Integrating Model System Components

- ABM
- DaySim
- Auxiliary Models
  - External Trips
  - Truck Trips
  - Visitor Trips
  - Special Generators
- LOS Skims
- Assignment
- TBRPM
- Assignment
Auxiliary Models – External Trips

- 2008 Cordon Line Survey
- Routine vs. Occasional External Trips

Modeling Area

Productions

Attractions

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Auxiliary Models – Truck Trips

- 2003 Truck Survey
- Quick Response Freight Manual
- New Employment Categories
- Forecast Truck Trips:
  - Single Destination Truck Trips
  - Tour-based Truck Trips
Auxiliary Models – Visitor Trips

- 2007/2008 Hotel/Motel Survey

- Original Hotel/Motel Categories (Prior to TBRPM 6):
  - Business
  - Resort
  - Economy

- Updated Hotel/Motel Categories (After TBRPM 7):
  - Low Density
  - Medium Density
  - High Density

- Updated Hotel/Motel Categories were implemented in the TBRPM 7.1 and will be incorporated into ABM
Auxiliary Models – Special Generators

**Special Generators Used for Auxiliary Models:**
- Airports
- Ports
- Mines
- Warehouses / Distribution Centers

**Special Generators Used for ABM Quality Check:**
- Major Activity Centers
- Hospitals
- Colleges and Universities
- Major Tourist Attractions (Busch Garden)
Travel Patterns in Major Activity Centers

MacDill CTPP Journey to Work Travel Patterns

Orientation Ratios

CTPP

0.00000 - 0.00010
0.00011 - 0.50000
0.50001 - 1.00000
1.00001 - 3.00000
>3.00000

MacDill Model HBW Trip Travel Patterns (Before Update)

Orientation Ratios

Model

0.00000 - 0.00010
0.00011 - 0.50000
0.50001 - 1.00000
1.00001 - 3.00000
>3.00000

MacDill Model HBW Trip Travel Patterns (After Update)

Orientation Ratios

Model_Update

0.00000 - 0.00010
0.00011 - 0.50000
0.50001 - 1.00000
1.00001 - 3.00000
>3.00000
ZDATA Files and ABM Components

- **ZDATA1 – POP & DU**
- **ZDATA2 – EMP**
- **ZDATA3 – Special Gen**
- **ZDATA4 - EI Trips**

Diagram:
- **ABM**
  - **Truck Trips**
  - **External Trips**
Dynamic Traffic Assignment

- Both ABM and 4 step model will still use traditional Static Assignment techniques for trip assignment
- DTA will be used only on a Corridor or Subarea basis for special analyses

Major Steps in Development

- Review Available Models and Methodologies
- Select DTA Model for the TBRPM
- Testing – Learning Curve
- Staff and Consultant Training
Ongoing Transit Projects in District 7

- TBARTA Master Plan Projects:
  - Pinellas AA (Clearwater and St. Pete.)
  - HART AA
  - Howard Frankland Bridge
  - SR 54/56
  - USF to Wesley Chapel
  - Westshore to Crystal River/Inverness
  - I-75 Regional Bus to Downtown
    - Bradenton and Sarasota
    - Wesley Chapel