

Wave Analyses

**Wave layers can be shared in pieces, by scope. For example, I've shared Orlando sidewalks in the past*

**The entire, unlimited database is only available via subscription, but the data can be used for projects*

**The trails and bike lanes data is in the public domain as of the ATP project*

**Does not include ideas that will be incorporated into the Active Transportation Plan*

**Critical trail gaps (shortest distance with biggest regional impact)*

**Critical bike lane gaps (shortest distance with biggest regional impact)*

- **Automobile Crash Overlay: Regional Statistical Report**
 - Crashes Overlaid with Road Characteristics – summary statistics
 - Crashes Overlaid with Point of Interest Types – summary statistics
 - Crashes Overlaid with Demographics – summary statistics
 - Findings of Statistical Anomalies and Regional Trends

- **Bike Ped Crash Overlay: Regional Statistical Report**
 - Crashes Overlaid with Road Characteristics – summary statistics
 - Crashes Overlaid with Point of Interest Types – summary statistics
 - Crashes Overlaid with Demographics – summary statistics
 - Findings of Statistical Anomalies and Regional Trends
 - Update to Wave Road Safety Scores (2) using regression of statistical findings

- **Fatal Automobile Crash Overlay: Regional Statistical Report**
 - Identify regional hot spots for night-time crashes
 - Overlay with night-life and entertainment venues; identify correlations if they exist

- **Online Maps or Analyses Showing Access (Distance to Nearest Point) to the following Point Types**
 - Dining (All Types)
 - Entertainment & Night Life
 - Grocery Stores
 - Grocery Stores & Markets
 - Grocery Stores, Markets & Convenience Stores
 - Parks
 - Public Services (any of the following): Fire Stations, Police Stations, Hospitals
 - Schools
 - Transit Stops (LYNX or SunRail)

- **Access Summaries (% of Population) for All Jurisdictions**
 - Percent of population within ½ mile (or custom distance) of any of the following:
 - Dining (All Types)
 - Entertainment & Night Life
 - Grocery Stores
 - Grocery Stores & Markets
 - Grocery Stores, Markets & Convenience Stores
 - Hospitals
 - Parks
 - Public Services (any of the following): Fire Stations, Police Stations, Hospitals
 - Schools
 - Transit Stops (LYNX or SunRail)

- **Corridor Trail Suitability Analyses**
 - Using right of way availability, tree coverage, LTS
 - Feasibility for specific corridors, or;
 - Prioritizing numerous corridors for feasibility
 - Can create algorithms that weight LTS, right of way to make a feasibility score for corridors
 - Probably doing some of this for the ATP, but not 100% sure yet

- **New Trail, Path, or Park Impact Analysis**
 - Statistics on improvements in access (if new trail off-road-network)
 - Population (number of people) impacted
 - Before/after access score view

- **Observed Speed Differential Analysis**
 - Variations in Differential by Road Attribute
 - Variations in Differential by Proximity to Point of Interest Types
 - Variations in Differential by Other Demographic/Environmental Indicators

- **Transit Stop Ridership and Proximity Analyses**
 - With LYNX, if possible/applicable
 - Analysis of ridership by proximity to point of interest types
 - *Public webmap of findings following report completion*
 - *Webmap updates over time automatically as Wave data updates*

- **Critical Sidewalk Gap Analysis (Numerous Types of Analyses)**
 - Identification of Gaps Within ½ Mile of Schools where Speed \geq 35 mph
 - Analysis/identification of most critical gaps
 - Identification of Gaps Within ¼ Mile of Transit where Speed \geq 35 mph
 - Analysis/identification of most critical gaps
 - Identification of Gaps Within Custom Distance of Any POI Type, by Speed/Lanes/AADT
 - *Public webmap of findings following report completion*
 - *Webmap updates over time automatically as Wave data updates*

- **Regional Food Desert Analysis**
 - Identification of Top 10-20 Food Deserts Regionwide
 - Identification of Top 10-20 Food Deserts in Low Income Areas
 - Can use custom income levels, custom distances to define deserts
 - Identification of Vacant/Public Parcels to Eliminate Desert
 - Simulation of future access scores if parcel used for grocery or dining
 - Regional Food Access Score Maps (Customizable)
 - Analysis of Findings
 - *Public webmap of findings following report completion*
 - *Webmap updates over time automatically as Wave data updates*

- **Regional Park Desert Analysis**
 - Identification of Top 10-20 Park Deserts Regionwide
 - Identification of Top 10-20 Park Deserts in Low Income Areas
 - Can use custom income levels, custom distances to define deserts
 - Identification of Vacant/Public Parcels to Eliminate Desert
 - Simulation of future access scores if parcel used for parks & recreation
 - Regional Park Access Score Maps (Customizable)
 - Analysis of Findings
 - *Public webmap of findings following report completion*
 - *Webmap updates over time automatically as Wave data updates*

- **Regional Transit Gap Analysis**
 - Identification of Top 5-10 Transit Expansion Areas
 - *See PowerPoint: Downtown Ocoee, Downtown Winter Garden*
 - Identification of Top 5 Transit Gaps in Low Income Areas
 - Can use custom income levels
 - Identification of Top 5 Transit Gaps in Areas with Low Vehicle Ownership Rates
 - *Public webmap of findings following report completion*
 - *Webmap updates over time automatically as Wave data updates*

- **School Trip Distance Fluidity Analyses**
 - Identification of Top 10-20 Fluidity Solutions
 - Identification of Potential Paths to Reduce Walking Trip Distance
 - *Public webmap of findings following report completion*
 - *Webmap updates over time automatically as Wave data updates*

- **Electric Vehicle Charging Station Access Analyses**
 - Maps of ½ Mile, 1 Mile, 2 Mile, 3 Mile Access Areas (by Driving)
 - Identification of regional gaps

- **Custom-Weighted Access Scores for MetroPlan Orlando, for Any Project**
 - Include Custom Point of Interest Types
 - Weight Points of Interest by Importance
 - Based on Score Decay Method
 - Based on Bike/Ped or Automobile

- **Retrofittability Analyses for Corridors, or Regionally**
 - Identify potential Retrofittability along specific corridors
 - Identify roadways that can potentially be thinned, provided Context Class type
 - See PowerPoint slide for general Retrofittability methodology

- **Population Proximity Analyses (Numerous Types)**
 - Calculate population within any distance of a corridor
 - Calculate population within any defined area
 - Calculate population within any distance of any point

- **On-Street Bike Lane Risk Analysis**
 - Identification of Bike Lanes on Roads where Speed \geq 35 mph
 - Identification of Bike Lanes on Roads where Speed \geq 40 mph
 - Identification of Bike Lanes on Roads where Speed \geq 45 mph
 - Summary of Findings with Analysis

Other Projects & Work

- [Complete Centralization of All MetroPlan Orlando Data](#)
 - For use on internal server by staff
 - For use in online maps
 - Website housing numerous web maps, by type
- [Network Evaluation Model](#)
 - Use Wave centerline data for regional scoring
 - Numerous score types based on underlying priority type
 - Use Wave analytics for project prioritization
- [Regional Map Templates](#)
 - Regional Maps
 - 8.5 x 11; 11 x 17; 24 x 36; 36 x 48
 - For reports or print outs
 - Individual County Maps
 - 8.5 x 11; 11 x 17; 24 x 36; 36 x 48
 - For reports of print outs
- [Live LOPP Webmap and Data Layers](#)
 - Color coded parcels by type and year funded
 - To be updated as amendments are made
- [Live TIP Webmap and Data Layers](#)
 - Color coded projects by type and status
 - To be updated as amendments are made
- [Live MTP Webmap and Data Layers](#)
 - Color coded projects by type and funding status
 - To be updated as amendments are made
- [Live CIP Webmap and Data Layers](#)
 - Large project; Would require data collection from all cities
 - Color coded projects by type, funding status, year funded
 - To be updated as amendments are made
- [Live Road Features Webmap](#)
 - All layers included in Wave database
 - Layers would not be available for public download (proprietary)
- [Freight Network & Infrastructure Analysis](#)
 - Webmap
 - Network evaluation analysis
 - Network prioritization using Wave data
- [Other Project Themes and Projects by Federal Priority Types](#)
 - Justice 40
 - Compare trail projects by population impacted
 - CDC 500 Cities Health Analytic Cross-References and Trends
 - US Census Data Cross-References and Trends

