

# **Central Data Warehouse**

**David Chang, PE, PTOE, PMP**

**FDOT PBS&J/Atkins**

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# CDW Background

- FDOT desires to collect traffic data statewide in a central server
- Historical traffic data has significant value for research, planning and operations
- FDOT contracted with University of Florida in 2004 to develop a prototype data warehouse, STEWARD
- FDOT is planning to enhance and expand prototype to a production system

# CDW Contents

- Traffic Data
  - Point detectors (speed, volume and occupancy)
  - Probe detectors (only speed)
- Transit Data
- IntelliDrive Data
- Traffic Detector Uptime statistics
  - Provide list of detectors that are not producing good data

# CDW Uses

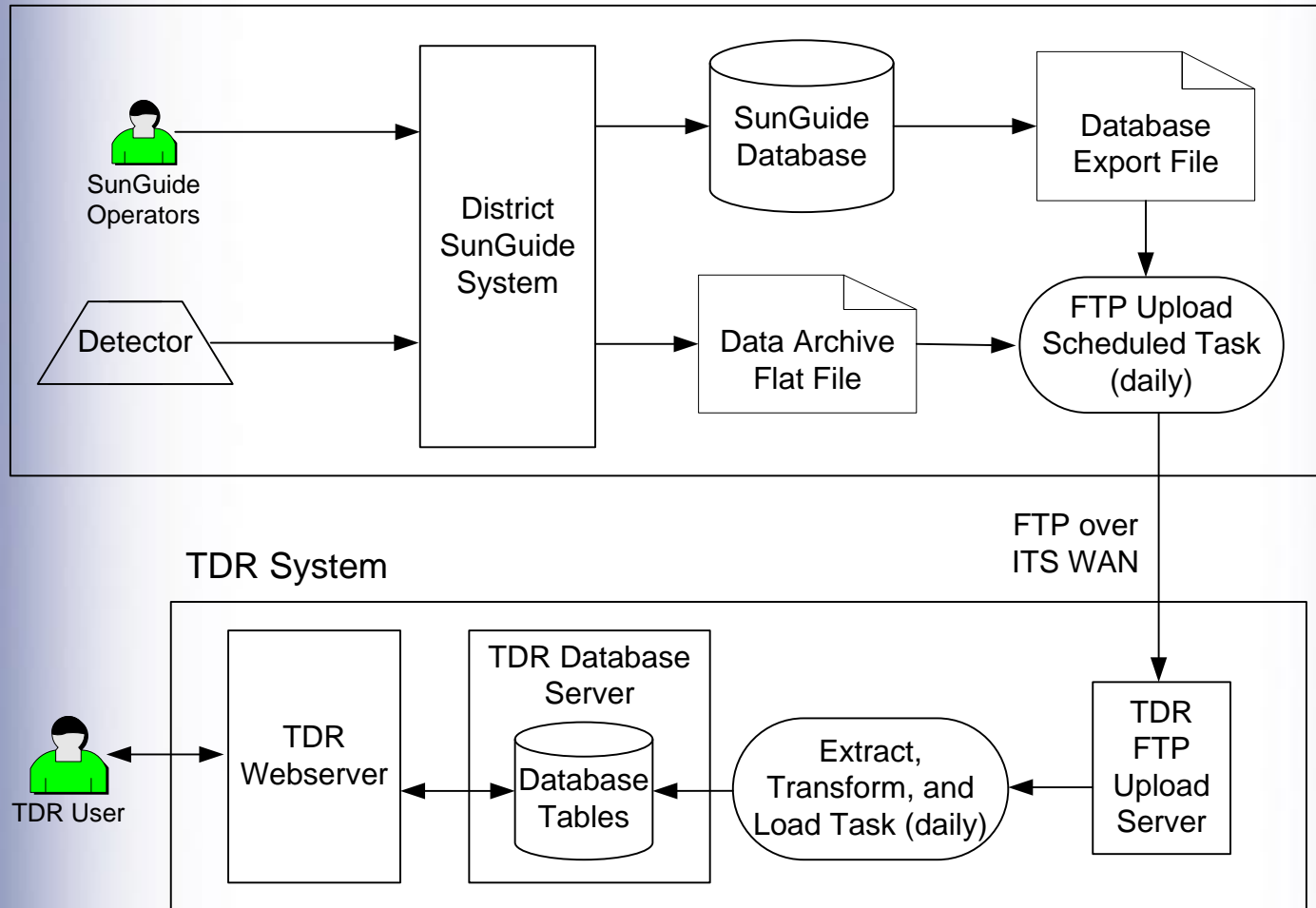
- FDOT ITS Office performance measures for FTC
- Traffic volumes to Districts and Statistics Office
- MPO for planning
- Transit Office for multimodal coordination

# CDW Uses

- Universities for research projects
- Support for work zone crash analysis
- Ramp meter analysis
- Support for identification of recurring congestion

# CDW System – Early Phase

District ITS Network / SunGuide Deployment



# CDW User Interface

- User friendly web interface
- Provide standard and custom reports
- Dashboard reports on the webpage
- Download files in pdf or xls/csv.
- Provide user accounts, security

# CDW Data Quality

- Quality assurance algorithm executed on all incoming data
- Data quality report provided as output
- Provides valuable feedback on
  - Detector malfunctions
  - Communication malfunctions
  - Detector calibrations issues

# CDW Benefits

- Roadway Performance Measures
  - Travel Time Reliability
  - Incident Duration Performance Measures
- Traffic Counts
- Crash data analysis
- Incident prediction analysis
- Congestion pattern analysis
- Facility Simulation and modeling
  - Travel demand, queuing, and simulation validation
- Work zone crash analysis support
- IntelliDrive: support for multi-modal data collection

# Project Contacts

**Arun Krishnamurthy, PE, FDOT**

[arun.krishnamurthy@dot.state.fl.us](mailto:arun.krishnamurthy@dot.state.fl.us)

**Clay Packard, EI, PBS&J/Atkins**

[clay.packard@dot.state.fl.us](mailto:clay.packard@dot.state.fl.us)

# Questions