

# Preparing for Mobile Data Computers



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## Begin

### 0-3 Years Before Implementation:

- System is identified for process
- Assistance with business practice and policy changes

### 6-12 Months Before Implementation:

- Completion of business practice and policy changes
- Submit Pre-Application

### 4-6 Months Before Implementation:

- ITRE and NCDOT review Pre-Application
- Denied applications must be re-submitted

### 3-5 Months Before Implementation:

- Receive quotes from vendors
- Obtain local approval

# IMPLEMENTATION

### 1-2 Months Before Implementation:

- Board of Transportation approves or denies application

### 2-4 Months Before Implementation:

- ITRE and NCDOT review Application
- If complete, item is added to the Board of Transportation agenda

- Systems with approved Pre-Applications submit full Technology Application and Pre-Implementation Assessment

### 0-6 Months After Implementation:

- Implementation is complete and the project is considered "live"

### 12-18 Months After Implementation:

- System completes Post-Implementation Assessment and returns it to ITRE

### 12-24 Months After Implementation:

- Pre-Implementation Assessment compared with Post-Implementation Assessment

System advances by using new technology, with continuous growth and improvement

# Planning for Technology

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1. Identify potentially eligible systems 3 years out
2. Create individual performance plans to increase performance and adjust business practices

# Planning for Technology

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3. Systems attend online training courses
  - Essential Policies and Procedures
  - Basics of Scheduling
  - Basics of Dispatching
  - Understanding Billing
  - Using Your Data
  - Budgeting (in development)

# Planning for Technology

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## 4. Certified as Eligible...

- Changed essential business practices
- Completed performance plan recommendations
- Attained minimum thresholds

## 5. Pre-Implementation Assessment

- Baseline data collection

## 6. Implementation/Go-Live

# Planning for Technology

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## 7. Post-Implementation Assessment

- Data collected and compared to pre-implementation
- Certified as Fully Implemented

## 8. Process begins for next technology

# You want MDCs to...

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- Become more efficient?
- Provide more service?
- Reduce operating and administrative costs?
- Reduce the cost per trip?
- Improve customer satisfaction by improving on time performance?
- Improve customer satisfaction by reducing ride time?

Can you accomplish these  
goals without changing?



# Common Obstacle to Successful Technology Implementation

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I want to be more efficient/carry more riders/reduce costs/etc., but I am not going to change my business to accomplish this goal.

# Guaranteeing Success-

Make required business practices NOW!

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**Essential business practices that should be in place before you implement this technology**

# Guaranteeing Success-

## Make required business practices NOW!

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### **Have a technology champion**

- ❖ Someone in your office must take responsibility for understanding all aspects of the MDCs and their interaction with the scheduling software
- ❖ Can't find this person? You are it!

# Guaranteeing Success-

## Make required business practices NOW!

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### **Upgrade Software Now**

- ❖ Your scheduling software version must be able to accept odometer readings and all other data transmitted by the MDCs
- ❖ Do now wait to upgrade until you receive the MDCs- do it now!

# Guaranteeing Success-

## Make required business practices NOW!

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### **Schedule to Runs**

- ❖ All trips are assigned to runs, not vehicles or drivers

# Guaranteeing Success-

## Make required business practices NOW!

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### **Staff appropriately**

- ❖ Can your current staff handle advanced technology?
- ❖ If not, consider training and/or staffing changes
- ❖ Why have a powerful tool if your people cannot use it???

# Guaranteeing Success-

Make required business practices NOW!

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## **Think of transportation as separate events**

- ❖ Reservation taking
- ❖ Scheduling
- ❖ Dispatching
- ❖ Verification
- ❖ Reports

# Guaranteeing Success-

## Make required business practices NOW!

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### **Standard billing method**

- ❖ You must adapt the way you bill to the software's capabilities
- ❖ The verification process will almost disappear when you bill using a standard method



# Guaranteeing Success-

## Make required business practices NOW!

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### **Standard passenger, mile, and hour tracking**

- ❖ You must track all statistics using the terms defined by NCDOT/PTD, ITRE and the software vendor
- ❖ DO NOT try to 'trick' the system by using fields meant for one reason for a different reason. This will distort all reports and make data unintelligible

# Guaranteeing Success-

## Make required business practices NOW!

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### **Prepare to become more efficient**

- ❖ Expect a 10% decrease in miles and hours and an increase in passenger capacity
- ❖ If you bill by service/revenue time/miles, expect to have reduced income
- ❖ Account for the reductions in income by reducing operating and administrative costs

# Guaranteeing Success-

## Make required business practices NOW!

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### **Prepare for the maintenance costs**

- ❖ NCDOT/PTD may not be able to assist with maintenance costs
- ❖ You must be able to generate these costs by using the MDCs to become more efficient, cut driver time, cut administrative staff time, etc.
- ❖ If you cannot, then why purchase the software???

# Guaranteeing Success-

## Make required business practices NOW!

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### **Manifests must be ordered by pickup and drop off time (one line for each)**

- ❖ You must have manifests ordered by pickup and drop off times
- ❖ If you do not have ordered manifests what is the point of buying very expensive software and very expensive MDCs to calculate the most efficient way to deliver the service???

# Guaranteeing Success-

## Make required business practices NOW!

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### **Drivers must perform the work in order**

- ❖ MDCs will list stop by stop instructions and estimated times
- ❖ If drivers ignore the MDCs stop order, then the value of the MDCs and your scheduling software is almost lost

# Guaranteeing Success-

## Make required business practices NOW!

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### **Schedules are 'blessed' daily**

- ❖ Someone must review the schedules and make certain that they are reasonable and doable
- ❖ Start 'blessing' the schedules now

# Guaranteeing Success-

## Make required business practices NOW!

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### **All communication is through the office**

- ❖ MDCs are a valuable tool, but they only know what you tell it
- ❖ If you do not tell the scheduling software and the MDCs about no shows and cancellations, it will not be able to accurately predict the most efficient routes and determine if the vehicle is on time

# Guaranteeing Success-

## Make required business practices NOW!

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### **Schedules only contain today's clients**

- ❖ Do not leave passengers on a route when you know they will not be riding
- ❖ The software and the MDCs can only optimize service delivery and decrease operating costs if you tell them everything you know!!! If you keep them in the dark, they will fail.



# Guaranteeing Success-

## Make required business practices NOW!

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### **Tomorrow's schedules established today**

- ❖ You must optimize tomorrow's schedules as close to the actual run time as possible because information changes constantly
- ❖ No longer can you establish manifests far in advance

# Guaranteeing Success-

## Make required business practices NOW!

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### **Real-time dispatching**

- ❖ To be effective, the scheduling software must know everything you know as soon as you know it
- ❖ Someone must answer radio and telephone calls and mark changes instantly
- ❖ No shows, cancellations, will calls, and trips performed by different drivers must be logged immediately
- ❖ Office staff must learn how to make service changes 'on the fly' as the information is coming in

# Guaranteeing Success-

## Make required business practices NOW!

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### **Manifests verified within 36 hours of completion**

- ❖ To make informed decisions, you need information
- ❖ Manifest verification provides this information
- ❖ Verification starts with real-time dispatching. Quality dispatching drastically reduces verification time.
- ❖ Verify the manifests ASAP!!!

# Guaranteeing Success-

## Make required business practices NOW!

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### **Justify your purchase**

- ❖ MDCs are provided to you at a large cost using Federal, State, and/or Local money
- ❖ No one is making you do this
- ❖ Prove you are worth the expense by being successful!!!

# Guaranteeing Success-

Make required business practices NOW!

**It is hard to implement new technology and business practices at the same time**

**You do not need to have software or MDCs to make these changes**

**Change your business practices NOW!!!**

**Use ITRE- we are here to help**

# Guaranteeing Success-

## Make required business practices NOW!

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- ❖ Have a technology champion
- ❖ Upgrade software
- ❖ Schedule to runs
- ❖ Staff appropriately
- ❖ Think of transportation as separate events
- ❖ Standard billing method
- ❖ Standard passenger, mile, and hour tracking
- ❖ Prepare to become more efficient
- ❖ Prepare for the maintenance costs
- ❖ Manifests must be ordered by pickup and drop off time (one line for each)
- ❖ Drivers perform the schedule as printed
- ❖ Schedules are 'blessed' daily
- ❖ All communication is through the office
- ❖ Schedules only contain today's clients
- ❖ Tomorrow's schedules established today
- ❖ Real-time dispatching
- ❖ Manifests verified within 36 hours of completion
- ❖ Justify your purchase!!!

# Other

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- Prepare to move staff time from verification to dispatching
- Someone must constantly monitor the information received from the MDCs and make service changes based on that information
- Upgrade GIS maps for the scheduling software if themaps are more than 2 years old. Include this costs in the MDC application.

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