

Managing Shifts, Managing Costs



What are the following percentages?

- 44% State-Funded Urban
- 44% Dual Rural/Urban
- 57% LEP
- 52% Rural

Salaries and Wages as % of Operating Costs

Learning Objectives

At the end of this lesson you will be able to:

- Evaluate current management practices.
- Employ information to manage operator and dispatcher shifts.
- Recall basic issues and strategies surrounding costs for transit operations staff.





The purpose of managing staff shifts

PRODUCTIVITY VS. COST-SAVINGS



Productivity vs. Cost-Savings

- What is productivity?

Typically, productivity is defined as the number of passenger trips per hour or mile carried by revenue vehicles.

- What is the impact of productivity?

Impact of Productivity

- Decrease resources needed to provide service

OR

- Increase service level using same resources

Table 3-2. Increased Productivity Scenarios.

Scenario "A" or "B"		Annual Revenue Hours	Annual Passenger Trips	Passengers per Revenue Hour	Operating Cost for Revenue Hours	Operating Cost per Revenue Hour	Operating Cost per Passenger Trip
Existing Service and Productivity		62,500	125,000	2.00	\$ 2,250,000	\$ 36.00	\$ 18.00
Increased Productivity							
A	Save Money	- 1,820		+ 0.06	- \$65,534		- \$0.52
	(↑ Productivity) = (↓ Revenue Hrs)	60,680	125,000	2.06	\$ 2,184,466	\$ 36.00	\$ 17.48
B	Serve More Passengers		+ 3,750	+0.06			- \$0.52
	(↑ Productivity) = (↑ Pass Trips)	62,500	128,750	2.06	\$ 2,250,000	\$ 36.00	\$ 17.48



Tools and information to help agencies self-evaluate.

EVALUATE CURRENT PRACTICES

Looking in the Mirror

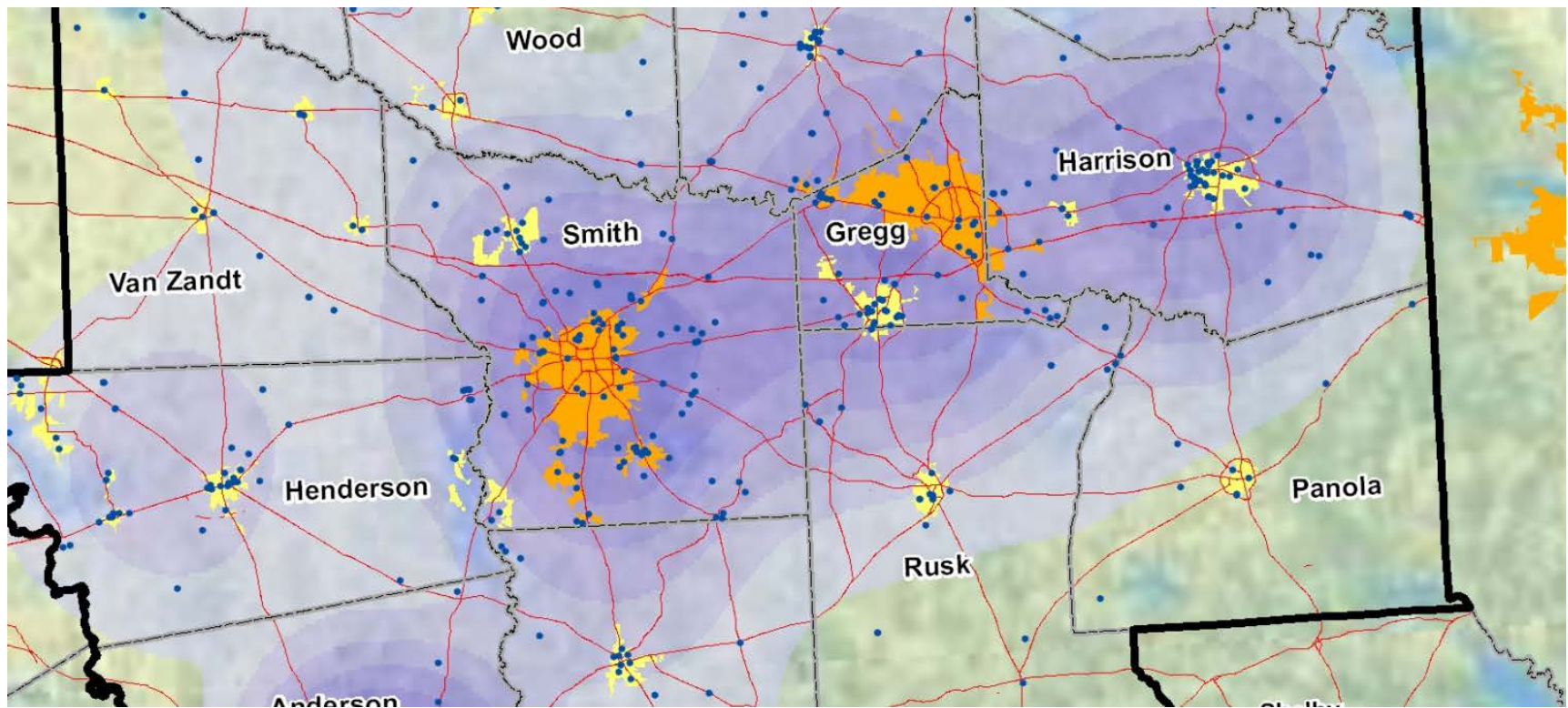
- Activity: refer to materials packet
- Take ~3 minutes, answer each question

<i>Question</i>	<i>Yes</i>	<i>No</i>
Does your agency have key performance indicators to monitor operator performance?	<input type="checkbox"/>	<input type="checkbox"/>
Does your agency have key performance indicators to rate dispatcher performance?	<input type="checkbox"/>	<input type="checkbox"/>
Does your agency ever compare performance with peer agencies?	<input type="checkbox"/>	<input type="checkbox"/>
Do you strategically manage the amount of full- and part-time staff to control labor costs?	<input type="checkbox"/>	<input type="checkbox"/>
Do you cross-train operators to cover routes other than their own when needed?	<input type="checkbox"/>	<input type="checkbox"/>
Do you cross-train supervisors or operators to adequately back up dispatchers when needed?	<input type="checkbox"/>	<input type="checkbox"/>
Do you have policies for staff tardiness, absences, vacations, holidays, and lunch or other breaks?	<input type="checkbox"/>	<input type="checkbox"/>
Do operators and dispatchers understand and comply with policies most of the time?	<input type="checkbox"/>	<input type="checkbox"/>
Do managers consistently hold staff appropriately accountable for following internal policies?	<input type="checkbox"/>	<input type="checkbox"/>

Results, Thoughts, Discussion?

- “NO” to any of the questions?
 - May be opportunity for productivity/ cost-savings
- “YES” to all questions?
 - Great!
 - But, room for improvement may still exist.





Information is the basis of informed management decisions.

INFORMATION AND ANALYSIS USEFUL FOR MANAGING STAFF LEVELS



Types of Analysis

- Operator related
 - Productivity by driver or vehicle
 - Slack time by vehicle (unused revenue time)
 - Overlap in service, potential for more ridesharing
- Dispatcher related
 - Shifts based on call volume trends
 - Call answering performance

What do all of these have in common?



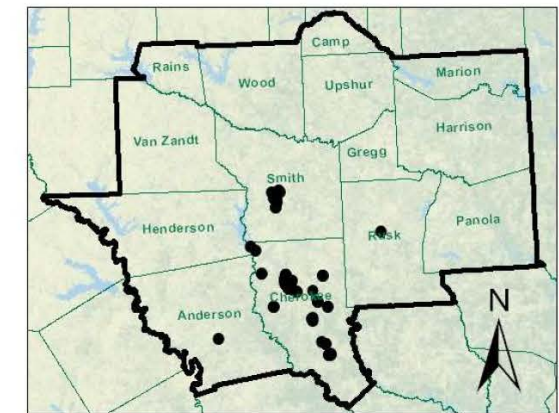
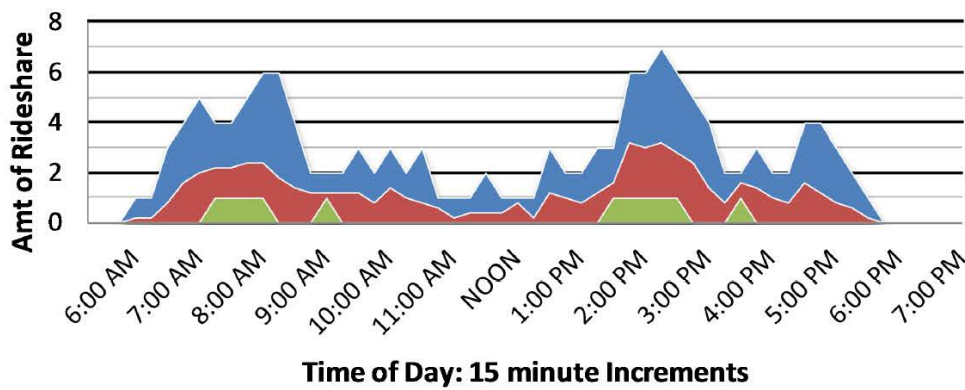
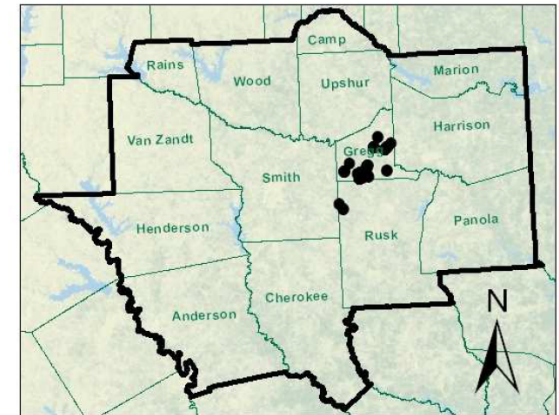
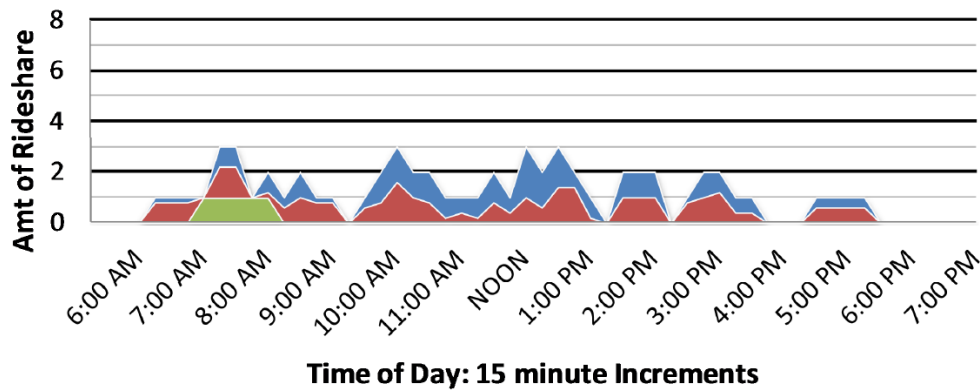
Dispatch's Central Role

Dispatch staff have the most impact on a transit agency's productivity, followed closely by the impact of drivers.

Productivity affects both quality and cost of transit service.

Example: Slack Time Analysis

Which vehicle's manifest is more productive?



Example: Productivity by Driver

$$\text{Productivity} = \frac{\text{Number of passenger trips}}{\text{Number of revenue hours or miles}}$$

Table 3-3. Example of Productivity by Driver.

Driver	Revenue Hours	Passenger Trips	Productivity
Driver A	19	59	3.1
Driver B	18	30	1.7
Driver C	13	31	2.4
Driver D	13	47	3.6

Example: Dispatch Concept

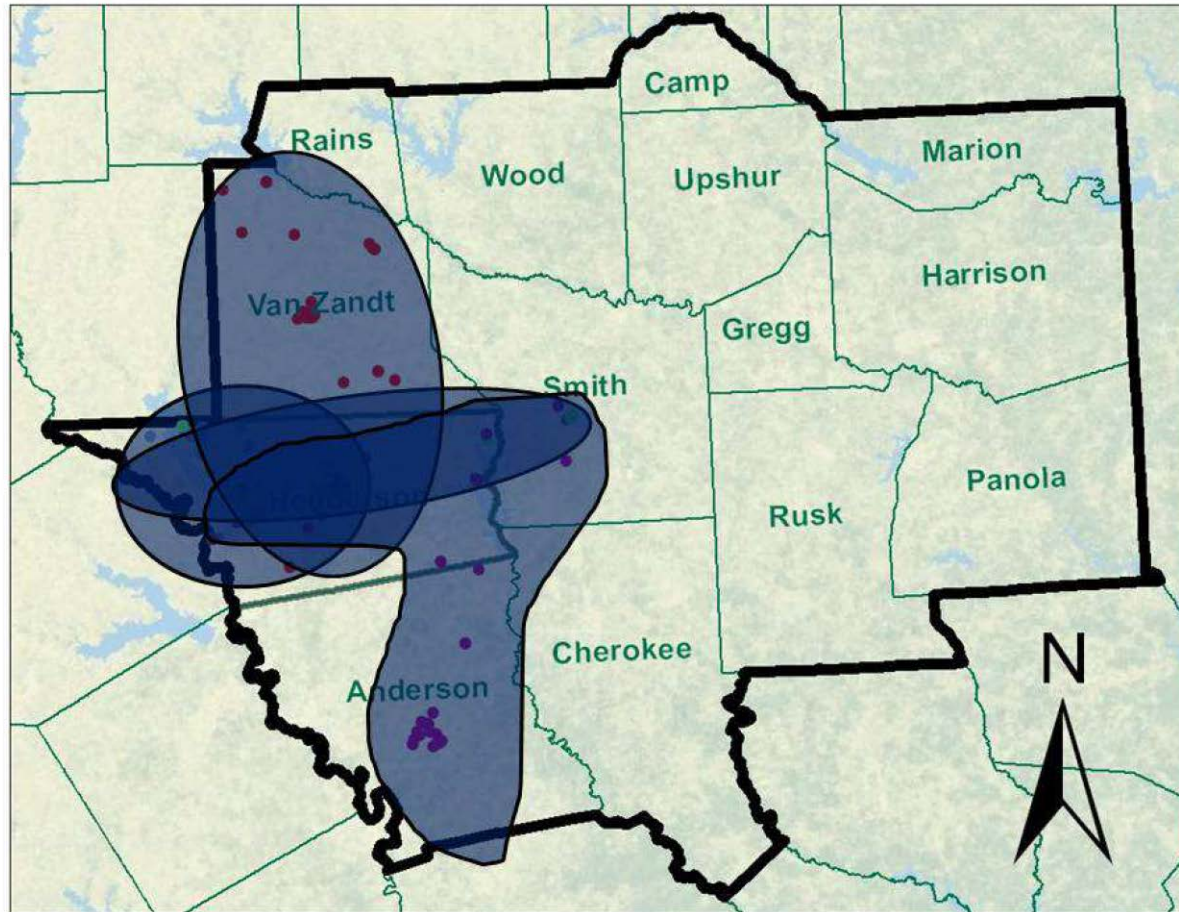


Figure 3-4. Identifying Data by Vehicle.

Activity 2

“How many staff do we need?”

- Locate materials for activity.
- Form groups of 2 or 3.
- Use 15 minutes to work through handout.
- Afterward, we will discuss as a group.



Many best or better-practices are easy to implement, but require diligence to sustain and realize the full benefit of the change.

PRACTICES TO REDUCE LABOR COSTS AND IMPROVE SERVICE



Other thoughts or practices?

- The people in this room possess a great deal of collective experience.
- **Activity 3**
 - Each table should take 10 minutes to discuss ideas for best or better practices for managing operations staff.
 - Come up with one or two ideas/methods to share with the larger group.



Best or Better Practices

- Require operators to turn in manifest information daily, reporting anomalies, etc.
- Track attendance and on-time arrival to work.
- Extra-board backup for operations staff.
- Staff based on demand (call volume, trip requests).
- Monitor performance by operator.

Best or Better Practices (cont'd.)


- Communicate expectations clearly.
 - Clear job descriptions and understanding of roles
 - Rider's guide
- Reduce slack-time or use it more effectively.
- Assign operators and dispatchers to similar geographies etc., but cross-train as possible.
- Assign operators to the same vehicle.



Review: Learning Objectives

Now that we are at the end of this lesson, you should be able to:

- Evaluate current management practices.
- Employ information to manage operator and dispatcher shifts.
- Recall basic issues and strategies surrounding costs for transit operations staff.



*Remember, fill out the session review form.
We need to know how we can improve, too!*

Jonathan Brooks

Associate Transportation Researcher

Texas A&M Transportation Institute

Ph 713.613.9206 or j-brooks@ttimail.tamu.edu

QUESTIONS? COMMENTS?