Overview

• About ODOT Public Transit Division (PTD)
• Motivation
• Objectives
• Project Description
PTD’s Vision and Mission

• Create a universally accessible public transit system
• Maximize investment in public transportation
• Support mobility options for Oregonians
Motivation

• PTD analyzes the transit network
• Federal and state grants funnel through ODOT
• Help shape investments/grant distribution
• Creation and maintenance of GTFS Data
Objectives

• Aid understanding of fixed route transit network
• Analyze network characteristics and issues
• Track changes in the network
• Simplify update of TripCheck.com’s data
Project Components

- Database of Oregon GTFS data
- Reporting and analysis tool
- Automatic update of TripCheck.com
General Transit Feed Specification

- Transit agencies serve current data
- Includes stop, route, trip and other info
- Used by Google Transit and others
- Host directory on GTFS-data-exchange.com

Sample stops.txt file

```
stop_id,stop_name,stop_desc,stop_lat,stop_lon,location_type,parent_station
S1,Mission St. & Silver Ave.,The stop is located at the southwest corner of the intersection.,37.728631,-122.431282,
S2,Mission St. & Cortland Ave.,The stop is located 20 feet south of Mission St.,37.74103,-122.422482,
S3,Mission St. & 24th St.,The stop is located at the southwest corner of the intersection.,37.75223,-122.418581,
S4,Mission St. & 21st St.,The stop is located at the southwest corner of the intersection.,37.75713,-122.418982,
S5,Mission St. & 18th St.,The stop is located 25 feet west of 18th St.,37.761629,-122.419382,
S6,Mission St. & 16th St.,The stop is located 10 feet north of Mission St.,37.766629,-122.419782,
S7,24th St. Mission Station,37.752240,-122.418430,,S8
```
The GTFS Database

• A repository of data from transit agencies
• A way to track changes in the network
• Easy access for third party developers
Reporting and Analysis Tool

• Integration of OpenStreetMap and GTFS data
• Multiple modes of data manipulation and representation
• Generation of analytical reports
OpenStreetMap

- Free and open source map data
- Free API
Data Manipulation

- Distance calculation
- Route drawing
- Connectivity analysis
Example Reports

- Number of service miles in a given geographic area
- Network connectivity in a given area
- Number of miles for TriMet
- KML for Google Earth
Deliverables

- A functioning application
- Scalable, well-documented open-source project
- Ability to reliably update TripCheck.com