



March 30, 2016

To: Dan Grippo, P.E., C.E.M.
Director, Municipal Services

From: T. Douglas Hess, P.E.
Traffic Engineer

Subject: **Downtown Development Order
Traffic History**

As you requested, I have researched the files on the Downtown Development Order (DDO) and the NOPC (notice of proposed change) revision history from the original approval in 1988 through today. Our files in Municipal Services went as far back as 1983.

In 1983 the Chief of Growth Management, Bob George, reported to the CRA on the 30-year growth estimates for Downtown redevelopment. Over the next 17 years the population estimate for the City and the service area west of the Turnpike was expected to increase by 130%. Commercial growth had been closely related to population growth and the Downtown was expected to capture its share of that expected commercial growth. With the assumption that the regional component of growth would be as great as the service area component, Bob estimated that the Downtown commercial growth could be expected to be 5,460,000 square feet over the next 30 years for a total building area of 8,341,144 square feet. Constraints identified included traffic congestion and inadequate utilities and drainage.

In 1984 the CRA hired a consultant, Kimley-Horn & Associates, to prepare a Downtown Transportation and Parking Analysis. This study identified the need for significant transportation improvements to accommodate the traffic, parking, and pedestrian needs for the expected growth. The improvement options brought forward included the need to widen and 6-lane roads, create one-way pairs of roads, add railroad crossings, or improve intersections and live with traffic congestion.

In 1986 another consultant, Barton-Aschman & Associates, was hired by the CRA to report on existing traffic conditions. That study concluded that the projected traffic conditions could not be handled with the CRA's constraint on widening the major roads unless major intersection improvements were made and traffic was diverted to other roadways.

Then in 1987 the CRA submitted an application to the Treasure Coast Regional Planning Council (TCRPC) for an area-wide DRI (Development of Regional Impact) and in 1988 the City Council approved the Downtown Development Order, recognizing approximately 3 million square feet of existing office equivalent building area and approximately 5 million square feet of proposed buildings. Conditions of approval included a listing of various transportation infrastructure improvements which would be necessary to support this development, as reviewed by the TCRPC, the Florida Department of Transportation (FDOT), and Palm Beach

County (PBC). This DDO granted approval status to approximately 5 million square feet of office-equivalent development for the Boca Raton Downtown. The individual development approvals (IDAs) now would only need to gain a site plan approval for their site specific details and not be liable or required to mitigate for off-site infrastructure needs. IDAs and permits could be granted to developers with the certain thresholds for off-site infrastructure improvement completions, as designated within the DDO. In 1990 the City established the Visions 90 Committee to manage the infrastructure improvements, which included a capital improvements program of funding for the comprehensive set of water, sewer, roads, drainage and beautification projects.

In 1992 the City Council approved a significant amendment to the DDO through Ordinance 4035. This amendment revised and/or deleted some transportation improvements and adjusted the timing of the improvements, given the Visions 90 funding program. It recognized the need to implement a traffic diversion plan which would divert north/south through-traffic around the downtown. Other significant changes included the deletion of the 6-laning of the eastern section of Palmetto Park Road as well as replacing proposed new turn lanes at the intersection of Federal Highway/Palmetto Park Road with north/south left-turn restrictions.

The DDO was further analyzed related to traffic and amended in 2006, 2008, 2012, and 2015 by the City Council. The 2006 amended DDO allowed for greater office reductions in sub-areas and revised the allocations in sub-area E. The 2008 amended DDO modified transportation conditions for Camino Real/Dixie Highway and Dixie Highway/Hillsboro Blvd. The 2012 amended DDO eliminated the eastbound and westbound left turn lanes for Palmetto Park Road/Mizner Blvd. The 2015 amended DDO deleted the transportation condition for Camino Real/Dixie Highway. Development patterns, market conditions, background traffic and other changes and trends occurred over the years from the original DDO approval in 1988 to the present. Attached to this memo is a summary table of the DDO changes over time with respect to traffic issues.

In July 2014 a Kimley-Horn letter stated, *“The actual pattern of development within and around the DDRI has differed from what was originally contemplated and expected within the DDRI boundary. The DDRI allows for tradeoffs between uses as long as trip generation thresholds are not increased. The actual pattern of development has included a mix of uses, including a greater percentage of residential development within the DDRI than what was originally contemplated.”*

Later in October 2014 Kimley-Horn said, *“Some of the characteristics of the development patterns have changed, as more residential development was built within the DRI than originally anticipated to this point. This increased level of residential development substantially changes the trip generation dynamics in a number of ways:*

- *Greater internalization of trips within downtown, as the residential uses help to balance out the pre-existing and new office and commercial uses*
- *Changes in the directional split of traffic, as residential trips are typically traveling in the opposite direction of office trips, especially during the AM peak hour*
- *Overall traffic is distributed more broadly over the course of the entire day, as opposed to the sharp AM and PM spikes in traffic volumes for office uses*
- *Lower overall trip generation, as residential uses have lower trip generation rates for comparably-sized office or retail uses*
- *Different trip distribution on the network, as residential units are traveling to and from different destinations using the roadway network.”*

The projection for the amount of residential dwelling units at buildout has consistently increased for the DDO over the years increasing from 1050 dwelling units in 1988 to 4038 dwelling units, which was analyzed in the 2006 NOPC as shown below:

<u>Analysis Year</u>	<u>Residential Units</u>
1988	1050
1990	1280
1992	1346
2002	2918
2006	4038

With time passing and the changes in varying conditions, the estimate of trips generated by the Downtown area-wide DRI project has also changed. The City's 2015 NOPC to the DDO application stated, *"The following table lists the project traffic projections contained within the Application for Development Approval along with the 1992 NOPC traffic analysis and recent projections for project traffic at full buildout:*

	<i>AM PEAK (trips)</i>	<i>PM PEAK (trips)</i>
<i>Original ADA</i>	6,694	6,391
<i>1992 NOPC Analysis</i>	6,634	6,720
<i>Recent Projections</i>	2,870	3,321

The recent traffic projections for full development of the Downtown DRI are less than one-half the project trips analyzed in the Application for Development Approval." [in 1988].

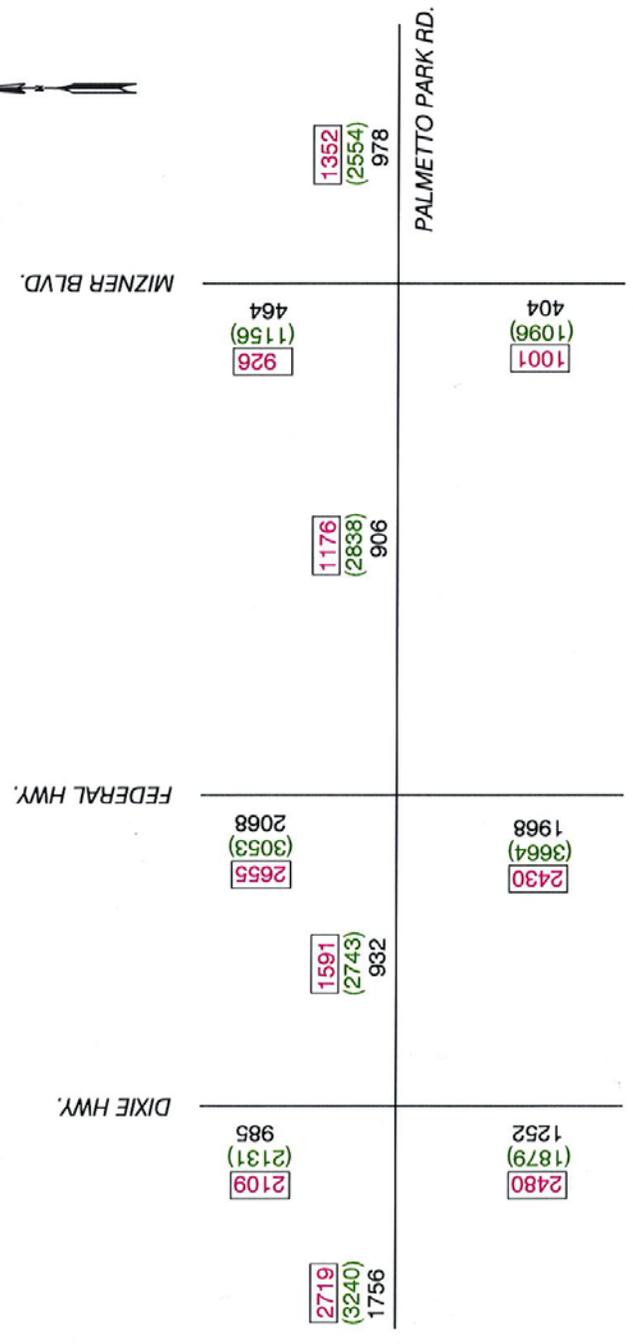
Interim year estimates of the area-wide project trip generation are also shown in the table below:

Transportation Analysis Forecast	AM Pk Hour Project Trips Generated	PM Pk Hour Project Trips Generated
Original 1988 DDO	6,694	6,391
1992 NOPC	6,634	6,720
2002 Projection (KHA)	4,062	6,233
2008 NOPC	2,128	2,213
2015 NOPC	2,870	3,321

The CRA also utilized Kimley-Horn in 2002 in order to do an Existing Conditions Analysis for the Boca Raton Downtown. In that study Kimley-Horn had noted that changes in the updated version of the ITE Trip Generation Manual also impacted the Downtown project trip forecasts. Additionally, that 2002 analysis also found that background traffic volumes had changed from the original assumptions. Kimley-Horn stated, *"activities and actions that have occurred outside the Downtown appear to generate additional background traffic on the local roadway network not anticipated in the 1990 Traffic Study. Some of these impacts are caused by constrained roadways in and around Downtown Boca and transportation concurrency [exception] areas (TCEA) designated in Broward County east of Interstate 95 and in Delray Beach."* A conclusion in that 2002 report stated, *"Project traffic generated from the Downtown DRI was found to be a small percentage of the total traffic observed on the local roadways in and around the*

downtown.” Kimley-Horn also provided graphs which summarized the breakdown of total traffic into project traffic and background traffic for typical roadway links in and around the downtown and those graphs are attached.

From the consultants’ studies and conclusions of the Boca Raton Downtown over the past years, the estimate of project traffic generated from the Downtown DRI has decreased from the original 1988 approval. There is also some evidence that background through-traffic in the Downtown area has increased to where it is higher than the original projections. The following figure shows PM peak hour traffic volumes in the core Downtown area for several scenarios including 1986 traffic counts, original 1988 DDO projected volumes, and 2015 traffic counts.



LEGEND

2015 COUNT
 ORIGINAL DDRI PROJECTION
 (As contained in DDRI Application of July 1987)

1756 1986 COUNT



City of Boca Raton
 Municipal Services Department
 201 West Palmetto Park Rd. Boca Raton Florida 33432

**PM PEAK HOUR
 PEAK SEASON TRAFFIC VOLUMES (2-WAY)**

2/22/2016
 1-749

History of Transportation Conditions for the Downtown Development Order

Date	Action	Details
March 1983	Staff report (Bob George) to CRA concerning 30 year growth estimates	Demand identified for commercial office and retail space in the Boca Raton Downtown so as to serve growing residential in the service area as well as region. Initial estimate of 8,341,144 s.f. of building area in the Downtown is considered a starting point. Constraints to the Downtown growth identified as design, utilities, drainage, and traffic.
August 1984	Consultant (Kimley-Horn) report to CRA concerning Downtown Transportation and Parking Analysis	Based upon building growth estimates for the Downtown including 2.7M s.f. of retail, 4.6M s.f. of office, 630 hotel rooms, and 888 dwelling units, the consultant identified significant transportation improvements to accommodate the traffic, parking, and pedestrian needs.
November 1984	Downtown Task Force meets and considers various possible improvements.	Traffic improvement options identified as: 6-laning roadways, creating 1-way pairs of roads, adding railroad crossings and congestion with intersection improvements.
1986	Consultant (Barton-Aschman) report of Existing Traffic Conditions for CRA.	Concluded that projected traffic conditions cannot be handled with the CRA's constraint on widening the major roads unless intersection improvements and significant traffic diversions are made to other roads.
March 1988	Downtown Development Order (DDO) approved by City Council through Reso. 23-88.	DDO recognized 3M s.f. of existing office equivalents and 5M s.f. of new proposed office equivalents.
April 1988	Amended DDO approved by City Council through Reso. 92-88.	Language revisions made to DDO.
October 1992	City Council approved Ord. 4035 amending the DDO.	The amended DDO recognized the need to implement a traffic diversion plan as well as adjusted the timing of transportation improvements based on the Vision 90 funding plan. Widening of the eastern section of Palmetto Pk Rd was deleted and turn lanes at Federal/Palmetto were replaced by turn restrictions.
May 1993	A referendum of the DDO was voted on and did not pass.	
August 2006	City Council approved Ord. 4945 amending the DDO.	The amended DDO allowed for greater office reductions in sub-areas and revised the allocations in sub-area E.
Sept 2008	City Council approved Ord. 5049 amending the DDO.	The amended DDO modified transportation conditions for Camino Real/Dixie Hwy and Dixie Hwy/Hillsboro Blvd.
Sept 2012	City Council approved Ord. 5213 amending the DDO.	The amended DDO modified the transportation condition for Palmetto Park Rd/Mizner Blvd, eliminating the EBLT and WBLT lanes.
February 2015	City Council approved Ord. 5295 amending the DDO.	The amended DDO deleted the transportation condition for Camino Real/Dixie Hwy.

