

**TRAFFIC SAFETY COMMISSION  
AGENDA REPORT**

**TO:** Traffic Safety Commission

**FROM:** Patrick Thomas, Director of Public Works/City Engineer

**DATE:** September 28, 2023

**SUBJECT** Coordinated Signal Timing Report for PW18-05 Fiber Optic Communication System Upgrade

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**PREPARED BY:** Nick Minicilli, Senior Traffic Engineer  
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**RECOMMENDATION:** That the Traffic Safety Commission receive and file a report on coordinated signal timing for project PW18-05 Fiber Optic Communication System Upgrade.

**BACKGROUND:** On December 2, 2015, the City was awarded HSIP Cycle 7 grant funding for the Fiber Optic Communication System Upgrade Project (PW 18-05) in the amount of \$1,208,200. The project recently completed construction and installation of fiber optic communication systems including conduits, cables, closed circuit television (CCTV) cameras, traffic signal controllers, and related communication equipment to improve safety and operations on the corridors of Winchester Road, Rancho California Road, and Temecula Parkway. The new system provides consistent, reliable, and modern communications and controls which enables proactive traffic signal management and response to real time traffic conditions.

In addition to the fiber communication upgrades, the project developed and implemented coordinated signal timing along the corridors. Ultimately the goal of the project was to improve public safety, shorten commute times, reduce greenhouse gas emission, and increase mobility for all modes of travel.

Coordinated signal timing was developed and implemented on the following corridors:

- Winchester Road from Diaz Road to Nicolas Road (11 traffic signals including 2 Caltrans)
- Rancho California Road from Business Park Drive to Butterfield Stage Road (17 traffic signals including 2 Caltrans)
- Temecula Parkway from Old Town Front St/I-15 SB ramps to Butterfield Stage Road (15 traffic signals including 3 Caltrans)

A detailed analysis of the coordination implementation and results on Winchester Road, Rancho California Road, and Temecula Parkway can be seen in Attachment 1. Based on the results of the data detailed in the Coordinated Signal Timing Report, all goals of the project were achieved. Significant improvements were made for AM, Midday, and PM traffic operations along the corridors. A simplified summary of results achieved on each corridor is summarized in Attachment 2.

Staff recommends the Commission receive and file this coordinated signal timing report.

**FISCAL IMPACT:** None.

**ATTACHMENTS:** 1 – Temecula Coordinated Signal Timing Report  
2 – Coordination Summary Results