Passenger Flow and Train Dwell Time

Operations

September 22, 2005
I. Purpose

• Provide the Committee with an overview of the plan to improve train efficiency and customer riding experience by improving passenger flow and reducing train dwell times

• This is the compendium piece to the rail car pilot interim reconfiguration evaluation
II. Background

- Station platforms at major Metrorail stations are frequently congested particularly at transfer locations and at major escalator and stairway landings
- The APTA Peer Review recommends implementing passenger flow strategies to maximize train through-put and improve station dwell time
- Many transit systems have successfully implemented passenger flow solutions to improve passenger flow and train dwell time
The pilot program will study current behaviors and implement low-cost solutions to improve passenger flow in three critical areas:

- **On The Platform**
- **Boarding/Alighting Trains**
- **Inside Cars**

The primary benefits of reducing dwell time and improving passenger flow include:

- Improves customer experience in boarding, alighting and riding trains with respect to service reliability, comfort and convenience
- Provides the maximum through-put capacity (number of trains operated reliably in the peak hour)
- Prevents increased dwell times as a result of increased ridership
Platform Improvements

Goal: Improve distribution of passengers along the platform to reduce crowding and improve platform dwell time

- **Platform Markings**
  - Low-cost Pilot Program at Union Station, Gallery Place and Metro Center
  - Marker or plate at each door
  - Additional Signage on platform to alleviate congestion points
- **Escalator Direction Protocol**
  - Station by station review of escalator flow
- **Increase Supervisor/Employee presence (part of FY 06 - Safe, Reliable Clean Customer Service Program)**
  - Direction of passengers during peak service periods
  - Assistance in train loading, door closing and crowd management
Suggested Platform Markings
Suggested Platform Markings
Boarding and Alighting Improvements

Goal: Develop a new and different system-wide door closing regimen to create an employee and customer focus on moving on and off the train

- Change voice and chime regiment to be used for door closing
- Announcement and messaging for passenger flow
  - Exit first
  - Do not block the doors
  - Move to the center of the train
- Implement system-wide program for employee training and customer communication
Inside Car Improvements

GOAL: Facilitate passenger flow in and out of rail cars and maximize capacity.

- Operator Announcements
  - Move to center of car
  - Prepare to exit announcements
  - Exit quickly
- Interior car signs to communicate message to customer
- Evaluate interior reconfiguration (integrate with on-going Rail Car Configuration Study)
## Project Schedule

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Description</th>
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<tbody>
<tr>
<td>September 22</td>
<td>Present to Customer Service, Operations and Safety Committee</td>
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<tr>
<td>October/November 2005</td>
<td>Implement Escalator Direction Protocols</td>
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<tr>
<td>November 2005</td>
<td>Implement new system-wide Boarding and Alighting Procedures</td>
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<td>Implement customer communications program</td>
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<td>Report to P&amp;D Committee results on Phase One of the Rail Car Configuration Study (data collection/analysis)</td>
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<td>December 2005 – February 2006</td>
<td>Implement Platform marking/signage Demonstration Project</td>
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<tr>
<td>February/March 2006</td>
<td>Report on Demonstration Project to Customer Service, Operations and Safety Committee</td>
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Appendix A
Platform Markings – Industry Research
Bay Area Rapid Transit

Los Angeles

Germany

Rio