Kansas City Scout
TMC Operator Certification and Training
Program Development

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SCOUT Managers

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SCOUT Overview

- Regional Traffic Management Center
  - Kansas DOT
  - Missouri DOT
  - Mid-America Regional Council (MPO)

- Major Interstates
  - I-70 St. Louis - Denver
  - I-35 Des Moines – Oklahoma City
  - I-29 Originates in KC North to Canadian Border

50% of all eastbound intermodal freight entering U.S. commerce through West Coast ports passed through the Kansas City area.
SCOUT Overview

Innovation for better mobility
SCOUT Goals

- Keep Existing 8-hour Operator Training
  - 6 Training Modules

- Add Tests to the end of each module

- Develop New Certification Program
  - Based on Operator Job Descriptions
  - Based on Knowledge, Skills and Abilities
  - Mapped to Policies & Procedures
  - Expand Training Materials
## Certification Program

### Job Activities

- Control Field Devices
  - Highway Advisory Radio
  - CCTV (Presets, Tours, PTZ controls)
- Dynamic Message Signs
- Roadway Sensors
- Manage Events
  - Planned & Unplanned
- Policies & Procedures
  - Amber Alerts
  - Ozone Alerts
  - Media

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The team documented over 150 job activities that a TMC Operator may complete on a daily basis.
Adult Learning

- Knowledge – Comprehension and understanding of operator policies, procedures and job activities

- Skills – Demonstrate and execute a series of actions to complete job activities. (i.e. Log-on, post an message, terminate a message)

- Abilities – Combination of knowledge and skills to successfully complete advanced job activities. (i.e. interpreting and anticipating traffic conditions, handling multiple advanced level job activities, etc)
Certification Program

- Knowledge – Comprehension and understanding of operator policies, procedures and job activities

KANSAS CITY SCOUT OPERATOR TRAINING CERTIFICATION EXAM

1. Which of the following statements is true about Dynamic Message Signs? (Policies/Procedures-11)
   a. Amber Alerts and/or Homeland Security alerts should not be posted
   b. Dynamic Message signs are used as a replacement for static speed limit signs
   c. Special event park-and-ride location notices can be displayed via DMSs
   d. Four-phase messages can be used at any time to convey information
Certification Program

- Skills – Demonstrate and execute a series of actions to complete job activities. (i.e. Log-on, post an message, terminate a message)

Expand scenario based table-top exercises to match operator abilities. Organize the scenarios by level of complexity:
- entry
- intermediate
- advanced
There has been a two-car collision on 35 NB at the 95th Street exit. Fire, PD, and EMS are on scene taking out lanes 1 and 2.

015 E - Questions:
1. Create DMS Message For This Scenario
2. Name Upstream DMS(s)
3. Name Upstream Camera
4. Name Downstream Camera
Abilities – Combination of knowledge and skills to successfully complete advanced job activities. (i.e. interpreting and anticipating traffic conditions, handling multiple advanced level job activities, etc)

Create a stepped level of progression working knowledge based questions and scenarios without time limits to introducing multiple scenarios with time limitations.
Regional Geography

- Kansas City Scout Supervisors recognized that a key element is understanding the geography of the region.
## Regional Geography

- Created 2 Bus-tours to be completed within the first 60 days of work.

- Created maps with ITS field device locations requiring operators to identify surrounding interchanges, freeway systems, upstream and downstream devices.

- Created a Google Earth Fly-Through of all roadway segments that SCOUT currently controls showing ITS field device locations.
Program Development

- Consistent with hiring practice
  - 90-day probationary period = 90-day entry-level certification program
- Developed 12-week training program that includes daily training/learning to progress through all policies & procedures and many scenario based exercises.
- At the end of 60 days the operator is expected to be able to take and pass a timed based entry-level certification exam.
Continuing Education

- Monthly continuing education for all operators

- Created 12 individual month outlines for training which map to the 150 different operator job responsibilities

Senior-level operators commented on how little they remember regarding the policies and procedures. So monthly refreshers led by the supervisor will be completed.
Management Elements

- Created a Database to manage scenarios.
  • Supervisor can add new scenarios with a *.doc (word file)
  • An Access database manages the scenarios (165 scenarios)
  • Select a random number to print
  • Select scenarios by a specific route
  • Select the level of difficulty, entry, intermediate or advanced
Management Elements

- Created a Database to track training and certification.
  - Supervisor can add new employees.
  - Supervisor can add completion of weekly progress
  - Supervisor can add completion of field tours or other training components
Simulated Tools

- Provided Training to the TMC Supervisors on editing each project component.
  - Knowledge based questions are mapped to a specific section of a policy & procedure. Stored as word documents for easy edits,
  - Scenarios are stored as word documents with a simple Access database to sort and print,
  - Provided training on editing the Google Earth fly-through.
Next Steps

- Supervisors will work all staff through certification by the end of the year

- Supervisors will manage next round of edits as policies and procedures require document changes
Contact Information

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