



# Washington Metropolitan Area Transit Authority

## SmarTrip® Bus Offboard Loading Project

June 2013





# Agenda

- **Project Goals**
- **Picture this...**
- **SmarTrip® Offboard Loading Device**
  - **Key Requirements**
  - **The Marketplace**
  - **Quantity & Location Criteria**
  - **Tentative Locations**
- **How You Can Help**

# Goal: Reduce this...

1. PRESS



2. TAP



3. INSERT



4. INSERT



5. TAP



**1 out of 14  
Metrobus riders  
add value to their  
SmarTrip® card at  
the farebox.**

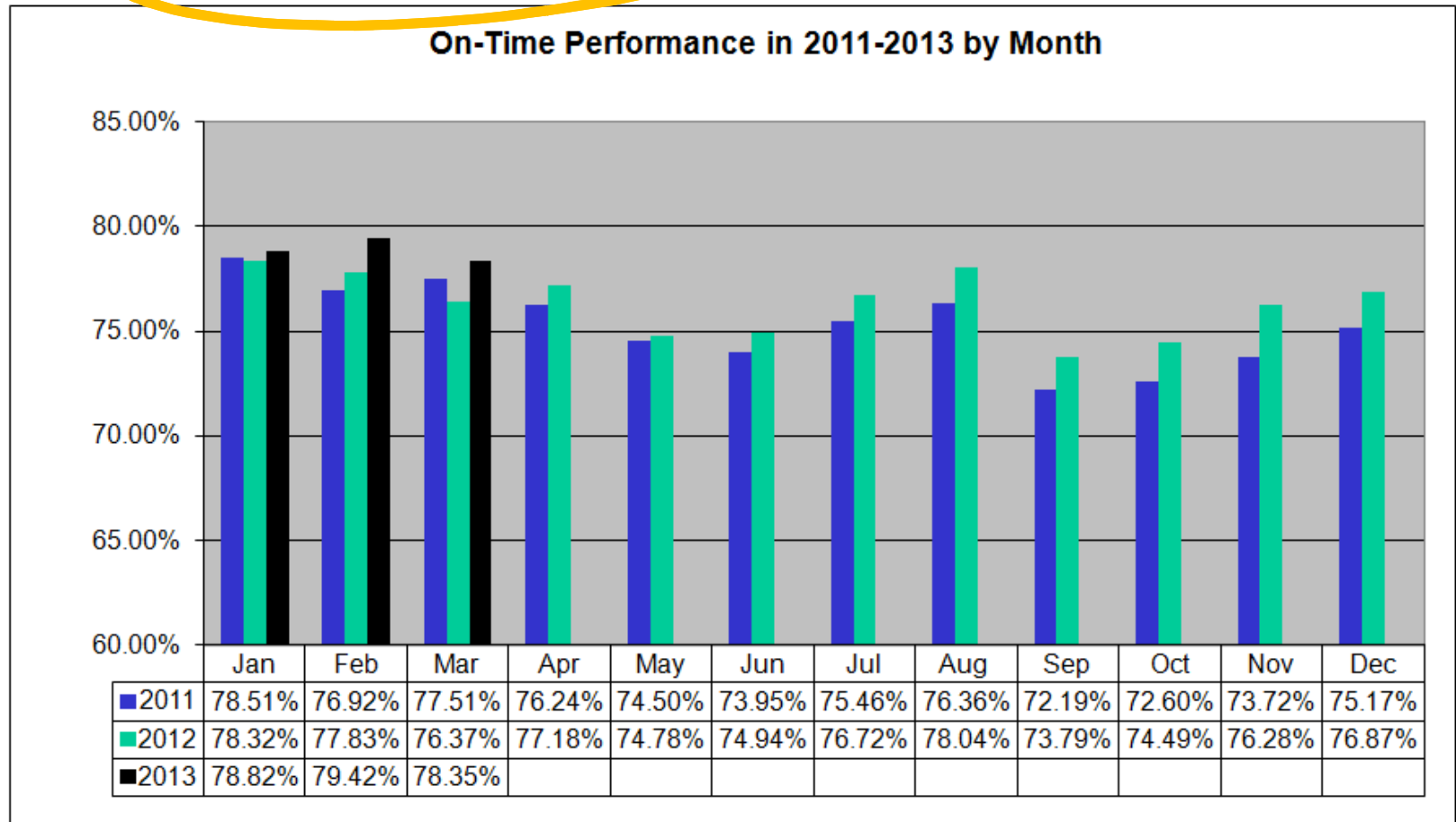
**On some routes, it's  
as high as 1 in 7  
riders.**



...to improve this



## Bus On-Time Performance Comparison Chart



...and to improve customer convenience



# Picture this...

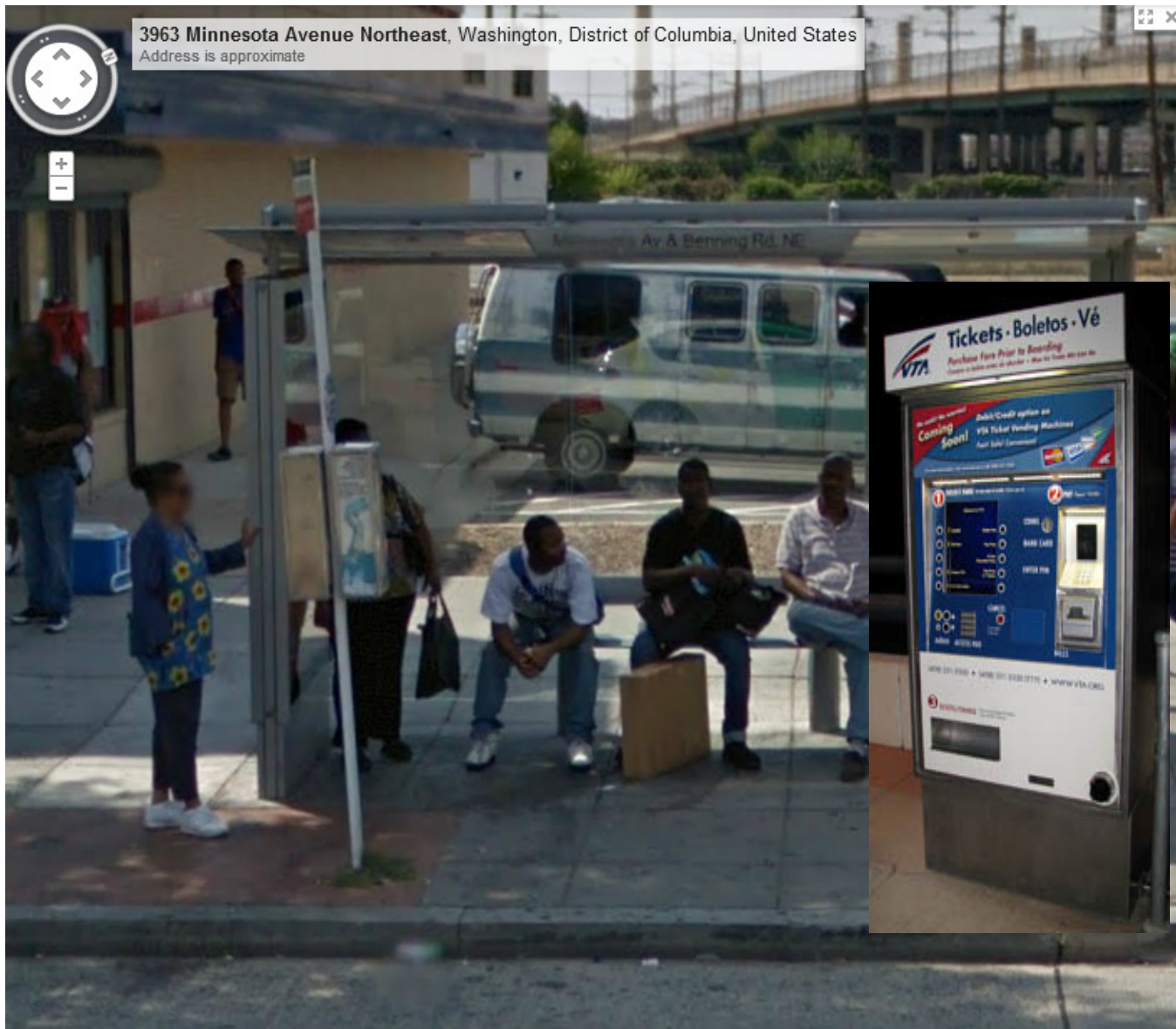
**Minnesota  
Ave &  
Benning  
Road**





# Or this.

**Minnesota  
Ave &  
Benning  
Road**



**Ticket  
Vendor  
Style  
+ an  
Electric  
Meter?**

# And this...

**H Street &  
7<sup>th</sup> NW**



# Or that.



+ an electric meter?

H Street &  
7<sup>th</sup> NW



# Key Requirements

FEATURE	DESCRIPTION
<b>Offboarding</b>	Add value and bus passes to WMATA accepted smart cards & update WMATA's back-end systems
<b>Payment Forms</b>	Take bills, coins, debit & credit (no change; no escrow)
<b>Streetscape</b>	Attractive with reasonable footprint
<b>Durability</b>	Work under all DC weather conditions
<b>Security</b>	Vandal and Tamper Resistant Support Revenue Collection; Encryption
<b>Regulations</b>	Utility, Permitting, ADA and Civil Rights



# Key Requirements

## What about NEPP?

- *This project is NEPP-compatible*
- *Even with NEPP, we need to serve the unbanked*
- *Remember, our primary target is customers who use cash to add value at the farebox.*



# The Marketplace

## Parking Pay Station Vendors

- Solar-Power Option
- Smaller Footprints
- More Experience with Outdoor Machines
- Less Experience with Smart Cards

## Traditional Ticket Vending Machine Vendors

- Remove the Ticket Printers to Meet Our Need
- Need Electric Service (no solar option)
- Larger Footprints
- Total Cost More Expensive than Parking Pay Stations



# Location Criteria & Quantity

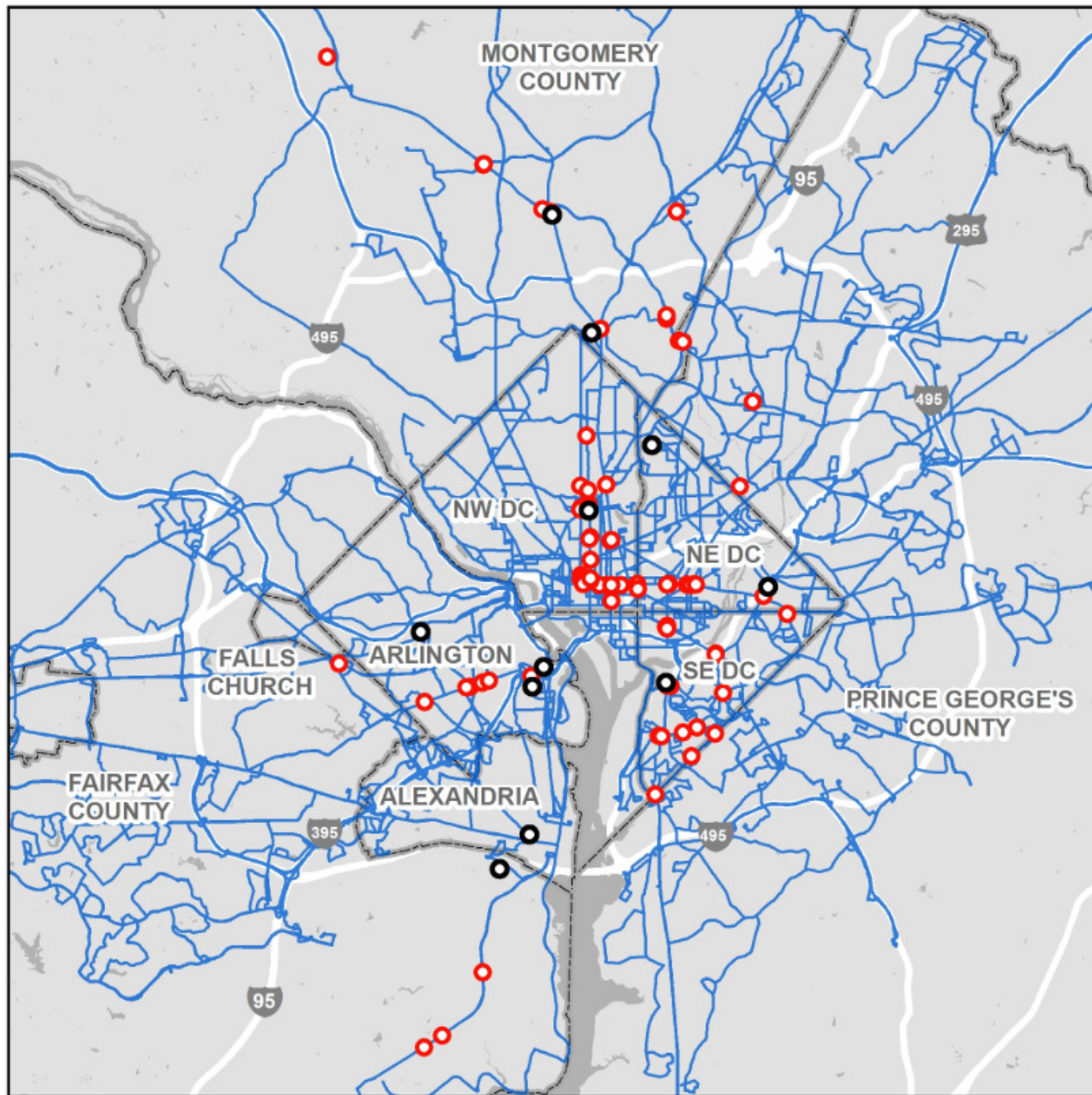
## Location Criteria

- **Lines with High SmarTrip Add Value Activity**
- **Lines with On-Time Considerations**
- **Regional Distribution**
- **Metrobus Stations**

## Quantity






- **100 to Start**
- **Option for 100 More**

# Tentative Bus Stops



**Selected  
Bus Stops  
for Off-Vehicle  
Fare Loading**

## Legend

-  Rail Stations
-  Bus Stops
-  Bus Network
-  Major Highways
-  Water



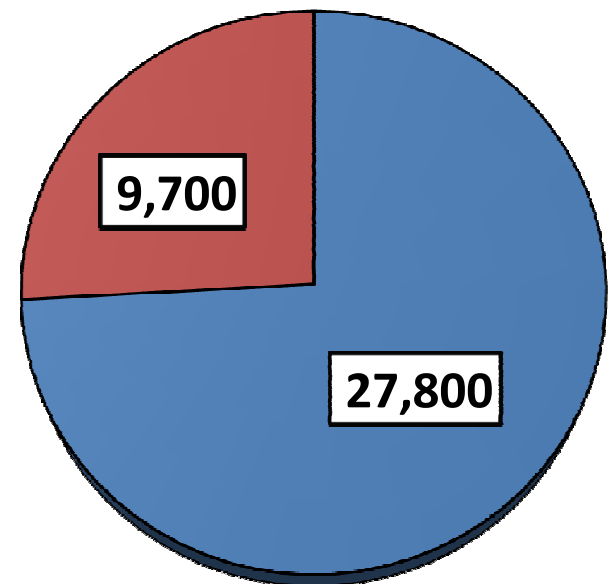
0 2.5 5 10 Miles



# Challenges

- **Integration with Nextfare**
- **Solar vs. Electric**
  - Multiple Utilities
  - Meters and Tariffs
  - Avoid Underground Utilities
  - Relocation Easier with Solar
- **Limited Street Space**
- **Multiple Jurisdiction Permitting**
- **Security & Revenue Collection**
- **Utilization: Retain Option for Value Add on Bus**

Total Unique Rider Count  
for Project Routes (est)



■ Go Card  
■ MIFARE



# How you can help

- **Location Feedback**
- **Marketing Thoughts & Utilization Incentives**
- **Benefit Estimates**