ORLANDO, FLORIDA

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City of Orlando

GCTC Portland – February 2017

Brief Update on Some of the City of Orlando-Led Smart Transportation Projects

Parking System Modernization

- **On-Street Meters**
  - **First Batch of 1000+ Meters Complete**
  - **Numerous Payment Methods**
    - **Coins**
    - **Credit/Debit Cards**
    - **Phone (for registered accounts)**
  - **Parking App & Online Routing to Available Spaces**
  - **Solar Powered**
  - **Usage Data Archiving**
- **Most Popular Feature**
  - **Phone Alerts & Phone Top-up**
- **Coming Feature**
  - **Demand Pricing**
    - **By Special Event**
    - **Time of Day**
    - **Day of Week**

Parking System Modernization

- **Parking Garage Upgrades**
  - **Currently Underway – Completion in Fall 2017**
  - **Numerous Payment Methods**
    - **Cash**
    - **Bar Codes – via paper or telephone**
    - **Special Validation via Telephone**
    - **Special Individual Account Codes**
    - **Debit/Credit Cards**
    - **Local Business Remote Payments for Patrons**
      - **Before or After Patron Visit**
  - **Special Event Entry Options**
    - **Cash Lanes**
    - **Cashless But Gated Lanes**
    - **RFID & Other Toll Reader Technology Gateless Lanes**
  - **Online Travel Time & Routing to and from Garages**
    - **Integrated Bluetooth & RFID Data**
    - **Special Apps**
    - **Online**
    - **Outreach being done to In-Vehicle Navigation System Providers**
  - **Data Archive**
    - **For Prediction**
    - **For Demand Pricing**
    - **For Allowing Public to Compare History to Current Performance & Availability**

Electric & Autonomous Transit Research

- **Partner NASA-KSC**
  - **Using fleet of 40 electric buses**
- **Several alternate fuel option buses being reviewed**
- **Central Florida Automated Vehicle Partnership Developed**
  - **http://www.cityoforlando.net/greenworks/wp-content/uploads/sites/9/2014/10/Proposal_Desig_AV_Proving_Grounds_2016_12_21_FINAL-1.pdf**

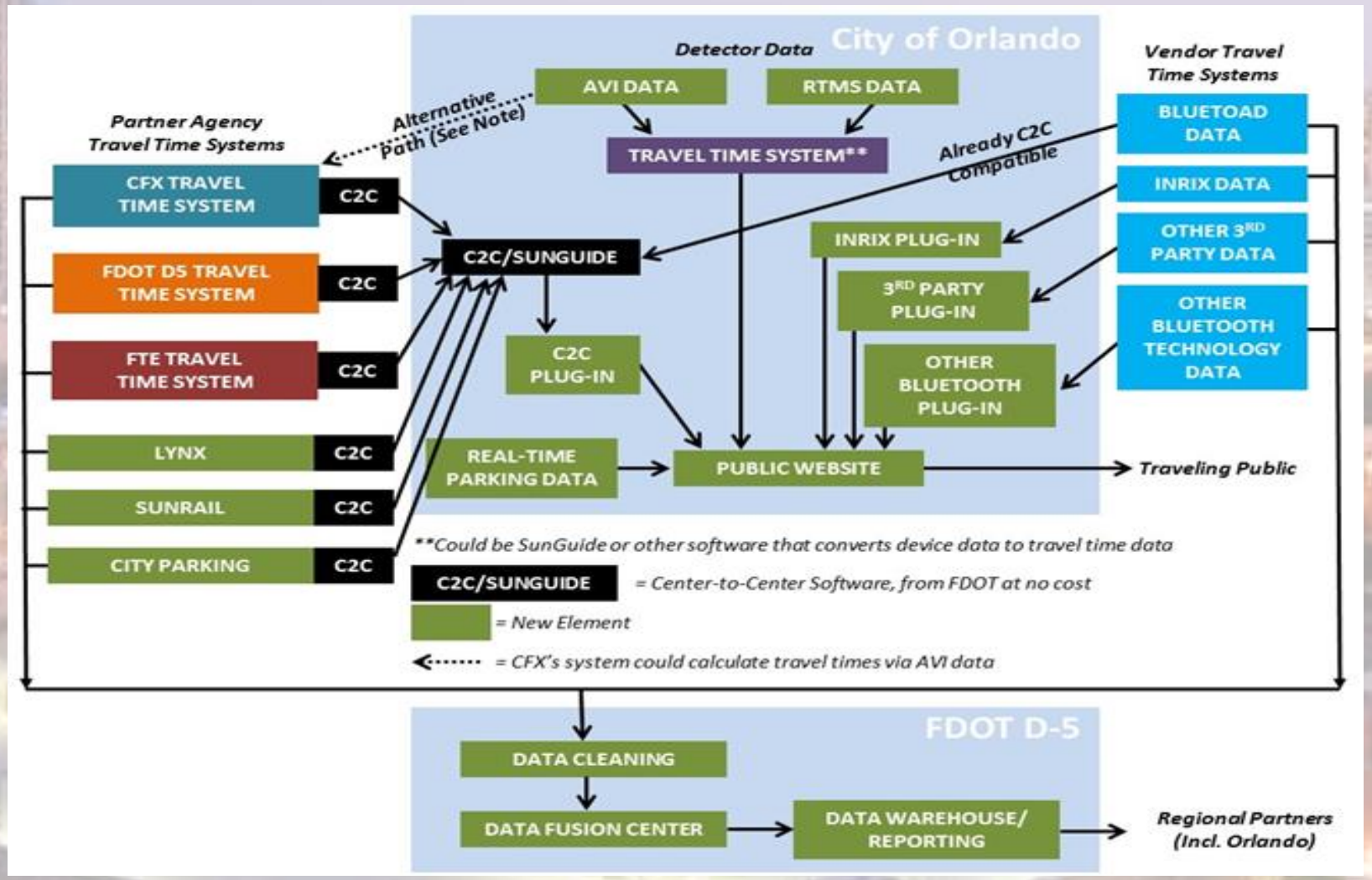
Solar Power Harnessing for Electric Vehicles

- **Fleet & Facilities Complex**
  - **Currently harnessing solar power**
    - **Provides electricity for off-peak operations**
    - **Charges electric vehicles**
      - **Vehicles share power with other vehicles and with other facilities**
    - **Net exporter of power to the grid**
- **Lake Nona/Medical City**
  - **New homes with solar power harnessing sharing technology**
- **World's Largest Rental Car Market**
  - **Increasing numbers of electric vehicles also benefitting from solar power charging**
- **Partner UCF**
  - **Visitor parking lots with combined solar power harnessing and electric vehicle charging**

Collection and Sharing of Real-Time Travel Information for All Modes of Travel

- **Advanced Local Partnership**
  - **City of Orlando**
  - **FDOT**
  - **Central Florida Expressway**
  - **Lynx**
  - **Seminole County**
- **Individual deployments of equipment & data gathering significantly underway**
- **Integration of data to be completed by Spring 2018**

Collection and Sharing of Real-Time Travel Information for All Modes of Travel



SafeX

The City's proposal and approach relies on two components

- **Video Detection**
- **Advanced Vehicle Notification**

Implementation in areas near heavy pedestrian centers in and around Downtown Orlando

Emphasis towards assisting persons with vision impairments, and other disabilities with safe crossing of intersections

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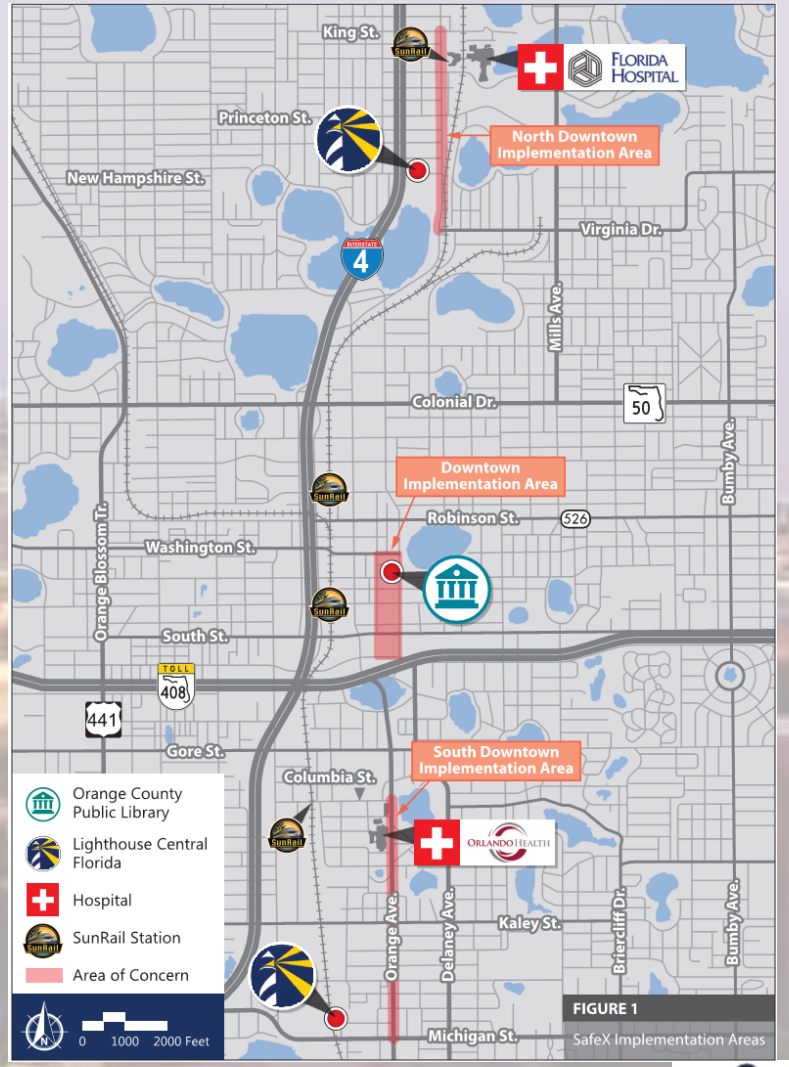
SafeX

Utilizes the City's existing Iteris pedestrian camera systems and integrated signal controllers

Will report to TMC when pedestrian activity is detected within intersection and extend protected phases until pedestrian has cleared intersection

TMC will push information to motorized vehicles within implementation area, via DSRC, Bluetooth, or Connected Device Application to notify motorists of pedestrian activity

In partnership with FDOT and Lighthouse Central Florida



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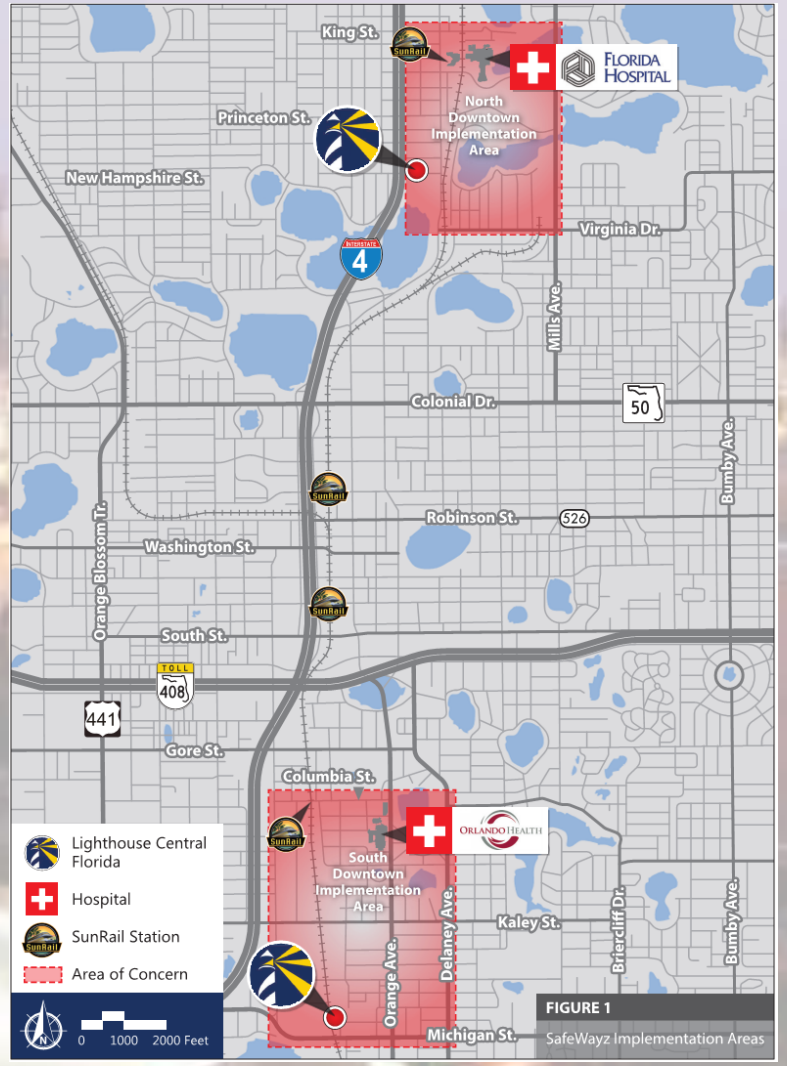
SafeWayz

The City's proposal and approach address the safe wayfinding of all pedestrians with emphasis towards persons with disabilities

Implementation in areas near heavy pedestrian centers in and around Downtown Orlando

Provides wayfinding based on mode of pedestrian travel (Walking, Assistive Device, Mobility Device) to safely navigate the City's pedestrian infrastructure



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SafeWayz

Can be used by any person with a connected device (i.e. smartphone or wi-fi enabled tablet)

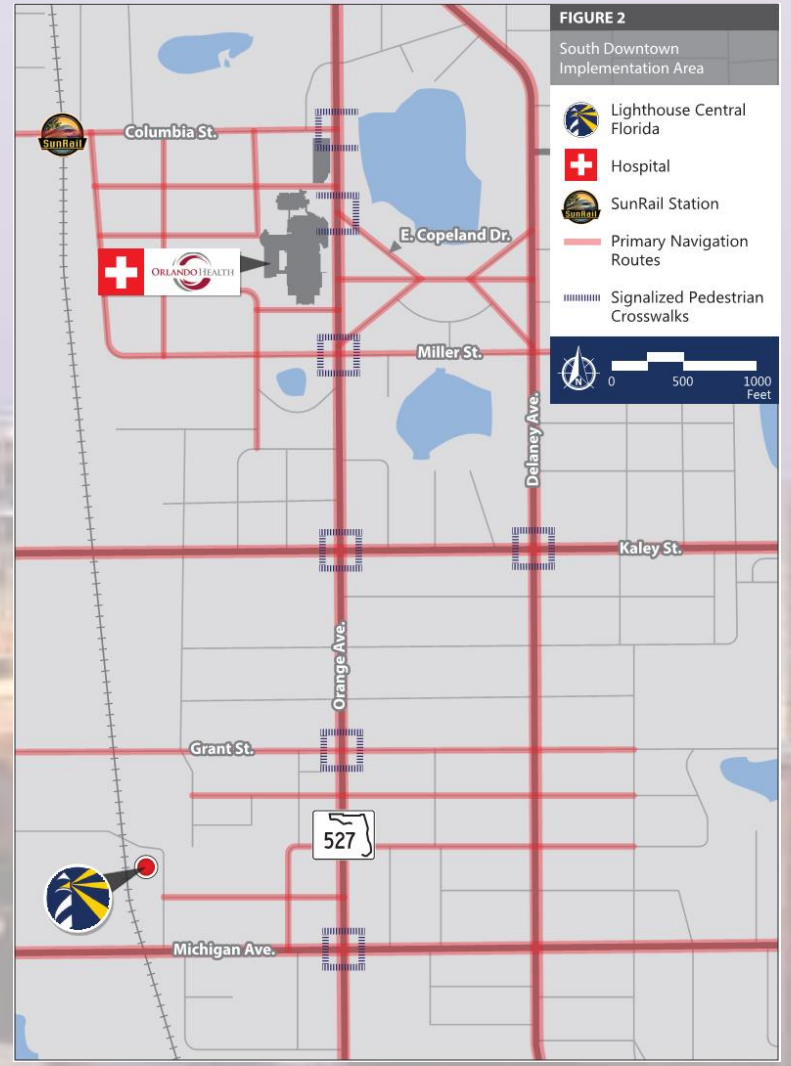
Citizens can report infrastructure deficiencies through the app directly to City staff

Relies on City's Open Data platform

Delivers information to users regarding infrastructure condition and availability

Possibility to tie in with transit planning systems to create "last-mile" connectivity for users

Creates a scalable model for implementation city-wide



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Questions?