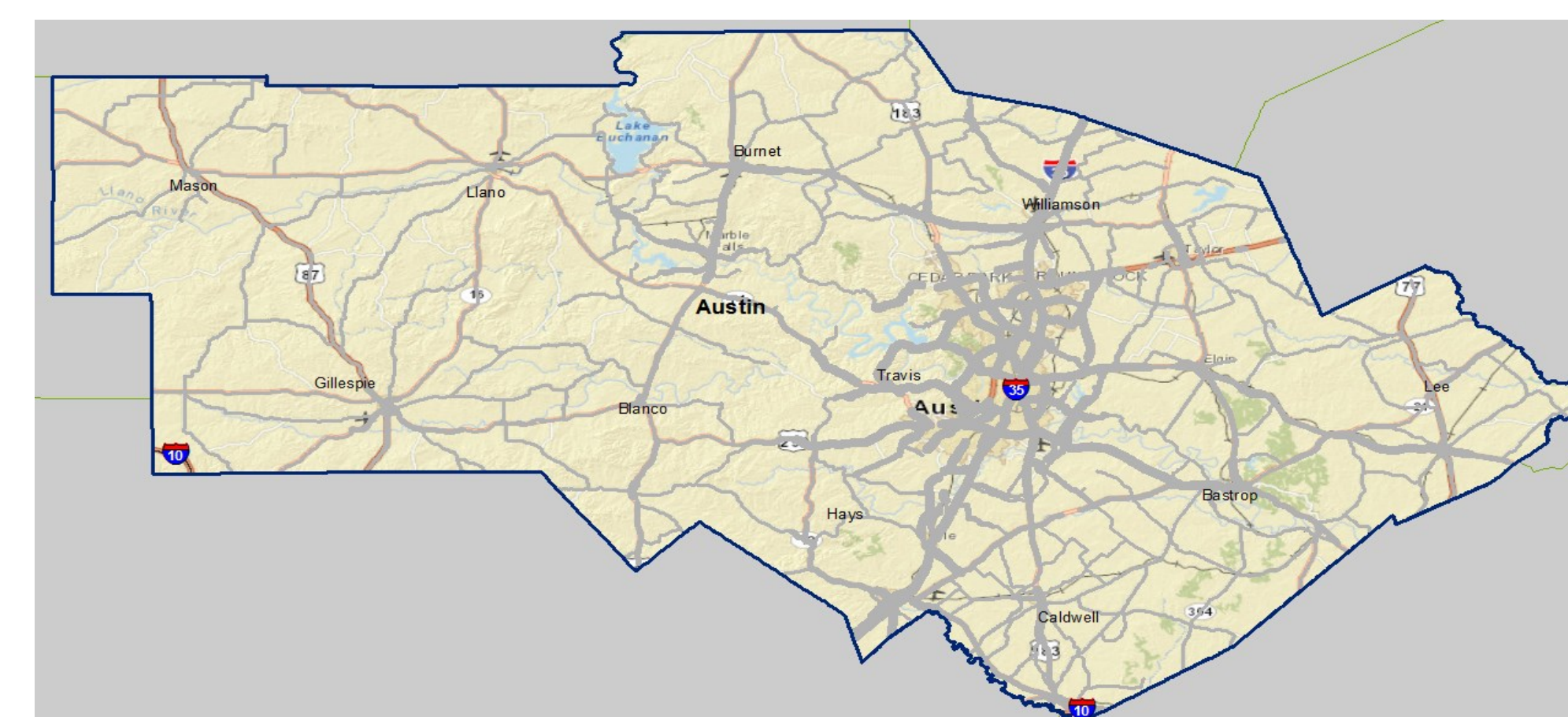
- 4-Year Plan by Fiscal Year/Work Type/Funding Type:
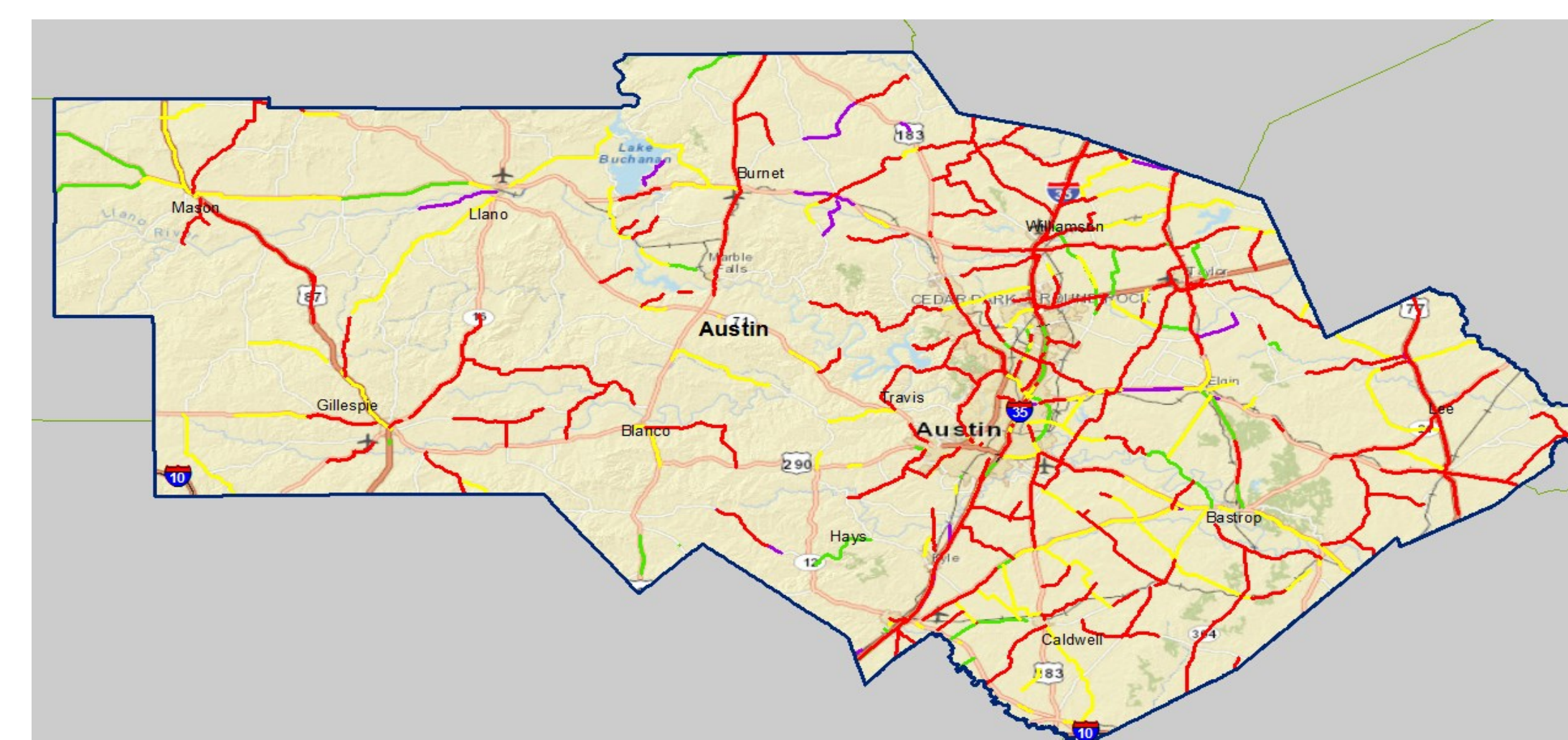
- Overlapped Projects of 4-Year Plan and Candidate Projects:

Map Demonstration — Online Version

The online version tool does not require ArcGIS software. It is a web-based tool.

- Currently can be accessed at: http://146.6.92.8/austin_map_new2/
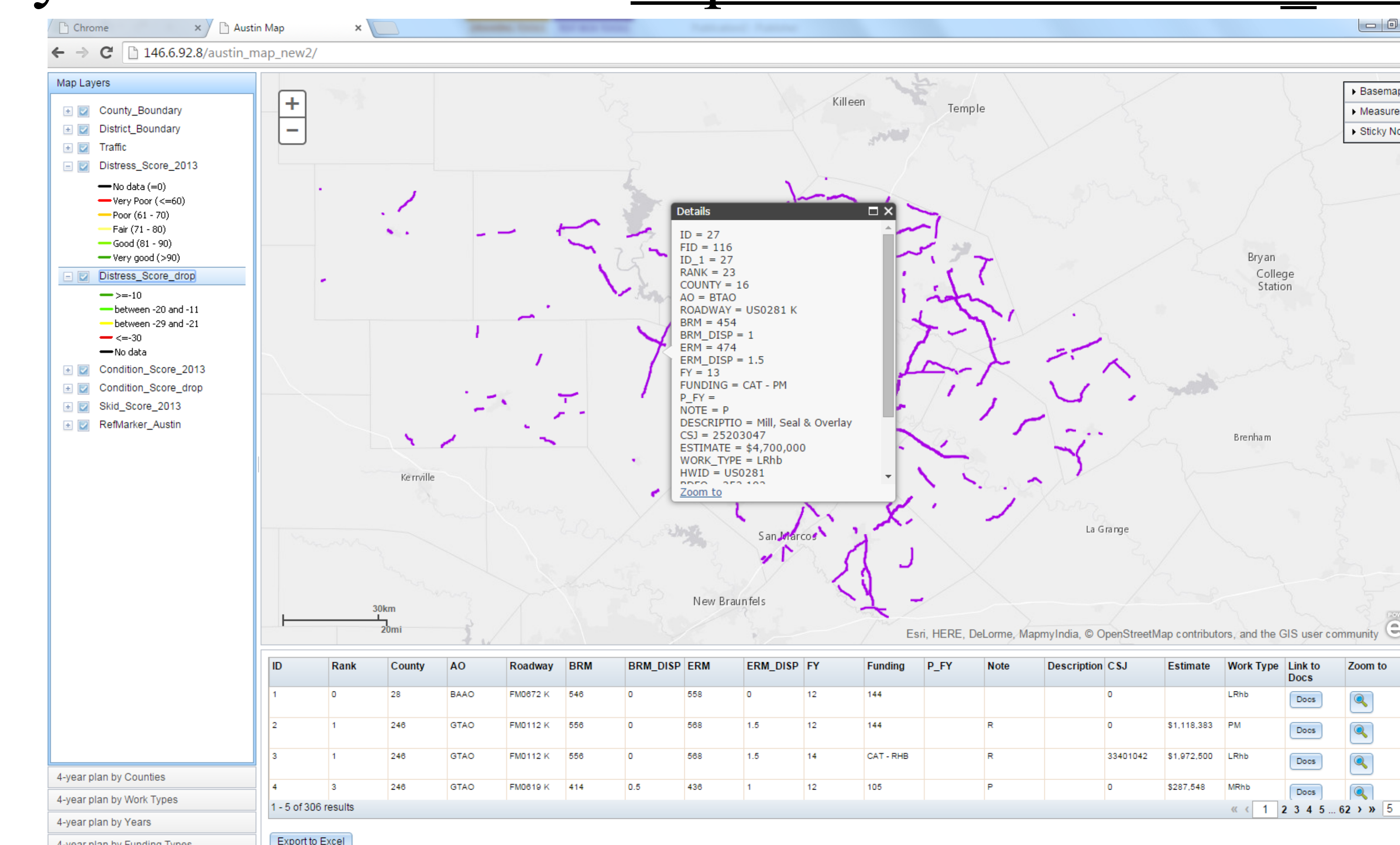
Conclusions

To summarize, this mapping tool:

- Visualize PMIS database

- Show planned project locations, treatment types and treatment timing to District Administration for further consideration

- Assist TxDOT District Pavement Engineer during meetings with the Area Engineers

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