# A FRIENDLY WAY TO TACKLE
CONCURRRENCY MANAGEMENT SYSTEM
By: Mario Fiorillo – January 2007

The City of Fort Pierce Concurrency Management System (CMS) was designed to monitor impacts of development on the roadway system and complement a Proportionate Fair Share Ordinance required to be adopted by all local governments by December 1, 2006 (Chapter 163.3180, Florida Statutes).
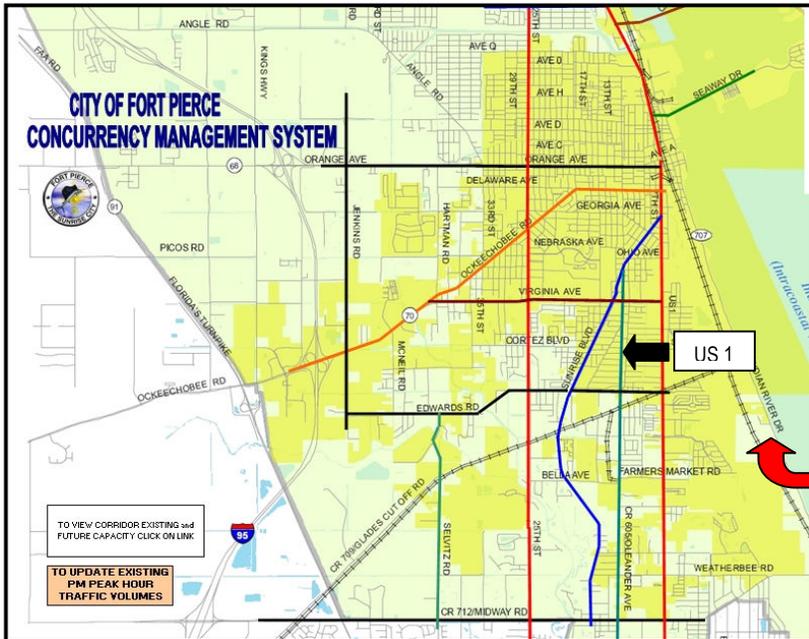

The CMS ensures that level of service standards established by the Comprehensive Plan area maintained at or above levels of service and identifies potentially failing roadways link. For Fort Pierce, fourteen major roadway corridors were established in a system that monitors the existing directional link capacities and the future two-way link capacities during the PM peak hour. The system was created in an easy-to-use Microsoft Excel spreadsheet designed for use by the City's engineer, transportation planner, or urban planner.

The menu map is the link to:
1) Existing P.M. Peak Hour traffic volumes, 2) Existing link directional and combined capacity, 3) Future link combined capacity and 4) Data input for future development site traffic. To view any of the corridors on this map you would have to click on the highlighted corridor on the above map this action would bring you to the existing roadway capacity directional and combined. The first order for this procedure was to establish the existing turning movement traffic volumes for the overall area.

EXISTING PM PEAK HOUR

The existing PM Peak Hour Traffic volumes compiled from previous traffic study in the area were used to create the existing traffic background. The turning movement traffic volume between two adjacent intersections were compare and the height of the two was use to analyzed the directional and combined link capacity.

PLATTS CREEK SITE TRAFFIC PM PEAK HOUR VOLUMES
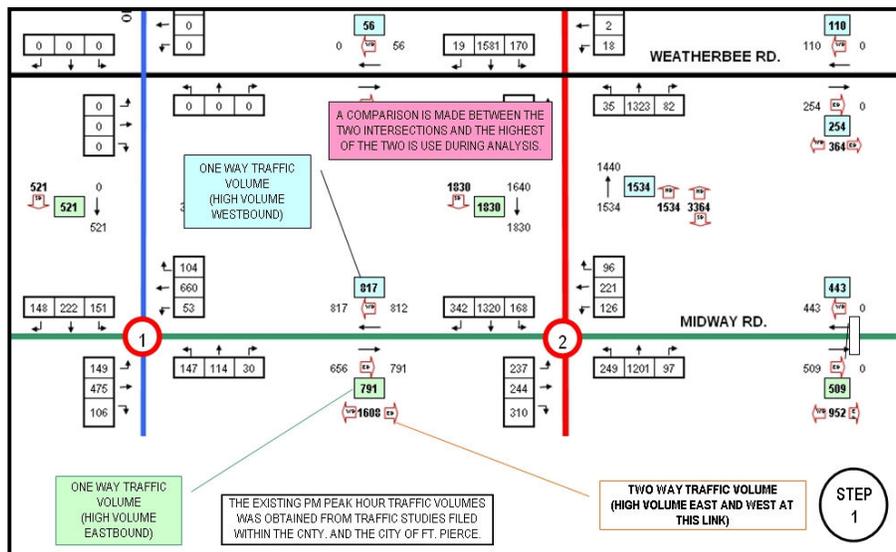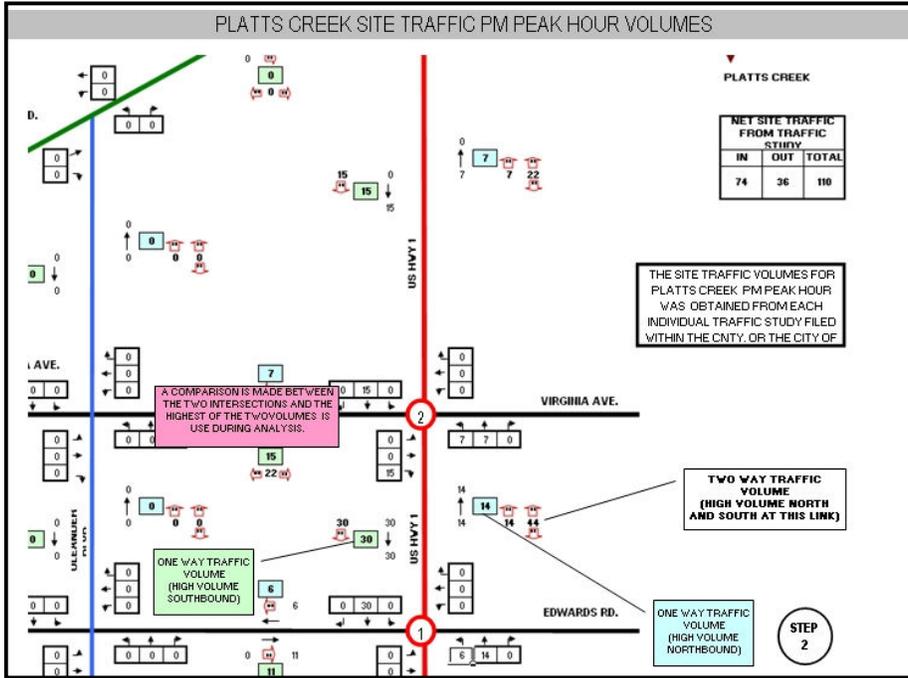
PROPOSED SITE TRAFFIC

An individual spread sheet will be developed for each of the proposed projects in the City of Fort Pierce and the proposed turning movement traffic volumes for the proposed project during the PM Peak will enter as depicted on the drawing to the left. Each individual file will use the trip generation and trip assignment on their correspondent Traffic Impact Study. If the Traffic Study did not provide the site traffic volume through the whole corridor, assumptions will be made to distribute this traffic through the different corridors.

COMBINED TRAFFIC CALCULATIONS

The total Combined Traffic for all approved developments by the City of Fort Pierce was added to the Existing PM Peak Hour Link Volume, and compare to the existing capacity of the LINK. Each development is checked for Capacity, Percent contribution to the Link. If a project Intensity changes it can be changed by linking thru DEV. SITE TRAFFIC or (DST) at row 6.
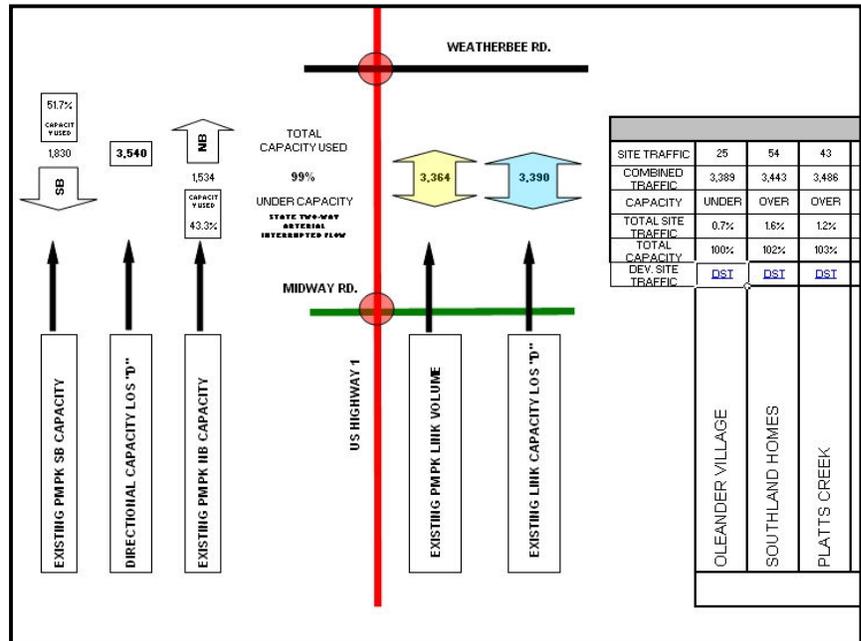
Definitions:

Site Traffic: Development Site Traffic provided by Traffic Study

Combined Traffic: Development Site Traffic plus Existing Traffic

Capacity: Comparison of Link Capacity/Combined Traffic

Total Site Traffic: Percentage of additional Site Traffic

Total Capacity: Percentage of Total Capacity for the Link

A **computer monitoring and update program** (**database),** will be maintained for the accountability of all trips assigned by links and by inventory. The existing database contains all trips generated by existing or proposed to the main arterials.

Each proposed development distributes the trips generated to the main arterials and intersection network that is comprised of their traffic impact area. The radius of impact will be determined according to the size of the development accounted for trips generated. Exhibit A includes the traffic impact area that each development needs to follow to qualify to be reviewed for traffic concurrency.

All applicants are required to provide a Traffic Impact Analysis using the most current traffic and transportation data. The data
provided is reviewed and added to the "working data" that is currently being used by the city's Database system. The database is capable of maintaining all data for projects that have provided studies for review, additionally providing key information to the City's staff.
The current database will be able to handle existing, committed vs. proposed/reserved trips to the network. The database is updated every month with developments and the volume counts are updated twice a year. Information of updated list of development orders, and Certificate of Occupancies will be kept current to incorporate accurate data.
Once the application has been reviewed for Concurrency, it will be determined if it is concurrent or not. The Applicant will be notified of the deficiency and of the mitigation efforts that can be offered.
Prior to mitigating the Applicant shall call to arrange a pre-mitigation meeting to discuss potential improvements with the affected agencies.
Applicants who satisfy the requirements for Concurrency can move forward with the application process.
The Director of Planning and Zoning shall review the application and certify that the application is sufficient and complete.

Note:
All of the spread sheets are interfacing between each other so any required change to a project would automatically trigger an update request when you open any spread sheet that relates any information to it. If you need to update a spread sheet please maintain all other spread sheets closed.

This Procedure and Software was developed Mario Fiorillo