

**North Central Texas Council of Governments (NCTCOG)  
Cooperative Vehicle Procurement and RAISE FY21 Bus Procurement  
Request for Proposals**

**Questions and Responses**

**Question #1:** How many cameras are required for the camera system? Is there a specific brand/model of camera system?

**Response:** The requested video surveillance camera systems must meet the following minimum requirements:

There shall be a minimum of four (4) cameras per system for Light-Duty Buses strategically placed to maximize coverage of the interior of the bus. Each bus's system of 4 cameras shall be considered one (1) unit.

Cameras angles should focus on capturing the following areas, per unit:

- Driver, farebox, and entrance area
- Front facing the rear
- Rear facing the front
- Windshield driver view
- Front curbside, exterior (rear facing)
- Wheelchair lift facing curbside
- Priority bus seating

Cameras, at a minimum, should:

- Have 420 - 700 TV lines of resolution
- Be operational during day/night
- Be resistant to tampering, vandalism, and theft
- Be operational in low-light conditions
- Contain scratch-resistant, anti-glare, impact-resistant lenses
- Contain an appropriate lens width to have full view of the priority bus seating areas
- Be stable and free of vibration
- Include built-in microphones on at least one camera
- Receive power directly from the DVR

DVR System Hardware: Per vehicle, the selected vendor shall propose a digital video recorder (DVR) capable of recording at least 4 video channels with audio simultaneously. The DVR, at a minimum, should also:

- Support a minimum of one (1) "swappable" 500 GB removable hard drive. A total of 1 hard drive must be provided with the camera system
- Be compatible with removable hard drives up to 1TB
- When inserted, the hard drive should automatically connect and synchronize to the DVR operating system with no additional formatting required
- Be mountable either vertically or horizontally
- Be switched on/off automatically by vehicle ignition with the ability to continue recording at least 15 minutes after shutdown
- Be capable of streaming real-time video over wireless network for review by administrative staff

- Be able to transfer recorded video and audio through automatic download over wireless network, connection to a PC or laptop via USB, and/or removable disk
- Contain a vandal- and shock-resistant covering with lock accessible by authorized personnel only. A total of 3 keys should be made accessible per partner agency
- Have a composite audio/video connection for an optional on-board monitor
- Have no active controls on the front panel of the DVR to be tampered with or damaged
- Be capable of recording and tagging events and incidents in response to vehicle break-ins, hard braking, and incidents activated by the driver for later review
- Imprint on the video the time, date, and camera location within the vehicle
- Be wireless ready for use on any IP network
- Be compatible with any GPS receiver with geofencing capabilities