Domestic Scan 13-01
Advances in Developing a Cross-Trained Workforce

Significant Findings and Recommendations
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Overview

• Scan Objectives and Participants
• Summary
  • Initial Findings
  • Conclusions/Recommendations
  • Dissemination Activities
Scan Objectives

- Problem Statement developed by Jennifer Toth, AZ DOT
  - Leading Management Practices For Developing A Cross-Trained Workforce will investigate how agencies are using workforce cross-training as a strategy for enhancing agency efficiency and agility in adapting to changing missions, priorities and budgets; and the conditions under which cross-training strategies are applicable and appropriate.
Presenting Organizations

- CalTrans
- Connecticut DOT
- Iowa DOT
- Missouri DOT
- National Institutes of Health
- Ohio DOT
- Oregon DOT
- Tennessee DOT
- Utah DOT
- Virginia DOT
Team Members

- Amanda Holland, (Chair), Division Operations Manager, Administrative Services Division, Alaska DOT & PF
- Olivia P. Alexander, Team Leader, Talent Development Division, FHWA Office of Human Resources
- Ann “Vicki” Arpin, Human Resources Administrator, Connecticut DOT
- Greg Duncan, P.E., Assistant Chief Engineer for Operations, Tennessee DOT
- Todd Emery, P. E., Deputy State Engineer, Statewide Operations, Arizona DOT
- Jane Lee, Chief, HR Officer Human Resources, Oregon DOT
- Lee Wilkinson, Director, Operations and Finance Division, Iowa DOT
- Rick A. Smith, Subject Matter Expert
Cross Training Definition

- “to train (an employee) to do more than one specific job” (Webster’s Dictionary)
- Teaches an employee who was hired to perform one job function the skills required to perform other job functions.
- Cross-trained employees become greater assets while gaining knowledge and skills that benefit them personally.
- An umbrella term used interchangeably with Job Shadowing and Rotation
- Eases the challenges of workforce shrink and reductions in funding.
What are the Business Needs?

- More skilled/capable workforce
- Employees more aware of the big picture
- Redundancy…Reliability
- Integration into Organization
- Executive Bench-strength
- Core strengthened Organization
Best Practices

- Single Discipline
- More Robust Employees
- New Employee/Engineer-in-Training
- Executive Programs
- Large Scale Silo Swapping
Best Practices

- More Robust Employees
  - NIH fed needs of Employees
  - CalTrans Knowledge Pyramid
  - Oregon DOT has a Right of Way rotational assignment program
Best Practices

- New Employee/Engineer-in-Training
  - CalTrans rotation program for engineers and planners
    - Focus is on Academies, coaching, internal training, mentoring, and job shadowing.
  - CT using consultant Bridge Inspectors to train CT employees
  - OH tests potential hires to determine behavioral traits and skill sets
Best Practices

- **Executive Programs**
  - VDOT Executive leadership rotation
    - District Engineer exposed to HQ
    - Temporary Special Assignment
  - MODOT Accelerated Leadership Development
    - EIT’s with 3-5 years experience
Best Practices

- Large Scale Silo Swapping
  - Iowa has a voluntary program for Trans Technicians
    - Worked with Union
  - Tennessee restructured all Maintenance Workers and Construction Technicians
    - Reclassification to Operations Tech (1, 2, 3)
Performance Measures

- Reduction in construction inspection cost (Tenn DOT).
- Meets the Federal Metric Requirements (Connecticut DOT).
- Completion of the cross-training assignment and feedback from those directly involved (VDOT).
A. Three categories of conclusions were developed by the scan team:

1) Conclusions addressing **How** successful cross-training programs can be developed

2) Conclusions for whom **Who** cross-training is intended

3) Conclusions that describe **Why** DOTs should adopt cross-training
~ Conclusions ~

1. **HOW**
   
   – Consider using adult learning theories, learning styles and barriers to learning (Malcom Knowles) when designing cross-training curriculum and activities.
   
   – Use internal resources/SMEs.
   
   – Tailor cross-training to meet predetermined goals and objectives.
   
   – Engage Union from the beginning.
1. HOW (cont.)

– Cross-training programs can be adopted from similar organizations if the program is adaptable to the specific needs of the Department; one size does not fit all.

– It is possible to implement cross-training in different employment environments – union or non-union.
2. WHO

– Agency commitment
– A positive tone at the top is important and sets the stage for success
  a. A champion
  b. An action plan based on change management.
  c. Employee involvement
3. **WHY**

- Consolidate resources
- Develops employees thereby improving agency
- There is an identified business need. For example, maintaining level of service through a reduction in workforce.
- Cross-training leverages organizational talent. Business cases vary but if they are clearly designed at onset, it will be easier to develop & implement performance measures.
~ Recommendations ~

- Consider informal cross-training options.
- Carefully select mentors or coaches who will be used in cross-training programs.
- Develop performance metrics to show the value of these programs.
- Embrace generational diversity.
- Align cross-training programs with organizational mission, vision, goals, and needs.
Questions?

AASHTO / NCHRP
U.S. Domestic Scan Program