INTELLIGENT TRANSPORTATION SYSTEMS (ITS) COMMITTEE

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MID-OHIO REGIONAL
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COMMITTEE UPDATE

- The ITS Committee met in January 2025 (next meeting April 17th)
  - A major topic of discussion among the Committee this year has been the Traffic Signal Priority (TSP) for transit vehicles as LinkUS BRT projects are being planned and engineered.
  - LinkUS will significantly expand TSP in Central Ohio.

Traffic Signal at W Broad St and Hilliard-Rome Rd

SIGNAL PRIORITY TECHNOLOGIES

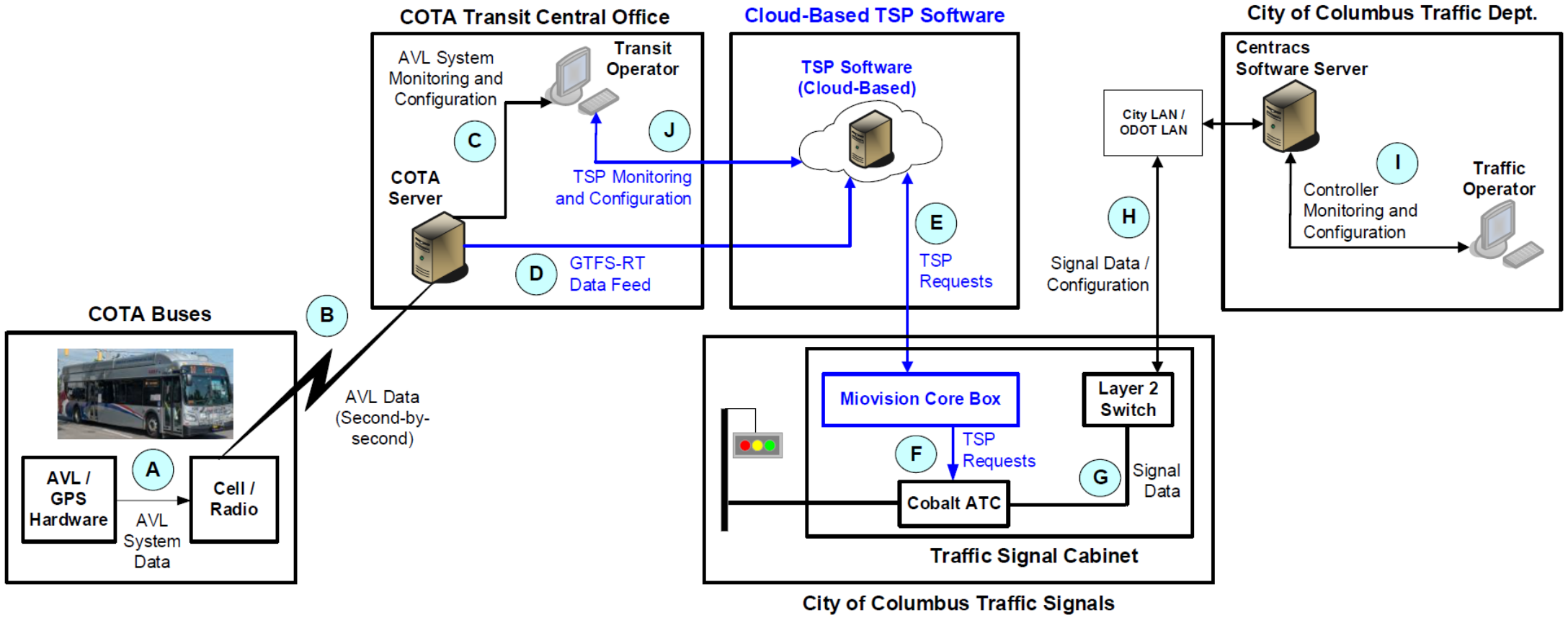
- Generally, Traffic Signal Priority strategies for transit can be classified as “active” or “passive”
  - **Passive** = signal timing favors roads with significant transit use and coordinates using average bus speed rather than average vehicle speed
  - **Active** = detecting presence of transit vehicle and giving an early green signal or extension of existing green signal to allow bus to pass through without delay

- The implementation of **Active** TSP requires multiple systems to work together to ensure effectiveness including:
  - Automatic Vehicle Locating (AVL) and “real time” location systems on transit vehicles
  - Sensors and/or cameras at traffic signals
  - Servers operating both transit and signal systems

Miovision Video Detection on signal pole

CLOUD BASED TSP ARCHITECTURE FOR COTA/COLUMBUS

Communications Flow for TSP Requests at City Signals



NEXT STEPS FOR TSP IN CENTRAL OHIO

- City of Columbus Traffic Management and COTA will test the new Cloud Based TSP system along Cleveland Avenue in preparation for implementation along the West Broad Street Bus Rapid Transit (BRT).
  - 5 Signals on Cleveland Ave will be included in the test.

- The ITS Committee will make any necessary updates to the Regional ITS Architecture to ensure the new system is properly documented.

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