## **Guidance for Federal-Aid Computerized Traffic Signal Systems (CTSS) spare parts equipment**

Federal regulations (23 CFR 940) define Intelligent Transportation Systems (ITS) as "...electronics, communications, or information processing used singly or in combination, to improve the efficiency or safety of a surface transportation system." This is a broad definition, covering the range from small, simple devices up to large and complex systems. FHWA includes CTSS as ITS.

CTSS spare parts are defined as system critical (i.e., ones that are essential for the successful operation of the system) that are susceptible to failure, regardless of reason - acts of God, crashes, electronic "infant mortality". The spare parts are necessary to provide initial support for projects that include CTSS and can be used in other Federal aid projects for CTSS as needed. The FHWA CT Division Office has determined that the spare parts listed below for CTSS equipment are eligible for federal-aid reimbursement. No other spare parts in federal-aid projects are eligible for federal aid reimbursement.

As required by FHWA-CT, CTSS spare parts eligibility will be determined on a project-by-project basis and the availability of project funding. A spare parts listing must be included in each project SEAFORM (Section 11) and submitted for approval or re-approval as required by the Stewardship & Oversight Implementation Manual.

CTSS equipment eligible for "spare parts" federal-aid are listed below:

- Accessible Pedestrian Signal Equipment
- Video Detection Equipment
  - o Camera Assemblies
  - Video Detection Processors
- Communications Equipment
  - Video Encoders/Decoders
  - Ethernet Switches
  - o Media Converters
  - Wireless modems
- Microwave Detection
  - Sensor Radars
  - o Transmitter / Receiver modules
- Wireless Communication
  - Broad Spectrum Radio Equipment
  - Wireless Interconnect Equipment
- Wireless Vehicle Detection Equipment
  - Wireless Detectors
  - Receiver / Transceiver Repeater
  - o Processor units and wire harnesses

FHWA-CT allows the total number of spare parts to be equal to ten (10) percent of total item quantity, rounded up to the nearest whole number.

FHWA-CT has conditionally approved specific spare parts for system critical items in CTSS projects. This guidance is subject to all Federal Regulations. FHWA-CT reserves the right to change, modify or cancel this guidance at any time.

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## References:

- ➤ "e-Code of Federal Regulations", PART 940 Intelligent Transportation System Architecture and Standards, can be accessed by the following link: <a href="http://www.ecfr.gov/cgi-bin/text-idx?rgn=div5&node=23:1.0.1.11.50">http://www.ecfr.gov/cgi-bin/text-idx?rgn=div5&node=23:1.0.1.11.50</a>
- "Transportation Systems Management & Operations: Operating Cost Eligibility Under the Federal-Aid Highway Program" can be accessed by the following link: http://ops.fhwa.dot.gov/travelinfo/resources/ops\_quide.htm
- "INFORMATION: Guidance on Federal-aid Eligibility of Operating Costs for Transportation Management Systems" can be accessed by the following link: <a href="http://www.ops.fhwa.dot.gov/travelinfo/resources/ops\_memo.htm">http://www.ops.fhwa.dot.gov/travelinfo/resources/ops\_memo.htm</a>
- "2015 Stewardship & Oversight Implementation Manual" can be accessed by the following link:
  <a href="http://www.ct.gov/dot/lib/dot/documents/denviro/ct\_stewardship\_implementation\_manual\_-june\_2015.pdf">http://www.ct.gov/dot/lib/dot/documents/denviro/ct\_stewardship\_implementation\_manual\_-june\_2015.pdf</a>